Fosse Green Energy

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EN010154

9.22 Applicant's Response to Deadline 2 Submissions

Planning Act 2008 (as amended)

Regulation 8(1)(k)

Infrastructure Planning (Examination Procedure) Rules 2010

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9.22 Applicant's Response to Deadline 2 Submissions

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1. Introduction

1.1 Purpose of this document

1.1.1 The purpose of this document is to provide Fosse Green Energy's ('the Applicant') response to the relevant Deadline 2 Submissions made by Interested Parties (IPs), submitted to the Examination issued on 6 February 2026. This report focuses on responding to comments from IPs which raise new, or substantially different, points to those already raised and responded to by the Applicant as part of previous submissions – for example, within the Applicant's Response to Relevant Representations [**REP1-047**], Applicant's Response to the Examining Authority's First Written Questions [**REP2-029**], Applicant's Response to Written Representations [**REP2-030**], Applicant's Response to Local Impact Reports [**REP2-031**], and Applicant's Response to Post Hearing Summaries [**REP2-032**].

1.1.2 This document does not respond to comments made by IPs at Deadline 2 regarding the Applicant's Draft Itinerary for the Accompanied Site Inspection (ASI) given that the comments made in this regard were for consideration by the Examining Authority (ExA) to inform the final itinerary for the ASI which was undertaken on 10 March 2026. Furthermore, this report does also not respond to the Withdrawal of Objection letter (dated 03 February 2026) from Cadent Gas Limited submitted to the Examination at Deadline 2.

1.1.3 It should be noted that several of the Deadline 2 submissions have been re-categorised from the title of their submission within the Fosse Green Energy Examination Library, given that their submission focusses on a different topic or category of response.

1.2 Structure of this Document

1.2.1 This document provides a response from the Applicant to the relevant matters raised in the Deadline 2 Submissions, and is structured as follows:

a. Deadline 2 Submissions:
    i. Table 2-1: Comments on Deadline 2 Submissions: the Applicant's responses to IP Deadline 2 Submissions.
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ii. Table 3-1b: ExQ1 Responses: the Applicant's responses to the responses provided by Lincolnshire County Council to the ExA First Written Questions.

iii. Table 3-1c: ExQ1 Responses: the Applicant's responses to the responses provided by the Environment Agency to the ExA First Written Questions.

iv. Table 3-1d: ExQ1 Responses: the Applicant's responses to the responses provided by National Highways to the ExA First Written Questions.

v. Table 3-1e: ExQ1 Responses: the Applicant's responses to the responses provided by Natural England to the ExA First Written Questions.

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vii. Table 3-1g: ExQ1 Responses: the Applicant's responses to the responses provided by National Grid Electricity Transmission to the ExA First Written Questions.

1.2.2 For ease of reference, a table of acronyms used in this document is provided in **Table 1-1.**

Table 1-1: Abbreviations

Abbreviation	Definition
AIL	Abnormal Indivisible Load
ALC	Agricultural Land Classification
ANPR	Automatic Number Plate Recognition
AWS	Anglian Water Services
BESS	Battery Energy Storage System
BMV	Best and Most Versatile Land
BNG	Biodiversity Net Gain
BPA	British Pipeline Agency Limited
BS	British Standard
BSI	British Standards Institution
BSMP	Battery Safety Management Plan
CEMP	Construction Environmental Management Plan
CNP	Critical National Priority

Abbreviation	Definition
CTMP	Construction Traffic Management Plan
DCO	Development Consent Order
DEFRA	Department of Environment, Food and Rural Affairs
DEMP	Decommissioning Environmental Management Plan
DESNZ	Department for Energy Security and Net Zero
DMS	Delivery Management System
DMRB	Design Manual for Roads and Bridges
EA	Environment Agency
EIA	Environmental Impact Assessment
EPD	Environmental Product Declaration
ES	Environmental Statement
ESSCP	Employment, Skills and Supply Chain Plan
ExA	Examining Authority
FRA	Flood Risk Assessment
FTE	Full Time Equivalent
GPG	Good Practice Guidance
GVA	Gross Value Added
GWh	Gigawatt hours
Ha	Hectares
HDD	Horizontal Directional Drilling
HER	Historic Environmental Record
HV	High Voltage
IP	Interested Party
kV	Kilovolt
LCC	Lincolnshire County Council
LEMP	Landscape and Ecological Management Plan
LFRS	Lincolnshire Fire and Rescue Service
LGV	Local Good Vehicle
LIQ	Land Interest Questionnaire
LNR	Local Nature Reserve
LPA	Local Planning Authority
LWS	Local Wildlife Site

Abbreviation	Definition
LWT	Lincolnshire Wildlife Trust
LVIA	Landscape and Visual Impact Assessment
MW	Megawatt
MWh	Megawatt Hours
NE	Natural England
NFCC	National Fire Chiefs Council
NGED	National Grid Energy Distribution
NGET	National Grid Energy Transmission
NH	National Highways
NKDC	North Kesteven District Council
NPPF	National Planning Policy Framework
NPPG	National Planning Practice Guidance
NPS	National Policy Statement
NRMM	Non-Road Mobile Machinery
NSIP	Nationally Significant Infrastructure Project
OEMP	Operational Environmental Management Plan
PEA	Preliminary Ecological Appraisal
PFAS	per-and poly fluoroalkyl substances
PINS	Planning Inspectorate
PPW	Permitted Preliminary Works
PRoW	Public Right of Way
PRoWMP	Public Right of Way Management Plan
PV	Photovoltaic
RAF	Royal Air Force
SAC	Special Area of Conservation
SMP	Soil Management Plan
SoCG	Statement of Common Ground
SoS	Secretary of State
SPA	Special Protection Area
SRN	Strategic Road Network
SWDS	Surface Water Drainage Strategy
TA	Transport Assessment
tCO2e	Tonnes CO2 Equivalent

Abbreviation	Definition
TEC	Transmission Entry Capacity
TCPA	Town and Country Planning Act
TPO	Tree Preservation Order
TTM	Temporary Traffic Management
UKHSA	UK Health Security Agency
WCA	Wildlife and Countryside Act
WCHAR	Walking, Cycling and Horse Riding Assessment
WHO	World Health Organisation
WMP	Water Management Plan
WSI	Written Scheme of Investigation
WRMP	Water Resources Management Plan
ZoI	Zone of Influence
ZTV	Zone of Theoretical Influence

2. Applicant's Responses to Deadline 2 Submissions

2.1 Comments on Deadline 2 Submissions

Table 2-1: The Applicant's responses to IP Deadline 2 Submissions

Interested Party	Theme	Comment	Applicant Response
Lincolnshire Wildlife Trust	Ground-nesting Birds	Based on the information provided in ES Chapter 8 (Revision 2, 20th January 2026), we are satisfied that appropriate mitigation for ground-nesting birds will be provided. The creation of skylark plots at a rate of 2 per ha, comprising of small uncropped/fallow areas of a minimum size of 16m2, with a minimum of 25m between plots and situated at least 50m from field boundaries, are appropriate and commendable measures. We have one outstanding query on this topic. Table 8-13 of ES Chapter 8 (Revision 2) states, in reference to areas to be managed restrictively for the provision of ground-nesting birds: "*These areas, will provide extensive benefits for other IEFs and wider biodiversity and include 64ha of permanent grassland and 181ha of managed arable*" Meanwhile, Section 4.2.4 of the Framework Landscape and Ecological Management Plan (FLEMP) (Revision 4, 20th January 2026), states: *"Approximately 83ha of permanent grassland [will be created] for bird mitigation purposes".* Clarification on this discrepancy in the reported hectares of permanent grassland is required.	As set out in paragraphs 8.12.19 - 8.12.26 of Chapter 8: Ecology and Nature Conservation of the ES **[REP1-019]**, to avoid significant effects on ground-nesting birds, namely Skylark and Lapwing, a minimum of 64ha (158 acres) of permanent grassland and 181ha (447 acres) of managed arable is required to mitigate for the loss of existing arable nesting habitat. Indicative areas for this mitigation provision are shown on Figure 8-5: Bird Mitigation Land Allocation of the ES **[AS-046]** and are set out in paragraph 5.3.56 of the Framework LEMP **[REP2-021]**. Grassland Areas A, B and C (as per Figure 8-5: Bird Mitigation Land Allocation of the ES **[AS-046]** and paragraph 5.3.56 of the Framework LEMP [**REP2-021]**) consist of approximately 64ha (158 acres) of permanent grassland creation – i.e. the required minimum quantum to avoid significant effects upon ground-nesting birds – with Grassland Area D providing the option for a further area of approximately 19ha (47 acres) (or in exchange for parts of Areas A-C whilst still meeting the minimum 64ha requirement). Therefore, Grassland Areas A-D total approximately 83ha (205 acres).
Lincolnshire Wildlife Trust	Adjacent woodland (Tunman Wood, Housham Wood)	(In reference to FLEMP Revision 4) - Whilst we are satisfied that a minimum offset of 15m from woodlands will be observed (S4.1.14), and that there will be tree and shrub planting throughout the site (S4.1.21), we wish to see our initial requests for the creation of an ecotone at the site boundaries with existing woodland addressed. This can simply consist of the planting of scrub at these boundaries, ideally increasing in height towards the woodland. This would soften hard and unnatural boundaries between the development area and adjacent woodland, significantly enhancing biodiversity. We wish to see details of this presented in updated documents.	The Framework LEMP **[REP2-021]** has been updated and was submitted to the Examination at Deadline 3, to recognise this request from Lincolnshire Wildlife Trust, in addition to comments from the Forestry Commission in its Deadline 2 submission [**REP2-050**], and from subsequent email correspondence from Natural England supporting this point. A new sub-section titled '*Natural Regeneration Buffer to Woodland'* has been inserted at paragraphs 5.3.13 – 5.3.16 of the Framework LEMP **[REP2-021]**, setting out the function, implementation and long-term management of this habitat type as follows: *"**Natural Regeneration Buffer to Woodland*** *A natural regeneration woodland buffer of up to 30m wide will be provided to the west, south and east of Tunman Wood and Housham Wood that will be encouraged to naturally*

Interested Party	Theme	Comment	Applicant Response
			regenerate from grassland and former cropland. Natural regeneration allows native trees to recolonise areas naturally, offering superior biodiversity, and better climate resilience compared to active tree planting. While planting allows for species selection and faster initial coverage, natural regeneration often results in stronger, better-adapted woodland with higher carbon sequestration potential. Outside of this buffer, within and surrounding the solar infrastructure, will be grassland habitat that will provide additional benefits for biodiversity, including pollinators and new foraging habitats for species associated with the adjacent woodland. *<u>Function</u>* *Natural regeneration will further increase biodiversity, create a buffer between the Site and the woodlands and provide an opportunity to observe the gradual structural transition from grassland to scrub and woodland habitats.* *<u>Implementation</u>* *During construction the areas identified for natural regeneration will be protected to ensure the soils do not become compacted and the natural process required to develop the area can operate. Additional fencing may be required during establishment to restrict grazing pressures (e.g. from rabbits and deer).* *<u>Long-term management</u>* *These areas are not expected to be subject to routine management. Annual inspection and survey during establishment at agreed intervals (as set out at paragraph 7.1.9) will be carried out to record growth and development of the area. If required, litter, rubbish and debris will also be removed and mowing, and cutting will be used to manage scrub / trees at the edge of the buffer where required."* The implementation of this habitat type aligns with the request of the creation of an ecotone at the boundary of the DCO Site with the adjoining Ancient Woodland and Tunman and Housham Wood, and the enhancement and protection of the woodland. Furthermore, the Landscape Mitigation Plan, which forms Appendix A of the Framework LEMP **[REP2-021]**, has been updated (ref. Sheet 1) to reflect this (submitted to the Examination at Deadline 3), illustrating the naturally regenerating buffer area around Tunman Wood and Housham Wood to be implemented. The provision of a detailed LEMP, which is to be substantially in accordance with the Framework LEMP, is secured under Requirement 8 of Schedule 2 to the Draft DCO **[REP2-005]**. By virtue of the same Requirement, the detailed LEMP must be submitted

Interested Party	Theme	Comment	Applicant Response
			to the relevant planning authority for approval in consultation with Lincolnshire County Council, Natural England and the Environment Agency. It must be implemented as approved and maintained throughout the operational lifetime of the Proposed Development.
Lincolnshire Wildlife Trust	LWS Grass Verges	Table 3 of the Framework Construction Environmental Management Plan (FCEMP) (Revision 2, 23rd January 2026), states, regarding works at Navenby Green Man Road Verges LWS: *"Vegetation clearance in these areas will be minimised as much as is practicable to facilitate the construction access track into the fields along Green Man Road. Post-construction habitat reinstatement will be undertaken soon after construction. This will comprise removing the soil and storing this, before re-instating this on completion of the cabling works, with re-seeding using locally sourced seed where practicable (potentially collected from other nearby higher quality calcareous grassland)."* We support reinstatement using the same soil that is to be removed. It is essential that soil with high nutrient concentrations is not used for this reinstatement, as this would lead to domination of weed species. We encourage the applicant to pursue the approach of re-seeding using locally sourced seed; this can be done via green haying. If clarification/advice is needed on this topic, we welcome further discussions. We note the proximity of the development's red line boundary to several other LWS grass verges, including Boothby Graffoe Road Verge; High Dike, Coleby Mill to Harmston Verges; Gorse Lane; and Navenby Heath Road Verges, and wish to see evidence that the development will not impact these sites. Provision of a detailed map of this area, showing the relation of the development to these LWSs, would provide suitable clarification. Additionally, we wish to see more detail on exactly where, and how Navenby Green Man Road Verges LWS will be impacted.	Regarding soil reinstatement at Navenby Green Man Road Verges Local Wildlife Site (LWS), the Framework SMP **[REP1-037]** sets out the management measures regarding appropriate handling and reinstatement of site soil resources in order to provide the best opportunity for the effective reuse of such resources. Regarding re-seeding, as noted in the Framework CEMP **[REP2-013]** and the Framework LEMP **[REP2-021]** seed will be obtained from a local source where practicable. Regarding the proximity of the Proposed Development to other LWS grass verges, Table 8-14 of Chapter 8: Ecology and Nature Conservation of the ES **[REP1-019]**, sets out the potential mechanisms of impact of the Proposed Development upon Gorse Lane and Navenby Heath Road Verges LWS (considered within the 'Four non-statutorily designated sites within 100m of the DCO Site' row) and Boothby Graffoe Road Verge and High Dike, Coleby Mill to Harmston Verges LWS (considered within the '23 non-statutorily designated sites >300m from the DCO Site' row). Regarding Gorse Lane and Navenby Heath Road Verges LWS, there will be no loss of habitat within these LWSs, nor fragmentation of habitats, or of populations of species using habitats within any of these non-statutorily designated sites during construction. Boundary vegetation, such as hedgerows and ditches, potentially linking the LWSs to the DCO Site, will be retained as secured in the Framework CEMP **[REP2-013]** and Framework LEMP **[REP2-021]**. Embedded mitigation measures (see Table 8-13) detailed in the Framework CEMP **[REP2-013]** will ensure there are no impact pathways that will affect the integrity or the functioning of LWSs and as such there will be no species mortality of any species using these LWS. Therefore, there are no impact pathways, either directly or indirectly, that would impact upon the integrity or functioning of these non-statutorily designated sites during the construction of the Proposed Development. During the operation and maintenance phase of the Proposed Development, there are no pathways (e.g. habitat loss or disturbance to designated site features (such as through pollution incidences involved with noise, changes in water quality, air quality, adverse lighting or visual impacts)) which could affect LWSs within 100m of the DCO Site. Therefore, there are no impact pathways, either directly or indirectly, that would impact upon these non-statutorily designated sites during the operation and maintenance phase of the Proposed Development. During the decommissioning phase of the Proposed Development, any impacts are expected to broadly align with those for

Interested Party	Theme	Comment	Applicant Response
			construction and would require mitigating fully in line with relevant legislative and policy requirements at the time of decommissioning. Initial measures are included within the Framework Decommissioning Environmental Management Plan (DEMP) **[REP2-017]**, secured under the draft DCO **[REP2-005]**. Regarding Boothby Graffoe Road Verge and High Dike, Coleby Mill to Harmston Verges LWS, as set out in Table 8-14 of Chapter 8: Ecology and Nature Conservation of the ES **[REP1-019]**, these LWS are all outside of the DCO Site and >300m from the DCO Site, with the closest LWS being High Dike, Coleby Mill to Harmston Verges LWS which is approximately 310m from the Cable Corridor area of the DCO Site. All of these LWSs are designated for their habitat. The construction of the Proposed Development will not directly impact on habitat within these non-statutory designated sites as they are outside of the DCO Site and as such there will be no fragmentation of habitats, or of populations of species using habitats within any of these non-statutorily designated sites during construction. Bou ndary vegetation, such as hedgerows and ditches, potentially linking these LWSs to the DCO Site, will be retained. Mitigation measures (see Table 8-13), detailed in the Framework CEMP **[REP2-013]** will ensure there are no impacts on the integrity or the functioning of LWSs outside of the DCO Site; that no construction related pollution would affect these LWSs (e.g. through management of surface water and sediment runoff (see also Chapter 9: Water Environment of this ES **[REP1-021]**)) and as such there will be no species mortality of any species using these LWSs. Therefore, there are no impact pathways, either directly or indirectly, that would impact upon the integrity or functioning of these non-statutorily designated sites that are outside of the DCO Site. During the operation and maintenance phase of the Proposed Development, there are no pathways (e.g. habitat loss or disturbance to designated site features (such as through pollution incidences involved with noise, changes in water quality, air quality, adverse lighting or visual impacts)) which could affect LWSs outside of the DCO Site. Therefore, there are no impact pathways, either directly or indirectly, that would impact upon these non-statutorily designated sites during the operation and maintenance phase of the Proposed Development. Given the distance of these LWSs from the DCO Site and the lack of pathways, as with the construction phase, there will be no disturbance or direct impact to these LWSs, fragmentation of habitats, habitat degradation or species mortality from decommissioning activities and any impacts at the time of decommissioning would be mitigated fully in line with relevant legislative and policy requirements. Initial measures to ensure that there are no impact pathways, are included within the Framework DEMP **[REP2-017]** secured under the draft DCO **[REP2-005]**.

Interested Party	Theme	Comment	Applicant Response
			Regarding Navenby Green Man Verges LWS, as set out in Table 8-14 of Chapter 8: Ecology and Nature Conservation of the ES **[REP1-019]**, the potential mechanism of impact upon this LWS arises from construction access (which is within the LWS), and the laying of cabling through the LWS, which will directly impact upon, and fragment, habitats over an approximate 30m total working width within this LWS. However, ECO-C1 part b of the Framework CEMP **[REP2-013]** adequately covers all necessary features to avoid and mitigate impacts on Navenby Green Man Road Verges LWS, as stated in paragraph 8.12.7 and 8.12.8 of Chapter 8: Ecology and Nature Conservation of the ES **[REP1-019]**. This is achieved by outlining how disturbance will be limited, and how the LWS will be protected though the construction phase of the Proposed Development. Where any LWS loss is required (potentially for construction access only), methods are provided to ensure that any reinstatement of habitats is carried out successfully and quickly after the construction phase is complete. The methods for re-instating species-rich grassland, including those associated with the LWS, are outlined the Framework LEMP **[REP2-021]** under the species-rich grassland section (from paragraph 5.3.36). Production of a detailed CEMP and LEMP, which are to be developed substantially in accordance with the Framework plans, will be secured under Requirements 12 and 8 of the Draft DCO **[REP2-005]** respectively. The provision of a detailed LEMP, CEMP and DEMP, which are to be substantially in accordance with the respective Frameworks, is secured under Requirements 8, 12 and 20 of Schedule 2 of the Draft DCO **[REP2-005]** respectively. Under Requirement 8 of Schedule 2 to the Draft DCO **[REP2-005]**, the detailed LEMP must be submitted to the relevant planning authority for approval, in consultation with Lincolnshire County Council, Natural England and the Environment Agency, and must be implemented as approved throughout the operation of the Proposed Development. Similarly, under Requirement 12 of Schedule 2 to the Draft DCO **[REP2-005]**, the detailed CEMP must be submitted to the relevant planning authority for approval, in consultation with Lincolnshire County Council (as the local highway authority and waste planning authority), National Highways and the Environment Agency, and must be implemented as approved. Finally, under Requirement 20 of Schedule 2 to the Draft DCO **[REP2-005]**, the detailed DEMP must be submitted to the relevant planning authority for approval, in consultation with Lincolnshire County Council (as the local highway authority and waste planning authority), National Highways and the Environment Agency, and must be implemented as approved. Regarding the request for the provision of a detailed map, please refer to Appendix A, Figure 1: Proximity of Local Wildlife Sites to the Proposed Development which illustrates the location of LWS in proximity to the DCO Site Boundary. Furthermore, the Figure 'Access C-018' and 'Access C-019' within Appendix B of the Framework CTMP **[REP2-023]** (see pages 65 and 66) which outline the proposed access layout, visibility splay

Interested Party	Theme	Comment	Applicant Response
			and swept path for accesses C-018 and C-019, which both interact with the Navenby Green Man Verges LWS.
Roberts Household	-	This is an objection to the whole plan and a complaint that Fosse Green continues to completely ignore views of the local population whilst marching ahead with this grotesque, disrespectful and frankly dangerous plan to industrialised vast areas of our local landscape.	The Applicant disagrees that it has ignored views of the local population - the design of the Proposed Development has been informed by a comprehensive, iterative design process that has sought to minimise effects upon the local population, and has been developed and refined in response to consultation feedback from statutory consultees, local stakeholders and persons with a land interest, with such engagement helping to shape the layout and approach to land use to minimise environmental impacts. The Applicant went beyond the procedural requirements and engaged early in the development process allowing for the consideration of feedback at a formative stage. The consultation process was designed to engage with the local communities which may be most affected by the Proposed Development. The Applicant defined a Core Consultation Zone of 3km from the site which received a direct mailing at each consultation and a Wider Consultation Zone of 5km from the site (see Section 10.1 of the Consultation Report Appendices [**APP-024**] for maps illustrating the Core Consultation Zone and Wider Consultation Area). This was to reach interested individuals or parties who were beyond the Core Consultation Zone. The Applicant also consulted with stakeholders including elected representatives, seldom heard groups, landowners, community organisations and statutory stakeholders as defined in s42 of the Planning Act 2008. The Applicant used a range of methods to share information about the proposals and to reach different audiences. This included digital methods - a project website, holding webinars and hosting online feedback forms, as well as holding in-person events and sending hard-copy letters to residents and other stakeholders. Local communities were invited to have their say on any aspect of the Proposed Development they wished to comment on during non-statutory (11 September 2023 to 20 October 2023) and statutory (21 October 2024 to 2 December 2024) consultation periods. The consultation process was open to anyone who wished to take part and feedback could be given by letter, feedback form or email. Following submission of the DCO Application, the Applicant's website (https://fossegreenenergy.co.uk/) remains open and includes information on how to get in touch with the Applicant to share their views.

Interested Party	Theme	Comment	Applicant Response
			The Applicant has accorded with its duty to take into account all responses to the Non-Statutory and Statutory consultation. The Consultation Report **[APP-023]**, and specifically Chapter 10 and Chapter 11 of the report (which set out the Section 42 and Section 47 consultation undertaken, responses received, issues raised and changes made), explains how the Applicant has had regard to consultation responses. The Planning Inspectorate, upon receipt of the DCO Application, was required to consider whether the Applicant had carried out adequate consultation in accordance with legislative requirements. The Planning Inspectorate invited the relevant local authorities to submit an adequacy of consultation response – these can be found within the Fosse Green Energy Examination Library at AoC-001 to AoC-013. The acceptance of the DCO Application for examination confirms that it is considered that adequate and compliance consultation has been undertaken. Interested parties are able to continue have their say in relation to the DCO Application throughout the Examination process.

2.2 Comments on Deadline 1 Submissions

Table 2-2: The Applicant's Responses to IP Comments on Deadline 1 Submissions

Interested Party	Theme	Comment	Applicant Response
Barry Smith / James Gallagher	Applicants Response to Relevant Representations - Knock on Impact on Decarbonisation	I welcome the applicant's acceptance that the proposal would displace existing non-food crops on site. I also note the applicant's view that the proposed use of the same area of land would contribute more to decarbonisation than current energy generation use so that there would still be a net benefit but I think the applicant overstates the net benefit. I do not accept that greater use of EVs will eliminate the need for biofuels into the foreseeable future. Heavy Duty Diesel powered vehicles and particularly machines with high duty cycles such as long-haul trucks, construction vehicles and intensive agricultural machinery are expected to be either hybrids or use electrical power from fossil fuelled generators well into the future. Batteries cannot replicate the energy density of liquid fuels without incurring a significant weight (size), cost and range disadvantage. By not recognising the displacement effect, the applicant overstates the benefits and the Environmental Statement should be revised to recognise that some of the land used for non-food crops is likely to need replacement.	As set out on p248 of the Applicant's Response to Relevant Representations **[REP1-047]**, the loss of non-food producing land as a result of the Proposed Development is not considered to require the need for alternative land to compensate for the loss of biomass. The two elements of non-food biomass currently are as petrol additives or direct electricity generation, and the proposed development contributes to decarbonising both of these activities through enabling electric vehicle uptake and Low carbon electricity. The UK's policy on surface transport sets the aim for HGVs to decarbonise through electrification, hydrogen fuel cells and electric road systems rather than biofuel (Sector-summary-Surface-transport.pdf) and similar strategies are likely for intensive machinery as well. Whilst there may be a role for biofuels in these sectors, the UK's net zero policy have a clear requirement for solar and renewable energy to enable decarbonising in the sectors mentioned.
Barry Smith / James Gallagher	Applicants Response to Relevant Representations - Socio-Economic Assessment Methodology	I wish to highlight an important tangible omission in the Applicant's approach, namely the Scunthorpe Steel works and associated cluster of firms that are major employers within the applicant's 60-minute travel area. The applicant refers to several aspects of government policy on the green transition but not the policy to re-orientate towards manufacturing for the green economy. There is no indication given by the applicant of engagement on steel production with the Greater Lincolnshire Combined Authority which has the statutory responsibility for economic development and has prioritised saving steel production in the UK. The applicant has identified benefits from the scheme (such as the community fund and new paths through the site to help support the visitor economy). However, the applicant is silent on the one measure that would provide the most significant socio-economic benefit to Lincolnshire, namely a purchasing policy to retain Scunthorpe as a producer of steel. The applicant has not indicated the tonnage of steel in the project but, if all of it was British-poured steel (from blast or electric arc furnaces), it would have a significant economic impact. The applicant dismisses the issue by saying "it is not possible to identify suppliers with certainty for products such as steel, due to the construction start date being some years hence". Whie suppliers may not have been identified, it would be possible at this stage, as a minimum, to commit to signing the UK Steel Charter demonstrating a commitment to use procurement to purchase UK-made steel. Construction starting "some years hence"	As indicated in the Applicant's Response to Relevant Representations **[REP1-047]** on this matter, the Applicant has undertaken an assessment of potential socio-economic impacts which is appropriate to the planning stage. It is based on extensive precedent from other consented solar schemes. It and has been conducted in accordance with the EIA Scoping Opinion (Appendix 1-B: EIA Scoping Opinion of the ES **[APP-119]**). Supply chain impacts have been assessed as part of a compound assessment of direct and indirect employment impacts which concluded that overall there would be a minor beneficial and not significant effect arising from the Proposed Development during construction. Scunthorpe Steel works could form part of this supply chain, as could other suppliers/businesses within the 60 minute drive-time area; none are referenced in the Applicant's assessment because it is not necessary to do so based on the established methodology set out in Chapter 12: Socio-Economics and Land Use of the ES **[AS-016]**.

Interested Party	Theme	Comment	Applicant Response
		does not preclude action in advance of NSIP examination - as evidenced by the Heathrow expansion programme. In a similar vein, a procurement commitment to the purchase of both the solar panels and the enabling electrical infrastructure (cabling, inverters etc) from UK suppliers by the applicant would bring significant benefit to the UK economy from the large-scale production and manufacturing of these products and needs to be mandated. Ministerial statements emphasise the importance of UK industry being supported in the delivery of clean energy supply chains and have been matched by the announcement by Great British Energy of a programme to secure long-term economic growth for the UK in this domain. The £1 Bn Energy Engineered in the UK programme announced on 11 December 2025 forms part of the 10-year plan within the government's published Industrial Strategy to boost investment, create good skilled jobs and unlock private investment for large-scale green energy manufacturing projects such as FGE. £700M of funding will be announced in the summer of 2026 to support the development of the industrial ecosystems required to deliver these UK supply chains. A commitment to the use of these nascent UK supply chains needs to form part of the conditions for the DCO. The oft repeated statement by the applicant of not making any procurement decisions until several years hence needs to be balanced by the requirement to adopt a UK supply chain for all of the different elements within the design of the development as seen with other NSIP projects.	The Framework Employment Skills and Supply Chain Plan (ESSCP) [**APP-197**], submitted as part of the DCO Application, would, once implemented in full post-consent, seek to maximise opportunities for investing in the local supply chain and businesses and procurements of materials that can support the construction and operation of the Proposed Development and other solar projects in the area. This could include businesses such as that referenced in this response, subject to a comprehensive audit to identify the right materials for the Proposed Development. During preparation of the full ESSCP post-consent it will be appropriate for consideration to be given to commit to signing the UK Steel Charter. The development of a detailed ESSCP, to be substantially in accordance with the Framework is secured by Requirement 19 at Schedule 2 of the Draft DCO **[REP2-005]**.
National Highways	Applicants Response to Relevant Representations - General	We note the Applicant's comments that they do not propose to interfere with existing rights of NH. NH are seeking wording within its protective provisions to ensure NH concern is addressed in this regard in terms of the compulsory powers sought and the detailed design for any cable crossings proposed. Discussions on the protective provisions are progressing well and we will provide the ExA with an update at the next deadline in this regard. b. It is noted from the Applicant's comment and the updated dDCO (REP1-007), requirement 14 of Schedule 2 has been updated to include NH as a consultee to the Construction Traffic Management Plan (CTMP). As set out within NH's Relevant Representation (REP-201) NH are seeking to be an approving body to the CTMP and not just a consultee on this matter. NH seek the approval of the CTMP to ensure construction traffic and vehicle movements is managed safely and efficiently, minimising disruption and potential hazards to the strategic road network (SRN). It is noted at paragraph 2(2) of Schedule 2 to the dDCO (REP-1-007) deemed approval is granted to an application to discharge a requirement if the Local Planning Authority (LPA) do not give notice of its decision within a ten week period. NH is concerned it will be caught by these deemed approval provisions over which NH have no control when the LPA responds. There are safety implications if NH are not able to comment and approve the CTMP and consider the impacts on the	Under the agreed Protective Provisions, the Applicant may not exercise compulsory powers in relation to acquisition or use of land, acquisition of new or existing rights and imposition or extinguishment of restrictive covenants in, on, over or under the SRN, or extinguishment of rights of National Highways in third party land without the prior written consent of National Highways' legal services team. The detailed design of cable crossings (which are specifically included in the definition of "specified works"), must be submitted to and approved by National Highways prior to commencement. In relation to Requirement 14 (CTMP) of Schedule 2 to the draft DCO [**REP2-005**], the Applicant considers that the inclusion of National Highways as a consultee is sufficient and as such, does not agree to add National Highways as an approving body for this Requirement. The Applicant considers that it would be highly unusual for National Highways to be named as a discharging body for a DCO Requirement in place of or in addition to the relevant local authority. Whilst the draft DCO includes two separate discharging bodies split between the county's and

Interested Party	Theme	Comment	Applicant Response
		road users of the SRN, particularly in light of the construction programme for the A46 Newark Bypass scheme which is yet to be finalised. This is a fundamental issue of public safety that should not be compromised to enable a private developer to achieve a quicker build programme. The potential implications from a safety perspective of something going wrong far outweigh the Applicant's case for such a provision. NH has statutory obligations to behave reasonably and support sustainable development and so it should not be forced to work under the pressure of deemed consent.	district's functions, this is in respect of separate Requirements, and further, it is likely that the forthcoming local government re-organisation will result in one discharging body for these DCO requirements in due course. Further, Local authorities are well versed in discharging DCO Requirements (as well as conditions of planning permissions) and have a number of processes and procedures in place to do so, including engaging statutory consultees prior to making a discharge decision. Lincolnshire County Council will also be interested to ensure that construction of the Proposed Development does not have adverse impacts on the strategic network, because such impacts are likely to have knock-on effects to their own local highway network. In these circumstances, it is highly unlikely that a local authority would fail to discharge a Requirement (as suggested by National Highways) such that deemed approval would apply. In contrast, National Highways would not normally discharge matters under a DCO, and the Applicant is not aware of any made DCOs for solar schemes which name National Highways as a discharging authority. To add in a further discharging authority to a single plan would add unnecessary complexity and the potential for delay, especially in circumstances where one discharging authority is content to approve the CTMP but the other is not. In addition, National Highways would have no enforcement powers in the event of any breach of the Requirement. Accordingly, the Applicant does not propose to include any amendments to Requirement 14 of the draft DCO in relation to National Highways request.
National Highways	Applicants Response to Relevant Representations – Protecting SRN	We will continue to work collaboratively with the Applicant on matters relating to the Trenchless crossing locations and protective provisions for technical approvals. We will provide the ExA with an update on the protective provisions negotiations at the next deadline. Additionally, at this stage and before NH can remove its concern in this regard, NH would like to understand if consideration has been given to a single crossing, as this option would reduce technical and construction risk on the SRN. We also note	The Applicant and National Highways have agreed bespoke Protective Provisions which will be included in the iteration of the draft DCO submitted to the Examination at Deadline 3A. As stated within the Applicant's Response to Written Representations, Table 2.4 on Page 12 **[REP2-030]**, the Application includes the flexibility for a single trenchless crossing beneath the A46, should the detailed design identify this as being feasible and viable following further geotechnical survey and

Interested Party	Theme	Comment	Applicant Response
		the typographical error in the applicant's response as highlighted. The reference should be to CD 622.	assessment. The parameters and assessment do not require two trenchless crossings to be built in the event that the Applicant can find a single trenchless crossing solution. This will be explored with National Highways post-consent, at the detailed design stage. At this stage however the Applicant has reserved the right for – and assessed – two crossings, in case a single crossing is not feasible or viable.
National Highways	Applicants Response to Relevant Representations – Drainage	Following a review of the Deadline 1 submissions, including the Framework Surface Water Drainage Strategy (Clean) (REP1-025) and the Framework Surface Water Drainage Strategy (Tracked) (REP1-026), it is noted that some small areas of impermeable surface are proposed to be attenuated to pre-development runoff rates. We have reviewed these areas and raise no further concerns with the proposed drainage strategy. In addition, we have no further concerns in relation to the proposed swales. Therefore, NH no longer seeks consultation on requirement 10 of Schedule 2 of the dDCO (REP1-007).	The Applicant notes this comment and no further response is required.
National Highways	Applicants Response to Relevant Representations – Additional Interface	NH accepts the proposed landscaping mitigation for glint and glare effects adjacent to the A46 trunk road. However, given the timeframe between now and the commencement of construction of the solar sites, which share a direct boundary with the A46 Trunk Road, NH considers ongoing involvement to be essential. Whilst proposed mitigation may be acceptable now, factors such as climate change and climate events introduces uncertainty regarding potential impacts on hedgerow density which could affect what mitigation is acceptable when the authorised development is built out. The principal purpose of the SRN, and of NH licence from the Secretary of State, is to enable safe and reliable journeys for people and goods. Therefore, managing glint and glare is paramount to achieving this objective. As set out in the Framework LEMP (AS-122), maintenance measures will be defined and implemented through the detailed LEMP, alongside the establishment of a post-construction monitoring programme, which will be formalised and agreed as part of that process. For reasons set out above, NH would seek the opportunity to review this information to ensure a suitable monitoring programme is included. NH therefore wishes to be named as a consultee under Schedule 2, Requirement 8(1) (Landscape and Ecological Management Plan) of the Draft DCO [APP-016].	Post construction, following the expiry of the defects period, responsibility for routine maintenance of the SRN reverts to National Highways. Routine maintenance of soft landscaping works (including glint and glare mitigation) must already be established and thereafter be maintained for a period of 3 years by the undertaker. This provision is secured under paragraph 13 of the Protective Provisions (Defects period) and ensures that if climate change or climate events impact hedgerow density, the undertaker will be required to remedy it. Prior to construction, the undertaker is required to seek approval of detailed designs from National Highways. The definition of "detailed design" in the Protective Provisions includes landscaping and "other such information that may be required to be used to inform the detailed design of the specified works". The Applicant is agreeable to including National Highways as a consultee on Requirement 8 (LEMP) with the caveat that National Highways' consultation on the detailed LEMP is to be limited to mitigation works within 15m of the A46. The Applicant has amended the wording of the requirement accordingly. This will be

Interested Party	Theme	Comment	Applicant Response
			reflected in the updated draft DCO to be submitted at Deadline 3A (24 March 2026).
National Highways	Applicants Response to Relevant Representations – Traffic and Transport – Framework Construction Traffic Management Plan (CTMP)	National Highways understands that a review has been undertaken for affects to PROWs and the temporary impacts during construction on the existing pedestrian, cycle and horse-riding network. However, until the details of the signage including positioning of the proposed traffic management are confirmed, it is not possible to determine whether there would be any impacts on non-motorised users. Therefore, we consider a WCHAR is necessary to be produced by the applicant, or an exception certificate produced once the traffic management has been further established. As set out in the Design Manual for Roads and bridges GG 142 Walking, cycling and horse-riding assessment and review, it is the responsibility of the applicant's design organisation to determine whether a WCHAR assessment is required. NH seek to address this requirement within its protective provisions. In terms of the Applicants comments on the consultation of requirement 14, NH response at 1b of this table applies here, in that NH are seeking an approval role to the CTMP rather than consultation.	A meeting between the Applicant and NH was held on 12 February 2026 where a number of items, including those raised in this comment, were discussed. It was agreed that a WCHAR or exemption certificate will be submitted at detailed design stage once the proposals for traffic management and signage have been further developed. This will be reflected in the SoCG with National Highways, which will be submitted at Deadline 3A, in line with the Examining Authority' s request in its Procedural Decision dated 22 August 2025 **[PD-005].** The Applicant confirms that Protective Provisions have been agreed with National Highways and these have been incorporated into the iteration of the draft DCO **[REP2-005]** submitted to the Examination at Deadline 3A. Under the heading 'Prior approvals and security' in the Protective Provisions for the benefit of National Highways set out in Schedule 14, the undertaker is required to submit detailed designs of any works to, or signalisation on, the SRN for approval by National Highways. This includes, specifically, information demonstrating that, where considered relevant by National Highways, a walking, cycling and horse riding assessment will be carried out in accordance with DMRB GG142. Where the Proposed Development falls within one of the exemptions to the WCHAR process under DMRB GG142, the undertaker will apply for an exemption certificate. The Applicant has responded to National Highways' request to be an approving body to the CTMP (Requirement 14) above.

Interested Party	Theme	Comment	Applicant Response
National Highways	Applicants Response to Relevant Representations – Abnormal Loads	It is noted within the current Framework Construction Traffic Management Plan (AS-102) routing as the port of entry is not yet known. Therefore, will be carried out a later stage, once the port of entry has been determined. NH seek to correct the position set out within its Relevant Representation (REP1-047), the National Highways Abnormal Indivisible Loads (AIL) team has not had any engagement to date, nor has there been any engagement on route feasibility work. National Highways had previously understood that the Applicant had contacted NH, via their transport consultant Wynns Ltd, regarding AIL routes to the Navenby area in which An Agreement in Principle (AIP) has been provided. However, it has seen been established this AIP related to a separate nearby project. Early route feasibility work is encouraged with National Highways to mitigate delays to project delivery. We encourage engagement with our AIL team and we have provided the relevant contact details to do so previously, please see below. Abnormal Loads email: abnormal.loads@nationalhighways.co.uk At this early stage, our primary interest regarding Abnormal Load deliveries is to agree the port of delivery and ensure compliance with the Water Preferred Policy, namely using the nearest suitable port of entry to minimise road mileage. With respect to route suitability, it is common at this stage of a project for only a high-level abnormal loads assessment to be undertaken. However, early engagement with local stakeholders is encouraged to identify any potential constraints, such as structures that could render the access route unsuitable. Agreement in Principle (to approve the port of entry) needs to be obtained from us as early as possible to avoid any potential delays to delivery. AIL movement refusal risk lies with the applicant and the project. In terms of the CTMP, NH's response at 1b of this table applies here, in that NH are seeking an approval role to the CTMP rather than consultation.	As above, a meeting between the Applicant and National Highways was held on 12 February 2026 where a number of items, including those raised in this comment, were discussed. The Applicant contacted the National Highways AIL team on 4 March 2026 and received a response from them on 5 March 2026 setting out the Special Order application process and the required route if Special Order loads for the project arrive at Immingham Docks. The Applicant notes the recommended 8-10 week timeline for Special Order applications and will liaise with the National Highways AIL team further at detailed design stage, once the port of entry has been identified. This will be reflected in the SoCG with National Highways, which will be submitted at Deadline 3A, in line with the Examining Authority's request in its Procedural Decision dated 22 August 2025 **[PD-005].** Furthermore, as noted in TT.2.06 in the Applicant's Response to the Examining Authority's Second Written Questions **[EN010154/EXAM/9.19]**, paragraph 7.3.4 of the Framework CTMP has been updated (submitted to the Examination at Deadline 3) to note: "*In addition, a separate road condition survey may will be carried out for the abnormal vehicle routes (transformer and cable drums) for the transformer to the Principal Site, covering the route between the A46 junction and the proposed site access on Bassingham Road (C-009) i.e. via Haddington Lane*." This update ensures that a road condition survey will be carried out for the AIL route, for both the AIL for the transformer and also the other (cable drum) AIL routes, between the A46 junction and the proposed site access on Bassingham Road (C-009).

Interested Party	Theme	Comment	Applicant Response
National Highways	Applicants Response to Relevant Representations – Compulsory Acquisition	6.2 NH note the Applicant's position and have no further comments 6.3 Discussions between NH and the Applicant on the protective provisions are still ongoing however they are progressing well. NH would seek to address its concerns in this regard within the protective provisions to ensure NH's has a role in the approval of the detailed design for the cable crossing under the SRN or land NH has an interest in to ensure the cable routes do not interfere with NH assets and can co-exist.	Under the Protective Provisions agreed for the benefit of National Highways in Part 5 of Schedule 14 to the draft DCO **[REP2-005]**, National Highways' approval for detailed design is secured under the heading 'Prior approvals and security' (paragraph 42), which applies to cabling works under the A46, as well as works on, in or over the SRN or land in which National Highways has an interest. This approval mechanism ensures that National Highways' assets are protected. The above referenced Protective Provisions have been agreed with National Highways and have been incorporated into the iteration of the draft DCO **[REP2-005]** submitted to the Examination at Deadline 3A. The Applicant believes that the new rights it is seeking to acquire in plots 2/7, 4/3, 4/5, 4/10, 4/11 and 4/13 can co-exist with National Highways' interests. Proposed directional drilling under the A46 will not affect the operation of the SRN as cable crossings will be provided under the surface of National Highways land. No direct interaction with the A46 carriageway or interference with the existing rights of National Highways is proposed. The location of the cable crossings will be discussed with National Highways at detailed design stage in respect of feasibility and geotechnical risk. The Applicant will also provide further details to National Highways as part of the feasibility study for Work No. 6.
National Highways	Applicants Response to Relevant Representations – Draft DCO	NH are content for the Applicant's proposed wording within this response and amendments made to Schedule 4 of the dDCO (REP1-007), subject to agreement of the NH's Protective Provisions. The protective provisions would seek to protect NH assets whilst the applicant is exercising powers pursuant to article 8.	The Applicant acknowledges National Highways' comment and confirms that the proposed wording has been inserted into the draft DCO **[REP2-005]**. Under the Protective Provisions, the undertaker must not exercise DCO powers, including article 8 (street works) powers, under, over, on or in any part of the SRN or land in which National Highways has an interest without the consent of National Highways. National Highways' approval for any proposed road space bookings or traffic management schemes is also required.
National Highways	Applicants Response to Relevant Representations – Requirement 4 approved details and amendments to them	NH are agreeable to the Applicant's proposed wording within this response and note the Applicant has updated dDCO at Schedule 2 (REP1-007). NH concern is addressed in this regard	The Applicant acknowledges NH's comment and confirms that the proposed wording has been inserted into the draft DCO **[REP2-005]**.

Interested Party	Theme	Comment	Applicant Response
National Highways	Applicants Response to Relevant Representations – Requirement 8 Landscape Ecological Management Plan	NH comments at section 5 above also apply here. NH wishes to be named as a consultee under Schedule 2, Requirement 8(1) (Landscape and Ecological Management Plan) of the Draft DCO [APP-016].	As noted above, the Applicant is agreeable to including National Highways as a consultee on Requirement 8 (LEMP) with the caveat that National Highways' consultation on the detailed LEMP is to be limited to mitigation works within 15m of the A46. The Applicant has amended the wording of the requirement accordingly. This will be reflected in the updated draft DCO to be submitted at Deadline 3A (24 March 2026).
National Highways	Applicants Response to Relevant Representations – Requirement 9 Fencing and other means of enclosure	NH updated and corrected the position it took on requirement 9 at the ISH2 within its summary of oral submissions (REP1- 073) NH require some further information before it can reconsider its position on requirement 9. NH requires further information and clear proposals demonstrating adequate set-back distances from the edge of the carriageway to ensure compliance with policy (DfT Circular 01/2022, paragraph 57). In general terms, structures should be located sufficiently far from the SRN boundary so that they cannot topple onto the SRN or undermine its geotechnical integrity. In addition, sufficient space must be retained to allow NH to undertake all routine and emergency maintenance activities for the A46 trunk road. At present, no plans have been submitted that clearly show the distance from the SRN, including foundation design and parameters.	The Applicant notes that during the oral submissions made by National Highways at Issue Specific Hearing 2 (ISH2), it was stated that upon further consideration NH no longer requires to be consulted on the provision of fencing and other means of enclosure under Requirement 9 of Schedule 2 to the **Draft DCO** [**REP2-005**]. This is subject to the Applicant providing further information, which is set out below. The Works Plans **[AS-105]** illustrate, and secure, the distance of structures (including fencing) from the SRN. It should be noted that the fencing around the solar PV Array Areas will be 'stock proof fence' (i.e., wooden posts and metal wire mesh), as set out in the Proposed Development Parameters **[REP1-029]**. If a distributed BESS is progressed, the fencing will comprise a palisade style fence up to 2.5m above ground level, painted in a muted colour sympathetic to the surrounding environment. As defined by the Works Plans **[AS-105]** and Proposed Development Parameters **[REP1-029]** (Works Area 3), any palisade fencing will be offset from the A46 (over 20m from the A46, as illustrated on the Works Plans **[AS-105]**). Furthermore, measure TT-C1 (item t) of the **Framework CEMP [REP2-013]** notes: *"Where the DCO Site adjoins the A46, any proposed fencing will be located behind the existing hedgerows which adjoin the A46."* As such, fencing will be located sufficiently far from the SRN (and behind existing hedgerow) so that it cannot topple onto the SRN or undermine its geotechnical integrity. There is also sufficient space to allow NH to undertake all routine and emergency maintenance activities for the A46 trunk road.

Interested Party	Theme	Comment	Applicant Response
			As noted in the Framework OEMP **[REP2-015]** (ref. WAT-O6), regular inspection and maintenance of fencing will be undertaken throughout the operational phase.
National Highways	Applicants Response to Relevant Representations – Requirement 10 Surface and foul water drainage	Please see our response to section 3 above. NH no longer seeks consultation on requirement 10 of Schedule 2 of the dDCO (REP1-007). NH no longer require the amendments proposed at requirement 10 (4) as this can be addressed within the protective provisions.	The Applicant acknowledges NH's comment and confirms that details of drainage and ducting as required by DMRB CD 535 (asset data and risk management) and DMRB CS 551 (drainage surveys – standards for Highways are included in the definition of "detailed design information" in the Protective Provisions set out in Part 5 of Schedule 14 to the draft DCO **[REP2-005]**. Under the heading "Prior approvals and security" (paragraph 42) the undertaker is required to submit detailed designs to National Highways for approval for all works under, on, in or over the SRN or land in which National Highways has an interest.
National Highways	Applicants Response to Relevant Representations – Requirement 14 Construction Traffic Management Plan	NH response at 1b of this table applies here, in that NH are seeking an approval role to the CTMP rather than consultation	The Applicant does not consider it appropriate or necessary for National Highways to approve the CTMP, for the reasons set out above.
Environment Agency	Agreed/resolved issues	Agreed/resolved issues The following issues which were 'Agreed in principle', subject the submission of satisfactory revised/additional application documents at Deadline 1 are now resolved/Agreed: EA01 - Requirement 10 (Surface and foul water drainage) We are satisfied that the Environment Agency has been included as a named consultee in this requirement in the revised Draft Development Consent Order (Revision 2) [REP1-007 & REP1-008]. As such, this issue is now resolved. EA02 - Permitted Preliminary Works We are satisfied with the Applicant's Response to Relevant Representations (Revision 1) [REP1-047] and the amendment made to Requirement 12 in the revised Draft Development Consent Order (Revision 2) [REP1-007 & REP1-008]. As such, this issue is now resolved. EA03 - Discharge of Requirements procedure	The Applicant notes this comment. The position of the EA will be reflected in the SoCG between the Applicant and the EA, which will be submitted at Deadline 3A, in line with the Examining Authority's request in its Procedural Decision dated 22 August 2025 **[PD-005].**

Interested Party	Theme	Comment	Applicant Response
		We are satisfied with the Applicant's Response to Relevant Representations (Revision 1) [REP1-047] and the amendment made to paragraph 5(5) of Schedule 15 in the revised Draft Development Consent Order (Revision 2) [REP1-007 & REP1-008]. As such, this issue is now resolved. EA04 - Disapplication of flood risk activity permits (FRAPs) The Applicant no longer seeks to disapply the requirement for FRAPs. We are satisfied that the appropriate amendments have been made to the revised Draft Development Consent Order (Revision 2) [REP1-007 & REP1-008]: Regulation 12 of the Environmental Permitting (England and Wales) Regulations 2016 in respect of a flood risk activity (Article 6(1)(e)) has been removed. There are no unnecessary protective provisions in the dDCO included (in Schedule 14) for the Environment Agency's benefit in this regard, as they are not now required. The Consents and Agreements Position Statement (Revision 2) [REP1-011 & REP1- 012] has also been updated accordingly. As such, this issue is now resolved. EA07 - Witham Washlands (Lincoln) Flood Storage Area – HDD construction compound We are satisfied with the Applicant's Response to Relevant Representations (Revision 1) [REP1-047]. As such, this issue is now resolved. EA08 - Flow direction of main rivers We are satisfied with Applicant's Response to Relevant Representations (Revision 1) [REP1-047] and that Table 8-10 of the revised ES Chapter 8: Ecology and Nature Conservation (Revision 2) [REP1-019 & REP1-020] has been updated with the correct flow direction for both rivers. As such, this issue is now resolved. EA09 - Protection of fish during spawning We are satisfied with Applicant's Response to Relevant Representations (Revision 1) [REP1-047] and that the revised Framework Construction Environmental Management Plan (Revision 2) [REP1-031 & REP1-032] has been updated to include avoidance of the coarse fish spawning season. As such, this issue is now resolved. EA10 - Invasive species – Signal Crayfish We are satisfied with Applicant's Response to Relevant Representations (Revision 1) [REP1-047] and that the revised Framework Construction Environmental	

Interested Party	Theme	Comment	Applicant Response
		Management Plan (Revision 2) [REP1-031 & REP1-032] has been updated to include pre-construction INNS to inform the Biosecurity Management Plan and now includes INNS animals as well as plants. As such, this issue is now resolved. EA13 - Horizontal directional drilling (HDD) – drilling fluid breakout (groundwater) We are satisfied with Applicant's Response to Relevant Representations (Revision 1) [REP1-047] and that the revised Framework Construction Environmental Management Plan (Revision 2) [REP1-031 & REP1-032] and ES Chapter 9: Water Environment (Revision 2) [REP1-021 & REP1-022] have been updated accordingly. As such, this issue is now resolved. Please also refer to our comments in response to ExQ1 question WE.1.02 in Appendix 2. EA14 - Horizontal directional drilling (HDD) – drilling fluid breakout (surface water) We are satisfied with Applicant's Response to Relevant Representations (Revision 1) [REP1-047] and that the revised Framework Construction Environmental Management Plan (Revision 2) [REP1-031 & REP1-032] and ES Chapter 9: Water Environment (Revision 2) [REP1-021 & REP1-022] have been updated accordingly. As such, this issue is now resolved. Please also refer to our comments in response to ExQ1 question WE.1.02 in Appendix 2. EA18 - BESS – firewater containment and disposal We are satisfied with Applicant's Response to Relevant Representations (Revision 1) [REP1-047] and that the Framework Battery Safety Management Plan (Revision 2) [REP1-041 & REP1-042] has been updated accordingly. Our concerns over testing and removing firewater have been satisfactorily addressed. As such, this issue is now resolved. Please note however that the linked issue regarding penstock valves (EA16) remains under discussion. Please section 1.2 below. EA19 - Foul water strategy We are satisfied with Applicant's Response to Relevant Representations (Revision 1) [REP1-047] and that the revised Flood Risk Assessment (Revision 2) [REP1-023 & REP1-024] and revised Framework Surface Water Drainage Strategy (Revision 2) [REP1-025 & REP1-026] have been updated accordingly. Our concerns if the Applicant had been using a septic tank which may discharge effluent to the environment have been addressed. The ES Chapter 9 (Revision 2) [REP1-021 & REP1-022], Flood Risk Assessment (Revision 2) [REP1-023 & REP1-	

Interested Party	Theme	Comment	Applicant Response
		024] and Framework Surface Water Drainage Strategy (Revision 2) [REP1-025 & REP1-026] are now consistent and refer to a sealed cesspit with no overflow to ground pipe system. We are therefore satisfied that this has been resolved. Within our discussions on the Statement of Common Ground (SOCG) in relation to this issue, we have requested additional confirmation that cesspits will be collected/emptied by specialist licensed contractors but understand that we are a named consultee in Requirement 10, so this can be addressed post-consent, if required. EA20 - Wheel wash water We are satisfied with Applicant's Response to Relevant Representations (Revision 1) [REP1-047] and that the revised Framework Construction Environmental Management Plan (Revision 2) [REP1-031 & REP1-032] has been updated accordingly. As such, this issue is now resolved. EA21 - PFAS in PV cells We are satisfied with Applicant's Response to Relevant Representations (Revision 1) [REP1-047] and that the revised Proposed Development Parameters (Revision 2) [REP1-029 & REP1-030] has been updated accordingly. As such, this issue is now resolved. EA23 - Water supply assessment and strategy Following the submission of the Water Resource Assessment (Revision 1) [REP1- 049] into the examination, we are satisfied that this issue is resolved. EA24 - Waste classification and soil reuse We are satisfied with Applicant's Response to Relevant Representations (Revision 1) [REP1-047] and that the revised Framework Construction Environmental Management Plan (Revision 2) [REP1-031 & REP1-032] has been updated accordingly. As such, this issue is now resolved.	
Environment Agency	Under Discussion/unresolve issues	EA05 - Disapplication of Water Resources Act 1991 We have no further comments to make following the Deadline 1 submissions. The Applicant has not provided a response to us on this issue yet, but they have indicated that they want to discuss it. We are working to arrange this discussion and will provide a further update to the ExA at the next examination deadline.	The Environment Agency contacted the Applicant on 10 March 2026 noting: "*in the circumstances we are content to agree to the disapplication of the byelaws*". This is reflected in the SoCG between the Applicant and the Environment Agency which will be submitted at Deadline 3A, in line with the Examining Authority's request in its Procedural Decision dated 22 August 2025 [**PD-005**].

Interested Party	Theme	Comment	Applicant Response
Environment Agency		EA11 - Stopping works where potentially contaminated land is encountered We have reviewed the following submissions in relation to this issue: • Applicant's Response to Relevant Representations (Revision 1) [REP1-047] • Framework Construction Environmental Management Plan (FCEMP) (Revision 2) [REP1-031 & REP1-032] • Framework Operational Environmental Management Plan (FOEMP) (Revision 2) [REP1-033 & REP1-034] • Framework Decommissioning Environmental Management Plan (FDEMP) (Revision 2) [REP1-035 & REP1-036] We agree with the Applicant's response to this issue in REP1-047 and respective amendments to the revised Framework CEMP (Revision 2), Framework OEMP (Revision 2) and Framework DEMP (Revision 2) documents, in relation to stopping works. However, in the first draft SOCG it is stated that the paragraphs below the lettered lists, which duplicates some instructions, would be deleted. The paragraph outlined to be deleted mentions "(including groundwater)" which we asked to be retained elsewhere in the instruction to ensure that groundwater is considered. We ask that these requests are completed as previously proposed. To clarify, in the FCEMP, ID GC-01, we ask that the Applicant: • Delete this paragraph (below the list), as was previously proposed: "If potentially contaminated land is encountered during construction works(including groundwater), works will be stopped in the affected area while further investigation is carried out in order to reduce the potential for contamination to be spread further before its extent and severity is identified, and appropriate remediation is agreed." • Then update (g) to read: "In the event that contamination is identified (including groundwater), works will be stopped in the affected area and appropriate remediation measures would be agreed with the appropriate authorities and undertaken to protect construction workers, future site users, water resources, structures, and services." In addition, we would like equivalent additions to the FOEMP and FDEMP. Specifically: • OEMP ID GC-01 Mitigation (h) updated to state: "In the event that contamination is identified (including groundwater), works will be stopped in the affected area and appropriate remediation measures would be taken to protect maintenance workers, future site users, water resources, structures and services;"	In response to this comment, the Applicant has updated the wording of GC-C1, GC-O1 and GC-D1, as suggested by the Environment Agency, within the Framework CEMP **[REP2-013]**, Framework OEMP **[REP2-015]** and Framework DEMP **[REP2-017]**. The updated Framework plans, reflecting these changes, have been submitted to the Examination at Deadline 3. This update has also been recorded within the SoCG between the Applicant and the Environment Agency, which will be submitted at Deadline 3A, in line with the Examining Authority's request in its Procedural Decision dated 22 August 2025 **[PD-005]**.

Interested Party	Theme	Comment	Applicant Response
		• DEMP ID GC-01 Mitigation (l) updated to state: "In the event that contamination is identified (including groundwater), works will be stopped in the affected area and appropriate remediation measures will be taken to protect decommissioning workers, future site users, water resources, structures and services;" The reason for this is to ensure that site workers are reminded that groundwater is a sensitive receptor and is susceptible to contamination, so must be protected. We consider this is straightforward to resolve and we are hopeful that we the issue can be resolved by the next deadline.	
Environment Agency		EA12 - Assessment of impacts on groundwater quality The Applicant has updated paragraph 9.7.48 of the ES Chapter 9: Water Environment [REP1-021 & REP1-022] to reflect the most recent guidance. However, the issue is not yet fully resolved as we have queried the Applicant's use of the wording "if and where necessary" in relation to the guidance. There is no "if" in the necessity of following relevant guidance. As such, we asked for "if" to be removed. We will discuss this with the Applicant over the coming weeks.	In response to this comment, the Applicant has updated the wording of paragraph 9.7.48 in Chapter 9: Water Environment as suggested by the Environment Agency. The updated ES chapter, reflecting this change, has been submitted to the Examination at Deadline 3. This update has also been recorded within the SoCG between the Applicant and the Environment Agency, and will be submitted at Deadline 3A, in line with the Examining Authority's request in its Procedural Decision dated 22 August 2025 **[PD-005]**.
Environment Agency		EA16 - BESS – penstock valves and swales We have reviewed the following submissions in relation to this issue: • Applicant's Response to Relevant Representations (Revision 1) [REP1-047] • Framework Battery Safety Management Plan (FBSMP) (Revision 2) [REP1-041 & REP1-042] • Framework Operational Environmental Management Plan (FOEMP) (Revision 2) [REP1-033 & REP1-034] This issue remains unresolved for the following reasons: • The FBSMP has been updated in paragraphs 3.2.12 and 4.3.7, however we still request to confirm in FBSMP that the penstock will have a manual option of closing should the automatic system fail, and to clarify what the trigger for automatically closing is. • There is no reference to penstock maintenance in the FOEMP. Paragraph 3.2.12 of the FBSMP states, "All maintenance will be undertaken in a carefully controlled manner following the Site safety rules and in accordance with the Framework Operational Environmental Management Plan (OEMP)	In response to this comment, the Applicant has updated the wording of paragraph 4.3.7 of the Framework BSMP, as suggested by the Environment Agency, to note "*The automatic close trigger of the penstock will be linked with fire detection, spill detection or abnormal conditions. The penstock will also have a manual option of closing should the automatic system fail*". Furthermore, the Framework OEMP at WAT-O6 has been updated to specifically reference penstock maintenance, as suggested by the Environment Agency. The updated Framework plans, reflecting these changes, have been submitted to the Examination at Deadline 3. This update has also been recorded within the SoCG between the Applicant and the EA, will be submitted at Deadline 3A, in line with the Examining Authority's request in its Procedural Decision dated 22 August 2025 **[PD-005]**.

Interested Party	Theme	Comment	Applicant Response
		[EN010154/APP/7.8] submitted as part of the DCO application". There should be specific reference to penstock maintenance in Table 6, WAT-03, as there currently isn't. Paragraph 2.2.1 of the FOEMP states general "equipment maintenance and servicing" and Table 6, WAT-05 states "regular inspection and maintenance of the drainage systems". We will discuss this with the Applicant over the coming weeks.	
Environment Agency		EA17 - Use of gravel in drainage systems around BESS and substation We have reviewed the following submissions in relation to this issue: • Applicant's Response to Relevant Representations (Revision 1) [REP1-047] • Framework Battery Safety Management Plan (FBSMP) (Revision 2) [REP1-041 & REP1-042] • Framework Surface Water Drainage Strategy (Revision 2) [REP1-025 & REP1-026] The issue remains unresolved. The Applicant is aware of the comments we have made in response to the draft SOCG we are working on. We also wish to point out that we have concerns regarding the integrity of the impermeable lining. Measures should be confirmed to ensure the integrity of the impermeable lining is preserved and checked during the removal process. We will discuss this with the Applicant over the coming weeks. The Applicant should also be aware and factor in that it could take some time to obtain the necessary permit to discharge firewater to ground or surface water. If there is prolonged rainfall, and/or another fire event in this time, they need to ensure the drainage system has sufficient capacity to cope while the testing and permit issuing is done. We advise that the Applicant refers to Discharges to surface water and groundwater: environmental permits - GOV.UK - on this website it advises it can take 4 months for a new permit decision.	The Applicant has discussed this item further with the Environment Agency. In response to this comment, the Applicant has updated the wording of paragraph 4.11.4 of the Framework SWDS to note: "*The impermeable lining will be overlaid by a minimum 300mm of soil. Any vegetation in swales will be shallow rooted fine-growing grasses and mixtures of perennial ryegrass and fescues, to avoid the potential for roots compromising the integrity of the lining. In the event this vegetation or soil needs to be removed during the operational phase, this would be carried out using hand dig techniques to ensure the integrity of the impermeable lining would not be damaged. Regular maintenance inspections will be carried to remove weeds, control plant growth, and check the swale lining*". The updated Framework plan, reflecting this change, has been submitted to the Examination at Deadline 3. This update has also been recorded within the SoCG between the Applicant and the Environment Agency, which will be submitted at Deadline 3A, in line with the Examining Authority's request in its Procedural Decision dated 22 August 2025 **[PD-005]**.
Environment Agency		EA22 - Storage of waste batteries We have reviewed the following submissions in relation to this issue: • Applicant's Response to Relevant Representations (Revision 1) [REP1-047] • Framework Battery Safety Management Plan (FBSMP) (Revision 2) [REP1-041 & REP1-042]	In response to this comment, the Applicant has updated the wording of paragraph 3.2.16 of the Framework BSMP and measure MW-O1 of the Framework OEMP, as suggested by the Environment Agency, to add "impermeable" before "bunded". The updated Framework plans, reflecting these changes, was submitted to the Examination at Deadline 3. This update has also been recorded within the SoCG between the Applicant and the

Interested Party	Theme	Comment	Applicant Response
		• Framework Operational Environmental Management Plan (FOEMP) (Revision 2) [REP1-033 & REP1-034] We have no further comments to make to those made in our Deadline 1 response. We are in discussion with the Applicant through the draft SOCG and we will discuss it with the Applicant over the coming weeks. We have flagged to the Applicant that we request that "impermeable" is added before "bunded" in the FBSMP (paragraph 3.2.16) and FOEMP (measure MW-O1). Please refer to Appendix 1 for a summary of our updated position on the issues we raised in our Relevant Representation [RR-089]. Appendix 3 includes a summary of our overall position on topic areas.	Environment Agency, which will be submitted at Deadline 3A, in line with the Examining Authority's request in its Procedural Decision dated 22 August 2025 **[PD-005]**.
Environment Agency	Other matters	Regarding item 33 '9.0 Water Management Plan – water quality monitoring' in the Applicant's Response to Relevant Representations (Revision 1) [REP1-047]: We provided comments on the Applicant's response in the first draft SOCG on this topic. To clarify, Table 4 of the FCEMP [REP1-031 & REP1-032] states that "The Water Management Plan (WMP) (which will be produced post consent as part of the detailed CEMP(s)) will include details of pre, during and post-construction water quality monitoring." Whilst Table 6 of the FOEMP states "Monitoring requirement will be included in the detailed OEMP(s)." It is positive that both include 'monitoring' but for consistency we would like it if the FOEMP [REP1-033 & REP1-034] to also reference the WMP. The details of the frequency and method of monitoring can be agreed post consent, as we are a named consultee on the final CEMP and OEMP. If the FOEMP [REP1-033 & REP1-034] is updated to include WMP then we will be able to consider this 'Agreed' following the submission of the updated FOEMP into the examination.	In response to this comment, the Applicant has updated the wording within the 'Monitoring Requirements' column of Table 6 of the Framework OEMP, as suggested by the Environment Agency, to include reference to the WMP. The updated Framework plan, reflecting this change, was submitted to the Examination at Deadline 3. This update has also been recorded within the SoCG between the Applicant and the Environment Agency, which will be submitted at Deadline 3A, in line with the Examining Authority's request in its Procedural Decision dated 22 August 2025 **[PD-005]**.
Lincolnshire County Council	Framework Landscape and Ecological Management Plan	The Council notes the reference to an "Ecological Advisory Group" at 7.1.9. and considers that this should align well with the Council's suggestion of an Ecological Steering Group in the Local Impact Report (REP1-053). The Council considers that a draft Terms of Reference for the group should be included in the Framework LEMP and is happy to provide the Applicant with a form of words for this used by other recent solar NSIP developments in Lincolnshire.	The purpose of the "Ecological Advisory Group or similar" referenced at paragraph 7.1.9 of the Framework LEMP **[REP2-021]** is to oversee the post-construction ecological monitoring works, with the key function of the Group comprising review of monitoring data on habitats and species to inform future management plans (as necessary). As noted at paragraph 1.3.7 of the Framework LEMP **[REP2-021]**: "*Any long-term biodiversity monitoring and management requirements specified in this document will be carried out by the*

Interested Party	Theme	Comment	Applicant Response
			Applicant and/or a Contractor appointed by the Applicant". As such, the Ecological Advisory Group (or similar) will comprise the Applicant or Operations Contractor, Environmental Manager (as defined in the Framework OEMP **[REP2-015]** – ref. paragraph 6.1.2, 6.1.3 and 6.2.1), a suitably qualified and experienced ecologist, and if relevant to the Proposed Development any research institution(s) carrying out ecological studies onsite during operation. It is not intended that the LPA will be a member of the Ecological Advisory Group and so it is not necessary for the Applicant to meet the LPA's costs of attendance. As set out at paragraph 7.1.11 of the Framework LEMP **[REP2-021]**, results from the post-construction monitoring will feed into the detailed management plan and, if required, management proposals may be amended accordingly based on this monitoring (for example, replacement planting and/or changes to planting species where planting has failed to establish). As noted at paragraph 7.1.9 of the Framework LEMP **[REP2-021]**, the monitoring reports for surveys during operation will be sent to the host authorities and the Lincolnshire Wildlife Trust for their information, along with a summary of any changes to management proposed. Any material changes proposed to the approved detailed LEMP management proposals, in response to the findings of post-construction monitoring, will be sent to the host authorities for their review and approval prior to their implementation. As noted at paragraph 7.1.9 of the Framework LEMP, the Terms of Reference of the Ecological Advisory Group (or similar) will be drafted following receipt of any future consent and agreed as part of the agenda for the first group meeting. The Framework LEMP has been updated (submitted to the Examination at Deadline 3) to clarify the purpose and function of the Ecological Advisory Group (or similar) and the composition of the Group, as outlined above.
Lincolnshire County Council	Archaeology	The issues flagged in LCCs Local Impact Report regarding the major ground disturbances identified through the submitted documentation remain.	As noted in the Applicant's Response to Local Impact Reports **[REP2-031]**, consultations with LCC's archaeological advisor and Historic England are ongoing. The Applicant would like to acknowledge the support and involvement from the consultees (both at LCC and HE) in the preparation of the Framework WSI **[AS-001]** which will be submitted to the Examination at Deadline 3A. For the avoidance of doubt, the surveys and assessments

Interested Party	Theme	Comment	Applicant Response
			completed to inform Chapter 7: Cultural Heritage of the ES **[APP-032]** have contributed to the understanding of the archaeological resource across the DCO Site which, together with the Final Trial Trenching Report **[REP2-036]**, provide sufficient information to inform the decision making process with regard to archaeology.
		Sufficient archaeological evaluation will need to be undertaken before any works which could damage or destroy currently surviving archaeology take place. This must include proposed soil movements as well as works with the potential for compaction given that trenching has shown that archaeology survives at less than 30cm from the current ground surface.	As per the Applicant's Response to Local Impact Reports [**REP2-031**], there is the commitment to ensure that archaeological remains to be preserved in-situ as part of the mitigation are protected from impacts, as secured within the Framework CEMP **[REP2-013]**, ref. measure CH-C1. The Applicant is of the opinion that appropriate measures will be defined within the detailed CEMP, by reflecting the understanding of the archaeological resource (informed by the ongoing and further trial trenching), specific construction methods and detailed design. There needs to be an understanding that where non-intrusive methods are proposed, some machinery movement will be required to facilitate construction, but this can be done using appropriate equipment in the right conditions (and not heavy machinery on saturated ground). The details will depend on the detailed design and the mitigation measures proposed, and those can be agreed in the detailed CEMP. The Applicant would also like to highlight the opportunities the Proposed Development brings to define appropriate measures to protect such remains (with no protection currently in place from regular ploughing and movement of farm machinery which result in impacts such as wheel ruts or plough scars).
		Full site-specific detailed plans of the proposed works should be included in all Management Plans. This is essential for information and to assist in effective site management as well as to provide clarity in the event of any future potential enforcement issues The Landscape Environmental Management Plan (Rev 4) (REP1-039), for example, includes bird mitigation and habitat creation areas (section 1.3.2) however there is no detail on any ground preparation or whether there would be scrapes or other work which would go below the archaeological horizon. Some habitat creation requires ground preparation which would damage or destroy surviving archaeology particularly in land previously in agricultural use where surviving archaeology may be close to the current ground surface. These areas	Considering the outline nature of the Proposed Development at this stage, including with regard to any potentially ground disturbing works within the ecological mitigation areas, with detailed design to follow granting of the DCO, there are no full site-specific and detailed plans available at this stage. However, the process of developing the detailed design, which will be informed by future post-consent archaeological work, will ensure that impacts on the archaeological resource are appropriately managed throughout the lifetime of the Proposed Development. The Framework WSI, which has been updated following consultation with LCC and Historic England and will be submitted to the Examination at Deadline 3A, will detail the process and mitigation measures which will be available to be implemented as

Interested Party	Theme	Comment	Applicant Response
		therefore need to be included in the evaluation work and the results can be used to inform the design process effectively.	and when impacts on archaeological remains are identified through detailed design.
		All Management Plans will need to include site-specific plans of the proposed works and these need to include any identified archaeological preservation in situ areas, any archaeological mitigation areas which have yet to be undertaken and any areas that have yet to be evaluated which will therefore need to be excluded from any activity that has potential to impact any surviving archaeology. All management plans will need to be assessed and informed by the Applicant's archaeological advisors and cross referenced to the agreed final WSI which will form part of the Archaeological Requirement. This is to ensure that proposed site-specific impacts are understood and inform adequate evaluation and mitigation programmes to identify areas of archaeological potential which will be impacted across the Order Limits and to ensure reasonable and fit for purpose mitigation to deal with the range of developmental impacts. Any management plan which includes proposed works which could impact on surviving archaeology in any preservation in situ, unmitigated or unevaluated areas will need to be tied into an agreed Archaeological Management Plan and Archaeological Clerk of Works. Table 2: Key construction roles and responsibilities in section 2.2 of this Construction Environmental Management Plan (Rev 2) (REP1-031) includes an Environmental Clerk of Works (EnvCoW), an Archaeological Clerk of Works is also required.	Appropriate archaeological mitigation options, which can be implemented when the impacts on archaeological remains are known following detailed design (at post-consent stage), are presented in the Framework WSI **[AS-001]** which has been updated following consultation with LCC and Historic England, and will be submitted to the Examination at Deadline 3A. The Framework WSI (revised and final version) will make specific reference to the need for Archaeological Management Plan(s). These AMPs will provide additional granular detail to ensure where preservation in situ is proposed or where limited impacts have been accepted, activities during construction and operation can be controlled and monitored to achieve required objectives. Regarding the reference to an Archaeological Clerk of Works, please note that the Framework DEMP **[REP2-017]** already makes reference to this (ref. CH-D1). For consistency, the Framework CEMP has also been updated at CH-C1, which was submitted to the Examination at Deadline 3, to also note "*If deemed necessary, an Archaeological Clerk of Works can be agreed*."
		The revised documents including the Framework Construction Environmental Management (REP-131) and Framework Decommissioning Environmental Management Plan (Rev 2) (REP1-035) make reference to Environmental and Ecological Clerks of Works as in section 2.2.1 Key roles and responsibilities in the DEMP. Again, as stated in our LIR, an Archaeological Clerk of Works will also be required as well as an agreed Archaeological Management Plan which will remain in place for the lifetime of the scheme until the end of the scheme's decommissioning phase to ensure that impacts on archaeological and unevaluated areas are dealt with in a reasonable and enforceable way with appropriate archaeological mitigation where required.	
		Regarding 7.9 Framework Decommissioning Environmental Management Plan (Rev 2) (REP1-035), we do not agree with the statement that '*The decommissioning phase is not expected to result in any impact beyond the already-*	With regard to the decommissioning impacts, Chapter 7: Cultural Heritage of the ES **[APP-032]** acknowledges a degree of uncertainty regarding potential harm upon the archaeological

Interested Party	Theme	Comment	Applicant Response
		disturbed footprint of the Proposed Development. Therefore, it is not anticipated that decommissioning activities will have a direct physical impact upon buried archaeological remains.' (Section 3.3: Cultural Heritage, Table 2, CH-D1, p13) There is no information on how hundreds of thousands of piles will be dealt with to restore land to its previous agricultural use.	remains during the decommissioning phase of the Proposed Development largely due to unknown techniques/methodology for such works which would be applied decades from now. Whilst removal of piles may impact archaeological remains which survive immediately adjacent to the areas of disturbance caused during the construction works, when decommissioning methods are clarified, appropriate measures to ensure protection or appropriate recording of archaeological remains during decommissioning works will be incorporated into the detailed DEMP, which will be agreed with the local authority. The Framework DEMP **[REP2-017]** notes the following at CH-D1: "*The decommissioning phase is not expected to result in any impact beyond the already-disturbed footprint of the Proposed Development. Therefore, it is not anticipated that decommissioning activities will have a direct physical impact upon buried archaeological remains. However, if such impacts are identified when methods for the removal of all infrastructure are confirmed, appropriate measures will be agreed within the detailed DEMP. If deemed necessary, an Archaeological Clerk of Works and Archaeological Management Plan can be agreed*." Whilst at this stage any potential impacts are anticipated to be immaterial/negligible (and less disturbing to archaeological remains than the ongoing ploughing regimes), if it becomes apparent that decommissioning works could affect archaeology, appropriate mitigation measures can be agreed with the relevant planning authority at the time; through appropriate design, safeguarding measures specified in detailed DEMP or archaeological mitigation through recording prior to impacts being incurred. This is also acknowledged within the Framework WSI which has been updated following consultation with LCC and Historic England, and will be submitted to the Examination at Deadline 3A, as well as in the future AMP.
Lincolnshire County Council	Streets, Rights of Way and Access Plans	It is noted that there are no obvious major changes to these plans as the drawings do not highlight any changes made in this Revision, it would be helpful to know what has changed, if anything. However, please see the below table, summarising comments from LCCs Public Rights of Way team with regard to the RoW Access plans.	The changes were focused upon updating the management measures applied to PRoW on Sheets 7 and 9 of the Streets, Rights of Way and Access Plans **[REP2-004]**. The changes are focused upon the removal of management measures and authorisation of motor vehicles applied to PRoW on these sheets where they were not required, with the update subsequently aligning to the Framework PRoWMP **[REP2-019]**. The 'Tracked' versions of the Framework PRoWMP **[REP2-020]** (ref. Section

<table>
<tr><th>Interested Party</th><th>Theme</th><th>Comment</th><th>Applicant Response</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>Sheet One</td><td>Permanent diversion of Thorpe on the Hill PF13 is considered to be acceptable.</td></tr>
<tr><td>Sheet Two</td><td>LCC considers the temporary diversions proposed to be acceptable.</td></tr>
<tr><td>Sheet Three</td><td>LCC considers the temporary diversions proposed to be acceptable.</td></tr>
<tr><td>Sheet Four</td><td>LCC has no observations to make with regard to PRoW.</td></tr>
<tr><td>Sheet Five</td><td>LCC considers the temporary diversions proposed to be acceptable.</td></tr>
<tr><td>Sheet Six</td><td>LCC considers the temporary diversions proposed to be acceptable. The permanent diversion of Thulby PF2 is also considered to be acceptable.</td></tr>
<tr><td>Sheet Seven</td><td>LCC has no observations to make with regard to PRoW.</td></tr>
<tr><td>Sheet Eight</td><td>LCC has no observations to make with regard to PRoW.</td></tr>
<tr><td>Sheet Nine</td><td>LCC has no observations to make with regard to PRoW.</td></tr>
<tr><td>Sheet Ten</td><td>The temporary diversion Bassingham PF23 is considered to be acceptable. However, LCC would highlight that the temporary diversion could be made permanent.</td></tr>
<tr><td>Sheet Eleven</td><td>LCC considers the temporary diversions proposed to be acceptable.</td></tr>
<tr><td>Sheet Twelve</td><td>LCC considers the temporary diversions proposed to be acceptable.</td></tr>
<tr><td>Sheet Thirteen</td><td>LCC has no observations to make with regard to PRoW.</td></tr>
<tr><td>Sheet Fourteen</td><td>LCC has no observations to make with regard to PRoW.</td></tr>
</table>
</td><td>3.3) and Draft DCO [REP2-006] (ref. Schedule 6, pages 61, 65, 67) show the changes made.</td></tr>
<tr><td>Lincolnshire County Council</td><td>Waste – Framework Environmental Management Plans</td><td>[REP1-032] Framework CEMP, [REP1-034] Framework OEMP & [REP1-036] Framework DEMP
LCC notes there are no relevant major changes in this version with regard to waste matters but all alterations look reasonable as they stand. As secured by the DCO, the full versions provided later will be based on these and will require LCC approval. LCC also notes that waste arising forecasts for each phase of the project are expected in the finalised versions of the framework management plans, to be discharged via requirement. However, LCC would highlight that arising forecasts at this stage would be too late in the process to enable the DCO decision to take proper account of the potential impacts of this waste. LCC will continue to review future document alterations which may address queries that have not yet been resolved. In particular, LCC considers overall, the suite of documents lacks clear waste arisings forecasts for the Examiner and SoS to properly take into account</td><td>A meeting was held with LCC's Waste Officer on 4 March 2026 to discuss the 'under discussion' issues within the SoCG between the Applicant and LCC. SoCG reference 3.10.6 regarding forecasts for waste arisings was discussed and it was noted that forecasts for waste arisings are outlined in Chapter 14: Other Environmental Topics [APP-039] of the Environmental Statement as follows:
• Construction – refer to Table 14-24 Estimated Construction Waste, the specific waste management route would be confirmed by the construction contractor however the wastes listed are recyclable or recoverable;
• Operation – refer to paragraph 14.5.84 Component Replacement Waste; and</td></tr>
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Interested Party	Theme	Comment	Applicant Response
		the potential impacts of those wastes. ES Chapter 15 and the recent draft SoCG provide some of this information but, as per LCC's feedback on the SoCG, these require further clarification and detail.	• Decommissioning – refer to Table 14-25 Estimated Decommissioning Waste, the specific waste management route would be confirmed by the decommissioning contractor however the wastes listed are recyclable or recoverable. Assuming a 2-year construction period and a failure rate of 0.05%, as outlined in the operational Component Replacement Waste section (paragraph 14.5.84) of **Chapter 14 Other Environmental Topics** of the **ES [APP-039]**, failed panels during the construction phase of the Proposed Development would result in 78 m^3 of waste per year. The failure rate of 0.05% is based on a 2017 study by the National Renewable Energy Laboratory (NREL) which found a median annual failure rate of 5 per 10,000 panels for solar photovoltaic (PV) systems installed between 2000 and 2015. This is equivalent to an annual failure rate of 0.05%. The study analysed data from over 4,500 globally deployed panels and 50,000 installed systems. With the improvement of panel reliability this is considered a worst-case failure rate. In summary solar panel waste is as follows: • Construction – 39 m^3 of solar panel waste per year, 78 m^3 total. • Operation (ad hoc replacement) – 39 m^3 of solar panel waste per year. • Operation (full replacement) - 77,190 m^3. • Decommissioning - 77,190 m^3.
Lincolnshire County Council	Draft Development Consent Order - Schedule 15 – Procedure for Discharge of Requirements	LCC note the addition of to 2(5) which states '…and the requirement consultee will be given no less than 15 working days in which to respond to the relevant planning authority'. LCC consider this addition to be unnecessary as timescales to respond are already referenced within the schedule at 2(1) and 3(3), the addition of a further timescale could create confusion, particularly when these timescales are running concurrently.	The Applicant has reviewed the timescales for discharge of Requirements as contained in Schedule 15 of the Draft DCO **[REP2-005]**. The additional timescale in paragraph 2(5) of Schedule 15 was included at the request of the Environment Agency **[RR-089]**. The Applicant is content to include this to ensure that there is a minimum period of time for Requirement consultees to respond to any requests from the Local Planning Authority (LPA). The Applicant does not consider that this causes any confusion and indeed gives clarity and certainty to a Requirement consultee of the minimum timescales within which they will be required to respond.

Interested Party	Theme	Comment	Applicant Response
			In addition, the Applicant proposes to make a minor, consequential amendment to extend the timescale within which the LPA may request further information where the discharge requires consultation with a Requirement consultee. This will be extended in paragraph 3(3) from 20 working days to 25 working days, so that there is sufficient time for the LPA to take into account any responses of the Requirement consultee, noting that the earliest they can be asked to provide their response is within 15 working days of the submission of the discharge application (as per paragraph 2(5)). In summary, this results in the following timeline for discharge of an application: • Start date – Undertaker submits discharge application to the LPA (and Requirement consultee if appropriate) • Week 2 (10 working days) – LPA notifies Requirement consultee of request and provides deadline for response (where appropriate) • Week 3 – (15 working days) Earliest date by which LPA can request the Requirement consultee to provide response • Week 4 (20 working days) – Latest date LPA can request any further information from the undertaker where no Requirement consultee • Week 5 (25 working days) – Latest date that LPA can request further information from the undertaker where there is a Requirement consultee • Week 10 (50 working days) – Determination (unless extended by virtue of submission of further information or as agreed between the parties) This provides a slightly longer period for the LPA to request further information where a Requirement consultee has responded to a discharge application, following the minimum time period for the Requirement consultee's response now included at paragraph 2(5).

Interested Party	Theme	Comment	Applicant Response
			Please note that there is also a minor typing error in paragraph 3(3) which will also be corrected in the version of the draft DCO to be submitted at Deadline 3A.
Paul Rea	Community financial involvement	I was disappointed to see that there is no offer of a community financial stake in this project. There is a national successful track record of community financial involvement in renewable energy projects that have enabled local communities and individuals to have a financial share in such projects. Models can be found at www.energy4all.co.uk	The Applicant has prepared a Framework Employment, Skills, and Supply Chain Plan **[APP-197]** which was submitted as part of the DCO Application and focusses on benefitting the wider community as enhancement measures associated with the Proposed Development. In addition, the Applicant is also proposing a community benefit fund, the intention of which is that this will be delivered in cooperation with local community foundations and North Kesteven District Council to benefit causes chosen by the local community. The community benefit fund delivered alongside the Proposed Development will provide a sum of £400 per MW of export capacity per year. The Applicant is exploring how this could best be managed. The Applicant believes those communities living closest to the Proposed Development are best placed to determine what a community benefit would be, and should be able to benefit from funding towards improvements to existing community facilities, such as village halls and sports facilities, provision of electrical vehicle charging points, subsidised solar PV panels for community use and lower cost energy, grants for broadband and wider improvements, educational visits and wider education/apprenticeship opportunities
Paul Rea	Community financial benefit	I was disappointed to hear of the pityingly low level of financial benefit envisaged for the local communities. I compare this to the vastly higher level of benefit that has been offered over several decades through community owned renewable energy co-operatives and Community Benefit Societies. For brevity I offer an example of Westmill wind and solar co-operatives that share a site in Oxfordshire. Their modest solar installation on 30 acres has 21,000 panels and is 5MWp. The wind installation has 5x1.3MW turbines giving 6.5MW total. As well as giving financial returns to investors, the project has just passed a milestone of donating over £1 million to good causes and community initiatives. This level of contribution should be scaled up to the size of the Fosse Green project and enshrined in a planning condition.	The Applicant considers that the community benefit fund would provide an appropriate financial benefit to local communities, in line with other recently consented solar NSIPs. This community benefit fund will provide a sum of £400 per MW of export capacity per year, whereby the Applicant is exploring how this could best be managed. The Applicant believes those communities living closest to the Proposed Development are best placed to determine what a community benefit would be, and should be able to benefit from funding (for example towards improvements to existing community facilities, such as village halls and sports facilities, provision of electrical vehicle charging points, subsidised solar PV panels for community use and lower cost energy, grants for broadband and wider improvements, educational visits and wider education/apprenticeship opportunities) - management and allocation of the fund would be secured by an appropriate legal agreement. A community benefit

Interested Party	Theme	Comment	Applicant Response
			fund would only operate if the Proposed Development received development consent and became commercially operational. Furthermore, to maximise the economic benefits to the local community a Framework ESSCP **[APP-197]** identifies potential opportunities for activities relating to skills, supply chain and employment which the Applicant could take forward post-consent. The Framework ESSCP **[APP-197]** also outlines the Applicant's intentions to engage with local schools, local further education providers, local higher education providers. The Framework ESSCP **[APP-197]** provides a structure for delivering ways under which local community members can put forward their ideas and the project can then maximise local benefits. The development of a detailed ESSCP, to be substantially in accordance with the Framework is secured by Requirement 19 at Schedule 2 of the Draft DCO **[REP2-005]**.
Michael Campbell	Applicant's Response to Relevant Representations – Site Selection and Grid Connection	I, and my family, live in the Hamlet of Thurlby, near Lincoln and wish to submit the following remarks and observations on section 7 of document REP1-047 i.e. the Applicant's responses to the Relevant Representations. In summary, I do not accept that the Applicant has either properly addressed, or satisfactorily answered, numerous, fundamental Planning Issues raised in this examination. The key two areas that I wish to address are that of Site Selection and Grid Connection. One of the key aspects not addressed is that this proposal is for a Nationally Significant Infrastructure Project (NSIP). The Applicant has not provided any evidence of: • A National perspective, professional, planning policy criteria based (e.g. EN-1 & EN-2) search, which both seeks to identify appropriate sites in line with these policies and The Clean Power 2030 Initiative. • A comprehensive, professional planning based evaluation of alternative sites. • A justification for this particular site against relevant criteria, and with special reference to: ○ "Land Use". National Policy (NPS EN-3 -reference Paras 2.10.21, 2.10.23, 2.10.17) which prioritises the use of brownfield, previously developed, contaminated and industrial land for solar projects.	As detailed in Section 1.3 of the Planning Statement **[AS-098]** the Proposed Development is defined as a Nationally Significant Infrastructure Project (NSIP), as it consists of the construction of an onshore generating station in England with a capacity exceeding 50 megawatts (MW) in accordance with s14(1)(a), s15(1) and s15(2) of the Planning Act 2008. Section 2 and 3 of Appendix A: Site Selection Report of the Planning Statement **[AS-098]** sets out the relevant policy in relation to both site selection and the assessment of alternatives. Section 3.3 describes how planning and environmental constraints were considered, taking into account the requirements of policy. For example, internationally and nationally designated biodiversity sites were excluded. In terms of flood risk, which requires a sequential approach, the Applicant considered land at lower risk of flooding (Flood Zone 1) in the search for an unconstrained site before introducing Flood Zones 2 and 3 into the area of search at a later stage. The site selection process seeks to verify the location of the Proposed Development by considering whether the site is the most suitable for the purposes of the Proposed Development taking into account operational requirements, national and local planning policy and environmental constraints. It is interpreted that the specific land use policies referred to here are from the newly adopted NPS EN-3 in January 2026 however

Interested Party	Theme	Comment	Applicant Response
		○ The Clean Power 2030 Initiative further contradicts and undermines FGE's site selection. This initiative emphasises strategic site selection for energy infrastructure, with key conditions and criteria used for selecting site locations highlighting: ▪ Proximity to existing grid infrastructure, ▪ Brownfield land — previously developed and now disused — is explicitly preferred for clean energy infrastructure due to faster permitting and community acceptance.	the equivalent justifications for the NPS in effect from 2024 for this application are set out in Planning Statement Appendix B: National Policy Accordance Tables **[AS-098]**, notably paragraph 2.10.29 which is the same as 2.10.21 *"applicants should, where possible, utilise suitable previously developed land, brownfield land, contaminated land and industrial land."* As described in Appendix A: Site Selection Report of the Planning Statement **[AS-098]**), reasonable alternatives were considered during the site selection process including brownfield and non-BMV land. No suitable sites of the required scale were identified within a viable distance of the proposed grid connection near Navenby. The Applicant has responded in detail to comments relating to Site Selection, including regarding concerns relating to a lack of available grid connection within Table 7-12 of the Applicant's Response to Relevant Representations **[REP1-047]** on Page 322 - 323. In terms of the consideration of brownfield sites, refer to the Written Summaries of Oral Submissions Issue Specific Hearing 1 **[REP1-046]** which set out the brownfield sites considered as part of the site selection process as described in Appendix A Site Selection Report of the Planning Statement **[AS-098]**. Please see the response below relating to the Clean Power 2030 Action Plan.
Michael Campbell	Applicant's Response to Relevant Representations – Site Selection and Grid Connection	Please note that NESO, in its November 2025 reform of the National grid connections pipeline, has stated that compliance with The Clean Power 2030 Initiative, will be a major decision making factor in the selection of which projects gain grid connection status. This applies to both BESS and Solar projects. The Applicant has failed to demonstrate how this application complies with this Initiative. Consequently, I wish to challenge the Applicant's response to the interested parties' points on the topic of a substation – tables 7.11 & 7.12.- The Applicant comment is that 'there are no obvious reasons for the substation not to be granted consent' either by NKDC or by the Planning Inspectorate at appeal." This seems to be just yet another unsubstantiated, unfounded assertion in this application. Where is their evidence and facts for making that statement? Indeed, with what is in the public domain relevant to this topic, it would be equally accurate – if not more so – to state that an application for a currently non-existent, unplanned for, theoretical substation:-	The Applicant provided an overview of the need for the Proposed Development, including in relation to the Clean Power 2030 Action Plan, at ISH1. A written summary of that oral representation was submitted at Deadline 1 **[REP1-046]**. Page 11 of the Clean Power 2030 Action Plan explains that the Connections Reform process aims to "*prioritise projects needed for 2030, while maintain a robust pipeline beyond 2030.*" Page 55 of the Clean Power 2030 Action Plan explains that government is "*expecting an increase in planning applications with the Clean Power 2030 target.*" Appendix A to **[REP1-046]** provides further context to the Connections Reform process, and the implications for the Proposed Development in relation to its outcomes of the Connections Reform process. Specifically, that the connection of the solar component of the Proposed Development has been prioritised with a Gate 2 connection at Navenby and will be notified of its firm connection date in accordance with NESO's notification timelines. The connection of the BESS component of

Interested Party	Theme	Comment	Applicant Response
		• May not even be applied for by national grid, due to the significant backlog of grid connection projects required for existing, installed, renewable energy assets. • That NESO states (as above) that compliance with The Clean Power 2030 Initiative, will be a major decision making factor in the selection of which projects gain grid connection status. I do not accept that this application is compliant with this requirement • Therefore it is wrong to make their above statement and it should be withdrawn.	the Proposed Development has been prioritised with a Gate 1 connection and will be notified of its indicative connection date, also in accordance with NESO's notification timelines. The Proposed Development, which is for a significant capacity of low-carbon generation, is aligned with the aims of the Clean Power 2030 Action Plan and has been assessed as part of the Connections Reform process with the outcomes described above. The Applicant maintains that given the generally supportive national and local policy position, and on the basis that National Grid Electricity Transmission (NGET) take a responsible approach to siting, design and mitigation, in compliance with the 'Horlock Rules', there are no obvious reasons known to the Applicant why planning permission for the proposed National Grid substation near Navenby and associated overhead lines to connect it into the national grid would be withheld. The Applicant has provided the 'Technical Note on the proposed National Grid substation near Navenby' **[EN010154/EXAM/9.22]** at Deadline 3 in relation to this matter.
Michael Campbell	Applicant's Response to Relevant Representations – Site Selection and Grid Connection	Further, as the proponents of this application are based in Swansea, South Wales, the following is pertinent:- • South Wales (Met office data) has more sunlight hours than Lincoln. Typically, the sunniest part of South Wales is the south-western coastal strip of Pembrokeshire. • Sunlight Hours: This region receives an average annual sunshine total of over 1,700 hours. • Sunniest Town: Tenby is often cited as the sunniest town in the region, with approximately 1,667 to over 1,700 hours of annual sunshine. • Specific Hotspot: The Dale Peninsula in Pembrokeshire is noted as having an average of over 1,800 hours annually, sometimes cited as the sunniest place in Wales. • While Pembrokeshire is the sunniest, Swansea is also a bright spot in South Wales with around 2,170+ hours reported in specific datasets (often linked to high-pressure systems), and Barry Island in South Glamorgan is noted for high sunshine levels. • Based on long-term climate data from the Met Office station, Key Sunshine Data for Waddington (Lincoln): Annual Average: ~1,505 hours.	The need for the Proposed Development is set out fully in the Statement of Need **[APP-184]**. The UK's transition to a low-carbon energy system is necessary to avoid the effects of climate change. The Applicant notes Paragraphs 4.3.24 of NPS EN-1 (2025) which explains that applications for development should not be refused simply because other sites may have fewer adverse impacts, because of the possibility that all suitable sites for energy infrastructure of the type proposed may be needed for future proposals. National Policy seeks a large capacity of new low-carbon to be developed to meet the government's clean power target on the way to net zero. The Clean Power Plan seeks to prioritise projects needed for 2030, while maintaining a robust pipeline beyond 2030. Therefore, as foreseen by national policy, an application in another part of the country cannot be considered as a suitable alternative to the Proposed Development, because it – and likely many others – will also be needed to achieve net zero by 2050.

Interested Party	Theme	Comment	Applicant Response
		There is no justification or explanation – that I have seen – as to how people, and an organisation, located as above, and involved in solar generation, just happened to ignore their own locale and amazingly alight in a rural Lincolnshire location. Obviously, in planning terms Lincolnshire is NOT ruled out for such development despite there being other better sites. The point here is that there is no available evidence of an appropriate site selection process, containing selection criteria, alternatives' ranking and prioritisation, which should have addressed – amongst many other things – why this project was not applied for in South Wales, where they (the Applicant) already have various existing solar projects. This failure requires further explanation in the light and context –as below - of The Welsh Government's report - Energy Generation in Wales, 2023 *Most solar PV capacity is located in south Wales, with both Cardiff City Region and Swansea Bay City Region hosting over 450 MW each. This is likely due to the greater availability of grid connections, higher irradiance and a more developed supply chain. The local authority area that hosts the largest amount of solar PV capacity is Pembrokeshire, with 209 MW installed. 0 300 600 900 1,200 1,500 Cumulative installed capacity (MW) Less than 10 kW (typical rooftop) 10 kW to 1 MW (typical commercial rooftop or small-scale ground array) 2009 2011 2013 2015 2017 2019 2021 2023 1 MW to 5 MW (small solar farm) Greater than 5 MW (large solar farm)* The Welsh Government is working hard to progress in this regard. The following is a summary of some key points from this government report. *"Welsh Government position: industrial solar in South Wales* 1. *Strong support for expanding solar as part of the net-zero transition* *The Welsh Government sees solar PV — including larger, industrial-scale projects — as an important part of meeting Wales's renewable energy and decarbonisation goals. Solar is treated as a key technology alongside wind, especially for increasing clean electricity supply. Wales already has around 1.3 GW of installed solar PV capacity, showing solar is a mainstream and growing contributor.* 2. *Industrial solar is expected to grow, but must be well-sited* *While most Welsh solar installations are currently small-scale, the Government recognises that larger commercial and utility-scale schemes will be needed to scale up renewable generation. However, development must balance energy needs with land, environmental, and community impacts.* 3. *South Wales is a major focus area because of demand and grid connections*	As set out in Appendix A: Site Selection Report of the Planning Statement **[AS-098]**, the Applicant was approached by a group of landowners who were willing to provide land north of the A46 at Morton Manor and Housham Grange, which comprised a large area of contiguous land, for the purposes of an NSIP for solar energy generation. As Appendix A: Site Selection Report of the Planning Statement **[AS-098]** further sets out in paragraph 2.3.3, given the identification of the Site for the Proposed Development was driven by the availability of deliverable land and site suitability in line with the requirements of policy and in recognition of the need to consider reasonable alternatives, the Applicant sought to assess the site against other potential alternative sites to ensure it was suitable taking into account operational requirements, national and local planning policy and planning and environmental constraints. The site selection process set out in Appendix A: Site Selection Report of the Planning Statement **[AS-098]** seeks to confirm that the site identified is the most suitable for the purposes of delivering the Proposed Development, firstly considering whether it would be possible to locate the Proposed Development on an unconstrained site, and secondly whether an alternative site would perform better against the assessment criteria. Impacts on agricultural land, landscape and communities have been minimised via the iterative process of the Proposed Development design, which was informed by a suite of technical studies to identify constraints and opportunities across the Order Limits, as discussed in Chapter 4: Alternatives and Design Evolution of the ES **[APP-029]**. For example, as a part of the design evolution, landscape and visual effects have been reduced by both embedded mitigation and sensitive design.

Interested Party	Theme	Comment	Applicant Response
		The Government highlights that solar capacity is concentrated in regions such as Swansea Bay and Cardiff, where: • *electricity demand is high* • *industrial and commercial sites are available* • *grid infrastructure is better developed* *South Wales is therefore strategically important for further industrial deployment".* Basically, this is stating that the Welsh Government is both, acting in accordance with, and also, promoting, the principles enshrined in the National Policy and Initiative. It is highlighting the suitability of Welsh locations compatible with the national policy and agenda. Further it has made changes to planning in order to facilitate such developments. I do not accept that the Applicant has addressed, nor explained, why none of this is covered in their – supposed – site selection survey and why an appropriate location was not / could not be, found in South Wales. Consequently, leading them to a rural Lincolnshire location, with a surplus of electricity generation, no available Grid connection and the taking up of agricultural land – and doing so supposedly with a regard for National Policy and Need.	
Michael Campbell	Applicant's Response to Relevant Representations – Site Selection and Grid Connection	Also, I do not accept their "post event" claims about alternative site selection choices in this Lincolnshire area. It has all the hallmarks of a belated attempt to pretend that they had done "something". That is "something" other than just be invited to the area by certain landowners – as stated by themselves - and trying to post rationalise their decision. There is no explanation of why other and, more appropriate sites, were not evaluated throughout England, Wales and Scotland for this NSIP. I do not accept that these issues have been satisfactorily addressed, nor answered, by the Applicant. I request that The Examining Authority challenges and evaluates the Applicant's responses and assertions in these – and other areas.	Appendix A: Site Selection Report of the Planning Statement **[AS-098]** demonstrates how the Applicant has sought to identify a suitable site that is as least environmentally constrained as possible. Additionally, the Applicant sought to reduce the need for the use of Compulsory Acquisition powers, meaning that the availability of landowners willing to lease land for the Proposed Development was an important consideration. Taking account of the suitability of the location for solar infrastructure, the availability of a network connection, appraisal of planning and environmental constraints and willing landowners, the Site was selected to be taken forward for the Proposed Development. Following site selection, and through the process of design evolution, the Applicant has sought to minimise impacts wherever possible. The Applicant has followed the Planning Act 2008 Guidance related to procedures for the compulsory acquisition of land from paragraph 8, which states "The applicant should be able to demonstrate to the satisfaction of the Secretary of State that all reasonable alternatives to compulsory acquisition (including modifications to the scheme) have been explored. The applicant will also need to demonstrate that the proposed interference with

Interested Party	Theme	Comment	Applicant Response
			the rights of those with an interest in the land is for a legitimate purpose, and that it is necessary and proportionate." The site selection process seeks to verify the location of the Proposed Development by considering whether the site is the most suitable taking into account operational requirements, national and local planning policy and environmental constraints. In terms of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017, there is no general obligation upon an applicant to consider alternatives to the development proposed; rather regulation 14(2)(d) requires an Environmental Statement to include "a description of the reasonable alternatives studied by the applicant, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the development on the environment". Therefore, where an Applicant examines a reasonable alternative as part of its design process, there is an obligation to describe that alternative in the Environmental Statement. Accordingly, the Applicant has set out the reasonable alternatives it studied in Chapter 4 Alternatives and Design Evolution of the ES **[APP-029]** which are relevant to the Proposed Development and its characteristics. The alternatives studied include alternative sites, overhead lines or underground cables, alternative solar infrastructure technologies and alternative storage arrangements, layouts and cable corridors. Chapter 4 Alternatives and Design Evolution of the ES **[APP-029]** also considers an alternative layout and alternative access point put forward at statutory consultation. The Applicant has set out in Chapter 4 Alternatives and Design Evolution of the Environmental Statement **[APP-029]** the main reasons for the options chosen, taking into account the effects of the development on the environment. This approach taken therefore fulfils the requirements of the EIA Regulations in terms of describing the reasonable alternatives studied by the Applicant.
Andrew Keeling	Applicant's Response to Relevant Representations – Planning Policy and Site Selection	Tables 7.11 and 7.12 summarise Relevant Representations from the General Public regarding planning policy and site selection. A consistent theme is that the initial selection of the Fosse Green Energy site was contrary to the site selection priorities for solar deployment as set out in NPS EN-3, in terms of the preference for sites that utilise brownfield, previously developed, industrial and contaminated land, and sites that can achieve a POC to the existing grid infrastructure. The applicant responds to these representations by referring to the Site Selection Report (Appendix A of the Planning Statement) as the justification as to why the chosen site was selected. The Site Selection Report does not however relate in	As stated on their website, National Grid is bringing forward the proposed National Grid substation near Navenby alongside the Great Grid Upgrade which seeks to upgrade the grid in order to connect homes, businesses and public services to sources of home-grown renewable energy in order to lower electricity bills and make the UK more energy secure. National Grid states on its website that based on current demand around Navenby, it is not possible to connect everything proposed in the area to existing regional substations such as Bicker Fen. To connect new developments to the network, they have identified that a new 400

Interested Party	Theme	Comment	Applicant Response
		any way to the initial selection of the site. It represents an attempt to retrospectively justify the selection of the site, assuming that the now proposed Navenby substation goes ahead. It is clear from the Site Selection report that there was no existing or proposed substation for the Fosse Green Energy solar farm to connect to at the time when the site was initially selected. It is also clear from the Site Selection Report that the site was not initially chosen following a search for sites that could utilise brownfield, previously developed, industrial or contaminated land. It clearly states that the site was chosen in response to the approach from the landowners. I do not believe that the applicant has addressed the Relevant Representations from the General public on this matter therefore.	kilovolt (kV) substation is needed but it should be made clear that, whilst the Proposed Development will connect into the proposed National Grid substation near Navenby, it is not driving the Navenby substation development. Section 4.4 of Chapter 4: Alternatives and Design Evolution of the ES **[APP-029]** sets out the methodology adopted for the site selection process. Following a formal application to National Grid for a connection into the 400kV Overhead Line at Whisby, however, National Grid informed the Applicant that this point of connection (POC) was not available and instead was offered and subsequently secured a POC at the proposed National Grid substation near Navenby, which was a location capable of serving multiple customers, including the Applicant. Therefore, as demonstrated, the Applicant considered existing points of connection prior to securing a connection at the proposed National Grid substation near Navenby. Having secured land with willing landowners, and in recognition of the need to consider reasonable alternatives, the Applicant sought to assess the site against other potential alternative sites to ensure it was the most suitable taking into account operational requirements, national and local planning policy and planning and environmental constraints. The site selection process set out in Appendix A: Site Selection Report of the Planning Statement **[AS-098]** seeks to confirm that the site identified is the most suitable for the purposes of delivering the Proposed Development, firstly considering whether it would be possible to locate the Proposed Development on an unconstrained site, and secondly whether an alternative site would perform better against the assessment criteria.

Interested Party	Theme	Comment	Applicant Response
Andrew Keeling	Applicant's Response to Relevant Representations – Grid Connection	Tables 7.11 and 7.12 also summarise the representations that members of the public have made regarding the unsuitability of the Fosse Green Energy site due to the lack of an existing grid connection, and the fact that the mooted Navenby substation is not yet the subject of a planning application. The applicant's response to these comments is that 'there are no obvious reasons for the substation not to be granted consent' either by NKDC or by the Planning Inspectorate at appeal. The applicant provides no analysis of the planning policies that the substation application will be judged against to support this contention. I do not believe therefore that this is a sufficiently robust response from the applicant to adequately address the General Public Relevant Representations on the issue of the grid connection.	The Applicant maintains that given the generally supportive national and local policy position, and on the basis that National Grid Electricity Transmission (NGET) take a responsible approach to siting, design and mitigation, in compliance with the 'Horlock Rules', there are no obvious reasons known to the Applicant why planning permission for the proposed National Grid substation near Navenby and associated overhead lines to connect it into the national grid would be withheld. The Applicant will provide a note on this matter at a subsequent deadline.
Andrew Keeling	Applicant's Response to Relevant Representations – Public Rights of Way	Table 7.18 summarises the significant number of concerns raised by members of the public regarding the impact of the Fosse Green Energy project on the enjoyment of local footpaths and walks. In response, the applicant claims that the design of the scheme has sought to minimise the siting of solar panels on both sides of a PRoW, and incorporated an offset of at least 10m where solar panels or associated infrastructure are proposed adjacent to a PRoW. I contend that there are a number of examples of where the design of the scheme will significantly impact footpaths and walks that are enjoyed by local people: • The stretch of the Aubourn and Bassingham Long Walk to the south of Aubourn Moor, where the footpath will have solar panel arrays on either side; • The footpath at Aubourn Moor, which will be significantly impacted by the substation; • The stretch of the Aubourn and Bassingham Long Walk that runs further south from Aubourn Moor to Fen Lane, which will have visible solar panel arrays to the east of much of its length; • The footpath to the west of Bassingham/ east of Clay Lane, which will have solar panel arrays immediately to its west. The applicant also claims that the design of the scheme includes enhancement measures in terms of the provision of a number of permissive paths to supplement the existing PRoW network. The applicant provides no evidence however of the rationale for these permissive paths, and no evidence of attempts to asses whether local people will welcome and use them. They cannot really claim them as enhancements unless this is the case, particularly when set against the negative impacts of the Fosse Green Energy project on the existing country walks that local people currently enjoy. As an example, the proposed permissive circular path off Clay Lane to the west of Bassingham is an a piece of flat, featureless land, and will	The Applicant acknowledges that there will be some significant residual adverse visual effects on users of public rights of way traversing the DCO Site, and these are reported within Chapter 10: Landscape and Visual Amenity of the ES **[AS-117]** (reference: Section 10.7), with the PRoW within/surrounding the DCO Site illustrated on Figure 2-2 Public Rights of Way Plan of the ES **[AS-020]**. It should be noted that the Proposed Development design has been an iterative process, informed by a suite of technical studies to identify constraints and opportunities across the Order Limits, as discussed in Chapter 4: Alternatives and Design Evolution of the ES **[APP-029]**. As a part of the design evolution, landscape and visual effects have been reduced by both embedded mitigation and sensitive design, including targeted mitigation to reduce visual impacts upon users of PRoW. The Design Approach Document **[APP-186]** further details how the design of the Proposed Development has sought to minimise adverse landscape and visual effects. Section 4 of the Design Approach Document **[APP-186]** outlines how the design has evolved at different stages of the pre-application process. The Applicant notes that it is widely accepted that some level of adverse impact is inevitable, as is reflected in the Overarching NPS for Energy (EN-1), paragraph 5.10.5 which states that *"virtually all nationally significant energy infrastructure projects will have adverse effects on the landscape, but there may also be beneficial landscape character impacts arising from mitigation."* Regarding non-visual impacts upon PRoW, Chapter 12: Socio-Economics and Land Use of the ES **[AS-016]** concludes

Interested Party	Theme	Comment	Applicant Response
		have solar panel arrays on its northern edge, and distant views of solar panels to the west. I contend that it will have limited recreational appeal, and doubt that it will be used much by Bassingham residents, who currently enjoy a circular walk around the village using the footpath to the east of Clay Lane and the recreational opportunities and countryside views offered by the Holmes Parish Woodland. Furthermore, the applicant gives no consideration to more attractive enhancement opportunities, such as the creation of riverside walks, green corridors and nature reserves. For these reasons, I do not therefore believe that the applicant adequately addresses the General Public Relevant Representations in relation to the negative impacts of the Fosse Green Energy project on Public Rights of Way	that the scale of changes to journey length, travel patterns and access opportunities is limited, and that effects on PRoW users, whether local residents or visitors, would be negligible and therefore not significant across construction, operation, and decommissioning. From a traffic and transport perspective, in terms of accessibility and connectivity, no significant effects on PRoWs are anticipated, as set out within Chapter 13: Traffic and Transport of the ES **[APP-038]**. Regarding the Proposed Development's provision of permissive paths and the IP's comment that the Applicant has not provided evidence that these will be welcomed and used by the local community, it should be noted that the permissive path design has been iterative, in response to consultation with various local stakeholders. For example, as summarised in Section 11.3 of the Consultation Report **[APP-023]**, following the statutory consultation, the Applicant reviewed and considered all feedback received and continued to develop the Proposed Development, making the following design changes relating to permissive paths: • Change of the permissive path network around Housham Wood in response to a request by Lincolnshire Wildlife Trust; • Change of the permissive path network around Cathedral Park, a caravan park north of the A46, in response to requests by local residents; and • Change of the permissive path network in the southern part of the site, providing better pedestrian links between Thurlby and Bassingham. Regarding the circular path off Clay Lane referenced, this has been implemented to create a circular walk for Bassingham residents – this was recognised as a design opportunity after non-statutory public consultation, whereby paragraph 4.8.4 (a)(xii) of the Consultation Report **[APP-023]** notes "*Permissive paths have been included to show the Applicant's intention for greater connectivity between the local villages and provision of shorter circular walks*". Regarding the IP's comment that the Applicant has not given consideration to more attractive enhancement opportunities,

Interested Party	Theme	Comment	Applicant Response
			including riverside walks, green corridors and nature reserves, it should be noted that enhancement opportunities (both for ecology/habitats and footpaths) have formed key design principles of the Proposed Development, as set out in the Design Approach Document **[APP-186]** (ref. Table 3-2) – for example, Design Principle 9 states: "*The Proposed Development will seek to avoid adverse impacts and to enhance existing biodiversity through the creation of new green infrastructure and the creation of new habitat for wildlife to achieve a minimum 10% in Biodiversity Net Gain*" whilst Design Principle 10 states: "*The Proposed Development will enhance, where possible, the existing connectivity within the network of PRoW through the provision of permissive paths and circular routes to be available for public use during the operation of the authorised development to improve accessibility*." This is evidenced in the design and commitments of the Proposed Development – for example, whilst not mandatory, the Applicant has committed to deliver a minimum of 30% biodiversity net gain in habitat units, 50% biodiversity net gain in hedgerow units and 10% biodiversity net gain in watercourse units using DEFRA's Statutory Biodiversity Metric (SBM) (Version 1.0.4) for the Proposed Development, as secured by Requirement 8 of Schedule 2 to the Draft DCO **[REP2-005]**. Furthermore, regarding riverside walks, as set out in the Framework PRoWMP **[REP2-019]** (ref. paragraph 3.5.10, and with reference to Figure 3-3 Proposed Permissive Paths Plan of the ES **[AS-024]**), footpath LL|Aubo|10/1 is proposed to be diverted to run to the west of the current route in parallel to the River Witham. In addition, regarding green corridors, this has been carefully considered as part of the landscaping design – for example, the Framework LEMP **[REP2-021]** (ref. paragraph 5.3.16) sets out that existing hedgerows across the DCO Site will be 'gapped up', in order to enhance existing landscape features, reinforce field patterns, increase species diversity and to provide continuous habitat corridors. Chapter 8: Ecology and Nature Conservation of the ES **[REP1-019]** recognises the ecological benefits of these corridors (ref. Table 8-18), identifying significant beneficial effects associated with these measures for hedgerows and associated species, e.g. increasing connectivity across the DCO Site for species that may use such habitats (such as bats).

Interested Party	Theme	Comment	Applicant Response
Philip Heard	Applicant's Response to Relevant Representations – Climate	1.1 In response to RR-222 (REP1-047) Para 7.1 Page 245,) the Applicant states "The methodology and the Environmental Product Declarations (EPDs) used for assessing the carbon impact of the solar panels are set out in paragraph 6.4.31 …..[APP-31]. These are in line with best practice and have been accepted in similar DCO projects by the planning inspectorate." An acceptance by the planning inspectorate previously is not necessarily an indication that the Applicant's assessment is correct. Where is the evidence this is 'best practice'? APP-031 Para 6.4.31 states "an average of published EPD data from manufacturers Jinko and Sunpower ….." An 'average' is clearly not a reasonable worst case approach and is not in accordance with the Rochdale Envelope.	These EPDs represented the most recent, applicable EPDs available at the time of the production of the ES and come from two of the largest solar panel producers. The average emission approach was chosen to create a reflective emission factor for the market. It should also be noted that these EPDs were issued in 2021 and therefore it is reasonable to expect that these manufacturing processes will have significantly decarbonised by the point of construction of the Proposed Development, so it is still likely to reflect a 'reasonable worst case' approach that the panels used in the Proposed Development will be as carbon intensive as the market position in 2021.
Philip Heard	Applicant's Response to Relevant Representations – Climate	1.2 Neither reference referred to in APP-031 Para 6.4.31 appears to be available on-line to read; could the Applicant please reproduce these. Do they include Green House Gas (GHG) emissions from mining in Africa? Do they include transportation of raw materials to China, then transportation to the UK?	The EPDs referred to at paragraph 6.4.31 of Chapter 6: Climate Change of the ES **[REP1-017]** are provided within Appendix B for reference; they include full emissions for mining, processing and assembly of materials. Transport of assembled panels to the UK is accounted for separately in Table 6-8 of Chapter 6: Climate Change of the ES **[REP1-017]**.
Philip Heard	Applicant's Response to Relevant Representations – Climate	1.3 The Applicant has dismissed my comparison with the proposed Springwell development regarding GHG emissions from manufacturing. The Springwell applicant equally wishes us to believe that 'best practice' has been adopted. The comparative calculation is: Fosse Green GHG emissions from the manufacture of solar PV Panels (APP-031 Table 6.7) are 110,110 tCO2e for 569,000 (fixed south facing) panels. The proposed Springwell Solar development, with 1,500,000 panels, will produce GHG emissions of 1,009,233 tCO2e (Planning Inspectorate Springwell Solar Farm APP-048 6.1 Environmental statement Volume 1 Chapter 8: Climate Table 8.11). Note, Springwell GHG emissions were "reported using the modular structure outlined in Royal Institution of Chartered Surveyors (2023) guidance" (Ref 8-17 of Springwell APP-028). This document is later than either of the documents referenced by the Applicant in APP-031 Para 6.4.31 and would therefore be assumed to be the more up to date guidance. If similar data to that applied for Springwell GHG emissions were applied to the proposed Fosse Green development, the result would be: (1,009,233/1,500,000) x 569,000 = 382,836 tCO2e This figure should be applied as a realistic worst case GHG emission estimate for original manufacture and for that of replacement panels.	The Raw Data and Emissions Factors (Appendix 8.1 of the Springwell Solar Farm ES **[EN010149/APP/6.3]**) for the Springwell Solar Farm sets out its emission factors and approach in the following reference, however it is not possible to trace the emission factor used for the solar panels. The Applicant would note that the emission factor is per m^2 of panel, and the Respondent's query uses number of panels to scale, however MW capacity is likely to be the most representative functional unit and was used in Chapter 6: Climate Change of the ES **[REP1-017].** The Applicant is unable to comment or compare the methodology with Springwell, but stands by the emission factors presented in the ES Chapter being applicable and representative using EPDs that are publicly available and representative of large solar manufacturers. The RICS guidance mentioned does not give any guidance about how to use emission factors for solar panels, instead it provides guidance on transport distances and other assumptions which have also been used in the assessment, as set out in paragraph 6.4.30 of Chapter 6: Climate Change of the ES **[REP1-017]**.

Interested Party	Theme	Comment	Applicant Response
Philip Heard	Applicant's Response to Relevant Representations – Climate	1.4 Further, in responding to RR-222, the Applicant states "…. [App-031] assumes that the solar panels will be replaced at Year 30 and is therefore a worst case estimate of the carbon intensity of the Proposed Development." How can this be 'worst case'? Given that a 30 year life appears to be beyond any current manufacturers guarantee, it is reasonable to assume a large number will not reach this point; hence a worst case would be a total replacement plus a further large percentage for faulty, damaged and life expired panels. There was considerable debate during the Springwell examination regarding panel life (see Paragraph 2.1 below); we do not know what the ExA will decide but there is no evidence nor any manufacturer's guarantee to suggest 40 years is achievable. Indeed, the Fosse Green Applicant refers to Jinko Solar (APP-031 P-031 Para 6.4.31); Jinko Solar offer a Service life of 25 years.	The Applicant has not declared or suggested a life cycle of 40 years at any stage, this was only referred to when explaining the differences between the assessment of the Proposed Development and the Springwell scheme which the Respondent has asked to adopt the methodology from. Most available modules at this time have a 30-year power output warranty from the manufacturers. The Applicant is confident that using a panel with a 30-year warranty will not present any risk to the site. Although the Applicant has not selected a solar module manufacturer at this time, the question mentions Jinko in particular. In the Summer of 2025, Jinko updated their standard warranty documentation to increase the power output warranty as standard from 25 to 30 years. This is in line with the developing trend of longer power output warranties across the solar industry in general.
Philip Heard	Applicant's Response to Relevant Representations – Climate	1.5 In response to my statement that a 60 year time limited consent period, as opposed to a 40 year period, results in a lower carbon intensity figure, the Applicant states "The 60-year operational life of the Proposed Development does not result in a lower carbon intensity figure…..". How has the Applicant arrived at this conclusion? Given that the denominator is the total energy generation figure which, being reasonably consistent across the 60 years, will need to be reduced by one third for a 40 year calculation, whilst the numerator will be only slightly reduced, as by far the majority of GHG emissions are as a result of component manufacture, this statement is incorrect. My calculations are as follows: For a 60 year time consent development the Applicant's carbon intensity figure is: 37 gCO2e/kWh (APP-031 Chapter 6 Para 6.4.68) (715,924 tCO2e divided by the total energy generation figure of 19,438,499 MWh (APP-031 Chapter 6 Para 6.4.67)). For a 40 year development, the operational GHG emissions would reduce by 1744 (APP-031 Table 6-10) to 468,744 tCO2e (note: this assumes all component replaced at the 25 – 30 year point but a reduction in staff transport costs etc) resulting in a lifetime GHG emission figure of 715,924 – 1,744 = 714,180 tCO2e. Also, the total energy generation figure will reduce by approximately one third to	Please note, the Applicant has applied for a 60 year operational period, not 40 years, in order to maximise the benefits of the panels and the Proposed Development in line with Government policy and targets. Regarding the question in relation to the Applicant's conclusions on carbon intensity (why a 60-year operational life would not result in a lower carbon intensity figure than a 40-year operational life), it should be noted that the quote provided is in response to the Respondents reference to Springwell, which assumed 40 years no replacement rather than 60 years and 1 replacement. The Clean Power Action Plan target focuses on DESNZ figures for carbon intensity of electricity which do not include construction or embodied carbon, so therefore the figures here would not be applicable and the Proposed Development would be near 0gCO_2e/kWh in practice when contributing to this target as it focuses on operational combustion emissions.

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		12,958,999 MWh. Dividing 714,180 by 12,958,999 gives a carbon intensity figure of 55 gCO2e/kWh, significantly higher than the 60 year carbon intensity figure. As previously stated, the UK Government's 2030 target (Clean Power Action Plan) states the target is to be well below 50gCO2e/KWh in 2030". 55 gCO2e/kWh is significantly above the Government's target and if the Applicant cannot provide reasonable justification to seek a 60 year time limited consent, the proposed development cannot be justified.	
Philip Heard	Applicant's Response to Relevant Representations – Climate	1.6 I will not repeat my Deadline 1 comments but, suffice to say, the Applicant's comparison to GHG emissions from fossil fuel produced power across the entire 60 year operational life is unjustified. This was echoed by the Secretary of State, in approving the Gate Burton Energy project, when he considered a Combined Cycle Gas Turbine an inappropriate baseline for comparisons (Gate Burton Decision Letter dated 12 July 2024 Para 4.59); this was further echoed by the Secretary of State in the Tillbridge decision.	The Planning Inspectorate has approved the use of CCGT as a baseline comparison in paragraphs of 4.10 and 4.11 of their Decision Letter (dated 1 December 2025) granting consent for Morecambe Offshore Windfarm [EN010121]. This is considered the most appropriate approach as natural gas currently constitutes the 'marginal' supply option, meaning it would be the first to be displaced by renewable electricity sources such as the Proposed Development.
Philip Heard	Applicant's Response to Relevant Representations – Solar PV Panel Replacement	2.2 In response to LCC, REP1-047 Page 123, the Applicant states "The failure rate of 0.05% …….. is considered a worst-case failure rate." Available data suggests this is an average failure rate, so cannot be considered 'worst-case'. Further, the LCC LIR (REP1-053) para 18.25 states "the applicant anticipates one full replacement of PV panels, but this may be insufficient given the proposed 60-year project lifespan, when we are aware that similar projects with a 40-year lifespan are also suggesting they will undertake a single replacement."	As noted in the response by the Applicant within the Applicant's Response to Relevant Representations **[REP1-047]** quoted, it is acknowledged that the assumed 0.05% failure rate is based on a *median* annual failure rate for solar PV systems installed between 2000 and 2015, based on the 2017 study by the National Renewable Energy Laboratory (NREL)[1]. However, as noted in the response, with the improvement of panel reliability (as will be the case by the time the Proposed Development is constructed, given that the study referenced (i.e. 2017) will be 10+ years old and the data which derives the assumed 0.05% failure rate (i.e. between 2000 and 2015) up to 30 years old), this failure rate is considered a reasonable worst-case rate for the purposes of assessment. As noted above, the assumption regarding a single replacement of solar panels is based upon solar modules being supplied with a 30-year power output warranty. This length of warranty has become standard for modules that would typically be used on an installation of this type.
Philip Heard	Applicant's Response to Relevant Representations – Solar PV Panel Replacement	2.3 Indeed, given the low figure stated by the Applicant for panel failure across the life of the proposed development, and the challenge facing the local authorities regarding cumulative waste from a number of solar developments, a similar	The Applicant does not consider it necessary to introduce a Requirement to limit the replacement of panels during the operational lifetime of the Proposed Development. A detailed

[1] Photovoltaic Failure and Degradation Modes (2017) Jordan, D.C, Silverman, T.J, Wohlgemuth, J.H, Kurtz, S.R and VanSant, K.T.

Interested Party	Theme	Comment	Applicant Response
		wording in the DCO to that quoted by the Springwell ExA limiting total unplanned replacements would be appropriate. Otherwise, the Applicant could replace up to 99% of panels under 'maintenance' if the solar PV panel life does not reach 30 years.	response to this point is set out in the Applicant's Response to Local Impact Reports **[REP2-031]**.
Philip Heard	Applicant's Response to Relevant Representations – Gross Inefficiency	3.1 As often quoted, the World Bank has ranked the UK as second to last regarding photovoltaic potential in the world. UK Solar Alliance has looked closer; the UK Government's target for installed solar capacity is 47GW. Based on 2024's UK solar load factor of 9.9% the actual output would be as low as 4.65GW. Across a decade of operational data captured by the Department for Energy Security and Net Zero (DESNZ), the average efficiency level does not even reach 11%. Projections based on DESNZ's own data suggests that if solar achieves the Gov 2030 target of 37GW, the gross inefficiency means it would produce less than 13% of the country's total annual electricity demand. If the full 2030 47GW target is reached via ground mounted solar, it would take some 2% of all cropland out of production and would contribute less than 13% of the UK's total annual electricity supply and with significant intermittency challenges. How can such inefficiency justify the huge impact on agriculture and the environment?	The government's Clean Power target, which has been designed to support achieving net zero by 2050, requires that over 95% of all electricity generated in the UK is from clean power sources; and that the total amount of electricity generated in the UK is greater than the total amount of electricity consumed in the UK, under normal weather conditions. The Applicant accepts that there are other global locations where solar yields are higher than in the UK, but (a) that does not mean that solar yields are too low to be of benefit to UK decarbonisation, and (b) solar generation in other countries may be important for those countries to achieve net zero themselves, but will not support the UK to achieve its legally binding net zero obligation. National Policy Statement EN-1 (2025) states, at Paragraph 3.3.23, that government analysis shows that "a secure, reliable, affordable, net zero consistent system in 2050 is likely to be composed predominantly of wind and solar". Further, NPS EN-3 (2025) states at Paragraph 2.10.5 that "*Solar farms are one of the most established renewable electricity technologies in the UK and the cheapest form of electricity generation*." Therefore, "*Solar energy is at the heart of our Clean Power 2030 Mission*" (NPS EN-3, Paragraph 2.10.2). Paragraph 2.10.17 of NPS EN-3 (2023) provides an indicative range for the land use of solar power facilities (updated at Paragraph 2.10.9 of NPS EN-3 (2025)). An explanation of the land use efficiency of the proposed development is included at Section 3.1 of the Applicant's **Solar Technology Technical Guide** [**REP2-033**].
Philip Heard	Applicant's Response to Relevant Representations – Gross Inefficiency	3.2 Indeed, 'Energy Dashboard' data for Cleve Hill Solar Park for w/c 26 Jan 2025, below, shows the export capacity limit of 320MW. The maximum generation period on any day is about 7 hours, with a peak output of about 60MW; grossly inefficient.	Paragraph 3.3.20 of NPS EN-1 (2023), updated to Paragraph 3.3.23 of NPS EN-1 (2025), explains that it is government's view that "a secure, reliable, affordable, net zero consistent system in 2050 is likely to be composed predominantly of wind and solar".

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			Any future energy system must be resilient to the weather and seasonal variations in renewable generation. This is recognised in the governments aims to deliver a Clean Power system in normal weather conditions. Solar PV has been identified as being vital for a decarbonised grid. NPS EN-3 sets out specific policy for solar development, recognising solar as a Critical National Priority which can support security of supply as part of a portfolio of different generation technologies, including wind. For example, in Great Britain, solar generation is lower in winter than in summer (the comment references energy generation data in January) wind generation is lower in the summer than the winter. The mix of the two technologies, alongside others identified in the Clean Power 2030 Action Plan, seeks to provide sufficient supplies through the year.
Philip Heard	Applicant's Response to Relevant Representations – Gross Inefficiency	3.3 What load factor has the Applicant applied in the calculation resulting in a total 60 year energy generation figure of 19,438,499 MWh (APP-031 Chapter 6 Para 6.4.67))? Note: it is assumed following Change Request 1, that this figure needs to be adjusted.	A yield of 916 kWh/kWp/year was used to generate the electricity generation figures of 19,438,499 MWh; this correlates to a load factor of 10%. The change in energy generation from Change Request 1 (i.e. the removal of solar PV from Field 46) would reduce the overall capacity by approximately 1%. This would be immaterial to the overall assessment presented in Chapter 6: Climate Change of the ES **[REP1-017]** and would not affect its conclusions or significance assessment. However, it should be noted that the solar PV lost from Field 46 could be compensated through other design optimisation at the detailed design phase, and as such does not affect the approach taken, or conclusions, of the assessment presented in Chapter 6: Climate Change of the ES **[REP1-017]**.
Philip Heard	Applicant's Response to Relevant Representations – Permanent Sealing of Agricultural Land	4.1 The Applicant states (REP1-047 Page 145) there will be "permanent loss of 1.5ha … of Grade 3a land …" There is no evidence to support the Applicant's claim that land can be returned to its previous ALC grading; indeed, there is considerable evidence to suggest it cannot. The Rochdale Envelope approach requires the Applicant should assume worst case that the land under BESS, substation, compounds, access roads etc may be permanently sealed; this is a similar approach taken by a number of other solar developments.	Some of the other solar developments have sought to retain Onsite Substations, tracks, and/or other infrastructure after decommissioning, for perpetuity. They have therefore been assessed differently to the Proposed Development, which will remove all above ground infrastructure during decommissioning. There are no permanent aspects to the Proposed Development, other than vegetation planting which may not be removed by the Applicant, and therefore no permanent sealing.

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			The approach to returning land to its existing ALC has also varied across projects, depending on the soil quality. Some projects have had substations or BESS sited on Grades 1 or 2 land, for example, and may then struggle to return the land to this quality immediately following decommissioning. The ability to and speed at which soil can be restored to its pre-development condition is more difficult for this very high soil quality. The centralised BESS, Onsite substation and tracks associated with the Proposed Development are mainly located on grade 3b (with some grade 3a) soil, which the Applicant considers can be restored to this soil quality following their removal. The Applicant has given a commitment to do this in the Framework Soil Management Plan **[REP1-037]** and Framework Decommissioning Environmental Management Plan **[REP2-017]**. Paragraph 7.1.4 of the Framework Soil Management Plan says "The agricultural land within the Cable Corridor is only temporarily required during construction and will be restored to the current ALC grade", whilst Paragraph 7.1.1 of the same document says "The detailed SMP will set out in full the methods for reinstatement (as relevant to ensure the soil resource is managed effectively according to its ALC, and that BMV resource is retained (as relevant) across the DCO Site". The Framework DEMP **[REP2-017]** commits to post-restoration surveys of the agricultural land to verify its condition.
Philip Heard	Applicant's Response to Relevant Representations – Permanent Sealing of Agricultural Land	4.2 It is worth noting the approach to the Mallard Pass NSIP, a 60 year time limited consent, which was also promoted by the same applicant as Fosse Green. Table 12-4 of Chapter 12 of the Mallard Pass ES, Land Use and Soils (APP-042), states that the areas of access tracks and solar stations on the site amounts to 8 ha. Paragraph 12.4.16 acknowledges that these areas will be treated as permanently sealed over. It was accepted in paragraph 12.4.20 that even though the outline Decommissioning Environmental Management Plan required the solar station and tracks to be restored to agricultural use at the end of the operational phase, "it is assumed that restoration may not be back to comparable quality, at least initially, following decommissioning". The onsite substation containing 6.4 ha (paragraph 12.4.45 and Table 12-5 refers) was also considered as permanently sealed over for the same reasons as the access tracks and solar stations. Of the 14.4ha of agricultural land affected by the substation, access tracks and solar stations, 4.2ha was BMV land (Table 1 of the ExA Recommendation Report refers). Therefore, the Applicant has already previously accepted that infrastructure and vehicle tracks are permanently sealed; why has the Applicant now changed its stance regarding the extent and areas of land that are permanently sealed?	Mallard Pass Solar Project [EN010127] presented its assessment on soils in Chapter 12 Land Use and Soils [APP-042 of project EN010127]. It shows that the tracks and Solar Stations are located on areas of Grade 2 (Very High sensitivity), Grade 3a BMV (High sensitivity) and Grades 3b and 4 (non-BMV). It acknowledges a potential downgrading of this soil quality when the tracks and Solar Stations are decommissioned, and classifies it as permanently sealed. In contrast Table 12-5 of the same document shows the Onsite Substation being located on Grade 3a (High) and 3b land and has not assessed this land as being permanently sealed or incurring a potential downgrading of this soil quality following decommissioning. The construction methods with concrete pads will be similar across the Solar Stations and Onsite Substation, with the different approach seemingly therefore being due to the existence or absence of Very High sensitivity soils.

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			The Applicant has followed the IEMA guidance 'A New Perspective on Land and Soil in Environmental Impact Assessment', taking into account the approach agreed with councils, Natural England and PINS on several more recent solar NSIPs which have been granted consent by the SoS since Mallard Pass. These other schemes such as Gate Burton, Tillbridge, East Yorkshire Solar Farm, and Fenwick, for example, have not assessed land as permanently sealed (and would not do unless infrastructure seals the ground and is being proposed in perpetuality). The Applicant considers it prudent to follow current good industry practice and expectations on this matter rather than aligning with an assessment carried out in 2022 for Mallard Pass.
Philip Heard	Applicant's Response to Relevant Representations – Funding Statement	5.1 In response to RR-222 regarding funding for decommissioning, REP1-047 Page 352 states "The Applicant notes that decommissioning costs are not included in the capital cost estimate of the Proposed Development in the Funding Statement [APP-021]" The Funding Statement says "The current capital cost estimate for the Proposed Development is approximately £340M. This estimate covers all aspects of the Proposed Development and has been arrived at by including construction costs, preparation costs, supervision costs, land acquisition costs, equipment purchase and commissioning." This needs to clearly state that NOT ALL aspects of the proposed development are included as decommissioning costs are excluded.	The Funding Statement **[REP2-009]** submitted with the application sets out the financial position of the Applicant, and the proposed funding structure for the Proposed Development. In its Deadline 2 submissions, the Applicant provided an updated Funding Statement **[REP2-009]** in response to GC.1.15 of the Examining Authority's first written questions and requests for information (ExQ1) **[PD-011]**. The updates to the Funding Statement **[REP2-009]** provide clarity that the cost estimate for the Proposed Development includes decommissioning costs. The Applicant considers that these updates to the Funding Statement **[REP2-009]** were not strictly required because it is intended to demonstrate how an order which contains the authorisation of compulsory acquisition powers (as the Draft DCO **[REP2-005]** does) is to be funded, in compliance with Regulation 5(2)(h) of The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (the APFP Regulations).
Philip Heard	Applicant's Response to Relevant Representations – Funding Statement	5.2 At REP1-047 Page 352 the Applicant says it is a criminal offence to breach DCO commitments. If, at the time of decommissioning, the undertaker is bankrupt, no amount of criminal action will pay to clean up the mess which would be left to the local authority to deal with. It is irresponsible not to put financial provision in place for decommissioning. Moreover, in Chapter 12, Page 12-17 (APP-037) the Applicant states "The Applicant is committed to setting aside money for decommissioning the Proposed Development." As the "Applicant does not consider	As noted above, the Funding Statement **[REP2-009]**, provides clarity that the cost estimate for the Proposed Development includes decommissioning costs. As secured by Requirement 20 of Schedule 2 to the draft DCO **[REP2-005]**, decommissioning works must commence no later than 60 years following the date of final commissioning of the

Interested Party	Theme	Comment	Applicant Response
		a restoration bond to be necessary or proportionate", exactly how is the Applicant going to fulfil this commitment? (Note: this statement regarding commitment to set aside money refers to the Applicant, not any subsequent developer or owner).	Proposed Development. As previously stated, at the end of its operational lifetime, the Proposed Development will be decommissioned in line with the controls set out in the Framework DEMP **[REP2-017]**; the provision of a detailed DEMP, which is to be substantially in accordance with the framework, is also secured under Requirement 20 of Schedule 2 to the draft DCO **[REP2-005]**. The provision of a restoration bond is not required under the Planning Act 2008, nor National Policy Statements and such a provision is largely unprecedented. The decommissioning of the Proposed Development, including the funding of the same, is sufficiently secured under the provisions of the draft DCO **[REP2-005]** and the Framework DEMP **[REP2-017]**.
Philip Heard	Applicant's Response to Relevant Representations – Food Security	6.2 REP1-047 P274 states "……0.09% of the total farmland in the East Midlands …." What does the Applicant define as East Midlands? Why not Lincolnshire or NKDC? What is certain is the proposed development will, for example, consume 47% of the Parish of Thorpe on the Hill. The Applicant goes on to say "…. Approximately 50% of the land within the proposed Principal Site is currently used for the cultivation of non-food crops." The Applicant does not state what non-food crops. Crops for feeding cattle are still supporting the human food chain. Moreover, the Applicant will be aware of crop rotation; what was grown in 2024 when the Applicant did 'research', will almost certainly not be grown in 2026. The Applicant states that "This retained arable land includes approximately 116ha (288.6 acres) of Subgrade 3a BMV agricultural land." If the Applicant thinks this is so important why has the Applicant not retained ALL BMV land?	As noted in paragraph 12.5.2 of Chapter 12: Socio-Economics and Land Use [**AS-016**]: *"Potential effects arising from the Proposed Development are assessed relative to the baseline impact areas of the relevant Study Areas, North Kesteven, the East Midlands, and England and Wales, benchmarked against local, regional and national standards where appropriate."* Furthermore, as noted in paragraph 12.7.43, the Department for Environment, Food and Rural Affairs (Defra), publishes agricultural statistics for the East Midlands[2], and as such allows for consideration of the potential impact of the Proposed Development with regards to the loss of agricultural land at this scale. Defra defines the East Midlands as Lincolnshire, Leicestershire, Rutland, Northamptonshire, Derbyshire and Nottinghamshire. Regarding the cultivation of non-food crops on the Principal Site, evidence from the landowners in 2024 indicates c 50% of the land within the Principal Site is currently used for the cultivation of non-food crops. Of this, the majority (approximately 81%) is grown for use as fuels for carbon-intensive energy sources, rather than for direct human or animal consumption. Therefore, in 2024 the Principal Site was 50% human food, 9.5% non human food such as cattle feed, and 40.5% fuels for carbon-intensive energy sources. The point on crop rotation is noted, but with

[2] Defra (2024); Agricultural facts: East Midlands region https://www.gov.uk/government/statistics/agricultural-facts-englandregional-profiles/agricultural-facts-east-midland-region

Interested Party	Theme	Comment	Applicant Response
			approximately 48% of the Principal Site being available for arable production during operation (best-case, if landowners and farmers prefer arable crops over grassland where there is flexibility for either), there is the potential for the Principal Site to produce a similar amount of food during operation as it did in 2024. Regarding the question as to why the Applicant has not retained all BMV land, as stated in the Applicant's Response to Relevant Representations [**REP1-047**], the use of BMV land has been carefully considered through the site selection process (as set out in Appendix A: Site Selection Report of the Planning Statement [**AS-098**]) and also through the sensitive design of the Proposed Development in order to minimise the impact on BMV land and agricultural operations. The Applicant has had to balance other environmental constraints, such as including adequate offsets from residential dwellings and heritage settings, and has needed to include solar PV on some BMV land in order to maximise the renewable energy generation from the grid connection offer, given the urgent need for renewable energy outlined in the Statement of Need **[APP-184]**.
Philip Heard	Applicant's Response to Relevant Representations – BESS	7.1 Given that the updated NFCC Guidance was initially due to be published in March 2025, and then by the end of 2025, and is still not published, it is reasonable to assume there are some issues. In Aug 2025, the NFCC issued a 'Battery Energy Storage System (BESS) Position Statement'. "*NFCC calls on the UK Government and Devolved Administrations to minimise BESS fire safety risks by:* • *Creating an overarching framework and UK standard for the safe deployment and operation of BESS. This should be supported by technical standards and include clear guidance on the design and suitable locations for BESS, taking into account potential impacts of BESS on Critical National Infrastructure, any sensitive environmental receptors, local communities, and the need to ensure effective FRS pre planning and operational response in the event of a fire.* • *Including BESS in the Environmental Permitting Regulations 2016 at the earliest opportunity and ensuring that equivalent regulations are established for Scotland and Northern Ireland.*	Please note that the '*Grid scale energy storage system planning - Guidance for fire and rescue services*[3] was approved for publication in December 2025 and released in February 2026. As stated at paragraph 1.2.8 of the Framework BSMP **[REP1-041]**, the BESS will be designed in accordance with the UK and internationally recognised good practice guidance available at the time of detailed design. Regarding the Respondent's purported oversupply of BESS, there is no planning policy requirement at either the national or local level to assess or limit renewable energy development on the basis of a perceived "oversupply". The NPSs support the delivery of renewable energy infrastructure to meet national decarbonisation, energy security and climate change targets, which are need-based at a national scale. Appendix A – Action Point 1 of the Applicant's Written Summaries of Oral Submissions Issue Specific Hearing 1 [**REP1-046**] provides further detail on the Proposed Development and the

[3] Grid scale energy storage system planning - Guidance for fire and rescue services - NFCC

Interested Party	Theme	Comment	Applicant Response
		• *Ensuring that FRS concerns and advice are taken into account and responded to when they are engaged about fire safety risks in BESS planning applications.* • *Investing in a programme of continuous research on best practice firefighting tactics for fire incidents involving BESS to inform FRS training and operational guidance."* To date, there appears to have been no response from the UK Government. Until there is, it would be appropriate to suspend further BESS developments especially given that the recent NESO "Connection Reform Results" (Jan 2026) showed that large-scale battery sites are already in excess of 3 times oversupplied and the urgent need for further solar deployment has reduced significantly.	Clean Power 2030: Action Plan, including in relation to the results of the Connections Reform process as announced in December 2030. In summary: The solar component of the Proposed Development has secured a Gate 2 prioritisation, therefore NESO has prioritised the solar component of the Proposed Development to help achieve Government's solar Capacity Ranges by 2035. The BESS component of the Proposed Development has secured a Gate 1 connection which means its connection date has not yet been confirmed and is currently indicative. The Applicant awaits confirmation from NESO of its confirmed connection date for the solar (expected to be issued no later than the end of Q3 2026), and NESO's indicative connection date for the BESS (expected to be issued later in 2026). Appendix A – Action Point 1 of the Applicant's Written Summaries of Oral Submissions Issue Specific Hearing 1 [**REP1-046**] concludes with Government's view that "*Clean Power 2030 is a milestone that reflects the scale of ambition required to meet our Net Zero 2050 target; it is not a fixed ceiling on technology deployment or project approvals*". Therefore, it would not be correct to infer from the current policy position, current capacity ranges and NESO's prioritisation, that the need established by NPS EN-1 does not apply to any scheme or component of a scheme which currently has a Gate 1 connection agreement.
Philip Heard	Applicant's Response to Relevant Representations – BESS	7.2 REP1-047 Page 152 states "*There have been very few utility scale BESS fires in the UK to date, all of which were built prior to the current NFCC safety guidance.*" This statement is incorrect. The NFCC Guidance was issued in November 2023. There have been 4 BESS fires to date in the UK (plus one in Ireland). The Essex (Feb 2025) and Aberdeen (Feb 2025) fires were both post issue of the NFCC Guidance. Moreover, in the absence of UK legislation, the Applicant references US Legislation eg NFA 855; a number of BESS built to such legislation have had fires, including fires resulting in thermal runaway.	In response to the Examining Authority's First Written Questions (ref. GC.1.09), the Applicant prepared a Technical Note (see Appendix B of the Applicant's Response to the Examining Authority's First Written Questions **[REP2-029]**) detailing instances of BESS having caught fire worldwide, advising on where those incidents have occurred and giving the reason(s) for those incidents. This Note concludes that the two BESS fires associated with operational BESS facilities in the UK to date were designed and built prior to UK safety guidelines for BESS, and therefore neither facility met current NFCC safety guidelines. These fires would not have occurred if the principles and

Interested Party	Theme	Comment	Applicant Response
			commitments in the Framework BSMP **[REP1-041]** for the Proposed Development had been applied. The Applicant has undertaken a variety of assessments to address any potential areas of risk from the BESS – for example, Appendix 14-G: Unplanned Emissions Assessment of the ES **[APP-176]** provides an assessment of the potential consequences of unplanned emissions to air from the Proposed Development BESS, and Chapter 9: Water Environment of the ES **[REP1-021]** includes an assessment of the potential for impact on groundwater or surface water from firewater runoff in the event of a BESS fire. The Proposed Development includes embedded design mitigation and protection measures to reduce fire/explosion risk, during the operation of the BESS, as detailed in the Framework BSMP **[REP1-041]**. These measures include, for example, an automatic cooling system which will be integrated into the BESS to stop or reduce the risk of a cell from overheating and failing and triggering a chain reaction in neighbouring cells (thermal runaway). Under Requirement 7 of the Draft DCO **[REP2-005]** a detailed BSMP must be submitted to LCC for approval which must prescribe measures to facilitate safety during construction, operation and decommissioning of the BESS. This detailed BSMP must be substantially in accordance with the Framework BSMP and LCC must consult with LFRS and the Environment Agency before approving the BSMP.
Philip Heard	Applicant's Response to Relevant Representations – Tourism/Recreation	In response to my comment (RR-222) regarding the recently erected full size Lancaster Bomber statue, the Applicant states (REP1-047 Page 253) "Whilst this statue was not subject to detailed assessment (if indeed it could be considered a heritage asset at all, considering its recent establishment and whether it is of sufficient interest to comprise a heritage asset) ……." My comment made no reference to the statue being a heritage asset. It is a memorial to over 55000 aircrew of bomber command who gave their lives for their country. Look at the visitor numbers for the Bomber Command Museum near Lincoln to gauge the likely interest in the coming years. The Applicant goes on to state that "… it recognises that the villages of Coleby, Bassingham, Navenby and Auborn contain visitor and recreational attractions, and that there is also a network of PRoWs in	The Bomber County Gateway Lancaster landmark at Norton Disney is located approximately 3km from the DCO Site, therefore outside of the relevant study area set out in Chapter 12: Socio-economics and Land use of the ES **[AS-016]**. There is no impact pathway by which the proposed solar development would materially affect access to, operation of, or appreciation of this landmark. While some visitors may pass through the wider area, there is no evidence that indicates that the key drivers of aviation-related tourism, heritage interpretation, on-site facilities and curated visitor experiences, at such a distance, will be adversely affected by the Proposed Development. For these

Interested Party	Theme	Comment	Applicant Response
		the surrounding area which may be used by visitors. ……. The assessment …… concludes that overall the impact of the Proposed Development on tourism/recreation receptors is not significant during the construction, decommissioning and operational phases." Visitors come to this lovely area primarily for views of the open, panoramic landscape and PRoWs associated with tranquillity and calm. The LIRs from NKDC (REP1-056) and LCC (REP1-053) both consider that the proposed development will have negative impact regarding landscape and visual, and PRoWs. In addition, both LIRs, in relation to socio-economics, consider the visitor economy and economic impact; both consider the proposed development will have a negative impact. It is reasonable to assume that those representing the Applicant who assessed this as 'not significant' are not familiar with the County. The local authorities are the experts and their professional judgement is borne from many years experience of working and living in the local area; their assessment should carry greater weight in the planning balance.	reasons, significant adverse effects on the Lancaster installation or the associated aviation heritage visitor economy are not anticipated. The Applicant notes the respondent's agreement with LCC and NKDC's responses regarding impacts on PRoWs, potential visual change and perceived implications for the visitor economy. The assessment set out in Chapter 12: Socio-economics and Land use of the ES **[AS-016]** has considered these matters in detail. This presents an assessment of the potential socio-economic and land-use impacts of the Proposed Development on tourism, recreation, and local businesses, considering accommodation, visitor attractions, and Public Rights of Way alongside findings from the Landscape, Noise, Traffic, and Air Quality chapters. The assessment concludes that effects on PRoWs, tourism/recreation receptors and local businesses would not be significant during construction, operation, or decommissioning. Although the project introduces solar and BESS infrastructure, the land is not permanently converted to industrial use and a substantial area of arable land, including Best and Most Versatile land, is retained in accordance with the design principles and commitments in the Framework LEMP, providing ecological and economic benefits. The development is temporary, with decommissioning required within 60 years and land returned to prior use. While the LCC LIR suggests reduced visitor numbers due to landscape change, no evidence supports this, and visual mitigation is secured through the Framework LEMP. Any impacts in relation to PRoW are expected to be short-term, localised and managed through established embedded mitigation measures. For these reasons, effects on PRoWs, from visual change and consequently on tourism-related businesses are not anticipated.
Philip Heard	Applicant's Response to Relevant Representations – House Prices	In response to many concerned IPs regarding house prices (REP1-047 Table 7.6 Page 268), the Applicant refers to a study by The Centre for Economics and Business Research and Renewable UK (2014); Renewable UK can hardly be considered an independent body. Science Direct (who do appear to be independent) have published a far more balanced and recent study 'Wind Turbines, Solar Farms and House Prices" by Martijn I Droes and Hans R A Koster (2021). This concluded "Further results indicate that solar farms lead to a decrease in house prices within 1 km of about 2.6%. By comparing the overall impact on house prices, we show that the external effects of solar farms per unit of energy output	National Planning Practice Guidance advises that in general, planning is concerned with land use in the public interest. As a result of this, the protection of purely private interests such as the impact of a development on the value of neighbouring property could not be considered as a material planning consideration and is not a matter for assessment under the 2017 EIA Regulations. As a result of this, an assessment of the effects of development on property value was not required as part of the socio-economic assessment within the EIA for the Proposed Development.

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		are comparable to those of wind turbines. Thus, building solar farms instead of wind turbines does not seem to be a way to avoid the external effects of renewable energy production." The average house price in the area of the proposed development is circa £350,000, hence the likely impact of the proposed development of properties within 1km will be an average of £9,100 decrease in value per dwelling.	In consideration of available research into the impact of similar development on property prices, a study conducted by Maddison et al 2023 from the University of Birmingham[4] concluded that " *properties located less than 750m south of an operational solar farm greater than 5MW capacity suffer a 5.4% reduction in relative prices*" . The research found that only in certain circumstances do solar farms incur disamenity impacts, which the paper concludes is due to *"(1) proximity to the solar farm; (2) a view of the solar farm unobscured by undulations of the land, vegetation, or buildings; and (3) glare from the solar farm*" . There are several residential dwellings that are 750m south of solar PV proposed within the Proposed Development, however there are no glint and glare effects or unobscured views of the Proposed Development from these locations, which the research has identified as the cause for effects on house prices. Chapter 10: Landscape and Visual Amenity [**AS-117**] identifies no likely significant visual effects greater than minor adverse following establishment of the planting at any residential receptors. It acknowledges therefore there may be an impact on visual amenity at some residences but this would not meet the criteria of unobscured views that the research concludes is needed to affect house prices. The Applicant therefore considers that any impacts on house prices, should this occur, would be more likely to occur during construction activity and not operation, and would therefore be temporary (given the transient nature of construction across the DCO Site). On the basis of the metrics considered by the relevant research, as noted above, the Applicant is confident that local property prices will not be affected by the Proposed Development, and notes that this is not a material planning consideration. The ES evidences how design principles to limit impacts on properties have been achieved as part of the design of the Proposed Development, including:

[4] Maddison, Ogier, Beltran (2023), The Disamenity Impact of Solar Farms: A Hedonic Analysis

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			• While residents of some dwellings would experience significant adverse visual effects during year 1 of operation, in most cases these effects would reduce in magnitude due to the establishment of mitigation planting and would be not significant. No residential property would experience a visual effect which was so overbearing that it would render the dwelling an unpleasant or unattractive place to live. There are no unobscured views for residences within 750m south of solar PV, nor any glint and glare effects on these residences; and • Following the implementation of appropriate mitigation, no significant adverse environmental effects are expected from the Proposed Development on: air quality, traffic and transport and water resources.
Philip Heard	Applicant's Response to Relevant Representations – Ground Contamination	REP1-047 Page 288 IP comments state "the Applicant has accepted that panels can leak chemicals and heavy metals." The Applicant's response does not adequately address this issue, explaining in detail about maintenance activities and manager responsibilities. The Applicant proposes measures to prevent leaking of chemicals from the BESS but does not explain what action will be taken if solar PV panels leach heavy metals into the groundwater. It should be noted that Porth Wen solar farm on Anglesey suffered severe damage "to hundreds of panels" as a result of Storm Darragh in Dec 2024. No amount of maintenance checks can prevent such unforeseen damage which could lead to serious implications for the Protected Drinking Water Area. Such a significant risk can only be avoided by not constructing a solar farm in such a sensitive area.	The Phase 1 Preliminary Risk Assessment (ES Appendix 14-C) **[APP-170]**, states in Chapter 14 Conclusions in paragraph 14.1.1 that *"The potential risks that have been identified from potential contaminated land have been assessed by the PRA as being very low to moderate / low"*. It should be noted that the Framework CEMP **[REP2-013]** (ref. measure GC-C1), Framework OEMP **[REP2-015]** (ref. measure GC-O1), and Framework DEMP **[REP2-017]** (ref. measure GC-D1) all secure appropriate mitigation in the event that contamination is identified. It should also be noted that, as stated in the Proposed Development Parameters **[REP1-029]** solar PV cells will be PFAS (per-and poly fluoroalkyl substances; 'forever chemicals' that will negatively affect water quality, and can have health consequences if they enter drinking water) free. Requirement 6(2) in the Draft DCO **[REP2-005]** requires the design of the Proposed Development to be in accordance with the design commitments.
Philip Heard	Applicant's Response to Relevant Representations – Further Comments Regarding Applicant Responses to Relevant Representations	11.1 UK HSA (REP1-047 Page 70), regarding emissions from a BESS fire, stated "…. The modelling results presented do not detail the BESS location(s) in comparison with sensitive receptors, which would be needed to contextualise the potential plume impact." The Applicant's response stated "The location of the BESS is dependent on the BESS arrangement that is progressed post-consent as part of the Proposed Development." It is difficult to understand what is preventing the Applicant from making a decision now regarding which BESS arrangement will be pursued. If that remains the case then the Applicant should model the sensitive	The Applicant does not consider it appropriate to fix the battery type at this stage. Technologies are constantly evolving and new efficiencies are developed regularly. As such, the Proposed Development includes flexibility at this stage for a centralised or distributed BESS in order to future-proof this element of the Proposed Development, particularly given that BESS is an important component of the transition to net zero and providing flexibility to the energy system. The BESS will have a direct

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		receptors regarding potential plume impact for both BESS options in order to inform the UK HSA. Moreover, worst case should model fire propagation from one container to another as has occurred on a number of real occasions worldwide (eg Moss Landing, California).	relationship with the Proposed Development and will support its operation by storing energy when it is generated in abundance and releasing it to the grid when it is needed, increasing the reliability of the energy system and contributing to the security of supply more generally. Therefore, fixing the BESS technology at this stage potentially reduces this benefit if advances are made in the alternative technology. The decision as to whether a centralised BESS or a distributed BESS arrangement is taken forward will be made post-consent, as part of the detailed design process and the relevant planning authorities will be made aware of that decision pursuant to Requirement 6(6) at Schedule 2 of the Draft DCO **[REP2-005]**. Regarding the plume modelling, as set out in paragraph 1.2.3 of Appendix 14-G: Unplanned Emissions Assessment **[APP-176]** the assessment has been based upon the secured parameters of the Proposed Development (e.g. such as the maximum scale, distance from receptor and embedded design controls/measures) as opposed to modelling a centralised or distributed BESS scenario.
Philip Heard	Applicant's Response to Relevant Representations – Further Comments Regarding Applicant Responses to Relevant Representations	11.2 In response to RR-222 (REP1-047 Page 324/5) the Applicant states "Commercial rooftops do present an opportunity for solar development but not at the scale of the Proposed Development which would require vastly more rooftops than are available within the site selection area of search." The Applicant set the 'site selection area of search', so the Applicant has deliberately excluded any realistic chance of opportunities of brownfield or previously developed sites. It is assumed the vast commercial roof-space in Newark would be within reach of the planned grid extension 'Trent Valley South'; it might be more technically challenging; the Applicant uses words such as 'may', 'often', 'not all', but it is not impossible. It is worth noting that University College London Energy Institute analysis estimates a technical potential of 117GW of solar power on 650km2 of non-domestic and domestic rooftops and car parks in England alone. It is irresponsible of the solar industry to ignore this potential at the expense of the easy option of decimating the countryside.	As set out in the Statement of Need **[APP-184]** and supported by the Government's overarching NPS for Energy (NPS EN-1) and NPS for renewable energy infrastructure (NPS EN-3), while smaller-scale solar on rooftops or brownfield land contributes to decarbonisation, it is unlikely to deliver the scale of generation needed at the required pace and cost. Large-scale solar is an essential part of the future electricity system, that must be deployed where there is the natural resource, where land is available and suitable, and in proximity to available grid connection locations, such as the area local to the Proposed Development, in line with NPS EN-1. Reasonable alternatives were considered during the site selection process (see the Appendix A: Site Selection Report of the Planning Statement **[AS-098]**), including brownfield and non-agricultural land. No suitable sites of the required scale were identified within a viable distance of the proposed grid connection near Navenby.
Philip Heard	Applicant's Response to Relevant Representations – Further Comments Regarding Applicant Responses to Relevant Representations	11.3 At REP1-047 Page 329, the Applicant states "The provision of visual screening, for example for residents and for users of PRoW, has been considered throughout the design of the landscaping proposals …." Visual screening of PRoWs will result in some 15 years of walking alongside glass panels and then 45 years of walking between 3m high hedgerows with the loss of wonderful panoramic views;	The Applicant acknowledges that there will be some significant residual visual effects on users of public rights of way traversing the DCO Site, and these are reported within Chapter 10:

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		the change from the wide open vistas currently enjoyed with be transformational, and not for the better. The Applicant goes on to state "There are no significant long term visual effects anticipated on residents of local villages as, by year 15 of operation, the proposed landscaping …… would have matured ……." For many people who have retired in the local area, 15 years will represent most, if not all, of the rest of their lives!	Landscape and Visual Amenity [**AS-117**] of the ES (reference: Section 10.7). The Applicant also notes that it is widely accepted that some level of adverse impact is inevitable, as is reflected in the Overarching NPS for Energy (EN-1), paragraph 5.10.5 which states that *"virtually all nationally significant energy infrastructure projects will have adverse effects on the landscape, but there may also be beneficial landscape character impacts arising from mitigation."* The Design Approach Document [**APP-186**] details how the design of the scheme has sought to minimise adverse landscape and visual effects. Section 4 of the Design Approach Document outlines how the design has evolved at different stages of the pre-application process as follows: • The provision of additional planting, screening measures, and buffers, including on land southeast of Thorpe on the Hill to reduce visual impacts • Confirmation of the location of the Onsite Substation on land south of Aubourn within an area of enclosed landscape, bound by frequent small woodlands and hedgerows, to minimise potential visual effects. • A reduction in the size of the BESS compound to address noise impacts and allow for increased landscaping to provide additional screening and increasing opportunities for biodiversity net gain. Other landscape-related design commitments are set out at Table A-1 of the Design Approach Document and further demonstrate ways in which the design would sensitively integrate into its landscape setting and minimise adverse landscape and visual effects.
Philip Heard	Applicant's Response to Relevant Representations – Further Comments Regarding Applicant Responses to Relevant Representations	11.4 At REP1-047 Page 333 the Applicant states "the Proposed Development is in line with achieving the government's Clean Power by 2030 (CP2030) goals." Given that the proposed development will not start output until circa 2033, how does the Applicant consider it is in line with achieving 2030 goals?	Section 4.2 of the Statement of Need [**APP-184**] sets out an explanation that the Government's Clean Power aim is to achieve Clean Power by 2030, then keep power clean while demand grows in other sectors. As set out on page 11 of the Clean Power Action Plan 2030, "*By 2050, annual electricity demand is likely to at least double. Clean power by 2030 prepares us for the rapid growth in power demand*

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			expected over the 2030s and 40s... We need… to prioritise projects needed for 2030, while maintain a robust pipeline beyond 2030". Page 57 of the Clean Power 2030 Action Plan confirms that *"We will need to continue delivering new clean power infrastructure at pace after 2030 to keep up with increasing electricity demand".* Page 130 of the Clean Power 2030: Action Plan next steps set out that *"Additionally, it is important that government looks at a clean power system beyond 2030, where demand is expected to increase".* Appendix A – Action Point 1 of the Applicant's Written Summaries of Oral Submissions Issue Specific Hearing 1 [**REP1-046**] provides further detail on the Proposed Development and the Clean Power 2030: Action Plan.
Philip Heard	Applicant's Response to Relevant Representations – Further Comments Regarding Applicant Responses to Relevant Representations	11.5 At REP1-047 Page 342 the Applicant states "Large-scale solar must be deployed where there is the natural resource, where suitable land is available ……" What natural resource …….. the sun? It shines, or rather does not shine, reasonably equally across the country. By saying "where suitable land is available" the Applicant clearly admits rooftops were not considered. In fact, the Applicant's only two considerations appear to be willing landowners and a non-existent grid connection.	With regards to exploring the scope to utilise rooftops and non-agricultural land (such as brownfield sites) for development, Appendix A: Site Selection Report of the Planning Statement **[AS-098]** sets out how previously developed land was considered. The Applicant recognises that energy alternatives such as decentralised energy generation on rooftops for example, have an important role to play in decarbonisation. However, on their own, smaller scale solar schemes, including solar on rooftops, are not likely to deliver a sufficient total capacity at the required pace and at an affordable cost to meet the Government's targets in relation to renewable energy generation and the achievement of net zero. The Government recognises in the Overarching NPS for Energy (NPS EN-1) that growth in large-scale solar schemes, alongside smaller schemes of solar or other renewable energy sources, is expected to improve the dependability of those assets as a combined portfolio, contributing to an adequate and dependable UK generation mix required to meet the UK's energy security needs, and the decarbonisation needs of the UK.
Philip Heard	Applicant's Response to Relevant Representations – Further Comments Regarding Applicant Responses to Relevant Representations	11.6 At REP1-047 Page 343, the Applicant states there will be a "community benefit fund of £400 per MW per year of export capacity." The Applicant states that estimated total generation (60 years) will be 19,438,499 MWh (APP-031 Chapter 6 Para 6.4.67)); could the Applicant please explain the 'per MW per year' statement and provide an estimated aggregate community benefit figure across the lifetime of	The community benefit fund comprises: *(£400 x 240 (MW)) x 60 (years)* As such, the community benefit fund will provide £5,760,000 over the 60 year operational period of the Proposed Development.

Interested Party	Theme	Comment	Applicant Response
		the proposed development. It the Applicant is committed to providing this community benefit fund, it should be a requirement of the DCO.	The community benefit fund does not form part of the DCO application and therefore does not comprise a benefit in the context of the planning balance. The community benefit fund would only operate if the Proposed Development received development consent and became commercially operational. Further, a community benefit fund cannot be secured by way of a DCO Requirement or a development consent obligation because it does not meet the tests set out in NPS EN-1 at paragraphs 4.1.16 and 4.1.18 respectively. In particular, as a community benefit is not a material consideration to be taken into account in the Examining Authority's recommendation or the Secretary of State's decision making, it cannot be said to be relevant to planning or necessary to make the Proposed Development acceptable in planning terms.
Anne Heard	Applicant's Response to Relevant Representations – Landscape and Visual Impact	Table 3-1 North Kesteven District Council 8. Landscape and Visual Impact – Cumulative Effects page 105 2.1 Applicant's response The Joint Interrelationship reports for schemes such as Springwell, Tillbridge, West Burton and Cottam found that given the notable distances and lack of intervisibility between the schemes, there was no potential for significant cumulative effects. 2.2 Comments in reply 2.2.1 The purpose of the Joint Interrelationship reports as they relate to cumulative impacts is for the developers of each scheme to review the information and assessment made in relation to other projects and consider whether there are any changes to the assumptions and conclusions on their own cumulative impact assessments. The basis for the assessments of the cumulative landscape and visual impacts in relation to the schemes referred to by the Applicant was not accepted by the ExA in the Tillbridge and West Burton schemes as set out below. The Springwell ExA report has not yet been published. 2.2.2 The ExA Recommendation Report for Cottam (dated 5 June 2024) noted at paragraph 3.6.70 that there was limited intervisibility between the proposed development and other cumulative developments, and that there would be some changes to land use over a large area which would be seen in the context of an extensive agricultural landscape. The ExA did not agree that it would create an	The Applicant has undertaken its own independent assessment of potential cumulative effects for the Proposed Development. The cumulative assessment undertaken follows an approach which is consistent with PINS Guidance on Cumulative Effects and a proportionate methodology as outlined in GLVIA3. In Landscape Technical Memo 3 (November 2024) contained at Appendix A of NKDC's LIR [**REP1-056**] AAH welcomed this approach and accepted its robustness and appropriateness in assessing the cumulative effects on landscape and visual amenity. The cumulative assessment contained in Chapter 10: Landscape and Visual Amenity of the ES [**AS-117**] primarily focusses on the cumulative schemes within the 2km Zone of Influence (ZoI), as this was judged to be the geographic area across which landscape and visual effects were most likely to occur, although the nearest NSIP scale solar schemes beyond 2km were also scoped in given their similar scale and typology to the Proposed Development. This is noted at Appendix A of NKDC's LIR [**REP1-056**] within AAH's Landscape and Visual Review (November 2025) as an appropriate approach (ref. paragraph 6.2). As part of the cumulative assessment, consideration was given to the likely significant cumulative sequential visual impacts,

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		"energy" landscape. However, it does not appear that the concept of the sequential approach of visual receptors travelling through the landscape and experiencing multiple schemes across several kilometres was either put to or considered by the ExA. 2.2.3 In the subsequent examination of the Tillbridge and West Burton schemes, the sequential approach was considered by the ExAs. In the ExA Examination Report for West Burton dated 8 August 2024, it was noted at paragraph 3.3.97 that the applicant's LVIA "underestimates the potential for cumulative sequential visual impacts" and at paragraph 3.3.98 that "the focus of the Applicant's LIVA assessment on the intervisibility between solar schemes and therefore combined views does not fully acknowledge the potential landscape and visual effects of the spread of considerable, albeit dispersed, solar development across an extensive area". At paragraph 3.3.106 the ExA concludes that the extent of the proposed solar NSIPs, along with other proposed solar development across the district and beyond raises concerns about their potential combined effect on the landscape character of a wide area as well as cumulative sequential visual impacts. 2.2.4 The ExA Recommendation Report for Tillbridge dated 14 July 2025 says at paragraph 3.7.133 that "we consider that the Applicant's focus on specific viewpoints neglects the sequential cumulative effects experienced when receptors move through the landscape" and concludes at paragraph 3.7.145 that "overall, we attribute great negative weight to the landscape and visual harm which would be caused by the development in isolation, and when considered cumulatively with other developments".	although negligible residual effects noted within the standalone assessment of the Proposed Development were excluded from the cumulative assessment as, by virtue of their definition, they are considered to be imperceptible and are unlikely to lead to a significant in-combination effect. By way of example of the consideration of cumulative sequential visual impacts, paragraph 10.10.21 of Chapter 10: Landscape and Visual Amenity of the ES [**AS-117**] notes that the addition of North Hykeham Relief Road (PL/0087/23) with the Proposed Development would result in construction activity being experienced from greater lengths of the Viking Way, and would therefore result in Major adverse effect on the visual amenity of users the Viking Way, which is significant. With regard to sequential cumulative effects with other NSIP scale solar farms, it is considered that there are very limited routes beyond the 2km ZoI where these could be experienced sequentially and, in any case, the substantial tracts of land outside of and between the different projects would serve to provide visual relief such that any cumulative changes to sequential views would be negligible and not significant. The Applicant included reference to the Joint Relationships Reports for Springwell Solar Farm, Tillbridge Solar Project, West Burton Solar Project and Cottam Solar Project in its response to Relevant Representations **[REP1-047]** to highlight that similar judgements were reached by consultant teams on other NSIPs in the wider area.
Anne Heard	Applicant's Response to Relevant Representations – BESS Fires	Table 4-2 Welbourn Parish Council RR-288 6. BESS fires page 152 4.1 Applicant's response There have been very few utility scale fires in the UK to date, all of which were built prior to the current NFCC safety guidance, meaning that the components/setup which caused these fires are no longer permitted for use. 4.2 Comments in reply The NFCC guidance was published in 2023.	The Applicant's response noted in this comment was in reference to fires at operational BESS – at construction stage it would not be possible to confirm that a BESS fully accorded with the current NFCC safety guidance given that the guidance includes operational aspects such as fire detection. In response to the Examining Authority's First Written Questions (ref. GC.1.09), the Applicant prepared a Technical Note (see Appendix B of the Applicant's Response to the Examining Authority's First Written Questions **[REP2-029]**) detailing instances of BESS having caught fire worldwide, advising on

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		The fire which broke out on 19 February 2025 in East Tilbury was at a 300MW BESS under construction and not already built as the Applicant asserts. The fire that broke out on 21 February 202 near Rothienorman in Aberdeenshire was at a 50MW BESS, also under construction and not already built.	where those incidents have occurred and giving the reason(s) for those incidents. This Note concludes that the two BESS fires associated with operational BESS facilities in the UK to date were designed and built prior to UK safety guidelines for BESS, and therefore neither facility met current NFCC safety guidelines. These fires would not have occurred if the principles and commitments in the Framework BSMP **[REP1-041]** for the Proposed Development had been applied. The fires at the East Tilbury BESS in Thurrock, Essex and the Rothienorman BESS in Aberdeenshire, which both occurred during construction, have not yet released a safety report, and therefore it is not possible to comment on the cause of the fires. The Applicant has undertaken a variety of assessments to address any potential areas of risk from the BESS – for example, Appendix 14-G: Unplanned Emissions Assessment of the ES **[APP-176]** provides an assessment of the potential consequences of unplanned emissions to air from the Proposed Development BESS, and Chapter 9: Water Environment of the ES **[REP1-021]** includes an assessment of the potential for impact on groundwater or surface water from firewater runoff in the event of a BESS fire. The Proposed Development includes embedded design mitigation and protection measures to reduce fire/explosion risk, during the operation of the BESS, as detailed in the Framework BSMP **[REP1-041]**. These measures include, for example, an automatic cooling system which will be integrated into the BESS to stop or reduce the risk of a cell from overheating and failing and triggering a chain reaction in neighbouring cells (thermal runaway). Under Requirement 7 of the Draft DCO **[REP2-005]** a detailed BSMP must be submitted to LCC for approval which must prescribe measures to facilitate safety during construction, operation and decommissioning of the BESS. This detailed BSMP must be substantially in accordance with the Framework BSMP and LCC must consult with LFRS and the Environment Agency before approving the BSMP.

Interested Party	Theme	Comment	Applicant Response
Anne Heard	Applicant's Response to Relevant Representations – Cultural Heritage	Table 7-2 Applicant's response to General Public Relevant Representations relating to Cultural Heritage- Bassingham Conservation Area page 250 5.1 Applicant's response The quoted "substantial harm" is unsubstantiated- this comprises a high test, measured by a degree of harm to heritage significance of an asset (as opposed to scale of development or level of change in an asset's setting). 5.2 Comments in reply 5.2.1 In the case of Bramshill v SSHCLG [2021] EWCA Civ 320, the Court of Appeal addressed the interpretation of policies in the NPPF on the assessment of harm to heritage assets. Paragraph 74 of the judgement states:- "*What amounts to substantial harm in a particular case will always depend on the circumstances. Whether there will be such "harm" and, if so, whether it will be "substantial" are matters of fact and planning judgement. The NPPF does not direct the decision maker to adopt any specific approach to identifying "harm" or gauging its extent*." 5.2.2 West Burton NSIP is an example of the determination by the Secretary of State that there was "substantial" harm to the setting of a heritage asset. It was proposed to site solar arrays within the former deer park associated with the Stow Park SAM. It was agreed by the parties that the former deer park formed part of the setting of the SAM but the point of contention was the extent to which the setting of the deer park contributed to the significance of Stow Park SAM and the subsequent level of harm caused by the impact to the setting of the SAM. Paragraph 3.4.133 of the ExA Recommendation Report states:-"the placing of solar panels within the former deer park would result in a material alteration to the character of the landscape….. there would be a loss of rural openness that has supported an appreciation of the SAM, undermining its current legibility". Paragraph 3.4.135 of the report states:- "The ExA 's clear view is that notwithstanding the lack of direct physical impact, the effects of the proposed development on the designated heritage asset of the highest significance would represent substantial harm". The view was endorsed by the Secretary of State at paragraph 4.175 of the decision letter. 5.2.3 Turning to the consideration of the impact of the proposed development on Bassingham Conservation Area, I have set out my submissions on this in section 3 of REP1- 106. In summary:- • Bassingham Conservation Appraisal describes the village as originally "an agricultural settlement with the village being surrounded by flat open	The Applicant stands by their position that references to substantial harm are unsubstantiated, and substantial harm has been acknowledged by the Courts in numerous judgments and within the Planning Policy Guidance (NPPG paragraph 018) as being a 'high test'. The particulars of the West Burton scheme, in regard to the effects on the land of the former deer park and the setting of the scheduled monument, were identified as a critical issue (and as substantial harm) by Historic England. The Secretary of State agreed with the position of Historic England. Historic England (and the local councils) identify no harm to the Conservation Area at Bassingham. Any representations that identify any harm to Bassingham Conservation Area (especially those that cite substantial harm) would be an outlier compared to the professional, expert opinions expressed by others.

Interested Party	Theme	Comment	Applicant Response
		farmland". There is therefore a strong association between the village and the surrounding fields that were worked by the agricultural community living in the village. The fields surrounding the village in my view form part of the setting of the Conservation Area. • The proposed development will wrap around the village on three sides, along Clay Lane and Bassingham Road leading to Thurlby, along Fen Lane and along Bassingham Road leading to Aubourn. This will result in the character of the area changing from extensive open arable fields to an industrial landscape. • This in turn will impact on the way that the village is perceived as a rural agricultural settlement. For example, the approach to the village along Clay Lane will be through solar arrays on both sides of the road, it will no longer be evident that the area was part of the fabric of the life of the community, cultivated by the people who lived there.	
		5.2.4 The Applicant refers to the assessment of Bassingham Conservation Area in the Detailed Heritage Asset Setting Assessment (APP-127) which concluded that the proposed development would cause no harm to the Conservation Area's setting. The credibility of the Detailed Heritage Asset Setting Assessment is undermined by the Applicant's acceptance that its analysis of the level of harm to the setting of the Grade II medieval Aubourn church in the Assessment was incorrect. The Applicant's conclusion that there was no harm to this heritage asset was criticised by Historic England which commented (RR107) that the assessment was reductive in terms of analysis. The Applicant has accepted the criticism as the Change Request (AS-103) now seeks to remove the solar arrays from Field 46 due to their impact on views towards heritage assets.	The Applicant considers that the detailed settings assessment, carried out in line with Historic England guidance (the Appendix 7-D Detailed Heritage Asset Setting Assessment of the ES **[APP-127]**), provides an appropriate and proportionate level of assessment with regard to Bassingham Conservation Area. As above, it should be noted that none of the heritage advisors to the LPA, LCC or at Historic England have raised concerns regarding the assessment of Bassingham Conservation Area as presented in Appendix 7-D **[APP-127]** which confirms the assessment presented is accurate, proportionate and appropriate. It should also be made clear that amendments to the Proposed Development layout may not necessarily be made because of need to address impacts (or erroneous assessment), but can be implemented to help remove concerns or objections, as is the case in this instance. With regard to the potential effects upon the Grade II Listed church in Aubourn, the Applicant did not accept that the conclusions, as presented in Appendix 7-D **[APP-127]** were not accurate. The design change to remove panels from Field 46 was carried out in response to concerns raised by Historic England, and in particular because this also reduced the potential visual impact at the Grade II Listed Grange Cottage.

Interested Party	Theme	Comment	Applicant Response
Anne Heard	Applicant's Response to Relevant Representations – Noise and Vibration	Table 7-5 Applicant's response to General Public Relevant Representations relating to Noise and Vibration – Noise impact on St Michael and All Angels Church page 266 6.1 Applicant's response Piling activities would only take place during a short window during construction. It should be possible to avoid periods when the churchyard is particularly sensitive to noise through consultation and liaison committed to in Table 3.7 of the FCEMP (REP1-031). 6.2 Comments in reply 6.2.1 St Michael and All Angels church is open to the public each day. The church receives visitors from all over the world, some paying their respects to family graves, other carrying out ancestry research. Comments in the visitor's book inside the church repeatedly mention the peacefulness experienced by those visitors. Their experience will be marred by construction activities being carried out. Table 1 of Appendix 11-D Construction and Operational Noise Modelling (APP-159) sets out the plant and equipment that will be used during construction and whilst the pile driving will be the loudest, there will be other machinery such as dumper trucks, cranes, generators and cement mixers all contributing to the noise. The area between the proposed solar arrays and the Church is open and over a flat landscape with no intervening buildings that might attenuate the noise. In the article entitled ""A nightmare": the grim reality of living near a mega solar building site" (the Stop East Park Energy website accessed online on 30 January 2026), one of the residents of Graveney living close to the Cleve Hill solar NSIP is quoted "The constant thud thud of pile-driving from early in the morning and into the evening drove us all mad. It was so intrusive that even when it stopped we felt we could hear it still". 6.2.2 The Table 3.7 referred to by the Applicant as being in the FCEMP does not exist. There is a section 3.7 on Noise and Vibration which identifies as NV-C1 an acknowledgement of the potential impact of construction traffic and machinery noise. The mitigation does not include consultation as the Applicant asserts, it refers to "liaison" prior to construction works being undertaken. I suggest that this will amount to no more than the contractor informing nearby residents of when the work will be taking place.	Noise from all construction activity at the church is assessed in Chapter 11: Noise and Vibration of the ES **[APP-036]** and, with appropriate mitigation secured through the Framework CEMP [**REP2-013**], is not classed as significant. In response to this comment from the IP, Table 6 in Section 3.7 of the Framework CEMP (ref. NV-C1) has been updated (submitted to the Examination at Deadline 3) within the 'Communication Strategy' section to note specific liaison with St Michael and All Angels church regarding the preferred timing for piling works in proximity to the receptor in addition to informing the church of when construction will be taking place.
Anne Heard	Applicant's Response to Relevant Representations – Noise and Vibration	Table7-5 Applicant's response to General Public Relevant Representations relating to Noise and Vibration – Impact of noise on PRoW users page 266	Paragraph 11.4.64 of Chapter 11: Noise and Vibration of the ES **[APP-036]** refers to WHO Guidelines in terms of internal noise levels and does not make any reference to noise levels for

Interested Party	Theme	Comment	Applicant Response
		7.1 Applicant's response • The use of WHO guidelines in the EA is specified in paragraph 11.4.64 of Chapter 11 Noise and Vibration (APP-036). • Operational noise would be between 35 and 50 dB on PRoWs. These levels are below the WHO guidelines on moderate community annoyance and are akin to the existing sound environment as evidenced by the baseline sound surveys given in Table 11-12 of Chapter 11 Noise and Vibration (APP-036). 7.2 Comments in reply 7.2.1 The Applicant's consideration of the WHO Guidelines as set out in paragraph 11.4.64 of Chapter 11 Noise and Vibration (APP-036) is limited to the guidance on noise levels which permit good sleeping conditions at night within dwellings. There is no reference in the EA to consideration of the WHO Guidelines as it applies to PRoW. 7.2.2 The Applicant's reference to noise levels of between 35 and 50 dB (I assume that the Applicant refers to A weighted levels) being below the WHO guidelines for moderate community annoyance relates to Table 1 of the Guidelines set out below:-	outdoor living areas set out in WHO Guidelines. The external noise levels in WHO Guidelines are set for annoyance in outdoor living areas (i.e. gardens, balconies and roof terraces) and are not intended to address temporary exposure to noise for PRoW users. The Applicant has not claimed that existing sound levels along the PRoW are between 30 and 50 dB, merely that predicted (A-weighted) levels in the general area are between 35 and 50 dB and this is in line with the wider existing sound environment. The predictions represent a reasonable worst-case where plant are operating under full load and representative of a hot summer day. A PRoW is a highway (Highways Act 1980) and is not a noise sensitive receptor in national policy so cannot be aligned with a land designation such as parkland or Conservation Area from WHO Guidelines. Weight would only be given to tranquillity of a PRoW if it was located within a Conservation Area, a National Park, an AoNB or a designated quiet area. The site contains none of these land designations, so the noise assessment appropriately considers noise effects on health and quality of life of PRoW users. Paragraph 11.4.17 of Chapter 11: Noise and Vibration of the ES **[APP-036]** acknowledges that such levels on the PRoW could affect the acoustic character of the area such that there is a perceived change in quality of life while using them. However, given the range of noise levels along the PRoW and the transient use of them, noise levels from the Proposed Development on PRoW users, which would be below those associated with regular speech, are not considered to constitute a permanent impact on user's health and quality of life. Hence why they were scoped out of further assessment, as explained in paragraph 11.4.18 of Chapter 11: Noise and Vibration of the ES [**APP-036**].

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Table 1: Guideline values for community noise in specific environments.

Specific environment	Critical health effect(s)	L_{Aeq} [dB(A)]	Time base [hours]	L_{Amax} fast [dB]
Outdoor living area	Serious annoyance, daytime and evening Moderate annoyance, daytime and evening	55 50	16 16	- -
Dwelling, indoors Inside bedrooms	Speech intelligibility & moderate annoyance, daytime & evening Sleep disturbance, night-time	35 30	16 8	 45
Outside bedrooms	Sleep disturbance, window open (outdoor values)	45	8	60
School class rooms & pre-schools, indoors	Speech intelligibility, disturbance of information extraction, message communication	35	during class	-
Pre-school bedrooms, indoor	Sleep disturbance	30	sleeping-time	45
School, playground outdoor	Annoyance (external source)	55	during play	-
Hospital, ward rooms, indoors	Sleep disturbance, night-time Sleep disturbance, daytime and evenings	30 30	8 16	40 -
Hospitals, treatment rooms, indoors	Interference with rest and recovery	#1		
Industrial, commercial shopping and traffic areas, indoors and outdoors	Hearing impairment	70	24	110
Ceremonies, festivals and entertainment events	Hearing impairment (patrons:<5 times/year)	100	4	110
Public addresses, indoors and outdoors	Hearing impairment	85	1	110
Music and other sounds through headphones/ earphones	Hearing impairment (free-field value)	85 #4	1	110
Impulse sounds from toys, fireworks and firearms	Hearing impairment (adults) Hearing impairment (children)	- -	- -	140 #2 120 #2
Outdoors in parkland and conservations areas	Disruption of tranquillity	#3		

#1: As low as possible.
#2: Peak sound pressure (not LAF, max) measured 100 mm from the ear.

#3: Existing quiet outdoor areas should be preserved and the ratio of intruding noise to natural background sound should be kept low.
#4: Under headphones, adapted to free-field values.

It appears that the Applicant is referencing line 1 of the Table where a level of 50dBA would cause moderate annoyance daytime and evening in an outdoor living area. The WHO guidelines consider adverse health effects according to specific environments. The reference to an outdoor living area is to areas such as residential gardens or balconies. More akin to the PRoW is the environment described in the last line of the Table "Outdoors in parkland and conservations areas" where the guidelines state that existing quiet outdoor areas should be preserved.

7.2.3 The Applicant asserts that the levels of operational noise along the PRoW of between 30dBA and 50dBA are akin to the existing sound environment as evidenced by the baseline sound surveys given in Table 11-12 of Chapter 11 Noise and Vibration (APP-036). However, none of the monitoring locations for the sound surveys were on the ProW. The purpose of the sound surveys was to assess noise levels at noise sensitive receptors, not PRoW as these had been scoped out of the EA. The position of the monitoring locations for the sound surveys is at Fig 11-1

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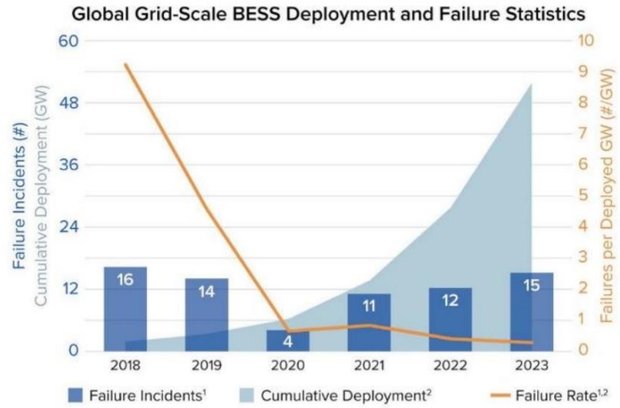
		Receptor and Noise Monitoring Locations (APP-099). The closest monitoring locations to the Thorpe on the Hill Stepping Out Walk footpaths are ML3 adjacent to the Cathedral View Holiday Caravan Park, ML5 close to the village of Thorpe on the Hill and ML4, close to a farm and vehicular track. The closest monitoring location to the stretch of footpath from Bassingham towards Aubourn (along LL/Bass/22/1, LL/Bass/21/2, LL/Bass/21/3 and LL/Aubo/8/1) is ML18 adjacent to a residential property along Fen Lane, a public highway open to all traffic. Noise levels measured at these locations will inevitably be higher than on the ProW network which are away from roads and residential properties. The Applicant has therefore no evidence to substantiate their claim that the existing sound levels along the PRoW are akin to between 30dBA and 50dBA.	
Anne Heard	Applicant's Response to Relevant Representations – Safety Concerns and Fire Risk	Table 7-14 Applicant's response to General Public Relevant Representations relating to Safety- Safety Concerns and Fire Risk (BESS) page 337 9.1 Applicant's response BESS failure rates dropped by 98% from 2018 to 2024 as lessons learned from BESS failure events have been incorporated into BESS design, testing requirements, control and monitoring systems, safety standards and construction and operation best practices. 9.2 Comments in reply 9.2.1 The figures quoted above by the Applicant are taken from the EPRI "Insights from Battery Energy Storage Systems (BESS) Failure Incident Database: Analysis of Failure Root Cause" and based on Figure 1 of the paper:-	As noted above, the Applicant has undertaken a variety of assessments to address any potential areas of risk from the BESS – for example, Appendix 14-G: Unplanned Emissions Assessment of the ES **[APP-176]** provides an assessment of the potential consequences of unplanned emissions to air from the Proposed Development BESS, and Chapter 9: Water Environment of the ES **[REP1-021]** includes an assessment of the potential for impact on groundwater or surface water from firewater runoff in the event of a BESS fire. The Proposed Development includes embedded design mitigation and protection measures to reduce fire/explosion risk, during the operation of the BESS, as detailed in the Framework BSMP **[REP1-041]**. These measures include, for example, an automatic cooling system which will be integrated into the BESS to stop or reduce the risk of a cell from overheating and failing and triggering a chain reaction in neighbouring cells (thermal runaway). Furthermore, as stated at paragraph 1.2.8 of the Framework BSMP **[REP1-041]**, the BESS will be designed in accordance with the UK and internationally recognised good practice guidance available at the time of detailed design. Under Requirement 7 of the Draft DCO **[REP2-005]** a detailed BSMP must be submitted to LCC for approval which must prescribe measures to facilitate safety during construction, operation and decommissioning of the BESS. This detailed BSMP must be substantially in accordance with the Framework

Interested Party	Theme	Comment	Applicant Response
		 ***Figure 1.*** *Global Grid-Scale BESS Deployment and Failure Statistics* *Figure 1 of the EPRI "Insights from BESS failure incidents database: Analysis of failure root cause"* 9.2.2 The Applicant suggests that the BESS failure rates as a proportion of BESS deployment has sharply decreased as the BESS technology has matured. However, if the years 2018 and 2019 are discounted (when the technology is less well advanced) the failure rate from 2020 onwards is on a far less steep downwards trend. EPRI acknowledge that not all of the BESS failures are included in their database, for example the Aberdeen fire in 2025 is not included. The EPRI database shows 8 BESS failures in 2024 and 13 BESS failures in 2025. Regardless of the root cause of the BESS failures, a BESS fire/explosion can have potentially devastating consequences.	BSMP and LCC must consult with LFRS and the Environment Agency before approving the BSMP. In response to the Examining Authority's First Written Questions (ref. GC.1.09), the Applicant prepared a Technical Note (see Appendix B of the Applicant's Response to the Examining Authority's First Written Questions **[REP2-029]**) detailing instances of BESS having caught fire worldwide, advising on where those incidents have occurred and giving the reason(s) for those incidents. This Note concludes that the two BESS fires associated with operational BESS facilities in the UK to date were designed and built prior to UK safety guidelines for BESS, and therefore neither facility met current NFCC safety guidelines. These fires would not have occurred if the principles and commitments in the Framework BSMP **[REP1-041]** for the Proposed Development had been applied.
James Gallagher	Applicant's Response to Relevant Representations – Use of Productive Agricultural Land and Net Financial Losses	Use of Productive Agricultural Land (page 272) and Net Financial Losses (page 276) The response states all affected landowners have confirmed "that there are not expected to be any job losses as a result of the removal of agricultural land." This is disingenuous as in most arable farming there is relatively little employment of workers by landowners. Much of the employment is in related businesses (mechanics to maintain farm machinery, suppliers of seed etc.). There is also a significant level of contract farming (typically where the contractor supplies labour, machinery and other inputs for a landowner with risk and profit sharing). The response goes on to say "it is expected that when the rent revenues from the land start, then there will be additional offsite jobs created on their farms as	The Applicant's Response to Relevant Representations **[REP1-047]** referenced the text at paragraph 12.7.52 of Chapter 12 Socio-economics and Land Use of the ES **[AS-016]** which states this. It is an accurate representation of consultation with the tenant farmers and contractors that has occurred as a result of statutory requirements and land negotiations regarding how farming operations are anticipated to change from existing activities to during operation of the Proposed Development. Much that there is employment in related businesses currently, there would also be the same requirements arising during operation for the new diversified farming enterprise. The creation of additional off-site jobs is an expectation. It is acknowledged that many factors can influence the propensity of an economic entity to

Interested Party	Theme	Comment	Applicant Response
		landowners diversify their land further with the underlying financial stability of the rental income". Economic research, often associated with research into "Universal Basic income" and "helicopter money" does not suggest that increased financial stability of landowners leads to investment in new business rather than, say, consumption or financial investment to achieve a steady stream of income. Without elaboration from the applicant, it is difficult to consider this a benefit of the scheme rather than speculation.	invest. It is though evidently the case that better financial stability provides better conditions for that investment to occur than a situation without such an environment. For the avoidance of doubt, the Applicant has not identified potential employment from this as being a benefit of the Proposed Development, with the assessment presented in Chapter 12 Socio-economics and Land Use of the ES **[AS-016]** concluding that the impact of operational employment generation in the study area would have a neutral and not significant effect.
James Gallagher	Applicant's Response to Relevant Representations – Impact of Traffic	Impact of Traffic (page 278-280) Interested parties at hearings and at deadline 1 have identified specific traffic concerns, (the framework CTMP etc.); they are not repeated here but best addressed in those representations. An exception relates to page 280 and the assessment of the effects on public transport users being anticipated as negligible. Could the applicant please elaborate on the potential effect on public transport users and the assessment of these as being negligible? For example, a temporary relocation of a bus stop by a short distance would have negligible impact; however, if a diversion meant that a service no longer served a village for even part of a day, it could, for example, significantly impact a care worker no longer able to get to work in that village. Also, PSV buses typically undertake return journeys with a couple of minutes of timetabled layover time at each end. Closures leading to diversions of a couple of minutes to a single trip probably have a imperceptible impact but longer diversion times may mean the return journey not only starts late but itself is further delayed by the works and the delay is compounded during the day as the bus shuttles back and forth; the impact on users would no longer be negligible. The applicant needs to describe the probable range of impacts to give assurance that they are negligible and that the bus operators agree with the assessment.	Through the **Framework CTMP [REP2-023]** the Applicant will seek to minimise the impacts on traffic movement during the construction period. As such, it is not proposed to implement full road closures which could result in the need to divert or suspend bus routes. In some cases it may be necessary to implement temporary traffic management, for example temporary traffic lights, to allow cables to be laid across a road in two parts on bus routes. However, these will be relatively short in duration and it would not be expected to result in a need to cancel or divert bus service provision, similar to other road works which take place from time to time. The assessments undertaken and presented in Chapter 13 of the ES **[APP-038]** and summarised in the Traffic and Transport Significance Assessment Summary **[APP-165]**, which conclude that no significant impacts have been identified as a result of the Proposed Development on the assessed categories for traffic and transport, are valid for all modes, inclusive of public transport. The Temporary Traffic Management will be coordinated through the detailed CTMP, which will be based on the principles established in the Framework CTMP **[REP2-023]** and will be subject to approval by LCC, in consultation with National Highways.
James Gallagher	Applicant's Response to Relevant Representations – Cumulative Effects of Numerous NSIPs	Cumulative Effects of Numerous NSIPs (page 295) The applicant uses several different metrics in relation to loss of land. Lincolnshire is a large county and the agriculture in North Kesteven is different to that of South Holland. Rather than loss of "BMV" as a proportion of Lincolnshire, it would offer a more nuanced understanding to indicate the loss of "arable" as a proportion of	The assessment undertaken within the EIA does not distinguish between the use of agricultural land (e.g. arable use) but instead focusses on the loss of agricultural land according to the quality of the land (i.e. it's agricultural land classification, such as BMV land).

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		Lincolnshire and loss of "farmland" as proportion of North Kesteven (recognising these would also need similar caveating about limitations).	The total land area required for the Proposed Development represents approximately 0.09% of the total farmland within the East Midlands and 0.2% of Lincolnshire, and therefore constitutes a very small proportion of the region and county's agricultural resource. The cumulative assessment focuses on the County level and considers all solar NSIPs within the County of Lincolnshire, presenting the best available information on BMV land take for each solar NSIP. The reference to the percentage of farmland occupied by the Principal Site within the East Midlands is provided for contextual purposes in the ES Chapter. The Applicant advises that the County-wide proportion of Lincolnshire farmland identified for NSIP solar proposals, at various project stages, is approximately 1.4% of BMV land and 2% of all farmland in the County. Chapter 12: Socio-Economics and Land Use of the ES **[AS-016]** identifies this as not significant.
James Gallagher	Applicant's Response to Relevant Representations – The Applicant and Funding	The applicant and funding (page 348 onwards) Towards the top of 348 the applicant responds that "Solar is one of the cheapest forms of electricity generation and is not supported by Government subsidies. The Proposed Development is not funded by, nor is it intended to be subsidised by, the Government.". Why does the applicant believe that the solar industry has not been supported through government subsidies e.g. through price support mechanisms, such as CfD offered through the Low Carbon Contracts Company which is owned by the holder of office of Secretary of State for Energy Security and Net Zero? Could the applicant confirm the intention not to be subsidised includes an intention not to apply for any future rounds of price support mechanisms offered by the Secretary of State or his agents? The response states the applicant is Fosse Green Energy Limited, a partnership between Windel Energy Limited and Recurrent Energy. Page 349 states the "Applicant will remain an English company during the operation of the Proposed Development." Is that not misleading as the company could, for example, be struck off the register before the end of the operation of the proposed development (for example, if a company is not fulfilling its legal obligations to file accounts with Companies House? On page 303, the applicant refers to "the consenting of the Mallard Pass Solar Project, (which was promoted by the Applicant)". The DCO was consented in the summer of 2024 to Mallard Solar Farm Limited (12575861) owned, at the time, by	Earlier phases of the UK solar industry did benefit from support schemes such as the Feed in Tariff and the Renewables Obligation, and more recently solar has been eligible to participate in the Contracts for Difference (CfD) scheme. However, the current market conditions for utility scale solar mean that projects of this scale can be financed and delivered without recourse to Government-backed price support. Regarding future participation in CfD allocation rounds, the Applicant notes that the CfD is a voluntary, competitive scheme open to eligible technologies, including established technologies such as solar and onshore wind, and emerging technologies like tidal and wave energy. This is likely to be the same for any future mechanisms that may be introduced. The Applicant is not at the stage where it can confirm whether it would or would not participate in the CfD allocation rounds, but should it participate, it should be noted that the Low Carbon Contracts Company (a government owned body) would only pay the Applicant if the wholesale electricity price is below the fixed 'strike price', and the Applicant would be required to pay money back should it be above the strike price. For this reason, it is not a grant or subsidy, but a Government support mechanism to stabilise revenues and encourage investment in low carbon generation. The UK

Interested Party	Theme	Comment	Applicant Response
		the partners in Fosse Green Energy Limited. In December 2024, the partners' shares in the company were transferredt to another UK company called Renewable & Decarbonisation Holdings Limited; the sole share in Renewable & Decarbonisation Holdings Limited is held by an offshore company. It is worth noting that Mallard Solar Farm Limited is currently red-flagged by Companies House for having "Overdue accounts".	Government explicitly describes CfDs as its "*main mechanism for supporting low carbon electricity generation*." With regards to Mallard Pass Solar Project, the Applicant team are no longer involved in this project and therefore cannot comment on the situation with regards to Companies House or the financial reporting. The Applicant, Fosse Green Energy Limited, will remain in ownership of the Proposed Development – although as with any company the investors in this company can change – and it is a company registered in England and Wales.
James Gallagher	Applicant's Response to Relevant Representations – Decommissioning Responsibility	Decommissioning Responsibility (page 357 -361) The applicant has stressed that this is a temporary project and that the developed areas of the site will be available for return to agriculture after decommissioning. As is noted by the applicant in the Relevant representations of LCC and NKDC, the reversible nature has been an argument advanced by many solar farm applicants to discount the negative aspects of the development. However, without the prospect of decommissioning, these harms cannot be discounted. Several representations raised concern about non-compliance by the undertaker at the point of decommissioning - particularly if the development has gone through several changes of ownership, some of whom may not be as responsible as their predecessors in financial matters. The applicant's response on several pages is that the "Applicant considers that any further requirement would be a duplication of existing controls potentially creating confusion. The production of a detailed DEMP, to be substantially in accordance with the framework plan, is secured under Requirement 20 of the Draft DCO [APP-016]." How would any suitably worded requirement cause confusion?. The applicant also notes that "the breach of any commitments under a DCO amounts to a criminal offence and the provisions and Requirements of a DCO are enforceable by the Local Planning Authority and that given the legally binding obligation to carry out decommissioning works, including the funding of the same, the provision of a restoration bond is not justified". The protections proposed by the applicant are insufficient. As has been clear recently in relation to landfill, there can be insurmountable challenges to prosecuting environmental crime perpetrated by those responsible. For example, the perpetrator may no longer exist (company wound up, perpetrator dead) or be living in an offshore centre with no possibility of extradition. Even if there is a successful prosecution, it is likely that any funding is accessible by the UK justice system (e.g. profits may have been locked in an offshore trust as is alleged in	The Applicant considers that the provision of security for decommissioning costs is a matter that is more appropriately dealt with as part of the regulation of the electricity sector overall, as opposed to being dealt with ad-hoc as part of the consenting process for individual projects. Under the Electricity Act 1989, the Secretary of State for the Department of Energy, Security and Net Zero (DESNZ) and the Gas and Electricity Markets Authority (Ofgem) are given the duty of protecting the interests of current and future consumers of electricity in Great Britain. There are a number of tools that DESNZ and Ofgem can use to carry out this duty. including in Ofgem's case, granting licences to the operators of generating stations. In order to operate a generating station, a company must hold a generation licence. Companies must apply to Ofgem for a generation licence. Ofgem will review the application, consider the evidence provided and determine whether or not to grant the licence. As part of this, the suitability of licence applicants is assessed by Ofgem. Amongst other things, Ofgem assesses all prospective licence holders to determine whether all individuals with significant managerial responsibility or influence are fit and proper for their roles. Further, generation licences include conditions. If a licence is granted, then the generation licence holder must meet the standard conditions, and any special conditions applied by

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		relation to the PPE Medro case which has led to failure to collect £122 million ordered by the High court in 2025). For these reasons, mechanisms as described in REP1-104 are necessary. Requirement 20 of the Draft DCO [APP-016] provides that decommissioning must commence no later than 60 years following the date of final commissioning; it does not refer to the completion of the decommissioning work. The Framework Decommissioning Environmental Management Plan says decommissioning "will likely take between 12 and 24 months" but gives no requirement for an end date. It is necessary that an end date be specified (e.g. by amending the order to state phases of decommissioning must be undertaken in accordance with deadlines specified in the Decommissioning Environmental Management Plan)	Ofgem, in relation to the licensed activity. Ofgem issues guidance about meeting licence conditions and also about how it monitors companies to check if they are complying with the licence conditions. The question of decommissioning of energy assets has been addressed on a number of occasions, including in respect of: 1. Offshore wind electricity generation – sections 105 to 114 of the Energy Act 2004; 2. Nuclear electricity generation – the Energy Act 2008; and 3. Offshore oil & gas – the Petroleum Act 1988. The common thread in each of these cases is that, when the Government makes a policy decision that financial security should be provided in relation to the decommissioning of a certain form of electricity generation or energy production, the Government has: a. Carried out consultation with the relevant part of the industry before introducing the requirements; and b. The power to create the obligations to provide security for decommissioning costs have been created by way of primary legislation. The enforcement of the provisions and Requirements of a DCO by the Local Planning Authority is governed by Part 8 of the Planning Act 2008. The reliance on these provisions to ensure a DCO is implemented as approved is heavily precedented and there is minimal precedent for the provision of a restoration bond. The Applicant is aware that a requirement for a decommissioning bond was included in the Helios Renewable Energy Project Order 2025 as follows: *"(3) No later than year 15 of operation the undertaker must notify the local planning authority that the undertaker has put in place the requisite decommissioning security in the form as required by the landowners."* However, this was agreed by the applicant for the Helios Renewable Energy Project and was not a contentious issue. It was also agreed at their first Compulsory Acquisition Hearing

Interested Party	Theme	Comment	Applicant Response
			which was prior to the date of the response to the parliamentary written question referred to below. A restoration bond for the Proposed Development is neither necessary nor required. The Framework DEMP provides for how the decommissioning will take place, and the Applicant is aware of its obligations in the draft DCO with respect to decommissioning (including the funding of the same) as set out in Requirement 20. The requirements of the DCO are enforceable and it is a criminal offence to fail to comply with a DCO. The Proceeds of Crime Act 2002 also acts as a further deterrent, and elements of the installed solar PV represent a valuable asset meaning it would be in Applicant's interest financially to decommission the site in order to sell or recycle the panels and other components. Furthermore, in an answer to a parliamentary question on 16 June 2025, the Government stated: *"We do not currently have plans to require solar and battery projects to be covered by decommissioning bonds. Solar farms are normally temporary structures and planning conditions can be used to ensure that the installations are removed when no longer in use and the land is restored to its previous use. Solar panels can be decommissioned relatively easily and cheaply. It is a legal requirement for any company that imports, manufactures or rebrands solar products to join a 'Producer Compliance Scheme', which then ensures their legal obligations are met, most significantly for the collection and recycling of old PV panels."* With regards to how decommissioning would be undertaken if the undertaker went into liquidation, in the event that the undertaker went into liquidation or receivership, its assets would be sold off to fund the decommissioning of the Proposed Development which is required pursuant to the legal requirements of the DCO. It is pertinent to note that a DCO is a piece of legislation, and therefore it differs to a planning permission in many ways, including in enforcement. In particular, it is not appropriate or necessary to include a timeframe for decommissioning in the draft DCO as this will

Interested Party	Theme	Comment	Applicant Response
			depend on the programme for decommissioning and any consents required for decommissioning at that point in time. It is not possible to stipulate the relevant timescales when these will not occur until many decades into the future. The Framework DEMP [**REP2-017**] specifies that *"decommissioning will likely take between 12 and 24 months..."*. Furthermore, at paragraph 2.4.3 of the Framework DEMP [**REP2-017**], it is stated that *"More details on the decommissioning phasing will be provided within the DEMP(s), prior to decommissioning commencing. This would include timescales and transportation methods which would be agreed in advance with the Local Planning Authority."* The provision of a detailed DEMP, which is to be substantially in accordance with the Framework DEMP [**REP2-017**], is secured under Requirement 20 of Schedule 2 to the draft DCO [**REP2-005**] and therefore, the provision of a timescale at the requisite time is sufficiently secured. This approach of including an indicative timeframe in the Framework DEMP and then a detailed programme in the full, detailed DEMP to be approved is appropriate.

2.3 Comments on Local Impact Reports

Table 2-3: The Applicant's responses to IP Comments on Local Impact Reports (LIR).

Interested Party	Theme	Comment	Applicant Response
Navenby Parish Council	Traffic and Transport - Objection to Additional HGV (and LGV) Traffic on Green Man Road and Church Lane	Navenby High Street (the A607) runs north-south, and running east-west from it are Green Man Road, linking to the A15, and Church Lane. Within the village, both are flanked on both sides by homes, there is a children's playpark at the junction of Green Man Road and the High Dyke, and both have awkward junctions with the High Street. NPC is currently working to have HGVs banned from Green Man Road, but whatever the outcome of our submission to Highways, NPC does not wish to see additional HGVs or LGVs using Green Man Road or Church Lane to access the A607. Construction traffic transiting to and from the A607 and compounds to the east of the A607 should be restricted to use of the A15, A607, and Heath Lane (B1202), which has recently been resurfaced and runs through open farmland with no adjacent housing.	As shown in Figure 13-4 Heavy Goods Vehicle (HGV) Routing of the ES **[AS-072]** HGVs will only use the easternmost section of Green Man Road to access construction accesses C-018 and C-019, associated with the Cable Corridor, from the A15. These vehicles will not use the western part of Green Man Road nor will they access the A607. Heath Lane B1202 is used to access C-016 and C-017 from the A15, again these vehicles would not use the A607. Church Lane does not form part of the HGV route.
Navenby Parish Council	Traffic and Transport – Enforcement Measures	NPC is also keen to secure robust monitoring and enforcement measures for non-compliance with any restrictions placed on construction traffic; our preference is for an ANPR system to be installed on Green Man Road and Church Lane (ideally networked in view of the likely concurrency of Fosse Green with other energy projects proposed for the area, which should also be subject to similar restrictions). Furthermore, NPC would wish to be consulted by LCC on the specific measures proposed prior to the finalisation of the Framework Construction Traffic Management Plan (CTMP).	The Framework CTMP **[REP2-023]** sets out (ref. paragraph 7.3.5) that a Delivery Management System (DMS) will be implemented to control bookings of HGV deliveries from the start of the construction period. This will be used to regulate the arrival times of HGVs via timed delivery slots, as well as to monitor compliance of HGV routing which will be communicated to all suppliers. Furthermore, paragraph 7.3.6 sets out that a Traffic Management and Monitoring System (TMMS) will be developed to provide details of the technologies and other means employed to monitor HGV movements to/ from the DCO Site, e.g. Global Positioning System (GPS) and Automatic Number Plate Recognition (ANPR). This will enable the Applicant to monitor compliance with the HGV routes discussed in the Framework CTMP **[REP2-023]** and set out on Figure 13-4: Heavy Goods Vehicle Routing of the ES **[AS-072]**. Provision of a detailed CTMP, substantially in accordance with the Framework CTMP **[REP2-023]**, secured via Requirement 14 of the Draft DCO **[REP2-005]**.

Interested Party	Theme	Comment	Applicant Response
Navenby Parish Council	Traffic and Transport - Inaccurate Assessment of the Collision Risk at the Green Man Road/A15 Junction.	We understand that Highways do not think that there is a particular risk of vehicle collisions at the junction of Green Man Road and the A15; the Chairman of the NPC has lived for 11 years in Greenman Farmhouse (LN5 0AT) facing this junction and disputes this assessment. On average there is at least one collision per month at this junction, the majority being rear-end shunts of vehicles travelling south that have stopped to turn right onto Green Man Road, often involving multiple vehicles travelling too close together. Many of these incidents do not result in the deployment of emergency services, so it is highly likely that there are gaps in Highway's collision data. In 2024-2025, in separate incidents the directional signs situated on the western verge were demolished 3 times (this can be evidenced via Fix My Street), a vehicle crashed through the boundary wall of the neighbouring Lincoln Clubhouse, and 12 metres of the boundary wall of Greenman Farmhouse is still waiting to be rebuilt following a hit and run incident during the night. That none of these collisions has resulted in a serious injury or fatality is only a matter of chance, and any increase in HGVs in particular using that junction will inevitably increase this risk.	Appendix 13-E: Transport Assessment Note of the ES **[APP-167]** Section 6.8 reviews the Personal Injury Accident (PIA) collisions at this junction for the period 1st June 2019 to 31st May 2024, representing the most recent five-year period of data available from LCC at the time of preparation. It should be noted that this data is based on reports filed by the police when attending incidents where casualties have been reported. Therefore, incidents where there are no police in attendance will not be recorded. This is currently the standard methodology for assessing accident statistics on UK roads. This analysis did not indicate common causation factors, however, a junction sensitivity of 'medium' was assigned to this junction in the subsequent impact assessment. However, it is recognised that for the duration of the use of construction accesses C-018 and C-019, there will be an increased number of vehicles/HGVs turning into and out of Green Man Road. The Framework CTMP **[REP2-023]** (paragraph 6.2.2) sets out that signage will form a key part of the Temporary Traffic Management, to be implemented through the detailed CTMP. Engagement will take place with National Highways (and, as necessary, LCC in relation to the local highway network) in developing the signage strategy as part of the detailed CTMP. This will include overall signage strategies for routes, including sign locations and sign face details for approval. Therefore, in the development of the signage strategy as part of the detailed CTMP, consideration will be given to the implementation of suitable warning signs at this junction.
Navenby Parish Council	Traffic and Transport – Desired Outcome	NPC requests the Examining Authority (ExA) to modify the Framework CTMP (AS -102) to reflect the wishes of the Council.	The Applicant does not consider any updates to be required to the Framework CTMP. It should be noted that LCC, in its capacity as host authority and local highway authority, considers the provisions of the Framework CTMP sufficient, whereby within LCC's LIR [REP1-053] it is noted "*the Framework CTMP provides sufficient details at this stage for all proposed access locations. It also outlines proposals for site working hours, HGV routes, security, compound parking, wheel washing, delivery management, and traffic monitoring. These elements must be detailed in the final CTMP and be monitored, controlled, and be enforceable to ensure highway safety and that traffic impacts align with the ES assessment*." The elements listed within the Framework CTMP will be detailed in the detailed CTMP. Production of a detailed CTMP, which is to be substantially in accordance with the

Interested Party	Theme	Comment	Applicant Response
			Framework CTMP, and the requirement for it to be approved by LCC as the relevant planning authority (in consultation with National Highways) before construction commences is secured under Requirement 14 of Schedule 2 to the Draft DCO [REP2-005].
Navenby Parish Council	Traffic and Transport - A607 Closure	It is understood that the applicant wishes to install an underground cable in a corridor from the Principal site to the proposed National Grid Navenby Substation. The applicant, in APP-016 3.1 Draft Development Consent Order, seeks power to temporarily close roads and in Schedule 6 part one specifies closure to all traffic for the width of the A607 to facilitate the street works for the length coloured in green hatching on Sheet 14 of the streets, rights of way and access (REP1 004 revision 4); this is a stretch of the A607 a couple of hundred metres north of Boothby Graffoe. NPC is concerned about three aspects of this. a. **Inconsistent Approach to Road Closures**. First, no justification is given for closure of the full width of this road. It is noted that the proposals for Green Man Road and the B1202 refer only to single lane closure, with no explanation given for why some roads are full width closure and others single lane. NPC requests the Examining Authority to amend the draft DCO so that disruption is minimised (e.g. by allowing continuing north-south access on the A607 - if necessary through a traffic light controlled single lane). b. **Potential Impact on Cycle Path**. Second, neither the LIR nor applicant recognise that the hatched green area of the A607 has a cycle path; the Examining Authority is requested to explore the impact on cyclists. c. **Potential Underestimation of Impact on Public Transport**. Third, referring not just to the A607 but also to the wider application, the applicant states the effects on public transport users is anticipated to be 'negligible', but does not elaborate and nor does the LIR - the ExA is requested to obtain the underlying analysis of the impacts on both PSVs and school buses and what query mitigations will be established to justify the assessment of a negligible impact on individual bus users.	a. Please note, Schedule 6 Part 1 of the Draft DCO [REP2-005], in relation to the A607 Grantham Road (ref. page 55), states (Applicant emphasis in **bold**): "***Temporary partial closure*** *to all traffic save for traffic under the direction of the undertaker for the width of the street to facilitate the street works for the length coloured in green patterned hatching on Sheet 14 of the streets, rights of way and access plans."* It is not proposed that the full width of this road will be closed, whereby the closure at this location (as defined by the Streets, Rights of Way and Access Plans [REP2-004], ref. Sheet 14) will comprise "*temporary partial closure*" to facilitate the works – i.e. the closure of part of the highway width, but not the full highway width at any one time. As part of this temporary partial closure, the highway will remain open to traffic in some form, and passage through the works area will be maintained. In practice, for a trenched crossing of the road, one suitably wide lane would typically be kept open under traffic management, with the works to cross the road taking approximately 2 weeks in total. It should be noted that the Framework CTMP [REP2-023] (ref. paragraph 7.1.4) states that Temporary Traffic Management (TTM) will be required at the A607 Grantham Road in the instance that open-cut tranches are employed. Furthermore, the Traffic Regulation Measures Plans [AS-107] (ref. Sheet 14) note this stretch of the A607 as requiring temporary traffic signal and banksman control area. b. Suitable route connectivity and continuity for cyclists and pedestrians through the short-term temporary works (approximately 2 weeks) will be maintained. Chapter 13: Traffic and Transport of the ES [APP-038] concludes that no significant impacts have been identified on these links, which include consideration of cyclists in terms of defining link sensitivity (see Table 13-7). c. The assessments undertaken and presented in Chapter 13: Traffic and Transport of the ES [APP-038], and summarised in the Traffic and Transport Significance Assessment Summary [APP-165], which

Interested Party	Theme	Comment	Applicant Response
			conclude that no significant impacts have been identified as a result of the Proposed Development on the assessed categories for traffic and transport, are valid for all modes, inclusive of public transport.
Andrew Keeling	North Kesteven District Council's Local Impact Report – Cumulative Impacts	Paragraph 26.13 of the LIR concludes '*that there will be negative effects on cumulative grounds, in particular in relation to the potentially extensive alteration of regional landscape character.'* I am concerned that the LIR has not fully identified all of the renewable energy infrastructure projects that are seeking a POC through the proposed Navenby substation. The LIR references the long-list and short-list of projects that the applicant considered regarding inter-project cumulative effects, as set out in Table 15.8 of ES Chapter 15. In terms of renewable energy projects that are seeking a POC via the proposed Navenby substation, the lists identify the Springwell Energy Farm and Leoda Solar Farm solar projects, in addition to the Fosse Green energy scheme, and the Navenby, Brant (Coleby) and Wellingore (Gorse Hill Lane) BESS projects. In its pre-examination submission National Grid references that the proposed substation at Navenby will facilitate up to seven customer connections for generation projects in the area, so potentially another four schemes in addition to Fosse Green Energy, Springwell and Leoda. It seems likely therefore that the cumulative negative effects of all of the renewable energy infrastructure projects that will be looking to connect to the gid through the proposed Navenby substation could be even more significant than the LIR envisages. I do not believe that the applicant's cumulative assessment has fully captured the realistic scale and interaction of all of the renewable energy infrastructure projects that will be seeking a POC through the proposed Navenby substation. Further work is needed to achieve a comprehensive and transparent assessment.	As set out in Chapter 15: Cumulative Effects and Interactions of the ES **[APP-040]** (ref. paragraph 15.5.10), cumulative schemes to be considered in the 'Long List' were required to meet a set of requirements for consideration, such as: a. Development currently under construction, approved applications which have not yet been implemented (covering the past five years and taking account of those that received planning consent over three years ago and are still valid but have not yet been implemented), or developments that have been registered with the council or relevant determining authority, and which meet one of the below criteria (b) to (e); b. Listed on the National Infrastructure Planning Programme of Projects within 10km of the DCO Site; c. Applications for EIA development within 5km of the DCO Site; d. Other, non-EIA applications for ground based solar and/or BESS development within 5km of the DCO Site; and e. Other schemes that do not meet the above criteria but which the Applicant wishes to include or a statutory stakeholder specifically requests is included. This may include development allocations identified in the relevant Development Plan (and emerging Development Plans) for example, which are aspirational but have not yet reached pre-application or application stage. The Applicant established its Long List based on this criteria, which did not identify any additional schemes seeking a point of connection at the proposed National Grid substation near Navenby. It should be noted that the final Short List of cumulative developments, inclusive of the relevant solar proposals in the area, for consideration within the ES was agreed with NKDC and LCC.

Interested Party	Theme	Comment	Applicant Response
Michael S O'N Campbell	North Kesteven District Council's Local Impact Report – Site Selection and Grid Connectivity	I would like to support the NKDC comments regarding the subjects of Site Selection and Grid Connectivity. However, I do not believe that they are comprehensive enough. The Applicant has substantially failed to evidence and justify their the site selection process and outcome as being compliant with appropriate National Policy. It is stated by the Applicant that they were approached, and invited, by local landowners to the area - rather than identifying the area through a rigorous selection and evaluation process. I believe that NKDC should be strongly challenging this aspect of the application. The same is relevant to the topic of "grid connectivity" - the Applicant made no mention of an available grid connection in their original site selection report. There now is only - theoretical - consideration of a local sub station due to the Applicant approaching NESO to request such. In the current planning requirements, this is putting the "horse and the cart" in the wrong order. I do not think that the NKDC LIR is strong and thorough enough in challenging these aspects.	In terms of the grid connection for the Proposed Development, as stated in paragraph 2.3.1 of Appendix A: Site Selection Report of the Planning Statement [**AS-098**], the Applicant was approached by a group of landowners who were willing to provide land north of the A46 at Morton Manor and Housham Grange, which comprises a large area of contiguous land, for the purposes of a nationally significant infrastructure project related to solar energy generation. Following a review of available capacity in the transmission network the Applicant identified a line in and line out connection into the 400kV Overhead Line close to Whisby Hall. A desk top review of the site to consider planning and environmental constraints, concluded that the site was viable, and accordingly, a formal application was made to National Grid for a connection into the 400kV Overhead Line. However, National Grid informed the Applicant that this point of connection (POC) was not available and instead the Applicant was offered and subsequently secured a POC at the proposed National Grid substation near Navenby, which was a location capable of serving multiple customers, including the Applicant. The Applicant has not approached NESO to request a local substation as is suggested by an IP in this comment.
Andrew Keeling	Lincolnshire County Council's Local Impact Report – Visitor Economy Impact	I am a resident of Bassingham. I have recently retired from a 40-year career in tourism. For the last 20 years of my career, I was one of the leading tourism consultants in the UK. I have been involved in supporting the development of Lincolnshire's visitor economy for over 30 years, firstly in my role as the Regional Tourism Development Manager for the East Midlands Tourist Board, and then as a tourism consultant, undertaking numerous tourism strategy, research and consultancy assignments for Lincolnshire County Council, Lincolnshire Tourism and the Greater Lincolnshire Local Enterprise Partnership. I believe therefore that I have the experience and knowledge to give an expert opinion on the likely impact of the Fosse Green Energy project of the visitor economy of the surrounding area. Paragraphs 16.12 to 16.15 of the LIR provide Lincolnshire County Council's assessment of the impact of the Fosse Green Energy proposals on the visitor economy. The Council raises concerns about the potential negative impact on the visitor economy from the visual degradation of the countryside that will result from the Fosse Green Energy project. I fully agree with this view, but believe that the Council, and the applicant, fail to fully understand the impacts on the visitor economy. The Council's assessment focuses largely on the impacts on the visitor attractions and hospitality and retail businesses in the villages on the	The Applicant notes the respondents agreement with Lincolnshire County Council's (LCC) concerns regarding potential visual change and its perceived implications for the visitor economy. The assessment set out in Chapter 12: Socio-economics and Land use of the ES **[AS-016]** has considered these matters in detail. This presents an assessment of the potential socio-economic and land-use impacts of the Proposed Development on tourism, recreation, and local businesses, considering accommodation, visitor attractions, and Public Rights of Way alongside findings from the Landscape, Noise, Traffic, and Air Quality chapters. The assessment concludes that effects on tourism/recreation receptors and local businesses would not be significant during construction, operation, or decommissioning. Although the project introduces solar and BESS infrastructure, the land is not permanently converted to industrial use and a substantial area of arable land, including Best and Most Versatile land, is retained in accordance with the design principles and commitments in the Framework LEMP, providing ecological and economic benefits. The Proposed Development is temporary, with decommissioning required at the end of the 60 year operational lifetime, and the land returned to prior use. While the LIR suggests reduced visitor numbers due to landscape change, no evidence supports this, and visual mitigation is secured through the Framework LEMP. A full response to LIR Paragraphs 16.12 to 16.15 is provided within the Applicant's Responses to Local Impact Reports [**REP2-031**].

Interested Party	Theme	Comment	Applicant Response
		Lincoln Cliff Edge. They are most likely to be affected in terms of lost trade from walkers and walking groups using the Viking Way as a result of disruption during the construction, replacement and decommissioning of the cable corridor, and the cumulative impacts of all of the renewable energy infrastructure in the area that is looking to connect to the proposed Navenby substation. The Council's, and the applicant's, assessments of visitor economy impact fail to recognise the potential impacts on the non-serviced accommodation sector in the area that immediately surrounds the Fosse Green Energy site. Para 12.5.29 of Chapter 12 of the Environmental Statement (Document AS-016) only considers the impacts on serviced accommodation. The area immediately surrounding the Fosse Green Energy site is home to several non-serviced accommodation businesses, including the Cathedral View Holiday Park (which will be surrounded on three sides by solar panels in the Fosse Green Energy scheme goes ahead) and Thorpe Park Lodges site in Thorpe-on-the-Hill; the Oakhill Leisure touring caravan and camping site at Norton Disney; two touring caravan, motorhome and camping sites at Haddington and Norton Disney; an eco-cabin site at Norton Disney and a number of holiday rental properties. The rural setting of these visitor accommodation businesses is a key part of their appeal as places to stay. The visual impact of the Fosse Green Energy on the local countryside is thus likely to impact on their future trading and investment potential, and could threaten their future viability. The Council's, and the applicant's, assessments of visitor economy impact fail to consider how the Fosse Green Energy project might affect future investment in visitor accommodation. There is evidence of potential for new investment in the area's visitor accommodation offer. A site at Thurlby for a lakeside holiday park, with planning permission for 103 holiday lodges, is currently being marketed. The site of the former Dovecote pub and restaurant off the A46 at Swinderby has previously been marketed for a hotel and leisure development and remains a potential investment opportunity site. Para 12.5.43 of Chapter 12 of the Environmental Statement fails to mention these potential leisure development sites. There could also be opportunities for farms to diversify into a range of visitor accommodation options, including touring caravan and camping, glamping, eco-lodges and cabins, holiday cottages and farmhouse bed & breakfast accommodation. Approval of the Fosse Green Energy	The respondent's concerns regarding potential effects on visitor attractions and hospitality businesses along the Lincoln Cliff Edge, particularly in relation to walkers using the Viking Way are noted. The Lincoln Cliff or Lincoln Edge is a portion of a major escarpment that runs north–south through the historic divisions of Lindsey and Kesteven in central Lincolnshire and is a prominent landscape feature in a generally flat portion of the county. The Viking Way crosses the Order Limits between Coleby and Boothby Graffoe. This section of the Viking Way intersects with PRoW LL|Cole|3/1, which has been included in the PRoW assessment. No significant effects were found in relation to the PRoW intersecting Viking Way where it intersects the relevant study area. The impacts in relation to PRoW are expected to be short-term, localised and managed through established embedded mitigation measures. The Viking Way will remain accessible throughout with the use of its route beyond the Order Limits being entirely unchanged during this period. In considering cumulative effects, the assessment also reflects that the main tourism destinations in this part of Lincolnshire draw visitors primarily for heritage, landscape and cultural experiences that are located at some distance from the on-site works. For these reasons, significant long-term effects on tourism-related businesses are not anticipated. Regarding the potential impacts upon the non-serviced accommodation sector, as is set out in the Applicant's Responses to Local Impact Reports [**REP2-031**], a review of holiday parks has identified three holiday or caravan parks within 2 km of the Proposed Development: Cathedral View Holiday Park, Oakhill Leisure, and Heath House Caravan Park. As set out in the Applicant's Responses to Local Impact Reports [**REP2-031**], Oakhill Leisure and Heath House Caravan Park, due to their distance and the residual effects reported in the air quality, noise, transport, and landscape assessments, would not experience potential likely significant adverse impacts during any phase of the Proposed Development. Cathedral View Holiday Park, located closest to the DCO Site, was found to experience no adverse significant residual noise, vibration, traffic, or air-quality effects, with only minor, non-significant temporary visual effects during construction and negligible effects during operation. This translates into there being no significant effect in respect of socio-economics and land use in accordance with the assessment methodology. Consequently, the Applicant concludes that none of the identified holiday parks would experience significant socio-economic or amenity effects, and, given the absence of adverse environmental impacts, there is no evidence to indicate that visitor bookings would be materially affected. While LCC in its LIR notes wider accommodation providers in the area, the Applicant's assessment focuses

Interested Party	Theme	Comment	Applicant Response
		scheme is likely to deter such future investment in the area's visitor accommodation offer. Paragraphs 16.16 to 16.18 consider the potential impacts of the Fosse Green Energy project on visitor attractions and recreational facilities. At paragraph 16.16, the Holmes Parish Woodland in Bassingham also needs to be noted as a recreational facility. It has been developed by local volunteers and with the support of Bassingham Parish Council. It includes a nature trail, picnic area, and a riverside walk with countryside views, which will be affected by clearly visible solar panels on the opposite side of the River Witham if the Fosse Green Energy project goes ahead. Paragraph 16.17 fails to note that The Five Bells pub in Bassingham and Green Man pub at Norton Disney need to be added to Table 12-21 of Chapter 12 of the ES (document AS-016). The assessment of the impacts on recreational receptors and Public Rights of Way fails to understand that the areas immediately surrounding the Fosse Green Energy site attract visiting walkers and walking groups, including those visiting their friends and relatives in the area, that often frequent the pubs and cafes in Bassingham, Aubourn, Norton Disney and Thorpe-on-the- Hill. The degradation of the walking routes around these villages that will result from the Fosse Green Energy project is likely to result in a loss of this trade for these businesses. The assessment of the impacts on visitor attractions makes no reference to the recently completed Bomber County Gateway Lancaster aircraft landmark art installation at Norton Disney. It provides a significant addition to Lincolnshire's aviation heritage offer, complementing the International Bomber Command Centre, Battle of Britain Memorial Flight and various RAF airfield heritage centres. It has the potential therefore to provide a significant boost to the area's visitor economy. For all of the above reasons, I believe that the County Council and applicant have significantly underestimated the likely impact of the Fosse Green Energy project on the area's visitor economy. I suggest therefore that in the overall determination of the DCO application the ExA should give greater weight to the potential negative impacts on the visitor economy than the LIR suggests.	on receptors with a credible pathway for potential likely significant effects and demonstrates that visual change will vary depending on distance, screening, and design measures such as new planting and set-backs. Whilst is it is recognised that individual solar developments have their own environmental characteristics, on other consented comparable projects in Lincolnshire, such as Gate Burton Energy Park and Tillbridge Solar Project, it has been concluded that there would not be significant adverse effects on visitor accommodation, such as through reduced occupancy or economic performance of the sector and therefore significant adverse effects on the viability of nearby accommodation businesses are not anticipated, though engagement with host authorities will continue. The respondent has also highlighted Thorpe-on-the-Hill, two touring caravan, motorhome and camping sites at Haddington and Norton Disney; an eco-cabin site at Norton Disney and a number of holiday rental properties, which have not been identified Chapter 12 Socio-economics and Land use of the ES [AS-016] or within the Council's LIR representation. Following the same approach as set above, due to their distance and the residual effects reported in the air quality, noise, transport, and landscape assessments, these would not experience potential likely significant adverse socio-economic effects on their amenity during any phase of the Proposed Development. As part of the Applicant's early stage engagement, a series of changes were made to the design of the Proposed Development to help reduce the visual impacts from sensitive receptors. This included changes in the vicinity of Cathedral View Holiday Park to provide additional buffers from the Solar PV Areas. Furthermore, as set out in the Consultation Report Appendices [APP-024], the proposed permissive paths were amended following feedback at statutory consultation, as explained in Chapter 4: Alternatives and Design Evolution of the ES [**APP-029**], providing more linkages across the DCO Site, including of relevance: a. Route from Tunman Wood to Fosse Lane including a link to the Cathedral View Caravan Park linking with PRoW LL/TOTH/6A/1. b. Cathedral View Caravan Park to Fosse Lane, providing a circular walk and safer route It should be noted that, as set out in the Consultation Report [**APP-023**], the Applicant contacted sensitive stakeholders and interest groups, including local residents and near neighbours, to discuss the Proposed Development and receive feedback, including Cathedral View Holiday Park.

Interested Party	Theme	Comment	Applicant Response
			The cumulative assessment in ES Chapter 12 [**APP-016**] is robust and proportionate, as it considers only reasonably foreseeable developments, those with planning permission, an active application or policy allocation, and appropriately does not include speculative or uncommitted opportunities such as the unimplemented Thurlby holiday park permission, the former Dovecote site with no extant consent, and general rural diversification possibilities. Cumulative Schemes are scoped out of further assessment where they exist outside of the 2km ZoI for socio-economics, while the respondent identifies potential future accommodation investment, these examples are either at a marketing stage with no confirmed delivery or represent broad diversification trends rather than defined tourism schemes and therefore are not scoped into the cumulative impact assessment. It should be noted that the final Short List of cumulative developments for consideration within the ES was agreed with NKDC and LCC. There is also no evidence that solar development deters visitor accommodation investment, particularly where design and landscaping minimise visibility. Investment decisions are more typically driven by visitor demand, location and commercial viability. Accordingly, the Proposed Development is not expected to constrain future accommodation development. The respondent has highlighted the Holmes Parish Woodland, which has not been identified in Chapter 12 Socio-economics and Land use of the ES [**AS-016**] or within LCC's LIR. The woodland was planted in 2022 to be an accessible wood. The wood sits on just over 3.5 acres of land that belongs to Bassingham Parish Council and was previously used as private grazing. The Holmes is reached from Rinks Lane along a short length of surfaced bridleway. The woodland is approximately 400m from the DCO Site. As set out within Chapter 12 Socio-economics and Land use of the ES [**AS-016**] no visitor attraction, recreational facility or area is identified to have significant residual effects in either Chapter 10: Landscape and Visual Amenity [**AS-117**], Chapter 11: Noise and Vibration [APP-036], Chapter 13: Traffic and Transport [**APP-038**] and Chapter 14: Other Environmental Topics (Section 14.2: Air Quality) [**APP-039**]. The degree of visibility from the woodland will vary depending on vegetation, intervening landform and the distance across the River Witham. The Proposed Development includes landscape planting, hedgerow reinforcement and the use of existing field boundaries to reduce visibility over time, helping to limit the extent to which the development would influence the recreational experience at Holmes Parish Woodland. There is no evidence from comparable solar schemes that views of renewable energy infrastructure typically lead to measurable reductions in use of local recreational assets, including where access, facilities and route continuity

Interested Party	Theme	Comment	Applicant Response
			are maintained. For these reasons, likely significant adverse effects are not anticipated. The Applicant acknowledges that the Five Bells in Bassingham and the Green Man in Norton Disney are not included in Table 12-21 of Chapter 12 Socio-economics and Land use of the ES [**AS-016**]. The Five Bells is located around 400m from the DCO Site and The Green Man is located approximately 500m from the DCO Site. The Applicant acknowledges both as local hospitality venues used by residents and visitors. Hospitality impacts are most likely to arise where there is a clear pathway for significant tourism-related effects, most typically in respect of views, which in this case are limited given the nature of the development, the separation distances involved with intervening buildings between the pubs and the Proposed Development, and the mitigation measures reducing visual change in key views. The Applicant would therefore clarify that it does not find that there would be any significant socio-economic effects on amenity in respect of The Five Bells pub in Bassingham and Green Man pub at Norton Disney. The assessment recognises that recreational walking forms part of the local visitor offering; however, the evidence indicates that walking activity is primarily influenced by route availability, safety and connectivity, all of which will be maintained throughout construction and operation of the Proposed Development. For these reasons, significant long-term effects on walking-related visitor spending are not anticipated. The Proposed Development will also create new permissive paths across the Principal Site. The Framework LEMP **[REP2-021]**, (a detailed version of which is to be developed, substantially in accordance with the framework, as secured by Requirement 8 of Schedule 2 to the Draft DCO **[REP2-005]**), sets out how the permissive path network will be implemented during operation of the Proposed Development providing routes across the Principal Site and enhancing the recreational value of the Order Limits. The Bomber County Gateway Lancaster landmark at Norton Disney is located approximately 3km from the DCO Site, outside of the relevant study area and there is no pathway by which the Proposed Development would materially affect access to, operation of, or appreciation of this landmark. While some visitors may pass through the wider area, there is no evidence that indicates that the key drivers of aviation-related tourism, heritage interpretation, on-site facilities and curated visitor experiences, at such a distance, will be adversely affected by the Proposed Development. For these

Interested Party	Theme	Comment	Applicant Response
			reasons, significant adverse effects on the Lancaster installation or the associated aviation heritage visitor economy are not anticipated. The Tourism and Recreation assessment set out in Chapter 12 Socio-economics and Land use of the ES [**AS-016**] concludes, based on established methodologies, local evidence and experience from comparable solar developments, that likely significant adverse effects on the visitor economy are not anticipated. PRoW access will be maintained, and no credible evidence indicates that well-screened solar infrastructure leads to sustained reductions in visitor activity, accommodation performance or hospitality trade. While perceptions of change may differ between individuals, the available evidence does not support the view that the Proposed Development would materially harm the visitor economy.

2.4 Comments on Change Request 1

Table 2-4: The Applicant's responses to IP Comments on Change Request 1

Interested Party	Comment	Applicant Response
North Kesteven District Council	The changes involve: a) Removal of approximately 13Ha of land from within the Order Limits north of Thurlby – retained arable / grassland, and land for possible buried cabling. b) Removal of solar arrays proposed from Field 46 c) Additional hedgerow planting around River Farm, Bassingham Road. The Council agrees with the Examining Authority's view that the proposed changes would not result in a materially different project, and would not generate new or different likely significant environmental effects – in particular adverse effects. The Council would ask, in light of the fact that the changes alter factors such as solar panel layout and overall land within the Order Limits, that the Applicant is asked to clarify how that affects some of the facts and figures presented in the application. These would include things like land take, solar panel overplanting ratio, BMV considerations. Whilst the changes may not be large, in the interests of clarity and the avoidance of doubt that information would be helpful. The Council has no further comments to make on the changed application at this point.	Regarding land take, in light of Change Request 1 [**AS-103**], the total area of the Principal Site is 1,055ha (2,607 acres), and the total area of the Order Limits is 1,354ha (3,346 acres). The removal of solar PV from Field 46 does not affect the overplanting ratio; the overplanting ratio that has been referenced in all Deadline 1 and Deadline 2 submissions, such as the Solar Technology Technical Guide [**REP2-033**], accounted for the removal of solar PV from Field 46. As noted in paragraph 5.1.2 of the Solar Technology Technical Guide [**REP2-033**], the overplanting ratio of the Proposed Development for the Fixed South Facing layout is 1.59 and for Single Access Tracker layout is 1.32. With regards to BMV, as per Figure 12-5: Agricultural Land Classification for the Principal Site of the ES **[AS-068]**, the area of land (approximately 13ha) north of Thurlby removed from the Order limits as part of Change Request 1 [**AS-103**] comprised a mix of Grade 3a (BMV) and Grade 3b land. Given this land comprised retained arable / grassland (above possible buried cabling), it's removal from the Order limits does not affect any assessed permanent loss of BMV (which considered BMV land permanently lost as a result of planting and habitat creation) set out within Chapter 12: Socio-Economics and Land Use of the ES **[AS-016]**. With regards to the assessed temporary loss of BMV, the removal of land north of Thurlby reduces the area of BMV land temporarily lost as a result of the Proposed Development from 282.9ha (699 acres) to approximately 278ha (687 acres) – i.e. a reduction of approximately 5ha of BMV. This is immaterial to the assessment presented at paragraph 12.7.42 of Chapter 12: Socio-Economics and Land Use of the ES **[AS-016]**, whereby the effect would remain minor adverse and not significant. Field 46 comprised Grade 3b land that was not permanently lost as a result of the Proposed Development, and as such the removal of solar PV from this area (which remains within the Order Limits, though now assigned as 'Proposed Species Rich Grassland – outside solar PV areas', as per the Landscape Mitigation Plan within Appendix A of the Framework LEMP [**REP2-021**]) does not affect the assessment in Chapter 12: Socio-Economics and Land Use of the ES **[AS-016]**.

2.5 Comments on Written Representations

Table 2-5: The Applicant's responses to IP Comments on Written Representations

<table>
<tr><th>Interested Party</th><th>Comment</th><th>Applicant Response</th></tr>
<tr><td>James Gallagher</td><td>I have previously made representations in REP1-104 relating to the cumulative traffic and transport impact, particularly in regard to junctions in the area of the cable corridor.

The B1202/A15 crossroad is a recognised problem in the locality and LCC agreed in to consider replacement by a roundabout or traffic lights. The outcome of this consideration has been significantly delayed. However, since deadline 1, it has been suggested that LCC are moving to prioritse its replacement by a roundabout (I should add that I personally have not seen any formal commitment as such). However, there is a strong possibility that these works will overlap with the construction period of the Fosse Green corridor and, as such, the latest position should be ascertained from LCC and considered for scoping into an updated cumulative traffic impact.

I also wish to point out that I wrote to the support team for the Examination saying "I am preparing for the start of the Fosse Green enquiry and have read Environmental statement chapter 13 on traffic. I see that there is a 'Table 13-26: Construction Traffic Impact (2032) – Principal Site – Development Peak Hours'. The table shows no development impact from construction traffic associated with the principal site at junctions J9/10/111/12 which I accept. However, there will be an impact at these junctions from the connection corridor but I can't find a similar table for the corridor". I asked how I may find this information. I received no reply but, on chasing it up after the hearings, was advised to contact the applicant at an email address provided to me. I sent an email in similar terms to this address on 15.1.26 and received only an automated acknowledgement. I sent a reminder on 2.2.26, also acknowledged, asking for the information to use in a deadline 2 submission but received nothing other than an automated reply. I am concerned that I am not being provided with information in order to meet the examination deadlines.

I therefore wish to make a formal request that an updated version of the Environmental statement chapter 13 on traffic be produced, to a deadline determined by the ExA, and that such an updated version should include both an updated/corrected cumulative impact assessment and a table similar to 13-26 but covering the cable corridor junctions.</td><td>The Applicant will continue to liaise with LCC, including in relation to the development of the detailed CTMP in order to coordinate the delivery of projects as relevant. This will allow for consideration of the impact of any planned highway works at the requisite time, including the A15/B1202 junction improvements, if applicable.

The Applicant notes the IP's email sent to info@fossegreenenergy.co.uk on 15 January 2026 and can confirm that the Applicant responded to the IP on 10 February 2026 with the following response:

Please note that the construction traffic associated with the Cable Corridor vehicle movements is shown in the '12-Hour Weekday (07:00-19:00)' column of Table 13-26 within Chapter 13: Traffic and Transport of the ES [APP-038], as shown below. Although this table is titled as 'Construction Traffic Impact (2032) – Principal Site – Development Peak Hours', this does include traffic associated with the Cable Corridor works as well as Principal Site traffic. As can be seen by the table, an increase of 60 vehicle movements over a 12-hour weekday is anticipated at each of Junctions 9-12. These are associated with the Cable Corridor construction activities – for reference, the forecast peak daily and hourly construction movements for the Cable Corridor are set out in Table 4 of the Framework CTMP [REP2-023], which identifies that cable route construction vehicles will be timed to occur outside peak hours (aside from one shuttle bus two-way movement between 08:00 and 09:00 and again between 17:00 and 18:00). As noted in Chapter 13: Traffic and Transport of the ES [APP-038] (ref. paragraph 13.7.16): "It can be observed that the screening results presented above indicate that all of the receptors located within the Cable Corridor have been screened out owing to the low number of additional vehicle trips and have therefore not been assessed further."

<table>
<tr><th rowspan="2">Ref</th><th rowspan="2">Location</th><th colspan="3">AM Development Peak (07:00-08:00)</th><th colspan="3">PM Development Peak (18:00-19:00)</th><th colspan="3">12-Hour Weekday (07:00-19:00)</th></tr>
<tr><th>Base</th><th>Dev</th><th>% Increase</th><th>Base</th><th>Dev</th><th>% Increase</th><th>Base</th><th>Dev</th><th>% Increase</th></tr>
<tr><td>J8</td><td>North Hykeham Roundabout (A46(N)/ Newark Road/ A46(S)/ Middle Lane)</td><td>2,548</td><td>224</td><td>8.8%</td><td>2,379</td><td>224</td><td>9.4%</td><td>31,681</td><td>615</td><td>1.9%</td></tr>
<tr><td>J9</td><td>A607 / White Lane / Church Lane</td><td>1,431</td><td>0</td><td>0.0%</td><td>820</td><td>0</td><td>0.0%</td><td>12,329</td><td>60</td><td>0.5%</td></tr>
<tr><td>J10</td><td>B1178 Tower Lane / A15 Sleaford Road</td><td>1,961</td><td>0</td><td>0.0%</td><td>1,044</td><td>0</td><td>0.0%</td><td>17,414</td><td>60</td><td>0.3%</td></tr>
<tr><td>J11</td><td>A15 Sleaford Road / Metheringham Heath Lane / Heath Lane</td><td>2,021</td><td>0</td><td>0.0%</td><td>1,011</td><td>0</td><td>0.0%</td><td>21,554</td><td>60</td><td>0.3%</td></tr>
<tr><td>J12</td><td>A15 Sleaford Road / Green Man Road</td><td>1,811</td><td>0</td><td>0.0%</td><td>843</td><td>0</td><td>0.0%</td><td>19,184</td><td>60</td><td>0.3%</td></tr>
</table>

The Applicant has since updated Chapter 13: Traffic and Transport to amend the title of Table 13-26 to 'Construction Traffic Impact (2032) – ~~Principal Site~~ DCO Site – Development Peak Hours'. The updated chapter was submitted to the Examination at Deadline 3.</td></tr>
</table>

3. Applicant's Responses to ExQ1 Responses

3.1 ExQ1 Responses

Table 3-1a: Applicant's Responses to the responses provided by North Kesteven District Council to the ExA First Written Questions

Question Number	Question to	Question	IP Response (NKDC)	Applicant Response
North Kesteven District Council				
GC.1.10	Applicant	**Minimum distance between proposed BESS and structures** North Kesteven District Council (NKDC) in its RR [RR-210] has questioned whether the minimum separation distances for a centralised BESS (790 metres) and a distributed BESS (200 metres) stated in paragraph 2.3.5 of [APP-198] have been applied. a) With respect to the proposed centralised BESS, submit a plan showing the full extent of the BESS compound relative to nearby structures and annotate around the entirety of the BESS compound the minimum separation distance: 1) recommended by the National Fire Chiefs Council (NFCC) in its extant and/or emerging BESS planning guidance for fire and rescue services or any other relevant extant or emerging regulations or guidance; and 2) the 790 metre minimum separation distance referred to paragraph 2.3.5 of [APP-198]. b) Agreed at Issue Specific Hearing 2 (ISH2) that the Lincolnshire Fire Rescue Service, via Lincolnshire County Council, will submit copies of the extant and current draft NFCC guidance. c) With respect to the proposed distributed BESS clarify whether in all circumstances the minimum separation distance of 200 metres between elements of the BESS and off site structures stated in paragraph 2.3.5 of [APP-198] would be possible. In the event the applicant identifies any instances where that separation distance could not to be achieved	At ISH1 the applicant stated that the separation distances of 790m for a centralised BESS and 200m for a distributed BESS are included in the Design Principles in APP-186. This is not entirely consistent with the Framework Battery Safety Management Plan (FBSMP, APP-198) which states at 2.3.5 that the figures are confirmed in the Development Parameters. The Council notes that at Deadline 1 the applicant submitted Revision 1 to the FBSMP (REP1-042). This document has been changed so that the separation distances from battery enclosures to offsite structures quoted are now as follows: • 280m from centralised BESS • 200m from distributed BESS The text of paragraph 2.3.5 has also been changed to refer to the Works Plans showing solar stations and the centralised BESS not '… closer than 200m to residential offsite structures." In addition to the points of clarification and additional information sought by the ExA, the Council requests that for the avoidance of doubt the FBSMP should be amended to reference Design Commitment BA1 in the Design Approach Document (APP-186).	The Applicant has clarified the minimum offsets for both the distributed and centralised BESS within the Applicant's Response to the Examining Authority's First Written Questions [**REP2-029**]. With regards to the distributed BESS, the Applicant commits to a minimum separation distance of 150m between the distributed BESS and offsite residential structures (ref. paragraph 2.3.5 of the Framework BSMP [**REP1-041**]). With regards to the centralised BESS, paragraph 2.3.5 of the Framework BSMP [**REP1-041**] recognises that the centralised BESS will not be located closer than 200m to offsite residential structures with reference to the Works Plans, where it is stated "*The Works Plans [EN010154/APP/2.2], which are secured under requirement 6 at Schedule 2 of the draft Development Consent Order [EN010154/APP/3.1], do not locate Solar Stations and the centralised BESS closer than 200m to residential structures offsite*" – i.e. irrespective of the commitment to a 200m minimum offset with regards to the centralised BESS and offsite residential structures stated at Design Commitment BA1 in the Design Approach Document [APP-186], the centralised BESS is fixed in location (restricted by the Works Plans **[AS-105]**) which doesn't allow the centralised BESS to be located closer than 200m from the nearest receptor (approximately 275m from the façade of Grange Cottage). However, for clarity on this item, the Framework BSMP has been updated, submitted to the Examination at Deadline 3,

Question Number	Question to	Question	IP Response (NKDC)	Applicant Response
		the structures in question should be listed (giving its address) and the distance between the distributed BESS and the structures in question should be quoted.		to specifically and clearly reference the minimum separation offsets committed to for both centralised and distributed BESS at paragraph 2.3.5.
GC.1.13	Applicant and National Grid Electricity Transmission Plc (NGET)	**Grid Connection** Section 3.7 of ES Chapter 3: The Proposed Development [APP-028] identifies that the proposed development would connect to the national electricity transmission network at National Grid's proposed substation near Navenby, which is subject to a separate planning application. Provide an update on the anticipated date for submitting a planning application for the proposed Navenby substation and how that compares with the timings described in paragraph 3.4.2 of the Grid Connection Statement [APP-200].	North Kesteven District Council has been contacted by National Grid who have stated that the anticipated date for submission of a planning application for the proposed Navenby Substation is now mid to late March 2026. Previously the expected date of submission was "early 2026" as reported in the Council's LIR (REP1- 056, paragraphs 3.16 and 28.1) (consistent with the statement contained on the National Grid website project page for Navenby Substation) and the Council's Written Representation (REP1-057, paragraph 8.2).	This timeline is noted, and it is also noted that at Issue Specific Hearing 4, NKDC noted that the application for the proposed National Grid substation near Navenby application is expected to be submitted around 27 April 2026. However, at the time of writing this response, the anticipated timeline provided for the Navenby Substation on NGET's website has not been updated to reflect this anticipated submission date. The Applicant wishes to reiterate that it does not have any information beyond that which has been provided by NKDC during the course of ISH4. The estimated timeline set out on NGET's website indicates a completion date of late 2029. As stated in paragraph 3.4.2 of the Grid Connection Statement [APP-200], this is 3.5 years ahead of the connection date for the Proposed Development.
GC.1.14	Applicant and NGET	**Implication for the proposed development were the proposed Navenby substation not to be consented and/or constructed** If the proposed development was to be consented but the proposed Navenby substation did not receive permission and/or the approved substation was not built, what implications would the unavailability of a new substation at Navenby have for the delivery of the proposed solar farm?	The Council draws the attention of the ExA the following: 1. The applicant's site selection process relies in large part for its justification on the proposed grid connection at a future Navenby substation. 2. The proposed development does not include any provision for an alternative grid connection 3. The Council's responses to question DCO.1.29 highlight the potential damaging effects which may occur if the development – including preliminary works – is allowed to proceed in the absence of the Navenby substation. 4. As a matter of fact a planning application for the proposed Navenby Substation has not yet been submitted to the District Council; and as such the outcome of that process known (along with associated timescales notwithstanding the suggested decision	It is understood that under NGET's Transmission Owner's Licence: Standard Licence Condition D4A: Obligations in Relation to Planning, NGET is required to undertake all reasonable steps to obtain the required consents. Under the commercial agreement between the Applicant and NGET, should no new substation at Navenby be available, it would fall to NGET to find an alternative point of connection for the Proposed Development.

Question Number	Question to	Question	IP Response (NKDC)	Applicant Response
			making timeframe on the National Grid website project page.	
GC.1.15	Applicant	**Funding for decommissioning** The Funding Statement [AS-014] identifies costs and funding associated with construction and maintenance, for example, paragraphs 1.3.1, 1.4.2, 1.4.3, and 1.4.5. Explain: a) How decommissioning activities have been factored into the costs estimate and funding availability and commitments? b) How funding for undertaking decommissioning works, potentially sixty years after the proposed development became operational, would be secured?	The Council draws the attention of the ExA to its Comments on the Draft Development Consent Order (REP1-058) submitted at Deadline 1 as follows: 1. Schedule 2 Requirements on page 7 – seeking an additional requirement in addition to Requirement 20, to provide financial security for decommissioning; 2. Comments on article 35 (consent to transfer benefit), on page 5. The Council considers it important to provide financial guarantees that the full decommissioning of all parts of the development will be delivered without costs to the public purse.	The Applicant provided full responses to the Council's comments on the draft DCO with these specific matters having been addressed on page 30 and pages 26-27 respectively of the Applicant's Response to Post Hearing Summaries **[REP2-032]**. The Applicant has set out further justification as to why a decommissioning bond is not required in response to question DCO.2.28 of the Applicant's Response to the Examining Authority's Second Written Questions [**EN010154/EXAM/9.19**], submitted to the Examination at Deadline 3.
GC.1.21	Applicant and all other interested parties and affected persons	Revised Energy National Policy Statements (NPS) On 6 January 2026 revised versions of the following NPS published in December 2025 took effect: • Overarching National Policy Statement for Energy (EN-1) • National Policy Statement for Renewable Energy Infrastructure (EN-3) • National Policy Statement for Electricity Networks Infrastructure (EN-5) Under the transitional provisions included in section 1.6 of the revised version of NPS EN-1, for the purposes of the determination of the application for the proposed development, the versions of NPS EN-1, EN-3 and EN-5 that were published in November 2023 and which took effect in January 2024 continue to be in effect under s104(2)(a) of PA2008, with the newly revised versions of those NPS being cable of being considered as important and relevant matters under s104(2)(d). If you consider the revisions made to the national policy included in the 2025	General The changes to the relevant NPS are many, and some are significant in a general sense – for instance the raising of the NSIP threshold for solar photovoltaic schemes from 50MW to 100MW set out in changes to paragraph 1.6.1 of EN-1 2025; and EN-1 2025 and EN-3. 2025 make frequent references to the Clean Power 2030 Mission. However, the comments below are limited to those which are considered to potentially most affect the Council's position on the Fosse Green Energy development as set out principally in the Council's Local Impact Report (REP1-056) and Written Representation (REP1-057). Changes to EN-1 Paragraph 4.1.7 of EN-1 has changed from the 2024 to the 2025 version, as follows (added text in red): For projects which qualify as CNP Infrastructure, it is likely that the need case will outweigh the residual	The Applicant notes the adoption of the revised NPS. As set out in section 2.4 of the Planning Statement [AS-098] when they were in draft, the new NPS EN-1, NPS EN-3 and EN-5 embed the Government's ambitions and commitments in the Clean Power 2030 Action Plan into the policy statements. In particular, the policy narrative in EN-1 was updated to reflect the government's Clean Power 2030 mission. This included textual amendments to Critical National Priority policy to reflect the Clean Power 2030 Action Plan, for example: This is highlighted in NPS EN-1 paragraph 2.3.4 which states "*meeting the Clean Power 2030 Mission objectives necessitates a significant investment in new energy infrastructure, both large nationally significant developments and smaller-scale developments determined at a local level. This requirement for new energy infrastructure will present opportunities for the UK and contributes towards the creation of secure, well paid jobs in*

Question Number	Question to	Question	IP Response (NKDC)	Applicant Response
		versions of the NPSs listed above have any implications for the case you have made, written submissions should be made explaining how you consider your case has been affected by the revised policy. For projects which qualify as CNP Infrastructure, it is likely that the need case will outweigh the residual effects not capable of being addressed by application of the mitigation hierarchy, in all but the most exceptional cases.	effects not capable of being addressed by the application of the mitigation hierarchy, in all but the most exceptional cases. This leads on to changes contained in paragraphs 4.2.24 and 4.2.25 of EN-1 2025 (formerly 4.2.11 and 4.2.12 of the 2024 version of EN-1), and the clarifying footnote 102. These changes mean that mitigation which result in a significant reduction in generating capacity are unlikely to be considered appropriate; but at the same time applicants should seek opportunities to enhance the natural environment – bearing in mind that compensatory provision does not reduce adverse effects per se. It is also noted that EN-1 2025 has added to paragraph 4.3.20 to require that the Secretary of State has regard not only to the government's Environmental Improvement Plan for improvements to the natural environment per se, but also in relation to the enjoyment of nature. In the Council's view, taken together these changes give greater emphasis to the need to fully mitigate and/or compensate for adverse impacts on the environment; and to take opportunities for environmental enhancements, including where these might assist in the public enjoyment of nature. Changes to EN-3 It is noted that EN-3 2025 states in paragraph 2.10.9 that a solar farm currently requires between 1.6ha and 2.25ha for each MW of output (equivalent to 3.95acres/MW and 5.56acres/MW). EN-3 2023 states at paragraph 2.10.17 that between 2 acres and 4 acres is required for each MW of output (equivalent to 0.81ha/MW and 1.62ha/MW).	*the UK's clean energy industry and building domestic supply chains."* The Applicant notes the change to Paragraph 4.1.7 as evidenced in this representation but notes that Paragraph 3.3.63 of EN-1 (2024) states that: *"Subject to any legal requirements, the urgent need for CNP Infrastructure to achieving our energy objectives, together with the national security, economic, commercial, and net zero benefits, will in general outweigh any other residual impacts* ***not capable of being addressed by application of the mitigation hierarchy****. Government strongly supports the delivery of CNP Infrastructure and it should be progressed as quickly as possible"* (Applicant emphasis added). The Applicant therefore has not identified any requirements arising from the 2026 NPSs which was not already in place in the previously extant 2024 NPSs. Regarding land take per MW or power output, the Applicant published its Solar Technology Technical Guide **[REP2-033]** at Deadline 2 which confirms that the Proposed Development is within the 2023 range and below (i.e. more efficient land take) the 2025 range.

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			This indicates that land take per MW of power output has risen. The Council looks forward to receiving the applicant's Technical Note in order to evaluate where the proposal sits within this range.	
DCO.1.03	Applicant NKDC LCC Environment Agency Natural England Historic England	**Article 2 - interpretation** Article 2 of the dDCO [APP-016] includes provisions for *"permitted preliminary works"*. Section 5.7.21 of Advice Note 15 "Drafting Development Consent Orders" advises that such provisions have been removed by the Secretary of State (SoS) in some decisions, particularly where such advance works were themselves likely to have significant environmental effects, for example, in terms archaeological remains. a) **For the applicant** - comment on the nature and scope of the identified permitted preliminary works in the context of section 5.7.21 of Advice Note 15. b) Given that the permitted preliminary works could take place with just the framework plans in place, views are sought on whether the level of detail in these documents would secure adequate control and manage the likely effects arising from the preliminary works?	There is relatively little provided in the application specifically detailing what the preliminary works would consist of – for instance they are not specified in ES Chapter 3: The Proposed Development (REP1-016). It is not known how much the detailed design will affect the precise nature of the preliminary works to be carried out. The applicant has structured the application and DCO so that the framework plans do not provide sufficient detail to control and mitigate the potential adverse effects of the project during its construction (post "commencement"), operational and decommissioning phases. The Council suggests that it might be counter-intuitive to rely on those same framework plans to fully address the effects of the preliminary works. By way of example, as currently drafted the DCO does not give effect to the Framework Construction Environmental Management Plan (FCEMP) (REP1-032) through the detailed CEMPs until the main development has commenced. Setting that aside, the FCEMP might be seen as one potential means of addressing the potential adverse effects of the preliminary works, along with other framework plans. However, the FCEMP does not contain any reference to the preliminary works as such. Whilst it is acknowledged that the FCEMP does provide some information on how, for instance, vegetation clearance might be mitigated for some activities / topic headings, it is not clear that all the effects of such works would	The Applicant is preparing a Permitted Preliminary Works Environmental Management Plan (the PPW EMP) which will contain the detailed mitigation in accordance with which the PPW must be undertaken. As the plan will contain the full, detailed mitigation, it will not require additional approval by the relevant planning authority. The plan will be a certified document under Article 41 of the draft DCO **[REP2-005]** and will be secured by a Requirement of the draft DCO. The amendments to the draft DCO to give effect to these provisions will be submitted at Deadline 3A and the PPW EMP will be submitted as soon as possible thereafter, and no later than Deadline 5. Accordingly, it is not necessary to delete any works from the PPW definition in Article 2 of the draft DCO **[REP2-005]**. Notwithstanding this, the Applicant has taken the opportunity to update this definition to remove reference to archaeological surveys, as these must be undertaken in accordance with Requirement 11 of Schedule 2 to the draft DCO **[REP2-005]**. The definition of PPW has also been reordered into groups of intrusive and non-intrusive works. This allows reference to be made to the intrusive works in Requirement 11 of Schedule 2 to the draft DCO **[REP2-005]**, which has the effect of allowing non-intrusive PPW to occur before the archaeological surveys secured under Requirement 11 have been undertaken.

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			all be fully mitigated in all respects. It is also not clear that the FCEMP measures would mitigate for the effects of other preliminary works, such "site preparation for temporary facilities for the use of contractors". Consequently, even if some of the potential adverse effects of the preliminary works might be addressed by implementation of measures contained in the framework plans, it is not clear to the Council that all such effects would be fully mitigated. The Council therefore refers the ExA to its views on Article 2 interpretation: definitions of 'commence' and 'permitted Preliminary works' which can be found at the top of page 3 of our 'Post-hearing submissions in relation to ISH2: Comments on the Draft Development Consent Order' (REP1-058), which also cross-reference the definition of 'date of final commissioning' in Schedule 2, Requirement 1. The Council considers that the following items should be carved out of the list of defined 'permitted preliminary works' in Article 2: (c) above ground site preparation for temporary facilities for the use of contractors; (e) diversion of existing apparatus and laying of temporary apparatus; (f) the provision of temporary means of enclosure and site security for construction; (h) site clearance (including vegetation removal, demolition of existing buildings and structures). This would then bring these works within the scope of the requirements dealing with commencement, the detailed design, and the detailed management plans in order to ensure comprehensive mitigation.	
DCO.1.04	Applicant NKDC LCC	**Articles 2 and 5 - maintenance** Article 2 provides a definition for *"maintain"* which includes *"inspect, repair, adjust, alter, remove, refurbish, reconstruct, replace and improve any part of the authorised development (but not*	The FOEMP (REP1-034) states at paragraph 2.3.1 that "*It is not anticipated that wholescale maintenance or replacement would be required but rather it would be programmed in stages to maintain the electrical export to the National Grid*." However, it appears	As stated in the Applicant's Response to Local Impact Reports **[REP2-031]** it is not considered necessary to introduce such a Requirement into the draft DCO. The Applicant has amended the Framework OEMP **[REP2-015]** to stipulate that *"every 12 months from the date of final*

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		remove, reconstruct or replace the whole of Work No. 1 at the same time)". Article 5 describes the power to maintain the authorised development. Paragraph 2.3.3 of the FOEMP [APP-190] identifies that every 12 months from the date of final commissioning and before undertaking the maintenance for the year ahead, the applicant would submit a planned maintenance schedule for the year ahead to the relevant planning authorities, excluding unforeseen emergencies that require maintenance throughout the year. Paragraph 2.3.4 sets out what the maintenance schedule must include, with item e being confirmation that any environmental effects that are likely to arise as a result of such maintenance and the environmental controls to be implemented are not to be materially worse than those reported in the ES. Would the provisions within Articles 2 and 5 and the commitments in the FOEMP be sufficient to ensure that any environmental effects from maintenance activities would not be materially worse than those reported in the ES. If not, what other measures should be included? Should there be a mechanism for the relevant planning authorities to determine whether the extent of maintenance would/would not give rise to materially worse environmental effects and if so, what this should comprise?	inevitable that wholesale replacement of some major elements of the development will required at least once, towards the mid-point of the 60 year operational duration of the development, due to their anticipated lifespans (Table 3-11 in ES Chapter 3: The Proposed Development, (REP1-016), as well as Table 2 in the FOEMP). The need for wholesale replacement will include all of the solar panels (25 – 40 years), transformers (30 – 40 years) and Onsite Substation equipment (30 – 40 years). Whilst it may be desirable and possible to stage this wholesale replacement, it does on the face of it appear somewhat different to 'normal' maintenance activities which will be required throughout the life of the development. As currently drafted, NKDC does not consider that Articles 2 and 5 are sufficient in this regard. NKDC has commented on the following parts of our 'Post-hearing submissions in relation to ISH2: Comments on the Draft Development Consent Order' (REP1-058): i. Article 2 interpretation: 'maintain' at the bottom of page 2. This includes a suggestion that a new Requirement is included in Schedule 2 that a solar panel / array replacement and repowering strategy is to be submitted to and approved by the Local Planning Authority - the implementation of which should not have new or materially different effects from those assessed in the ES. ii. Article 30 temporary use for maintaining on page 5, which also cross-reference the definition of 'date of final commissioning' in Schedule 2, Requirement 1. NKDC's view is that the responsibility for demonstrating that maintenance (including full replacement and repowering) will not have new or materially different environmental effects sits with the applicant; and the suggested approval process for the	*commissioning the Applicant will submit a planned maintenance schedule for the year ahead to the relevant planning authorities (excluding unforeseen emergencies, breakages and malfunctions that require maintenance throughout the year)"*. This would detail the extent of planned repowering for the next 12 months, providing the councils with foresight of the planned number of panels that would be replaced in the following 12 months. Article 5 (Power to maintain the authorised development) of the Draft DCO **[REP2-005]** expressly states, at sub-paragraph (3) that *"this article does not authorise the carrying out of any works which are likely to give rise to any materially new or materially different effects that have not been assessed in the environmental statement"*. Therefore, the power to maintain is already sufficiently limited in this way, and no further requirement is necessary. In its Deadline 2 submissions the Applicant amended the definition of "date of final commissioning" in Article 2 (Interpretation) and has made consequential amendments to Article 30 (Temporary use of land for maintaining the authorised development) of the Draft DCO [REP2-005]. In addition to the above, the definition of "maintain" as per Article 2 (Interpretation) and the provisions of Article 5 (Power to maintain the authorised development) were discussed during Issue Specific Hearing 4 on Friday 13 March 2026, as set out in the Written Summaries of Oral Submissions at ISH4 submitted to the Examination at Deadline 3.

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			replacement strategy will involve the Local Planning Authority confirming its agreement or otherwise with the applicant's submissions in that regard.	
DCO.1.12	Applicant NKDC	**Article 40 – trees subject to tree preservation orders** Paragraph 2(b) of Article 40 states that the duty contained in section 206(1) (replacement of trees) of the Town and Country Planning Act 1990 would not apply although where possible the undertaker would seek to replace any trees which are removed. a) Applicant - Explain why it is considered this provision should not apply to the proposed development. b) NKDC - in your relevant representation [RR-210] you have identified some concerns about the wording of Article 40 in respect of trees subject to tree preservation orders. Can you clarify what those concerns are and how you consider those concerns could be addressed?	NKDC's views on Article 40: Trees subject to tree preservation orders were set out in paragraph 25.3 on page 84 and 27.8 – 27.10 on page 93 of the Council's LIR (REP1-056). The Council has given further consideration to this matter, and set out further comments on Article 40 at the bottom of page 5 of the Council's 'Post-hearing submissions in relation to ISH2: Comments on the Draft Development Consent Order' (REP1-058). The Council suggests that DCO Article 40 is reworded as follows: (1) Subject to paragraphs (3), (4) and (5) t~~T~~he undertaker may fell or lop any tree within or overhanging land within the Order limits subject to a tree preservation order which was made after [**] if the undertaker reasonably believes it to be necessary to do so to prevent the tree or shrub— (a) from obstructing or interfering with the construction, maintenance or operation of the authorised development or any apparatus used in connection with the authorised development; or (b) from constituting a danger to passengers or other persons using the authorised development. (2) In carrying out any activity authorised by paragraph (1)— (a) the undertaker must do no unnecessary damage to any tree or shrub and must pay compensation to any person for any loss or damage arising from such activity; (b) the duty contained in section 206(1) (replacement of trees) of the 1990 Act is not to apply although ~~where~~	In line with the request set out in NKDC's LIR, the Applicant amended Article 40 (2) to provide the required prior notice as follows: *(2) In carrying out any activity authorised by paragraph (1)--* *(a) the undertaker must do no unnecessary damage to any tree or shrub and must pay compensation to any person for any loss or damage arising from such activity;* *(b) the duty contained in section 206(1) (replacement of trees) of the 1990 Act is not to apply although where possible the undertaker is to seek to replace any trees which are removed; and* *(c) the undertaker must give ~~consult~~ the relevant planning authority 14 days' notice prior to that activity taking place except in relation to dead or dangerous trees, where only 5 days' notice is required.* This was reflected in the updated Draft DCO **[REP2-005]** submitted at Deadline 2. The Applicant does not consider any further amendments are required to Article 40. The Applicant notes that NKDC in its LIR (at paragraph 27.9) states that the Council does not seek to wholly restrict the undertaker's powers to carry out works to trees subject to TPOs, however the Applicant considers the amendments proposed by NKDC in this response are unnecessarily restrictive. The disapplication of the duty contained in section 206(1) of the TCPA 1990 is precedented. However, it should be noted that the Applicant's inclusion of the wording "where possible the undertaker is to seek to replace any trees which are removed" is largely unprecedented. Therefore, the Applicant considers the extent of Article 40, and the

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			~~possible~~ the undertaker must ~~is to~~ seek to replace any trees which are removed; and ~~(c) the undertaker must consult the relevant planning authority prior to that activity taking place.~~ (3) ~~The authority given in paragraph (1) constitutes a deemed consent under the relevant tree preservation order.~~ Prior to carrying out any activity authorised by paragraph (1), the undertaker must submit details of the activity, including proposals for replacement of trees, to the relevant planning authority for its approval. (4) The relevant planning authority must give the undertaker notice of its decision whether or not to approve the details of the activity submitted under paragraph (3) within 14 days of receipt of those details. (5) The activity must be carried out only in accordance with an approval granted by the relevant planning authority under paragraph (4). (6) An approval granted by the relevant planning authority under paragraph (4) constitutes a deemed consent under the relevant tree preservation order. (7) Any dispute as to a person's entitlement to compensation under paragraph (2), or as to the amount of compensation, is to be determined as if it were a dispute under Part 1 of the 1961 Act.	provision requiring the Applicant to seek to replace removed trees where possible, to be sufficient. As noted above, the Applicant has amended the wording of the Article to require notice to be given to the relevant planning authority as requested by NKDC in its LIR. Having undertaken a review, the Applicant has amended Article 40(1) of the draft DCO **[REP2-005]** to refer to 10 April 2025 (instead of 30 June 2025), as this is the date when the statutory designation searches were undertaken, as set out in Section 5.2.1 of the Arboricultural Impact Assessment Report **[APP-155]**. This amendment has been incorporated in the version of the draft DCO **[REP2-005]** submitted at Deadline 3A.
DCO.1.24	Applicant NKDC LCC	**Requirement 20 – decommissioning** a) **For applicant** – Having regard to the definition for the *"date of final commissioning"* stated in paragraph 1 of Schedule 2 (*""date of final commissioning" means in respect of each part of the authorised development the date on which each part of the authorised development commences operation by generating electricity on a commercial basis but excluding the generation of electricity during commissioning and testing."*) and the wording of subparagraph (1) of Requirement 20, what does each part of the development mean and how would the	NKDC views on Article 20: Decommissioning and related definitions are set out in the following documents: • Paragraphs 25.29 – 25.33 starting on page 89, 27.2 -27.6 on page 93, and the table on page 95 of the Council's LIR (REP1-056) • Art. 20 on page 7, and Sch. 2 definition of 'Date of final commissioning' on page 2 of the Council's 'Post-hearing submissions in relation to ISH2: Comments on the Draft Development Consent Order' (REP1-058).	a) The concept of "part of the authorised development" was a point of discussion during Issue Specific Hearing 4 on Friday 13 March 2026, as set out in section 3.1 of the Written Summaries of Oral Submissions at ISH4 submitted to the Examination at Deadline 3. The Applicant has inserted an additional Requirement into Schedule 2 of the draft DCO **[REP2-005]** under which the Applicant must provide notification to both NKDC and LCC to set out a list of what constitutes a "part of the authorised development". In addition to this, the Applicant has inserted a definition for "part of the authorised

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		commencement of each part of the proposed development on a commercial basis be recorded and be made known to the relevant local planning authority? b) Would Requirement 20 adequately address the situation where the proposed development ceases to be in use/generate electricity before the 60-year period ends (early cessation)? If it is considered that the draft wording of subparagraph (1) would inadequately address early cessation, provide wording that is considered to be appropriate, including the triggering for an early cessation procedure. c) Should a timescale for completion of decommissioning works be included?	a) The Council has expressed its concern regarding the lack of clarity and division of the development into undefined 'parts', with its consequences for (in particular) the decommissioning phase. The Council has suggested on page 2 of REP1-058 revised wording for the definition of '*date of final commissioning*' which it considers would provide greater clarity so as to ensure that there will be less ambiguity in the future regarding the date of decommissioning: *'date of final commissioning' means ~~in respect of each part of the authorised development~~ the date on which ~~each part of~~ the authorised development commences operation by generating electricity on a commercial basis but excluding the generation of electricity during commissioning and testing* b) The Council's views on potential adverse effects in the event of unexpected 'Extended Period of Outage' are set out at LIR 25.29 – 25.33 (REP1-056). However, this would not necessarily deal with an early, permanent cessation of generation in advance of the 60 year lifespan for the development sought in the application. The Council suggests that early cessation should be dealt with by changes to paragraph (1) of Requirement 20 along the following lines: (1) Decommissioning works must commence no later than either of the following dates, whichever is the earliest: (i) 60 years following the date of final commissioning (ii) the end of a period of 36 months during which the development has not generated electricity on a commercial basis.	development." These amendments are reflected in the iteration of the draft DCO submitted to the Examination at Deadline 3A b) A similar point regarding an unexpected extended period of outage was raised by both NKDC and Lincolnshire County Council in their LIRs and as a result the Applicant added relevant wording to the Framework OEMP **[REP2-015]** to address this point as follows: *"The Applicant must provide notice to the relevant planning authority once any part of the authorised development stops generating electricity for a continuous period of 12 months for non-maintenance reasons ("Period of Extended Outage"). When giving such notice the Applicant must provide details of the steps it is taking to rectify the issue along with an expected timeframe for when generation is predicted to re-commence operation. The Applicant agrees to keep the relevant planning authorities updated following the Period of Extended Outage until the re-commencement of operation. The above does not apply if it was a force majeure event*, the outage occurred as a result of National Grid undertaking any activities to the transmission network, the relevant planning authority agree otherwise (acting reasonably), including where the relevant planning authority agree otherwise following decommissioning commencing pursuant to an approved decommissioning environmental management plan.* **Footnote: A 'force majeure event' means an event or circumstance which is beyond the reasonable control of the Applicant which will include but is not limited to an act of God, war, civil disturbance, statutory prohibition, disruption to or issues with supply chains, Government intervention, order or act of Government or local/public authority, acts of terrorism, fire, lightning, flood, adverse weather conditions, prevention of access to any site as a consequence of any local, regional or national*

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			In addition, it is suggested that the Framework Operational Environmental Management Plan (REP1-034) should include provisions along the following lines: • After a period of 12 months without any part of the development generating electricity for non-maintenance reasons ('Extended Outage'), the undertaker will give notice to the relevant planning authority, along with details of the steps it is taking to rectify the issue along with an expected timeframe for when generation is to recommence. • In the event that the equipment or plant is still inoperative after an additional period of 24 months from the first Period of Extended Outage (resulting in a continuous period of 36 months of outage), then the undertaker must submit a decommissioning and restoration plan to the relevant planning authority for that part of the authorised development and decommissioning of that part of the authorised development must take place in accordance with the approved plan. c) NKDC would support the inclusion of a timescale for the completion of decommissioning works, and suggests that this should be 30 months from the start of such works (consistent with the estimated duration of construction).	*restriction on movement in consequence of a health emergency, or otherwise to prevent the spread of any communicable disease, explosion, accident, theft, vandalism or national strike action."* The Applicant provided an explanation of what the above wording would mean in practice in response to question DCO.2.19 in the Applicant's Responses to the Examining Authority's Second Written Questions [EN010154/EXAM/9.19], submitted to the Examination at Deadline 3. The detailed OEMP, which is required to be substantially in accordance with the Framework OEMP, is secured by Requirement 13 of Schedule 2 to the Draft DCO [**REP2-005**]. Requirement 13 provides that the operation of the authorised development must be carried out and maintained in accordance with the approved detailed OEMP. The Applicant therefore does not consider further provisions, such as a DCO Requirement, to be necessary in this regard. The Applicant does not propose that this would trigger mandatory decommissioning. c) The Framework Decommissioning Environmental Management Plan (DEMP) **[REP2-017]** specifies that *"decommissioning will likely take between 12 and 24 months..."*. Furthermore, at paragraph 2.4.3 of the Framework DEMP **[REP2-017]**, it is stated that *"More details on the decommissioning phasing will be provided within the DEMP(s), prior to decommissioning commencing. This would include timescales and transportation methods which would be agreed in advance with the Local Planning Authority."* The provision of a detailed DEMP, which must be substantially in accordance with the Framework DEMP **[REP2-017]**, is secured under Requirement 20 of Schedule 2 to the draft DCO **[REP2-005]** and therefore, the provision of a timescale at the requisite time is sufficiently secured. It is not appropriate or necessary to include a

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				specified timeframe for decommissioning in the draft DCO **[REP2-005]** as this will depend on the programme for decommissioning and any consents required for decommissioning at that point in time. It is not possible to stipulate the relevant timescales when these will not occur until many decades into the future. The Applicant's approach of including an indicative timeframe in the Framework DEMP [REP2-017] and then a detailed programme in the full, detailed DEMP to be approved under Requirement 20 is appropriate.
DCO.1.29	Applicant	**Prohibition of the commencement of the proposed development until the proposed NGET Navenby has obtained a planning permission** Comment on the written and oral submissions made by NKDC and LCC that any made DCO for the proposed development should include a requirement prohibiting the commencement of works, including intrusive survey works, until the proposed substation at Navenby has obtained planning permission. In answering this question the applicant should outline the **internal processes** it would follow after the making of any DCO for the proposed development and the final decision being made to commence works on the proposed development, including what factors would influence a decision being made as to whether to the implement any consented development and the point(s) at which any funding decisions would be made.	NKDC views on the proposed grid connection to an as yet unbuilt substation at Navenby are set out in the following documents: • Section 28 starting on page 97, and the table on page 95 of the Council's LIR (REP1-056) • In the table at the bottom of page 8 of the Council's 'Post-hearing submissions in relation to ISH2: Comments on the Draft Development Consent Order' (REP1-058), under the heading of 'Sch2 Requirements: NEW CLAUSE RE NAVENBY'. • Paragraphs 8.1 – 8.8 of the Council's Written Representation (REP1-057) EN-1 paragraph 4.11.8 sets out policy for applicants in situations where different elements of a project may have different lead-in times and be undertaken by different legal entities operating under different regulatory regimes – and provides the example of a grid company. Where separate applications for each element are submitted, EN-1 states that '…the applicant should … … and explain the reasons for the separate application confirming that there are no obvious reasons for why other elements are likely to be refused.' This places the onus on the applicant. EN-1 also points out that where separate applications are pursued, the applicant accepts the risks involved	The Applicant has set out its view on this in various documents submitted at Deadline 2, including the Applicant's Response to Written Representations **[REP2-030]**, the Applicant's Response to Local Impact Reports **[REP2-031]** and the Applicant's Response to Post Hearing Summaries **[REP2-032]**. With regards to the information referred to, the Applicant has prepared a 'Technical Note on the proposed National Grid substation near Navenby', submitted to the Examination at Deadline 3, which fulfils the requirements of the relevant paragraphs of NPS EN-1 which are noted in the Council's response. No Grampian condition requiring planning permission to be granted for a transmission network connection is necessary, appropriate nor will be offered as a requirement because: 1. NPS EN-1 paragraph 4.11.8 requires an applicant to '*explain the reasons for the separate application confirming that there are no obvious reasons for why other elements are likely to be refused*'. This has been demonstrated by the Applicant in its 'Technical Note on the proposed National Grid substation near Navenby', submitted to the Examination at Deadline 3. The Technical Note explains why there are no obvious reasons why planning permission for the

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			in that approach (4.11.9). The Council's position is that the applicant has failed to discharge this evidential responsibility in sufficient detail. It is also relevant that in terms of the Secretary of State's decision-making, EN-1 paragraph 4.11.13 states that: *'Where the Secretary of State has decided to grant consent for one project this should not in any way fetter the Secretary of State's ability to take subsequent decisions on any related projects*.' There is a strong parallel here, for the Fosse Green Energy development. The decision on Fosse Green Energy should not in any way fetter the local planning authority's discretion regarding the decision on the forthcoming National Grid Navenby Substation planning application. As far as the Council is aware, the application proposals are wholly dependent on connecting to a future Navenby Substation; there is no 'Plan B' to connect to the grid by some other route or means. To be clear, the Council is not suggesting that the fact that there is not currently a substation at Navenby capable of accepting a grid connection for the Fosse Green Energy development is in itself a reason to refuse the DCO application. Rather, the Council's concern is that without appropriate safeguards in place, there is a risk that some of the identified damaging effects of the solar farm development could occur, and yet the claimed benefits of the development might not be realised for some time, or indeed never. If the DCO is granted as currently proposed, there would be nothing to prevent the applicant from:	proposed Navenby substation and associated overhead lines to connect it into the national grid would not be granted. 2. The Applicant has received notification from NESO that it has been prioritised for a Gate 2 connection for that part of the Proposed Development comprising the solar array. Therefore, as a transmission licence holder of the national transmission network, National Grid are required to provide a grid connection for the Proposed Development. This Gate 2 connection provides for connection within a window of 2031 – 2035, which is consistent with the Proposed Development's Grid Connection offer. 3. A planning application for the Navenby substation is expected to be submitted by National Grid to NKDC in April 2026. The Applicant is not aware of anything to suggest that this impacts National Grid's currently estimated completion date of late 2029 for the Navenby substation, which is around 3.5 years ahead of the current planned connection date for the Proposed Development as set out in the Grid Connection Statement [**APP-200**]. 4. As explained in response to question DCO.2.08 in the Applicant's Responses to the Examining Authority's Second Written Questions [**EN010154/EXAM/9.19**] submitted to the Examination at Deadline 3, a Final Investment Decision requires certain matters to be settled. This includes a requirement for all necessary consents to construct and operate having been granted, including for a viable connection. 5. The Applicant intends to provide a commitment in the Permitted Preliminary Works Environmental Management Plan (to be submitted no later than Deadline 5), to restore the land to its original condition in the event that permitted preliminary works are undertaken but the Proposed Development is not then commenced within five years of the date of the Order. This ensures that any

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			a) carrying out the majority of preliminary works without further delay; and b) once pre-commencement requirements have been satisfied, carrying out parts of the development. These activities could occur at a point significantly in advance of the availability of a suitable grid connection at the proposed Navenby substation, or even, depending on the decision making outcome for the proposed Navenby substation any absolute certainty that the Navenby substation would be forthcoming (without prejudice). Therefore the Council requests that such an appropriate safeguard is put in place. In a schedule of proposed changes to the draft Development Consent Order for the Springwell Solar Farm issued on 2 September 2025, the following Additional Requirement was proposed by the Examining Authority: **Grid connection** **24. No part of the authorised development, including any permitted preliminary works, shall commence until planning permission has been granted for the National Grid Navenby Substation.** The reasoning provided by the ExA was as follows: *'The ExA acknowledge the Applicant's view in terms of commercial reality and the unlikelihood that it would proceed with the construction of the Proposed Development until there was certainty that the Proposed National Grid Navenby Substation (NGNS) would be delivered. However, the ExA are mindful that it would be possible for the Applicant to undertake site preparation works (such as hedgerow and tree removal) prior to planning permission being granted for the NGNS that would be at limited commercial*	advance PPW which may be undertaken would be restored if required. This is also detailed in the Applicant's response to DCO.2.08 and DCO.2.09 within the Applicant's Responses to the Examining Authority's Second Written Questions [**EN010154/EXAM/9.19**] submitted to the Examination at Deadline 3. 6. Finally, paragraph 4.11.9 of NPS EN-1 makes clear that it is acceptable for separate applications to be dealt with by separate entities, and this is a matter for an applicant to determine at its own risk. That is precisely the case here and the Applicant for the Proposed Development is free to progress the Application in the absence of planning permission having been secured for a grid connection. Further, there is nothing in policy which requires a Grampian condition to prevent the implementation of one application prior to the securing of permission for the other.

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			cost, but which could result in adverse environmental effects.' North Kesteven District Council understands that as of 8th January 2026 the ExA's recommendation report for the Springwell Solar Farm DCO has been sent to the Secretary of State for a decision. The Council recommends that an additional requirement along the lines set out above is inserted into the draft DCO for the Fosse Green Energy project. The requirement does not seek to prohibit the development from proceeding until the proposed substation has been completed. A requirement to wait until planning permission has been granted is considered to be reasonable and proportionate, and consistent with the general planning approach taken by the Council elsewhere.	
ENC.1.10	Applicant NKDC LCC	**Mitigation - Navenby Green Man Road Verges Local Wildlife Site** Paragraph 8.12.7 in ES Chapter 8: Ecology and Nature Conservation [APP-033] identifies specific measures to limit the potential impacts to the Local Wildlife Site and that these would be included in the CEMP. Paragraph 8.12.8 in [APP-033] explains it may be possible to supplement the re-instated areas with seed collected from more diverse sections of the Local Wildlife Site. Table 3.4 of the FCEMP [APP-189] under ECO-C1 part b. identifies measures specific to the Local Wildlife Site. Comment on whether the measures set out in ECO-C1 part b of [APP-189] would adequately cover those identified in paragraphs 8.12.7 and 8.12.8 of [APP-033].	The Council agrees with the views of Lincolnshire County Council (with whom it shares ecological advice) on this question, and considers that: a) additional wording and clarification is required in ECO-C1 part b of the FCEMP (APP-189) in order to ensure that it aligns with the stated intent of APP-083 Para 8.12.7 and 8.12.8 of REP1- 020. b) 8.12.7 of REP1-020 makes specific reference to the removal, storage and watering of turves from the LWS whereas ECO-C1 part b only refers to soils. Turves should be removed and stored to ensure that re-instatement of impacted areas of the LWS is as effective as possible. c) 8.12.8 of REP1-020 refers to the collection of seed from more diverse areas of the LWS whereas ECO-C1 part b simply refers to the use of locally collected seed from nearby higher quality calcareous grassland where practicable. The Council agrees that it may be appropriate to use locally sourced seed to supplement any collected from the LWS, but ECO-C1 part b	In response to this comment, the Applicant has updated the wording of ECO-C1 part b of the Framework CEMP, as suggested by North Kesteven District Council, with the specific measures stated in ES Chapter 8: Ecology and Nature Conservation [**APP-033**] paragraphs 8.12.7 and 8.12.8 regarding storage of turves, collection of seed from the LWS and supplementary planting of locally sourced seed. The updated Framework CEMP, reflecting these changes, was submitted to the Examination at Deadline 3.

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			should still include reference to the collection of seed from with the LWS as well. d) Measures aimed at preventing unnecessary access and pollution / contamination of the LWS set out in ECO-C1 part b are appropriate.	
ENC.1.16	Applicant LCC NKDC	**Cumulative effects** Table 8-16 in ES Chapter 8: Ecology and Nature Conservation [APP-033] identifies the residual effect for ground nesting birds of the proposed development in isolation as minor adverse (not significant). The assessment presented in Table 8-19 of [APP-033] concludes that there would be a negligible cumulative effect assuming appropriate mitigation measures would be included within respective developments to ensure there would be no significant residual effects. However, if several projects are identifying a minor adverse effect due to a loss of land for ground nesting birds, which is not significant in isolation, at what point might the effects for ground nesting birds become significant?	The Council agrees with the views of Lincolnshire County Council (with whom it shares ecological advice) on this question, and is concerned about the potential for cumulative impacts on ground nesting bird species, particularly skylark, arising from the number of similar developments across the County. The Council considers that a) each development should ensure that it provides adequate mitigation for its own impacts on ground nesting birds to avoid the potential for cumulative impacts as far as possible. b) where several developments are all having a minor adverse effect in isolation on an ecological feature which is deemed to be of at least county-level importance there is potential for the cumulative impacts to become significant. c) populations of ground-nesting birds are assessed by the Applicant for this proposal as being of county-level importance. A significant effect could therefore occur if the development resulted in the loss or degradation of habitat which impacts the long-term viability of ground nesting bird populations within the county. d) measures currently proposed by the Applicant to mitigate impacts on ground nesting birds are adequate and considers that any negative impacts from this proposal are likely to be minor and temporary in nature if the proposed mitigation is secured.	The Applicant notes that NKDC and LCC agree that the measures proposed by the Applicant to mitigate impacts on ground nesting birds are adequate. Further detail on this mitigation is provided in the Applicant's response to ENC.1.12 of the Applicant's Response to the Examining Authority's First Written Questions [**REP2-029**]. In response to the specific points from NKDC/LCC: a) As detailed in Sections 8.12.19 to 8.12.26 of ES Chapter 8: Ecology and Nature Conservation [REP1-019] the Proposed Development has provided sufficient mitigation to avoid a significant effect on Skylark and Lapwing. b) The populations of breeding Skylark and Lapwing present within the Order limits and likely to be impacted by the proposed development were deemed to be of district-level importance (see Table 8-12 of Chapter 8: Ecology and Nature Conservation of the ES [REP1-019]). c) In considering cumulative impacts on ground nesting birds the Applicant reviewed the assessments presented by relevant developments within the agreed zone of influence. For example, comparable large scale solar schemes were reviewed and where assessment of impacts on ground nesting birds is provided this was considered in the Applicant's assessment of cumulative impacts. This includes the following relevant schemes at a district level: • Springwell solar farm concluded that with their proposed mitigation the impact to ground-nesting

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				birds would only occur at the local level and would not be significant. • Leoda solar farm has not to date submitted any preliminary assessment, but being of comparable size and in a similar landscape ground-nesting bird populations are likely to be similar, with mitigation requirements necessary to avoid a significant effect. As the Applicant has not concluded any loss or degradation of habitat which impacts the long-term viability of ground nesting bird populations at a county level (and neither have any of the other Schemes), the Applicant maintains that no significant cumulative effects will arise.
ENC.1.19	NKDC	**Arboricultural Impact Assessment – mitigation** The Arboricultural Impact Assessment [APP-155] identifies that the final specification for mitigation measures would be detailed in the Arboricultural Method Statement which it is proposed would be secured via the FCEMP [APP-189]. Would the mitigation mechanism proposed by the applicant be sufficient to address the point raised in your relevant representation [RR-210] about root and stump removal and, if not, what other details would be required to address the council's concern?	In its Relevant Representation, the Council stated on the seventh page that: *Areas of woodland felled may require root and stump removal. That may be detrimental to retained trees as there is a very high likelihood of intermeshed root systems. This should be addressed in the AIA and mitigation proposals.* Requirement 14 of the draft DCO (REP1-008) states: (1) No part of the authorised development may commence until a construction traffic management plan for that part has been submitted to and approved by the relevant planning authority in consultation with National Highways. (2) The construction traffic management plan must be substantially in accordance with the framework construction traffic management plan. (3) The construction of any part of the authorised development must be carried out in accordance with the approved construction traffic management plan for that part.	In response to this comment, the Applicant held a meeting with the North Kesteven District Council Tree Officer on 24 February 2026, where it was agreed to update Section 3.17 part j) of the Framework CEMP [**REP2-013**] to include: "*Tree works and/or stump removal or stump treatment will be carried out in a way that avoids damage to any nearby trees that are being retained. The methodology for tree works will be described in the CEMP."* The updated Framework CEMP, reflecting these changes, was submitted to the Examination at the Deadline 3.

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			On page 103 of its response to the Council's Relevant Representation (REP1-047), the Applicant has stated as follows: *The methodology for tree removal and stump management will be detailed in the Arboricultural Method Statement secured via the Framework CEMP [APP-189] (ref. ARB-C1). In general stumps would be retained in situ where located within the Root Protection Area of a retained tree.* The FCMEP has been updated, and the current version (Revision 2) is REP1-032. This includes section 3 which sets out mitigation, management and monitoring measures which are to be included in the detailed, final CEMP(s) when they are drawn up. Part 3.17 Arboriculture, including Table 16, refers to the Arboricultural Impact Assessment (AIA) (APP-155), stating that the AIA sets out a number of measures to be implemented, including for instance that, as a general statement (page 82): b. Where practicable the detailed design will be further developed to avoid or minimise impacts to trees. The final level of arboricultural impacts will be assessed and recorded as part of an Arboricultural Method Statement which will be produced as part of the detailed CEMP(s). This general approach is reflected in the subsequent more detailed tree-related text, for instance under the heading of "Tree Protection" on page 91 of the FCEMP. However, mitigation measures for potential stump removal are not specifically identified in the FCEMP. The FCEMP also refers to outline tree protection measures considered in Annex D of the AIA (APP-155). However, Annex D does not refer to specific protection measures related to stump removal.	

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			Therefore the Council's position is that: a) the application documents do not satisfactorily address the point raised in Relevant Representation [RR-210] regarding root and stump removal; and b) the FCEMP should be amended to make it clear that the forthcoming Arboricultural Method Statement will address this particular point	
ENC.1.26	Applicant LCC NKDC Natural England	**BNG Report [APP-194] – strategic significance** Paragraph 2.6.2 of the BNG Report sets out that NKDC has yet to produce a Local Nature Recovery Strategy and because of that strategic significance has been assigned to habitats using the alternative methodology in line with guidance set out in the Statutory Biodiversity Metric User Guide. LCC, in its relevant representation [RR-157], considers that significance has not been applied in accordance with the Statutory Biodiversity Metric User Guide, as NKDC has identified criteria for assessing strategic significance (Central Lincolnshire Biodiversity Opportunity Mapping). NKDC, in its relevant representation [RR-210] also refers to a failure to apply locally adopted strategic significance criteria. a) Comment on what would be the most appropriate approach for assigning strategic significance within the context of the advice stated in the Statutory Biodiversity Metric User Guide. b) **NKDC** - provide an update on when the council's Local Nature Recovery Strategy is expected to be published.	b) Lincolnshire County Council (LCC) is leading on the preparation of the Greater Lincolnshire Local Nature Recovery Strategy (GLLNRS). A draft GLLNRS has been prepared and approved by the Supporting Authorities and LCC. A public consultation exercise in relation to the draft GLLNRS began on 26th January 2026, and closes on 8th March 2026. The published timetable is to consider the consultation responses and finalise the GLLNRS by May 2026, with adoption anticipated in June 2026. At present, the Applicant should continue to use the currently adopted methodology to define Strategic Significance and not use to the draft LNRS to inform their BNG strategy. However, should the development gain consent, the Council considers that updates to the Applicant's BNG calculations are likely be required following the adoption of the LNRS to inform the final LEMP(s) and BNG Strategy. The Greater Lincolnshire Nature Partnership have indicated that they are willing to share the "shape files" of the draft GLLNRS with the applicant and ExA if that would assist the examination.	The Applicant notes that LCC/NKDC confirm that the Applicant should continue to use the currently adopted methodology to define Strategic Significance and not use the draft LNRS to inform the BNG strategy. Requirement 8 of Schedule 2 to the draft DCO **[REP2-005]** secures the delivery of biodiversity net gain. Any adopted changes to the guidance for defining Strategic Significance will be applied, as necessary, when discharging Requirement 8 post-consent.
ENC.1.27	Applicant NKDC LCC	**BNG Report [APP-194] – trading rules** Paragraphs 3.3.2 to 3.3.6 in the BNG Report explain the trading rules. Paragraph 3.3.2 confirms	NKDC requires that all trading rules be met to comply with the Statutory Biodiversity User guide. This will	The Applicant undertook a review of the classification of 'arable field margins' against the Priority Habitat description and where appropriately re-defined. This resulted in a

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	Forestry Commission Natural England	that for area habitats, the trading rules within the Statutory Biodiversity Metric currently would not satisfied for each distinctiveness level. That would be because of the loss of "Lakes – Reservoirs", "Heathland and shrub – Mixed scrub" and "Cropland – Arable field margins" habitats, which would not be directly mitigated for by the proposed development. a) For the **applicant** - paragraphs 3.3.3 and 3.3.4 in the BNG Report provide more detail with respect to Lakes – Reservoirs' and Cropland – Arable field margins. Clarify why a similar explanation is not provided for Heathland and shrub – Mixed scrub. b) Comment on the approach to the trading rules.	require the applicant to either deliver on-site or commit to purchasing local off-site units. The use of Rule 4 is not considered appropriate in this site's context so cannot be used to bypass the trading rules. The trading rules could be addressed on-site by delivering higher distinctiveness habitat such as orchards/reedbeds or compensatory habitat of the same broad habitat type. It will not be possible to deliver the same broad habitat type for arable field margin, in such cases the applicant could consider whether the baseline assessment could be reviewed and whether classification of arable field margins at baseline could instead be classified as a grassland habitat. Such as change would likely negate any trading rule issues for this habitat. North Kesteven District Council and Lincolnshire County Council met with the Applicant on 22 January 2026 to discuss Biodiversity Net Gain, including issues over use of the metric. The Council is happy to continue its dialogue with the Applicant on this issue.	reduced area of arable field margin habitat. To offset the residual loss of arable field margins and the small area of mixed shrub the Applicant has done the following: - Partly offset this with the creation of a higher distinctiveness habitat - Traditional Orchard; and - Committed to the annual creation of arable field margins within the areas of retained arable within the Order limits. This is set out in the Framework LEMP, submitted to the Examination at Deadline 3. This is demonstrated in the revised BNG Report which was submitted to the Examination at Deadline 3. With respect to the loss of 'Lakes-Reservoirs' the Applicant still anticipates that impacts to this habitat can be avoided when undertaking detailed design post-consent. This would be reflected in the updated final BNG to be agreed with relevant stakeholders post-consent. In the absence of a legislative regime for delivering BNG on NSIPs the Applicant has sought to comply with the wider BNG Regulations through the Environment Act 2021, setting out how they have followed the Mitigation Hierarchy and where the trading rules are not met, clearly described how this will either be sought to be rectified post-consent or how the ecological function potentially lost will be replaced. However, if a worst case scenario is considered and compliance with the trading rules not met then the Applicant would point to a number of examples of granted solar DCOs, such as Tillbridge Solar Farm in Lincolnshire and Fenwick Solar Farm in Yorkshire, where stakeholders and the SoS agreed that, with appropriate justification from the relevant applicants, that non-compliance with the trading rules in some circumstances was acceptable.
ENC.1.29	Applicant LCC NKDC	**Ecological Steering Group** **Applicant** - confirm its view on establishing such a group.	The Council envisages that the ESG could be secured by means of the following: a) Setting out the key purposes, functions and setting up of an ESG in section 7.1 of the Framework	The purpose of the "Ecological Advisory Group or similar" referenced at paragraph 7.1.9 of the Framework LEMP **[REP2-021]** is to oversee the post-construction ecological monitoring works, with the key function of the Group

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		Councils - explain how it is envisaged that the ecological steering group referred to in NKDC's relevant representation [RR-210] could be secured.	Landscape and Ecological Management Plan (FLEMP, REP1-040) – currently, the FLEMP makes limited reference at paragraph 7.1.9 to an 'Ecological Advisory Group', so this section would require expansion. b) The ESG would form an element of the detailed LEMP to be submitted and approved in accordance with Requirement 8 of the DCO (REP1-008). c) Participation in the ESG would require significant commitments of time from the partner organisations. Therefore the Council seeks financial contributions to fund the operation of the ESG, which could be secured through a s.106 agreement. The Council has taken this approach at the Springwell Solar Farm DCO, the examination for which closed on 8th October 2025. The Council understands that the Examining Authority's recommendation was submitted to the Secretary of State on 8 January 2026. The applicant for the Springwell Solar Farm DCO (Springwell Energy Farm Ltd) agreed to this approach, and links to the relevant documents on the Planning Inspectorate's website can be found here: • Outline Landscape and Ecology Management Plan (oLEMP) (Tracked) Revision 5 – see section 7.2, beginning on page 43; and • Draft Section 106 Agreement Revision 1 – see in particular Schedule 3 on page 14. At the same time, the Council would be happy to discuss alternative mechanisms to secure funding of the ESG. The Council is of the view that this might be achieved through an Article in the DCO, which offers potential benefits in terms of savings in legal processing.	comprising review of monitoring data on habitats and species to inform future management plans (as necessary). As noted at paragraph 1.3.7 of the Framework LEMP **[REP2-021]**: "*Any long-term biodiversity monitoring and management requirements specified in this document will be carried out by the Applicant and/or a Contractor appointed by the Applicant".* As such, the Ecological Advisory Group (or similar) will comprise the Applicant or Operations Contractor, Environmental Manager (as defined in the Framework OEMP **[REP2-015]** – ref. paragraph 6.1.2, 6.1.3 and 6.2.1), a suitably qualified and experienced ecologist, and if relevant to the Proposed Development any research institution(s) carrying out ecological studies onsite during operation. It is not intended that the LPA will be a member of the Ecological Advisory Group and so it is not necessary for the Applicant to meet the LPA's costs of attendance. As set out at paragraph 7.1.11 of the Framework LEMP **[REP2-021]**, results from the post-construction monitoring will feed into the detailed management plan and, if required, management proposals may be amended accordingly based on this monitoring (for example, replacement planting and/or changes to planting species where planting has failed to establish). As noted at paragraph 7.1.9 of the Framework LEMP **[REP2-021]**, the monitoring reports for surveys during operation will be sent to the host authorities and the Lincolnshire Wildlife Trust for their information, along with a summary of any changes to management proposed. Any material changes proposed to the approved detailed LEMP management proposals, in response to the findings of post-construction monitoring, will be sent to the host authorities for their review and approval prior to their implementation. As noted at paragraph 7.1.9 of the Framework LEMP, the Terms of Reference of the Ecological Advisory Group (or similar) will be drafted following receipt of any future consent and agreed as part of the agenda for the first group meeting.

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				The Framework LEMP has been updated (submitted to the Examination at Deadline 3) to clarify the purpose and function of the Ecological Advisory Group (or similar) and the composition of the Group, as outlined above.
FS.1.11	Applicant LCC NKDC Natural England	**Framework Soil Management Plan** Within the Framework Soil Management Plan [AS-100] mention is made of a number of documents that would need to be referred to for the management of soils, for example, the soil resource survey, DEFRA's Construction Code of Practice for the Sustainable Use of Soils on Construction Sites document, as well as the SMP. a) **Applicant** - for each element of the proposed development, explain the approach to managing soils during construction, operation and decommissioning. This should include the methods for stripping, storing and replacing soils, including during wet weather, and activities during the aftercare period. b) Comment on other matters which you consider should be included in a final soil management plan to ensure that it provides an appropriate basis for the preparation of a detailed plan for the management of soils during construction, operation and decommissioning.	b) The Council has set out views on this topic in its Local Impact Report (REP1-056) – paragraph 14.33 and Appendix D and in its Written Representation (REP1-057). Particular attention is drawn to paragraph 3.17 of the Written Representation, along with Appendix A (pre-construction soil health assessment) The detailed Soil Management Plans should be led by the Soil Resources Survey, which is required to be carried out as part of the pre-construction planning (Framework Soil Management Plan REP1-037 section 4.1.1). In particular, soils should not be stripped or otherwise handled when 'plastic', and work should only be done when soils are dry and friable.	The Applicant has responded to NKDC's views on this topic in the Applicant's Response to Written Representation [**REP2-030**] and the Applicant's Response to Local Impact Reports [**REP2-031**]. NKDC acknowledge that the Applicant has committed to a Soil Resources Survey in Section 4.1.1 of the Framework SMP [**REP1-037**]. Further detail on soil handling is also provided in the Applicant's Response to the Examining Authority's First Written Questions [**REP2-029**].
LV.1.03	NKDC LCC	**Applicant's assessment of landscape and visual effects** The applicant has summarised the proposed development's effects for landscape and visual amenity for the fifteenth operational year in Table 10-13 in ES Chapter 10: Landscape and Visual Amenity [APP-035]. a) Advise on whether you agree or disagree with the applicant's classification of significance of effects, for both landscape and visual amenity, for the fifteenth	The Council shares with Lincolnshire County Council professional advice from AAH on landscape and visual impact matters. The Council has already commented on the findings of the applicant's landscape and visual impact assessment in the following documents: i. paragraphs 13.15 – 13.21 (landscape character) and 13.24 (bottom of page 35) - 13.27 (visual impacts) 31, and in Appendix A (AAH report) of its Local Impact Report (REP1-056); and	It is noted that the LCC response to LV.1.03 is the same as NKDC's response to LV.1.03 – as such, this has just been responded to once here. The statement that Table 10-13 of ES Chapter 10 [formerly **APP-035**, superseded by **AS-117**] concludes a reduction to minor adverse and non-significant effects by year 15 for the Principal Site, LLCA 03: Tunman Hill, and LLCA 08: Thurlby Fenland is incorrect. Further justification for the conclusion of non-significant residual effects on LCT 4a: Unwooded Vales, Sub-area 2: Terrace Sandlands, and Sub-area 5: Witham and Brant

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		operational year for each receptor summarised in Table 10-13 in [APP-035]? b) For any receptors for which you disagree with the applicant's classification of significance, state your preferred effect classification and explain why that is the case. c) For any instances of disagreement, you should also explain whether the provision of any additional or different mitigation would address your reasons for disagreeing with the applicant's assessment.	ii. ii. paragraphs 4.5 – 4.14 (starting on page 8) of its Written Representation (REP1-057). Landscape effects: question a) We agree that by year 15 landscape receptors subject only to temporary and/or indirect effects, notably along the cable corridor where works are below ground and land is reinstated, would not experience significant residual landscape effects, subject to the retention and protection of existing vegetation. However, we do not agree with the applicant's judgement of significance for a number of landscape receptors that will be subject to direct and permanent effects arising from the principal site. Landscape effects: question b). Particular disagreement is raised in relation to the following receptors summarised in Table 10-13 of ES Chapter 10 [APP-035]: • Principal Site • LLCA 03: Tunman Hill • LLCA 08: Thurlby Fenland • Sub-area 2: Terrace Sandlands • Sub-area 5: Witham & Brant Vales; and • LCT 4a: Unwooded Vales For these receptors, the applicant concludes that effects reduce to Minor Adverse or non-significant by year 15. This conclusion is not agreed. We consider that residual landscape effects for these receptors at operational Year 15 should be classified as Moderate Adverse and Significant.	Vales was provided in the Applicant's Response to Local Impact Reports [**REP2-031**] (LIR ref. 13.20). The reference to post-submission design changes relates to the removal of solar PV panels from Field 46 adjacent to Grange Cottage that was made to the application documents and submitted to the Examination Library in December 2025 (ref. Change Request 1 [**AS-103**]).

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			This is because the development results in a fundamental and permanent change to the baseline landscape, through the introduction of large-scale solar infrastructure across an extensive area (approximately 1,368 hectares within the Order Limits). The effects arise from inherent land use change and alteration to landscape character, rather than from short-term construction activity or visual exposure alone. When considered cumulatively with other existing and consented NSIP-scale solar developments in the locality, the proposal contributes to a wider change in regional landscape character and land use. This reinforces the position that residual effects remain significant at year 15. Landscape effects: question c) We do not consider that any additional or alternative mitigation strategies would materially alter the outcome of the residual landscape effects for these receptors. While mitigation planting may reduce localised visual prominence over time, it does not reinstate the open agricultural character, land-use function, or rural qualities that define the affected landscapes. As such, mitigation may reduce indirect effects but does not reduce the magnitude of direct landscape character change. Visual effects: question part a) We broadly agree that the number of visual receptors experiencing Significant adverse effects reduces between Year 1 and Year 15, primarily due to the completion of underground cable works and the establishment of mitigation planting	

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			We also agree that a number of sensitive visual receptors will continue to experience Significant adverse effects at year 15 including: • Recreational users of PRoW west of Thorpe on the Hill • Recreational users of Aubo/8/1 • Selected receptors on the PRoW network during winter conditions; and • Residents and recreational receptors in close proximity to the Order Limits where screening is limited or ineffective Visual effects: question part b) We consider the applicant's judgement of Moderate to Major Adverse and Significant effects at year 15 for the receptors listed above to be appropriate. These residual effects arise from the scale, extent and proximity of the Development, which results in close-range, open and sequential views of solar infrastructure along parts of the public rights of way network and from nearby residential receptors. While mitigation planting reduces visual exposure in some locations, it does not fully screen views in winter, nor does it prevent prolonged views experienced by recreational users moving through the landscape. The extent of reliance on mitigation planting to reduce visual effects must be treated with caution, as poorly sited or excessive planting has the potential to introduce adverse visual effects in its own right, including loss of openness, foreshortening of views and a sense of enclosure within an otherwise open landscape. Visual effects: question part c) While mitigation planting and the proposed Outline Landscape and Ecological Management Plan	

Question Number	Question to	Question	IP Response (NKDC)	Applicant Response
			(OLEMP) would assist in reducing visual effects for some receptors over time, they would not fully eliminate Significant adverse visual effects for all sensitive receptors. Post-submission design changes discussed with the applicant will introduce additional mitigation, including increased offsets between built development and sensitive residential receptors, the removal of solar development from the field adjacent to 5 Bassingham Road, and increased separation distances for properties in close proximity to Clay Lane, including River Farm]. These measures are welcomed and would likely reduce visual effects at a localised level. The scale and extent of the Development makes it difficult to fully mitigate visual effects for close-range receptors on the PRoW network and nearby residential properties. The proposed permissive paths, while increasing access provision, would not mitigate effects on existing PRoW users, as these routes would remain in close proximity to solar arrays and other above-ground infrastructure and would continue to experience sequential views of the Development. We consider that Significant adverse residual visual effects would remain at year 15 for a number of sensitive receptors, notwithstanding the implementation of mitigation.	
LV.1.04	NKDC LCC	**Visual effects for users of public rights of way (PRoW)** Paragraph 2.10.43 in NPS EN-3 (2023) states *"Applicants are encouraged where possible to minimise the visual impacts of the development for those using existing public rights of way, considering the impacts this may have on any*	The Council has already commented on the potential visual effects of the development, including in relation to hedgerow planting as screening, in the following documents: a) paragraph 13.12 on page 31, and in Appendix A (AAH report) of its Local Impact Report (LIR, REP1-056); and	It is noted that the LCC response to LV.1.04 is the same as NKDC's response to LV.1.04 – as such, this has just been responded to once here. The Applicant disagrees that users of Stepping Out Walks should be assessed as having High susceptibility on the basis that although the views are considered relevant to the experience of their journey, the appreciation of the

Question Number	Question to	Question	IP Response (NKDC)	Applicant Response
		other visual amenities in the surrounding landscape.[89]" Most of the proposed Order Limits through which PRoWs pass is open in character. To mitigate the visual effects of the proposed development for PRoW users the applicant is proposing to plant hedgerows. Having regard to the above quote from NPS EN-3 (2023), do you consider the planting of the proposed hedgerows would or would not be an appropriate form of mitigation for users of the affected PRoWs? If you consider such hedgerow planting would not be appropriate, are there any other forms of mitigation which you consider would be more appropriate?	b) paragraph 4.8 and (in respect of the Stepping Out Walks affected) paragraphs 7.58 – 7.59, 7.64 – 7.66, 7.69 – 7.71 of its Written Representation (WR, REP1-057). The Council shares with Lincolnshire County Council professional advice from AAH on landscape and visual impact matters. The detailed LVIA review carried out by AAH (and appended to the Council's LIR and WR) identified concerns regarding PRoW associated with locally promoted walking routes, including the Stepping Out Walks, which have increased recreational value and are promoted for their views and scenic quality. AAH's further comments are as follows. The applicant's assessment distinguishes between the Viking Way, assessed as having High susceptibility, and other PRoWs assessed as having Medium susceptibility. While this distinction is broadly justified for long-distance routes, AAH considers that locally promoted PRoWs associated with the Stepping Out Walks should also be assessed as having High susceptibility due to their recreational and scenic purpose. In terms of mitigation, the planting of hedgerows is considered an appropriate form of mitigation for users of affected PRoWs in the context of a solar photovoltaic development). The PRoWs largely pass through open agricultural landscapes where a sense of openness and separation between land uses forms part of the baseline character and visual experience. Hedgerow planting reflects established landscape patterns, provides visual filtering rather than complete screening, and avoids introducing overly enclosing elements that could alter the open character of the landscape. This approach is consistent with paragraph 2.10.43 of NPS EN-3 (2023), which	landscape is judged to not be the primary reason for using these routes unlike the Viking Way Long Distance Path. The Applicant also considers that should the relevant receptors be assessed as having a high susceptibility as suggested by AHH, rather than medium as currently judged in Chapter 10: Landscape and Visual Amenity of the ES [**AS-117**], then this would have no difference to the levels of significance established.

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			encourages minimisation of visual effects while having regard to wider visual amenity. For the majority of PRoW sections, hedgerows therefore represent a proportionate and landscape-led form of mitigation. However, in specific locations where development elements are taller and more visually prominent, and where sensitive residential receptors are located at medium proximity, additional mitigation may be appropriate. In particular, the residents of Bassingham and in the vicinity of the proposed substation, the introduction of additional tree planting associated with the existing copse, extending part way along its edge, would assist in screening and softening intervisibility over time. This would remain consistent with local landscape character while addressing heightened visual sensitivity at that location. In addition to AAH's comments reported above, NKDC remains concerned regarding the effects on the experience of users of the Stepping Out Walks. This includes those using the Bassingham and Villages Circular walk, who currently experience wide and open views such as that along both sides of Clay Lane. Whilst hedgerow planting may help to screen views of the solar arrays, it will also interrupt those existing open views.	
PE.1.07	NKDC	**Skills and Education Package** Clarify whether the skills and education package that is sought in [RR-210] would be a mitigation or an enhancement measure.	The Planning Statement (AS-099) at paragraphs 5.3.17 to 5.3.19 on page 49 outlines the number of jobs that could be created by the development through the construction, operational and decommissioning phases. These figures are drawn from ES Chapter 12 Socio Economics and Land Use (AS-016). The majority of jobs would be during the 24 – 30 month construction phase, when it is estimated that a total of 350 construction jobs would be involved on average (12.7.3). However, when taking economic multipliers	The Applicant has provided detailed responses to NKDC's comments on the ESSC Plan on pages 68 – 70 and page 93 of the Applicant's Response to Local Impact Reports **[REP2-031]**. a) The Applicant does not consider that it is necessary to have an earlier trigger date for the approval of the ESSC Plan. In practice, the plan is likely to be approved well in advance of commencement of the main construction works for the Proposed Development because the requirements of the plan

Question Number	Question to	Question	IP Response (NKDC)	Applicant Response
			into account, this number rises to 394, comprising 177 jobs for people within a 60 minute drive time, but the majority (217) based further afield (see table 12-23 on page 12-52). The Planning Statement also refers to the construction of the development creating 600 Full time Equivalent jobs (paragraph 7.3.8). ES Chapter 12 also concludes that there would be a neutral effect on agricultural employment due to the development, notably because landowners have indicated that although agricultural land would be taken out of production, income from the solar farm would be invested into diversification schemes involving additional employment (see for instance paragraphs 12.7.50 – 12.7.53). Employment during the operational phase is likely to be much lower (total net employment 5 jobs – see Table 12-27 on page 12-60); but could rise significantly during the decommissioning phase. ES Chapter 12 goes on to estimate the Gross Value Added (GVA) by the development to the economy. For the local economy, paragraphs 12.7.16 – 12.7.19 and Table 12-24 indicate that this would add £12.3M GVA to the area within a 60 minute drive time; and that given the size and medium sensitivity of the District, this would represent a minor beneficial (not significant) effect on the local economy. Nevertheless, the Planning Statement indicates at paragraph 5.3.19 that this represents an economic benefit which the submitted Framework Employment, Skills, and Supply Chain Plan (FESSCP) (APP-197) seeks to maximise for the local community. The focus of the FESSCP (para 1.1.2) is on: • opportunities for the involvement of local companies in the construction and operation supply chain;	will need to feed into procurement and construction strategies; otherwise there is a risk of non-compliance with the plan and therefore a breach of the Requirement when the main construction works start. In this respect, the Requirement trigger is self-fulfilling, i.e. if the ESSC Plan was not submitted and approved in sufficient time to feed into the relevant procurement and construction strategies, there would likely be a breach of the Requirement which would be enforceable in the usual way. It is up to the Applicant to plan the discharge strategy in a way which can ensure there is no breach of the Requirements, and as the Applicant needs flexibility in this regard, it is not appropriate to amend the trigger in Requirement 19 to provide for an earlier discharge date. For the reasons set out above, the Applicant does not see that there is any risk to NKDC in taking this approach. b) The Applicant has amended the wording of Requirement 19 of Schedule 2 to the draft DCO **[REP2-005]** to remove reference to "part" to ensure the provision and implementation of a single ESSC Plan for the entirety of the Proposed Development. This will be reflected in the iteration of the draft DCO submitted to the Examination at Deadline 3A. c) The Applicant has set out in detail the reasons as to why it does not consider the provision of a financial contribution through a s106 agreement to be necessary or justified in the Applicant's Response to Local Impact Reports **[REP2-031]**. In summary, the contribution sought is not required to make the Proposed Development acceptable in planning terms, and nor is the scale of the requested figure proportionate. No policy requirement has been identified that would indicate otherwise.

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			• the ability of local residents and businesses to access employment and apprenticeship opportunities associated with the construction and operation of the Proposed Development; and • the ability of research organisations to use the DCO Site to enable research and innovation in the renewable energy sector. On this basis, North Kesteven District Council considers that a skills and education package could potentially deliver enhancements related to the development, rather than representing a mitigation measure to avoid or reduce its harmful effects on employment. EN-1 paragraph 5.13.11 recognises the socio-economic benefits which may arise from a project; and paragraph 5.13.12 suggests that the Secretary of State may wish to include a requirement for the local authority to approve an 'employment skills plan' to secure local employment and skills development opportunities. EN-1 paragraph 5.13.11 sets out that the Secretary of State '… should consider any relevant positive provisions the applicant has made or is proposing to make to mitigate impacts (for example through planning obligations) and any legacy benefits that may arise as well as any options for phasing development in relation to the socio-economic impacts'. As paragraphs 23.6 and 23.7 of the Council's LIR (REP1-056) point out, policy S28 of the Central Lincolnshire Local Plan also offers some support to the employment generating aspects of the project in so far as it would '… strengthen the Central	Section 7.3 of the **Planning Statement [AS-098]** sets out the Applicant's consideration of the planning balance, identifying at paragraph 7.3.8 that 600 Full Time Equivalent (FTE) jobs would be created during construction, with approximately 45% of construction staff being sourced from the local area, and four permanent jobs created during operation. Accordingly, paragraph 7.3.8 of the **Planning Statement [AS-098]** concludes that job creation should be afforded moderate positive weight in the planning balance. Given the Framework Employment, Skills, and Supply Chain Plan **[APP-197]** is an enhancement measure that is not required to mitigate any effects and the effects remain as they are stated without it and jobs will still be created without the Framework Employment, Skills, and Supply Chain Plan **[APP-197]** in place, the Applicant maintains that this job creation provides employment and skills benefits and should be afforded moderate positive weight in the planning balance. These benefits are secured by Requirement 19 of Schedule 2 to the draft DCO **[REP2-005]**, which is enforceable in the usual way for DCOs, such that it is not necessary to require or secure any funding for local skills and development through a section 106 obligation in order to ensure delivery of these benefits.

Question Number	Question to	Question	IP Response (NKDC)	Applicant Response
			Lincolnshire economy offering a wide range of employment opportunities focused mainly in and around the Lincoln urban area and the towns of Gainsborough and Sleaford …'. The Council will work with the applicant to ensure that the content of the FESSCP is fit for purpose in securing these potential benefits which are supported by policy, not least given that 'legacy' benefits potentially accruing (i.e. over the lifetime of the development) are specifically referred to as a matter that the Secretary of State should have regard to. However, the Council forsee three main problems with the suggested arrangements for producing and implementing the suggested detailed ESSCPs in order to secure the claimed benefits: a) Requirement 19 'Employment, skills and supply chain' in the draft DCO secures the production of a detailed ESSCP for each part of the development prior to the commencement of that part. However, that wording would not in itself provide adequate triggers to ensure that the timelines for developing and delivering the package set out in section 4.3 of the FESSCP (APP-197) are met. If the detailed ESSCPs are not in place early enough, they will miss opportunities presented by the main construction period, which could begin in 2031. b) Also, the Council has concerns that the way in which the Requirements in Schedule 2 of the DCO are worded and structured would mean the production of a number of detailed ESSCPs, one for each 'part' of the development. This does not seem an efficient or practical way of approaching the issue. c) Finally, the Council considers that in order to adequately secure the delivery of the ESSCP(s) in practice, a commitment to funding is required.	

Question Number	Question to	Question	IP Response (NKDC)	Applicant Response
			On this last point, Appendix B to this document is a copy of a s.106 agreement signed between the Council and the developer (and others) for the Heckington Fen Solar Park project granted DCO on 24 January 2025. That s.106 agreement contains obligations in respect of a 'Skills and Education Contribution', amounting to the payment of a sum of £50,000.00 per annum (index linked), with further detail provided in Schedule 2. The Council has taken the same, consistent approach with all solar NSIPs in its area, and seeks the same contribution from the Fosse Green Energy development. Nevertheless, as for the requested contribution to fund the Ecological Steering Group (see ExQ1 ENC.1.29), the Council is prepared to discuss alternative mechanisms to secure funding of the ESSCP – for instance via an Article in the DCO, which offers potential benefits in terms of savings in legal processing. But without points a) – c) above being addressed, the Council considers that the ExA should not afford to the proposed development the moderate positive weight in the 'planning balance' which the Planning Statement (AS-099) attributes via employment and skills benefits (paragraph 7.3.8).	
TT.1.19	LCC NKDC	**Framework Public Rights of Way Management Plan** Is there sufficient clarity in the Framework Public Rights of Way Management Plan (FPRoWMP) [APP-195] to provide an understanding of what is proposed for the affected PRoWs? If not, what other details would be necessary?	The Framework Public Rights of Way Management Plan (FPRoWMP) (APP-195) is concerned with accessibility and safety through the phases of the proposed development (see for instance paragraph 1.2.1). The Council defers in general to Lincolnshire County Council as Highway Authority on most rights of way issues. However, it is considered that the FPRoWMP sets out in general terms what is proposed for the affected PRoWs. What is lacking is the detail – such as	The Applicant maintains that detailing the affected PRoW in the Framework PRoWMP [**REP2-019**] and proposed permissive paths in the Framework LEMP [**REP2-021**] is appropriate. The Framework PRoWMP relates specifically to the protection, management and reinstatement of existing statutory Public Rights of Way affected by the Proposed Development. Permissive paths are non-statutory, discretionary routes provided voluntarily as part of the wider landscape and recreational enhancement strategy. They are therefore more appropriately secured through the Framework LEMP, which governs the long-term management of landscape, habitat and access features and allows these routes to be managed alongside

Question Number	Question to	Question	IP Response (NKDC)	Applicant Response
			crossing construction, means of segregation etc for each right of way affected - but DCO Requirement 18 is intended to secure detailed PRoWMPs for each part of the development. The Council suggests that, rather than deal with permissive paths via the Framework Landscape and Ecological Management Plan (APP-196), it may be more straightforward to include permissive paths in the FPRoWMP and the detailed PRoWMPs. Permissive paths are already shown on the Streets, Rights of Way and Access Plans (REP1-004), and the proposals in the FPRoWMP use parts of existing permissive paths. This may ensure a more holistic approach to the package of permissive routes and statutory rights of way affected and provided by the development.	ecological and land management objectives. The provision of a detailed LEMP, which is to be substantially in accordance with the Framework, is secured under Requirement 8 of Schedule 2 to the Draft DCO [REP2-005], ensuring the permissive paths are delivered and managed in accordance with an approved plan. The Applicant has amended section 6 of the Framework LEMP to provide clarity in relation to permissive paths. Requirement 17 of Schedule 2 to the draft DCO **[REP2-005]** has also been updated to signpost the requirements for permissive paths set out within section 6 of the Framework LEMP. This is reflected in the iteration of the draft DCO submitted at Deadline 3A. Paragraph 1.2.1 of the Framework PRoWMP [**REP2-019**] states the "…*Framework PRoWMP [EN010154/APP/7.14] outlines how the Applicant will manage Public Rights of Way (PRoW) within the DCO Site to ensure they have been suitably considered and will continue to operate effectively throughout the construction, operation and decommissioning of the Proposed Development. This report reviews both user safety and accessibility, during the complete life cycle of the Proposed Development, considering the potential interaction and impact on the PRoW associated with the construction works, as well as the day-to-day operation of the Proposed Development.*" Accordingly, this is not the correct document to deal with permissive paths. As NKDC notes, the detail relating to PRoWs will be dealt with in the detailed PRoWMPs secured under Requirement 18 of the Schedule 2 to the draft DCO [**REP2-005**].

Table 3-1b: Applicant's Responses to the responses provided by Lincolnshire County Council to the ExA First Written Questions

Question Number	Question to	Question	IP Response (LCC)	Applicant Response
Lincolnshire County Council				
GC.1.16	Applicant LCC Environment Agency	**Waste Management** Section 5.15 of NPS EN-1 (2023) addresses resource and waste management including identifying requirements for the applicant assessment. That includes, at paragraph 5.15.9, that applicants should include an assessment of the impact of the waste arising from development on the capacity of waste management facilities to deal with other waste arising in the area for at least five years of operation. Views are sought on whether this has been adequately addressed in the ES, for example, in Appendix 14- E: Materials and Waste Impact Assessment Methodology and Baseline [APP-174].	The Council notes this application is to be assessed under the 2023 National Policy Statements as per transitional provisions, however, the Council has also reviewed the updates to the NPS (adopted Jan 2026). NPS EN-1 retains the same requirement (now at 5.15.8) which also requires the applicant to '*include information on how re-use and recycling will be maximised in addition to the proposed waste recovery and disposal system for all waste generated by the development*'. Thus the Council would suggest that, to demonstrate compliance with NPS EN-1, the applicant needs to identify how much waste of each type they anticipate producing at each stage of the project, the intended fate (e.g. recycling) of each waste stream, and how they will follow the waste hierarchy. The ES does not provide such information, and Appendix 14-E [APP-174] merely sets out a methodology for calculating the impacts of these unspecified waste streams. Indeed, the Council cannot find such forecasts in any of the applicant's documents (e.g. framework CEMP, OEMP & DEMP) and would request that the applicant either directs us to where the forecasts have been provided or produce them now, albeit we recognise that such figures would be indicative at this stage and be based on assumptions – e.g. failure rate of PV panels.	The methodology set out in Appendix 14-E: Materials and Waste Impact Assessment Methodology and Baseline of the ES **[APP-174]** and assessment outlined in Chapter 14: Other Environmental Topics of the ES **[APP-039]** is in accordance with the IEMA (now the Institute of Sustainability and Environmental Professionals (ISEP)) (2020) Guide to: Materials and Waste in Environmental Impact Assessment, Guidance for a Proportionate Approach. Available at: https://www.iema.net/media/0t5fwyhj/iema-materials-and-waste-in-eiamarch-2020.pdf (IEMA Guidance). As outlined in 14.5.28 of Chapter 14: Other Environmental Topics of the ES **[APP-039]** the sensitive receptor for waste is landfill capacity and the study areas are the East Midlands (non-hazardous and inert waste) and England (hazardous waste). As outlined in the IEMA Guidance "this guidance does not consider waste processing and recovery facilities as sensitive receptors, rather: they are part of a system that has the potential to reduce the magnitude of adverse impacts associated with waste generation and disposal. Waste processing and recovery facilities are, hence, different to landfills, in that the latter are finite resources". Appendix 14-E Materials and Waste Impact Assessment Methodology and Baseline of the ES **[APP-174]** (paragraphs 14.5.80-14.5.94) includes an assessment of operation effects which includes the whole operational period (including the first five years) of the Proposed Development. As outlined in paragraph 14.5.80, operational waste arisings from day-to-day operation (which will be occurring in the first five years) are expected to be negligible. Component replacement is not anticipated in the first five years. As outlined in paragraph 14.5.93, waste receptor sensitivity is determined as 'very high'. With the embedded mitigation measures in place e.g. applying the waste hierarchy, the overall quantities of operational waste to be disposed of to landfill are anticipated to be below 1% of regional inert and non-hazardous landfill capacity, and less than 0.1% of national hazardous landfill capacity. Therefore, the

Question Number	Question to	Question	IP Response (LCC)	Applicant Response
				magnitude of impact is negligible, and the effect is slight, which is considered to be not significant. The Applicant therefore considers the approach taken is in line with best practice and adequately addresses the NPS EN-1 requirement to assess the capacity of waste management facilities to deal with other waste arising in the area for at least five years of operation. A meeting was held with LCC's Waste Officer on 4 March 2026 to discuss the 'under discussion' issues within the SoCG between the Applicant and LCC. SoCG reference 3.10.6 regarding forecasts for waste arisings was discussed and it was noted that forecasts for waste arisings are outlined in **Chapter 14: Other Environmental Topics [APP-039]** of the Environmental Statement as follows: • Construction – refer to Table 14-24 Estimated Construction Waste, the specific waste management route would be confirmed by the construction contractor however the wastes listed are recyclable or recoverable; • Operation – refer to paragraph 14.5.84 Component Replacement Waste; and • Decommissioning – refer to Table 14-25 Estimated Decommissioning Waste, the specific waste management route would be confirmed by the decommissioning contractor however the wastes listed are recyclable or recoverable. Assuming a 2-year construction period and a failure rate of 0.05%, as outlined in the operational Component Replacement Waste section (paragraph 14.5.84) of **Chapter 14 Other Environmental Topics** of the **ES [APP-039]**, failed panels during the construction phase of the Proposed Development would result in 78 m^3 of waste per year. The failure rate of 0.05% is based on a 2017 study by the National Renewable Energy Laboratory (NREL) which found a median annual failure rate of 5 per 10,000 panels for solar photovoltaic (PV) systems installed between 2000 and 2015. This is equivalent to an annual failure rate of 0.05%. The study analysed data from over 4,500 globally deployed panels and 50,000 installed systems. With the improvement of panel reliability this is considered a worst-case failure rate. In summary solar panel waste is as follows: • Construction – 39 m^3 of solar panel waste per year, 78 m^3 total.

Question Number	Question to	Question	IP Response (LCC)	Applicant Response
				• Operation (ad hoc replacement) – 39 m^3 of solar panel waste per year. • Operation (full replacement) - 77,190 m^3. • Decommissioning - 77,190 m^3.
GC.1.18	LCC	**Minerals safeguarding** The Minerals Safeguarding Assessment [APP-162] considers that minerals resources would not be sterilised because the proposed development would be temporary in nature and the land would be restored to a condition that would not inhibit mineral extraction and the Lincolnshire Local Aggregates Assessment demonstrates that there should be sufficient sand and gravel and limestone resources to last beyond the Lincolnshire Minerals and Waste Local Plan period. However, as the proposed development's operational period could potentially be 60 years that would extend beyond the period covered by the extant Minerals and Waste Local Plan. Advise on: a) the current landbank for sand and gravel and limestone; b) the effects of the proposed development on minerals supply in the area; and c) any mitigation required to safeguard mineral resources.	It is noted that the Mineral Safeguarding Assessment included at APP-162, identifies that the Local Aggregates Assessment (2023 data) demonstrates that, through a combination of permitted reserves and allocated sites, there should be sufficient sand and gravel and crushed rock (limestone) resources to last beyond the Lincolnshire Minerals and Waste Local Plan (LMWLP) period. The current Lincolnshire Minerals and Waste Local Plan period is to 2031, the date at which the Fosse Green Solar is expected to commence construction [APP-028, paragraph 3.4.1] with construction anticipated to take between 24 and 30 months. The County Council is currently updating the LMWLP to 2042, a significantly shorter period than the 60 year Fosse Green DCO which would indicate decommissioning circa 2093. Please note that the LAA references permitted reserves on which the landbank is calculated. Resource is the extent of the mineral and defined in the PPG as 'Mineral resources are defined as natural concentrations of minerals or, in the case of aggregates, bodies of rock that are, or may become, of potential economic interest due to their inherent properties.' a) The NPPF (2024) paragraph 226(f) states Minerals planning authorities should plan for a steady and adequate supply of aggregates by maintaining landbanks of at least 7 years for sand and gravel and at least 10 years for crushed rock. The latest Lincolnshire Local Aggregates Assessment (LAA) (2024 data) calculates the following landbanks for Lincolnshire: • At the end of 2024, Lincolnshire had sufficient permitted reserves of sand and gravel to meet the 7-year minimum landbank, based on average sales over the period 2015-2024. The landbank for	Whilst the Applicant has not contacted quarries directly to discuss their future proposals, with regards to the existing near-by quarries a short overview of potential constraints is provided below. **<u>Whisby Quarry</u>** The preferred site extension to the quarry as set out in the Lincolnshire Minerals and Waste Local Plan Preferred Approach for Updating the Plan Regulation 18 Consultation Site Assessment Report is to the west towards Eagle Hall rather than southwards toward the Order Limits. The presence of Tunman Wood and Morton Hall would preclude to some extent expansion of the quarry southwards. It is considered likely therefore that future extensions would be to the west, north-west or north. **<u>Swinderby Quarry</u>** The presence of the village of Witham St Hughs and previously worked areas would preclude expansion to the east toward the site. The proposed extension of the quarry to the north towards Ansons Farm was discounted in the Lincolnshire Minerals and Waste Local Plan Preferred Approach for Updating the Plan Regulation 18 Consultation Site Assessment Report June 2024 stating "clear constraints / planning reasons". Swinderby Quarry was noted as having "existing and currently allocated reserves are considered sufficient to maintain production at this site beyond the plan period". **<u>Norton Bottoms Quarry</u>** Expansion of the quarry to the north-east towards the site is precluded by the presence of the village of Norton Disney and lakes of previous worked areas. In conclusion, whilst the current and potential future plans for mineral extraction are unknown at this stage, there are significant constraints for expansion onto the proposed site.

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			sand and gravel is 8.01 years with the annual production rate remaining closely aligned with the annual provision rate set out in the adopted plan. • At 31 December 2024, it is estimated that permitted reserves of crushed rock aggregate (Limestone) totalled 13.479mt. This provides for 9.06 year landbank based on the average of the last 3 years sales (2022-2024) which is slightly below the 10 year minimum. Sales of limestone crushed rock have increased significantly over the last ten years with the three-year average (2022-2024) being 1.487mt - over twice the provision rate set in the Core Strategy and Development Management Policies (2016) at 0.62mt per annum. This is also 0.308mt higher than the 10-year average (1.179mt), an increase of around 26%. To reflect the higher level of demand, the landbank will continue to be calculated using the last 3-years average sales as opposed to the 10-year sales average (Planning Practice Guidance (Paragraph: 064 Reference ID: 27-064-20140306). The current landbanks are therefore significantly less than the 60 year operational lifetime of the solar farm. b) There are 2 operational sand and gravel quarries within 400m of the proposed solar farm, namely Swinderby Airfield to the west and Whisby Quarry to the north. Both quarries are identified within the Mineral Safeguarding Assessment [APP-162 paragraph 3.6.1 a. and b.]. The County Council is currently updating the Lincolnshire Minerals and Waste Local plan and is in the process of identifying additional provision to 2042. At the call for sites, a number of sites were submitted for consideration within this area, therefore it must be recognised that this is clearly a location of industry interest. Please see the Site Assessment Report undertaken as part of the Regulation 18 consultation which identifies the 'preferred' sites proposed for allocation and those discounted at	

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			that stage: https://www.letstalk.lincolnshire.gov.uk/mine rals-and-waste-local-plan[5] Even though some of the nominated sites in this area were discounted at Regulation 18 stage from being taken forward in the current plan, these and other areas could potentially be put forward for consideration in a later plan. Sterilisation of the resource, albeit until the 2090s, could impact on the future extraction of sand and gravel resources within the vicinity. Whilst the Council may have a landbank in the immediate term, and are in the process of assessing sites for allocation in the MWLP update, additional resources will need to be identified for future LMWLPs during the extended 60 year life of the proposed Fosse Green Solar Farm, and given its proximity and industry interest in the wider area, mineral safeguarding and protection of resources needs to be given meaningful consideration in the NSIP. c) The Council suggest contacting the site operators to accurately determine their long term plans to ensure that the proposed Fosse Green Solar Farm does not constrain the extension of existing or delivery of new sand and gravel sites. At this stage, the Council has not seen any evidence that such engagement has been undertaken.	
DCO.1.03	Applicant NKDC LCC Environment Agency Natural England Historic England	**Article 2 - interpretation** Article 2 of the dDCO [APP-016] includes provisions for "permitted preliminary works". Section 5.7.21 of Advice Note 15 "Drafting Development Consent Orders" advises that such provisions have been removed by the Secretary of State (SoS) in some decisions, particularly where such advance works were themselves likely to have significant environmental	The Council considers the scope of works within the definition of 'Permitted Preliminary Works' is wide. The dDCO Article 2 states; "permitted preliminary works" means all or any of— (a) environmental surveys, geotechnical surveys**,** **intrusive archaeological surveys** and other investigations for the purpose of assessing ground conditions; (b) removal of plant and machinery;	The Applicant is preparing a Permitted Preliminary Works Environmental Management Plan (the PPW EMP) which will contain the detailed mitigation in accordance with which the PPW must be undertaken. As the plan will contain the full, detailed mitigation, it will not require additional approval by the relevant planning authority. The plan will be a certified document under Article 41 of the draft DCO **[REP2-005]** and will be secured by a Requirement of the draft DCO. The amendments to the draft DCO to give effect to these provisions will be submitted at Deadline 3A and the PPW EMP will be submitted as soon as possible thereafter, and no later than Deadline 5.

[5] https://www.letstalk.lincolnshire.gov.uk/minerals-and-waste-local-plan

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		effects, for example, in terms archaeological remains. a) For the applicant - comment on the nature and scope of the identified permitted preliminary works in the context of section 5.7.21 of Advice Note 15. b) Given that the permitted preliminary works could take place with just the framework plans in place, views are sought on whether the level of detail in these documents would secure adequate control and manage the likely effects arising from the preliminary works?	(c) above ground site preparation for temporary facilities for the use of contractors; (d) remedial work in respect of any contamination or other adverse ground conditions; (e) diversion of existing apparatus and laying of temporary apparatus; (f) the provision of temporary means of enclosure and site security for construction; (g) the temporary display of site notices or advertisements; or (h) site clearance (including vegetation removal, demolition of existing buildings and structures); or (i) advanced planting to allow for early establishment of protective screening The Council welcomes the clarification within the explanatory memorandum {REP1-010], which states at paragraph 4.2.2 (d) that the intrusive archaeological surveys require further approval under Requirement 11(3), which the Council considers to be appropriate and necessary. The Council notes the broadness of the definition, due to the vast scale of the proposed development, the preliminary works proposed above could have significant environmental impacts and the Council consider the framework environmental management plans should reference the preliminary works. The Council consider the framework management plans, specifically the CEMP should explicitly cover preliminary works should they be able to commence without the discharge of the finalised documents. This would provide the Council with some level of certainty that a mechanism of control would be in place to control the extent of these works. As the Council has previously highlighted within its LIR [REP1-053], paragraph 8.8 – 8.9. The Council considers	Accordingly, it is not necessary to delete any works from the PPW definition in Article 2 of the draft DCO **[REP2-005]**. Notwithstanding this, the Applicant has taken the opportunity to update this definition to remove reference to archaeological surveys, as these must be undertaken in accordance with Requirement 11 of Schedule 2 to the draft DCO **[REP2-005]**. The definition of PPW has also been reordered into groups of intrusive and non-intrusive works. This allows reference to be made to the intrusive works in Requirement 11 of Schedule 2 to the draft DCO, which has the effect of allowing non-intrusive PPW to occur before the archaeological surveys secured under Requirement 11 have been undertaken. With regards to the imposition of a requirement to restrict the commencement of the Proposed Development until such time as planning permission has been granted for the proposed National Grid Navenby substation, the Applicant's position is set out in the Applicant's Response to Local Impact Reports **[REP2-031]** (pages 91, 95-96, 102-106). The Applicant has also set out further detail on this point in response to NKDC's comments on DCO.1.29 above. Furthermore, the Applicant intends to provide a commitment in the Permitted Preliminary Works Environmental Management Plan (to be submitted no later than Deadline 5), to restore the land to its original condition in the event that permitted preliminary works are undertaken, but the Proposed Development is not then commenced within five years of the date of the Order coming into force. This ensures that any advance PPW which may be undertaken would be restored if required. This is also detailed in the Applicant's response to DCO.2.08 and DCO.2.09 within the Applicant's Responses to the Examining Authority's Second Written Questions **[EN010154/EXAM/9.19]** submitted to the Examination at Deadline 3.

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			that a requirement be imposed to restrict the commencement of the development, including any preliminary works, until such time planning permission has been secured for the Navenby Substation. Ensuring no negative environmental impacts occur from the Fosse Green development commencing without the benefits of generation which would be relied upon for the grant of any consent being secured.	
DCO.1.04	Applicant NKDC LCC	**Articles 2 and 5 - maintenance** Article 2 provides a definition for *"maintain"* which includes *"inspect, repair, adjust, alter, remove, refurbish, reconstruct, replace and improve any part of the authorised development (but not remove, reconstruct or replace the whole of Work No. 1 at the same time)"*. Article 5 describes the power to maintain the authorised development. Paragraph 2.3.3 of the FOEMP [APP-190] identifies that every 12 months from the date of final commissioning and before undertaking the maintenance for the year ahead, the applicant would submit a planned maintenance schedule for the year ahead to the relevant planning authorities, excluding unforeseen emergencies that require maintenance throughout the year. Paragraph 2.3.4 sets out what the maintenance schedule must include, with item e being confirmation that any environmental effects that are likely to arise as a result of such maintenance and the environmental controls to be implemented are not to be materially worse than those reported in the ES. a) Would the provisions within Articles 2 and 5 and the commitments in the FOEMP be sufficient to ensure that any environmental effects from	As stated within the Councils LIR, the definition of 'maintain' is considered to be too broad and would potentially allow for wholesale replacement of solar panels. The clause to restrict the removal, reconstruction or replacement the whole of Work No. 1 'at the same time' is noted but this would not appear to prevent this from occurring over the lifetime of the development. In line with comments made within section 18 the LIR a requirement to limit the replacement of panels to the percentages stated in the application documents and an annual reporting requirement would be welcomed. Notwithstanding comments made around the replacement of panels within the Councils LIR [REP1-053], paragraph 19.14. The Council welcomes the measures states within paragraph 2.3.3 within the Framework Operational Environmental Management Plan (fOEMP) [REP1- 034] and Article 5(3) of the dDCO which states ' This article does not authorise the carrying out of any works which are likely to give rise to any materially new or materially different effects that have not been assessed in the environmental statement'. The Council does however note that these statements rely wholly upon the developers professional judgement with no consultation with the Council for comment. The Council would expect that the developer would employ competent professionals to review and assess the environmental impacts from maintenance.	Please see the Applicant's response to DCO.2.01 within the Applicant's Response to the Examining Authority's Second Written Questions **[EN010154/EXAM/9.19]**. As part of this response, the Applicant refers to the indicative set of maintenance schedules provided at Appendix C of the Applicant's Response to the Examining Authority's Second Written Questions [**EN010154/EXAM/9.19**]. The Applicant maintains that the provisions within Articles 2 and 5 of the Draft DCO **[REP2-005]**, together with the commitments set out in the Framework OEMP **[REP2-015]**, are sufficient to ensure that any environmental effects arising from maintenance activities would not be materially worse than those reported in the Environmental Statement (ES). Sub-paragraph (3) of Article 5 of the Draft DCO **[REP2-005]** specifically states that "*this article does not authorise the carrying out of any works which are likely to give rise to any materially new or materially different effects that have not been assessed in the environmental statement*." The inclusion of this wording is considered sufficient to ensure that any environmental effects from activities associated with the maintenance of the Proposed Development would not exceed those assessed in the ES and any breach of this provision would amount to a breach of the DCO which would constitute a criminal offence and be the subject of enforcement action by the relevant planning authority. It should be noted that following further discussions with LCC, and as set out in the Applicant's response to GC.2.05 within the Applicant's Response to the Examining Authority's Second Written Questions **[EN010154/EXAM/9.19]**, the Framework OEMP has been updated at paragraph 2.3.4 (submitted to the Examination at Deadline 3) to note that the annual planned maintenance schedule will include "*details of anticipated waste arisings by type and quantity*" as a new item.

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		maintenance activities would not be materially worse than those reported in the ES. If not, what other measures should be included? b) Should there be a mechanism for the relevant planning authorities to determine whether the extent of maintenance would/would not give rise to materially worse environmental effects and if so, what this should comprise?	In light of the above, the Council would welcome further detail to be inputted into the annual maintenance schedule details, paragraph 2.3.4 (a) of the fOEMP as follows; 'The extent and nature of the scheduled maintenance; to include the anticipated amount of waste and the intended destination/fate of each waste stream'.	Further detail on the Applicant's position is provided in the Applicant's response to DCO.1.04 of the Applicant's Response to the Examining Authority's First Written Questions **[REP2-029]** and the Applicant's response to DCO.2.01 within the Applicant's Response to the Examining Authority's Second Written Questions [**EN010154/EXAM/9.19**].
DCO.1.22	Applicant LCC	**Requirement 17 – permissive paths** a) Should this requirement include a provision specifying that the permissive paths would be made available to the public for a specified number of days a year during the operation of the proposed development or would the reference in paragraph 6.1.2 of the FLEMP [AS-101] be sufficient? b) Should the wording in the FLEMP and Requirement 17 be more prescriptive than "up to" 364 days a year as this could be interpreted as being a maximum and therefore allow for less than 364 days? If so, the applicant should provide clearer wording.	It would not be appropriate for the Council to advise in detail with regard to this question. The operation of permitted paths would be down to the operator to decide. LCC can advise that provided that there is sufficient signage to show that use of the route is by permission, there is no need to restrict access for a day. The efficacy and legal impact of a one day closure is not likely to have any impact on a user based claim, unless there is sufficient other actions taken by the landowner to disabuse the public of the notion that they are exercising a public right.	The Applicant acknowledges the Council's comment and noting that LCC considers operation of the permissive paths to be a matter for the Applicant to determine, has no further comment.
DCO.1.24	Applicant NKDC LCC	**Requirement 20 – decommissioning** a) **For applicant** – Having regard to the definition for the *"date of final commissioning"* stated in paragraph 1 of Schedule 2 *(""date of final commissioning" means in respect of each part of the authorised development the date on which each part of the authorised development commences operation by generating electricity on a commercial basis but excluding the generation of electricity during commissioning and*	The Council have provided some commentary previously within our LIR with regard to Requirement 20. LCC suggested that an additional clause is provided for a) how a period of extended outage would be managed (if not dealt with through the management plans) and b) funding for decommissioning both as a result of an extended period of outage and at the end of the lifespan of the development – see Section 21 of the LIR for further detail. B) The wording of Requirement 20(1) states 'decommissioning works must commence no later than 60 years following the date of final commissioning' - this	(B) As noted by the Council, a similar point regarding an unexpected extended period of outage was raised by both NKDC and Lincolnshire County Council in their LIRs and as a result the Applicant added relevant wording to the Framework OEMP **[REP2-015]** to address this point as follows: *"The Applicant must provide notice to the relevant planning authority once any part of the authorised development stops generating electricity for a continuous period of 12 months for non-maintenance reasons ("Period of Extended Outage"). When giving such notice the Applicant must provide details of the steps it is taking to rectify the issue along with an expected timeframe for when generation is predicted to re-commence*

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		testing.") and the wording of subparagraph (1) of Requirement 20, what does each part of the development mean and how would the commencement of each part of the proposed development on a commercial basis be recorded and be made known to the relevant local planning authority? b) Would Requirement 20 adequately address the situation where the proposed development ceases to be in use/generate electricity before the 60-year period ends (early cessation)? If it is considered that the draft wording of subparagraph (1) would inadequately address early cessation, provide wording that is considered to be appropriate, including the triggering for an early cessation procedure. c) Should a timescale for completion of decommissioning works be included?	wording does not restrict decommissioning occurring earlier should early cessation occur. However, the Council consider that the procedure to be followed if early cessation does occur should be included within the Framework Decommissioning Environmental Management Plan (fDEMP) [REP1-036]. C) As stated with paragraph 2.4.2 of the fDEMP, 'decommissioning will take between 12 and 24 months' the fDEMP goes on to state at paragraph 2.4.3 that more details on decommissioning phasing including timescales would be provided within the finalised DEMP prior to decommissioning commencing, this final document would be agreed in advance with the LPA. The commitments stated within paragraphs 2.4.2 and 2.4.3 of the fDEMP would be secured within Requirement 20 of the DCO. Article 20(3) of Schedule 2 states 'The decommissioning environmental management plan submitted and approved under sub-paragraph (2) must be substantially in accordance with the relevant part of the framework decommissioning environmental management plan', in theory, this should include timescales as referenced within paragraph 2.4.3. However, for the avoidance of doubt the Council sees no reason why 20(3) could not state ' The decommissioning environmental management plan submitted and approved under sub-paragraph (2) must be substantially in accordance with the relevant part of the framework decommissioning environmental management plan and must include a timetable for its implementation'. Wording to this effect has been included within the Tillbridge Solar Farm DCO and the Springwell Solar Farm dDCO.	*operation. The Applicant agrees to keep the relevant planning authorities updated following the Period of Extended Outage until the re-commencement of operation. The above does not apply if it was a force majeure event*, the outage occurred as a result of National Grid undertaking any activities to the transmission network, the relevant planning authority agree otherwise (acting reasonably), including where the relevant planning authority agree otherwise following decommissioning commencing pursuant to an approved decommissioning environmental management plan.* **Footnote: A 'force majeure event' means an event or circumstance which is beyond the reasonable control of the Applicant which will include but is not limited to an act of God, war, civil disturbance, statutory prohibition, disruption to or issues with supply chains, Government intervention, order or act of Government or local/public authority, acts of terrorism, fire, lightning, flood, adverse weather conditions, prevention of access to any site as a consequence of any local, regional or national restriction on movement in consequence of a health emergency, or otherwise to prevent the spread of any communicable disease, explosion, accident, theft, vandalism or national strike action."* The detailed OEMP, which is required to be substantially in accordance with the Framework OEMP, is secured by Requirement 13 of Schedule 2 to the Draft DCO **[REP2-005]**. Requirement 13 provides that the operation of the authorised development must be carried out and maintained in accordance with the approved detailed OEMP. The Applicant therefore does not consider further provisions, such as a DCO Requirement, to be necessary in this regard. (C) The Framework DEMP **[REP2-017]** specifies that *"decommissioning will likely take between 12 and 24 months..."*. Furthermore, at paragraph 2.4.3 of the Framework DEMP **[REP2-017]**, it is stated that *"More details on the decommissioning phasing will be provided within the DEMP(s), prior to decommissioning commencing. This would include timescales and transportation methods which would be agreed in advance with the Local Planning Authority."* The provision of a detailed DEMP, which is to be

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				substantially in accordance with the Framework DEMP [**REP2-017**], is secured under Requirement 20 of Schedule 2 to the draft DCO **[REP2-005]** and therefore, the provision of a timescale at the requisite time is sufficiently secured. It is not appropriate or necessary to include a specific timeframe for decommissioning in the draft DCO **[REP2-005]** as this will depend on the programme for decommissioning and any consents required for decommissioning at that point in time. It is not possible to stipulate the relevant timescales when these will not occur until many decades into the future. The Applicant's approach of including an indicative timeframe in the Framework DEMP **[REP-017]** and then a detailed programme in the full, detailed DEMP to be approved under Requirement 20 is appropriate.
ENC.1.10	Applicant NKDC LCC	**Mitigation - Navenby Green Man Road Verges Local Wildlife Site** Paragraph 8.12.7 in ES Chapter 8: Ecology and Nature Conservation [APP-033] identifies specific measures to limit the potential impacts to the Local Wildlife Site and that these would be included in the CEMP. Paragraph 8.12.8 in [APP-033] explains it may be possible to supplement the re-instated areas with seed collected from more diverse sections of the Local Wildlife Site. Table 3.4 of the FCEMP [APP-189] under ECO-C1 part b. identifies measures specific to the Local Wildlife Site. Comment on whether the measures set out in ECO-C1 part b of [APP-189] would adequately cover those identified in paragraphs 8.12.7 and 8.12.8 of [APP-033].	The Council considers that additional wording and clarification is required in ECO-C1 part b of the FCEMP (APP-189) in order to ensure that it aligns with the stated intent of APP-083 Para 8.12.7 and 8.12.8 of APP-033. 8.12.7 of APP-033 makes specific reference to the removal, storage and watering of turves from the LWS whereas ECO-C1 part b only refers to soils. The Council is of the opinion that turves should be removed and stored to ensure that re-instatement of impacted areas of the LWS is as effective as possible. 8.12.8 of APP-033 refers to the collection of seed from more diverse areas of the LWS whereas ECO-C1 part b simply refers to the use of locally collected seed from nearby higher quality calcareous grassland where practicable. Whilst the Council agrees that it may be appropriate to use locally sourced seed to supplement any collected from the LWS, ECO-C1 part b should still include reference to the collection of seed from with the LWS as well. The Council considers that measures aimed at preventing unnecessary access and pollution / contamination of the LWS set out in ECO-C1 part b are appropriate.	In response to this comment, the Applicant has updated the wording of ECO-C1 part b of the Framework CEMP, as suggested by North Kesteven District Council, with the specific measures stated in ES Chapter 8: Ecology and Nature Conservation **[APP-033]** paragraphs 8.12.7 and 8.12.8 regarding storage of turves, collection of seed from the LWS and supplementary planting of locally sourced seed. The updated Framework CEMP, reflecting these changes, has been submitted to the Examination at Deadline 3.

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ENC.1.16	Applicant LCC NKDC	**Cumulative effects** Table 8-16 in ES Chapter 8: Ecology and Nature Conservation [APP-033] identifies the residual effect for ground nesting birds of the proposed development in isolation as minor adverse (not significant). The assessment presented in Table 8-19 of [APP-033] concludes that there would be a negligible cumulative effect assuming appropriate mitigation measures would be included within respective developments to ensure there would be no significant residual effects. However, if several projects are identifying a minor adverse effect due to a loss of land for ground nesting birds, which is not significant in isolation, at what point might the effects for ground nesting birds become significant?	The Council is concerned about the potential for cumulative impacts on ground nesting bird species, particularly skylark, arising from the number of similar developments across the County. The Council believes that each development should ensure that it provides adequate mitigation for its own impacts on ground nesting birds to avoid the potential for cumulative impacts as far as possible. The Council considers that where several developments are all having a minor adverse effect in isolation on an ecological feature which is deemed to be of at least county-level importance there is potential for the cumulative impacts to become significant. Populations of ground nesting birds are assessed by the Applicant for this proposal as being of county-level importance. A significant effect could therefore occur if the development resulted in the loss or degradation of habitat which impacts the long term viability of ground nesting bird populations within the county. The Council is of the opinion that measures currently proposed by the Applicant to mitigate impacts on ground nesting birds are adequate and considers that any negative impacts from this proposal are likely to be minor and temporary in nature if the proposed mitigation is secured.	The Applicant notes that LCC acknowledge in their Response to the ExA's First Written Questions **[REP2-045]** that the measures to mitigate impacts on ground nesting bird are adequate. Further detail on this mitigation is provided in the Applicant's response to ENC.1.12 of the Applicant's Response to the Examining Authority's First Written Questions **[REP2-029]** and the Written Summaries of Oral Submissions - Issue Specific Hearing 3 **[EN010154/EXAM/9.16]** submitted to the Examination at Deadline 3. As detailed in Table 8-19: Assessment of Cumulative Effects of Chapter 8: Ecology and Nature Conservation **[REP1-019]** cumulative developments which include land-take of arable farmland and where there are ground-nesting birds, have the potential to interact cumulatively with the Proposed Development. However, where cumulative developments are predicted to have adverse effects on the same ground-nesting bird species as that present within the DCO Site, appropriate mitigation measures are included within each of these respective cumulative developments to ensure there are no significant residual effects. Where there is currently no information available from cumulative developments regarding mitigation, it is reasonable to assume that these will provide suitable mitigation measures to reduce or offset impacts on ground-nesting birds, in adherence with legislation and policy. As appropriate mitigation measures would be included for ground nesting birds within the cumulative developments (which they state are included) there would be no significant residual effects (e.g. Site or Local level effects). For a proposed development, either on its own or cumulatively to result in significant residual effects would likely require residual negative effects at the County level scale. This is unlikely to be possible as each proposed development, aims to reduce the adverse effects on Important Ecological Features (such as ground nesting birds) with embedded and/or additional mitigation measures to not-significant levels.
ENC.1.26	Applicant LCC NKDC Natural England	**BNG Report [APP-194] – strategic significance** Paragraph 2.6.2 of the BNG Report sets out that NKDC has yet to produce a Local Nature Recovery Strategy and because of that strategic significance	A consultation on the draft Greater Lincolnshire Local Nature Recovery Strategy was launched on 26th January 2026. This will run until the 8th March 2026. Following this, it is anticipated that the final LNRS will be adopted and launched in the summer of 2026. At present, the Applicant should continue to use the currently adopted	The Applicant notes that LCC/NKDC confirm that the Applicant should continue to use the currently adopted methodology to define Strategic Significance and not use the draft LNRS to inform the BNG strategy.

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		has been assigned to habitats using the alternative methodology in line with guidance set out in the Statutory Biodiversity Metric User Guide. LCC, in its relevant representation **[RR-157]**, considers that significance has not been applied in accordance with the Statutory Biodiversity Metric User Guide, as NKDC has identified criteria for assessing strategic significance (Central Lincolnshire Biodiversity Opportunity Mapping). NKDC, in its relevant representation [RR-210] also refers to a failure to apply locally adopted strategic significance criteria. c) Comment on what would be the most appropriate approach for assigning strategic significance within the context of the advice stated in the Statutory Biodiversity Metric User Guide. d) **NKDC** - provide an update on when the council's Local Nature Recovery Strategy is expected to be published.	methodology to define Strategic Significance and not use to the draft LNRS to inform their BNG strategy. However, should the development gain consent, the Council considers that updates to the Applicant's BNG calculations are likely be required following the adoption of the LNRS to inform the final LEMP(s) and BNG Strategy.	Requirement 8 of Schedule 2 to the draft DCO **[REP2-005]** secures the delivery of biodiversity net gain. Any adopted changes to the guidance for defining Strategic Significance will be applied, as necessary, when discharging Requirement 8 post-consent.
ENC.1.27	Applicant NKDC LCC Forestry Commission Natural England	**BNG Report [APP-194] – trading rules** Paragraphs 3.3.2 to 3.3.6 in the BNG Report explain the trading rules. Paragraph 3.3.2 confirms that for area habitats, the trading rules within the Statutory Biodiversity Metric currently would not satisfied for each distinctiveness level. That would be because of the loss of "Lakes – Reservoirs", "Heathland and shrub – Mixed scrub" and "Cropland – Arable field margins" habitats, which would not	b) Lincolnshire County Council and North Kesteven District Council met with the Applicant on 22/01/26 to discuss comments made on biodiversity and ecology in the Local Impact Reports including the Statutory Biodiversity Metric trading rules. The Councils suggested an alternative classification methodology for areas of grassland habitat around arable fields. This may address the failure to meet the trading rules for the 'Cropland – Arable field margins habitat' which are responsible for most of the losses 'medium distinctiveness habitat' Biodiversity Units. The Applicant agreed to consider this suggestion and make the required changes to the Statutory Biodiversity Metric calculations if appropriate.	With respect to the loss of 'Lakes-Reservoirs' the Applicant still anticipates that impacts to this habitat can be avoided when undertaking detailed design post-consent. This would be reflected in the updated final BNG to be agreed with relevant stakeholders post-consent. In the absence of a legislative regime for delivering BNG on NSIPs, the Applicant has sought to comply with the wider BNG Regulations through the Environment Act 2021, setting out how they have followed the Mitigation Hierarchy and where the trading rules are not met, clearly described how this will either be sought to be rectified post-consent or how the ecological function potentially lost will be replaced.

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		be directly mitigated for by the proposed development. a) For the **applicant** - paragraphs 3.3.3 and 3.3.4 in the BNG Report provide more detail with respect to Lakes – Reservoirs' and Cropland – Arable field margins. Clarify why a similar explanation is not provided for Heathland and shrub – Mixed scrub. b) Comment on the approach to the trading rules.		However, if a worst case scenario is considered and compliance with the trading rules not met then the Applicant would point to a number of examples of granted solar DCOs, such as Tillbridge Solar Farm in Lincolnshire and Fenwick Solar Farm in Yorkshire, where stakeholders and the SoS agreed that, with appropriate justification from the relevant applicants, that non-compliance with the trading rules in some circumstances was acceptable. The Applicant also undertook a review of the classification of 'arable field margins' against the Priority Habitat description and where appropriate re-defined. This resulted in a reduced area of arable field margin habitat. To offset the residual loss of arable field margins and the small area of mixed shrub the Applicant has done the following: - Partly offset this with the creation of a higher distinctiveness habitat - Traditional Orchard; and - Committed to the annual creation of arable field margins within the areas of retained arable within the Order limits. This is set out in the Framework LEMP, submitted to the Examination at Deadline 3. This information is provided in the revised BNG Report which was submitted to Examination at Deadline 3.
ENC.1.29	Applicant LCC NKDC	**Ecological Steering Group** **Applicant** - confirm its view on establishing such a group. **Councils** - explain how it is envisaged that the ecological steering group referred to in NKDC's relevant representation [RR-210] could be secured.	In line with other recent NSIP applications in Lincolnshire, the Council considers that the Ecological Steering Group (ESG) could be secured in the LEMP. However, financial contributions relating to the ESG and monitoring of BNG are likely to require a S106 agreement.	The purpose of the "Ecological Advisory Group or similar" referenced at paragraph 7.1.9 of the Framework LEMP **[REP2-021]** is to oversee the post-construction ecological monitoring works, with the key function of the Group comprising review of monitoring data on habitats and species to inform future management plans (as necessary). As noted at paragraph 1.3.7 of the Framework LEMP **[REP2-021]**: "*Any long-term biodiversity monitoring and management requirements specified in this document will be carried out by the Applicant and/or a Contractor appointed by the Applicant".* As such, the Ecological Advisory Group (or similar) will comprise the Applicant or Operations Contractor, Environmental Manager (as defined in the Framework OEMP **[REP2-015]** – ref. paragraph 6.1.2, 6.1.3 and 6.2.1), a suitably qualified and experienced ecologist, and if relevant to the Proposed Development any research institution(s) carrying out ecological studies onsite during operation. It is not intended that LCC will be a member of the Ecological Advisory Group and so it is not necessary for the Applicant to meet the LCC costs of attendance.

Question Number	Question to	Question	IP Response (LCC)	Applicant Response
				As set out at paragraph 7.1.11 of the Framework LEMP **[REP2-021]**, results from the post-construction monitoring will feed into the detailed management plan and, if required, management proposals may be amended accordingly based on this monitoring (for example, replacement planting and/or changes to planting species where planting has failed to establish). As noted at paragraph 7.1.9 of the Framework LEMP **[REP2-021]**, the monitoring reports for surveys during operation will be sent to the host authorities and the Lincolnshire Wildlife Trust for their information, along with a summary of any changes to management proposed. Any material changes proposed to the approved detailed LEMP management proposals, in response to the findings of post-construction monitoring, will be sent to the host authorities for their review and approval prior to their implementation. As noted at paragraph 7.1.9 of the Framework LEMP, the Terms of Reference of the Ecological Advisory Group (or similar) will be drafted following receipt of any future consent and agreed as part of the agenda for the first group meeting. The Framework LEMP has been updated (submitted to the Examination at Deadline 3) to clarify the purpose and function of the Ecological Advisory Group (or similar) and the composition of the Group, as outlined above.
FS.1.11	Applicant LCC NKDC Natural England	**Framework Soil Management Plan** Within the Framework Soil Management Plan [AS-100] mention is made of a number of documents that would need to be referred to for the management of soils, for example, the soil resource survey, DEFRA's Construction Code of Practice for the Sustainable Use of Soils on Construction Sites document, as well as the SMP. a) **Applicant** - for each element of the proposed development, explain the approach to managing soils during construction, operation and decommissioning. This should include the methods for stripping, storing and replacing soils, including	The Council will defer to NKDCs agricultural consultant on this matter. The detailed Soil Management Plans should be led by the Soil Resources Survey, which is required to be carried out as part of the pre-construction planning (Framework Soil Management Plan REP1-037 section 4.1.1). In particular, soils should not be stripped or otherwise handled when 'plastic', and work should only be done when soils are dry and friable	The Applicant has responded to LCC's views on this topic in the Applicant's Response to Written Representations **[REP2-030]** and the Applicant's Response to Local Impact Reports **[REP2-031]**. LCC acknowledge that the Applicant has committed to a Soil Resources Survey in Section 4.1.1 of the Framework SMP **[REP1-037]**. Further detail on soil handling is also provided in the Applicant's Response to the Examining Authority's First Written Questions **[REP2-029]**.

Question Number	Question to	Question	IP Response (LCC)	Applicant Response
		during wet weather, and activities during the aftercare period. b) Comment on other matters which you consider should be included in a final soil management plan to ensure that it provides an appropriate basis for the preparation of a detailed plan for the management of soils during construction, operation and decommissioning.		
FS.1.20	NKDC LCC	**Cumulative Effects** The applicant has assessed the cumulative effects for agriculture in section 12.10 of ES Chapter 12 (Socio-Economics and Land Use) [AS-016]. Table 12-29 on page 71 presents the applicant's estimates of BMV land under solar infrastructure for solar NSIPs in Lincolnshire (including the unitary authority areas), with the applicant estimating in paragraph 12.10.15 in [AS-016] that other solar NSIPs in Lincolnshire, together with the Proposed Development would occupy approximately 1.4% of the BMV land in the County. What are the Councils' views on the applicant's consideration of the cumulative effects for agriculture?	The Council, in its LIR [REP1-055] at paragraph 15.24, refer to the applicant's assessment of percentage BMV land affected by solar developments in Lincolnshire and state that it is broadly comparable with its own calculations. Notwithstanding that position, the Council is continuing to review and analyse the data around the impact of solar developments on BMV land and will update its position during the course of the examination if and when necessary. LCC has identified discrepancies in the applicant's Table 12-29 of {AS-016] (e.g. Meridian Solar, due to go to examination in 2026, should be included; while other sites – Great North Road Solar and Steeples should be excluded as they lie in Nottinghamshire). The Table also excludes any TCPA solar projects, which our records currently indicate amount to a further 1,583 hectares of BMV land. In total, our calculations indicate solar projects (NSIP and TCPA) in Lincolnshire will impact on 5,120 hectares of BMV land. In absolute terms, this constitutes a significant cumulative and incremental loss of high-quality agricultural land in an area of the country that has a disproportionately higher percentage of such resource, and therefore it remains an area of concern to the Council.	The Applicant presented its approach to cumulative effects in section 12.10 of ES Chapter 12 (Socio-Economics and Land Use) **[AS-016]**. The Applicant notes that the Council is continuing to review and analyse the data around the impact of solar development on BMV land and the Applicant has similarly reviewed more recent data. The Applicant's latest analysis, which includes the additional data related to TCPA solar projects, aligns closer with LCCs calculations, although with 11,258ha of farmland and 3,924ha of BMV used by solar farms. It is noted that LCC has calculated a cumulative area of BMV of 5,120 ha. The Applicant's latest analysis differs to this (and the data in the ES) because it now differentiates between total site area and total area of above ground infrastructure, with the latter representing 78% of the total site (the remaining 22% is buried infrastructure where the land is returned to farming and has therefore been discounted). Applying the cumulative analysis only to the area of above ground infrastructure, the Applicant has identified 3924ha of BMV land used for above ground solar PV. 3864ha of this will be returned to farmland when the solar farms are decommissioned and is therefore not permanently lost from agriculture. The Proposed Development only contributes 283ha to this. The Applicant has also differentiated between reversible development and permanent change of use of BMV land. The latter accounts for approximately 0.02% of the Lincolnshire's BMV land (about 60ha). The Applicant considers that permanent change of agricultural land and loss of soil resources is the primary consideration for cumulative

Question Number	Question to	Question	IP Response (LCC)	Applicant Response
				effects and is not significant. This therefore does not change the conclusions in the ES.
TT.1.17	Applicant LCC	**Framework CTMP – conditions surveys** Paragraphs 7.3.2 to 7.3.4 in the Framework CTMP [AS-102] set out that a road condition survey would be carried out pre-construction, during construction and post-construction, to identify any defects that arise to highways assets/verges during the construction phase for the proposed development and during decommissioning. How would the undertaking of any necessary repairs be secured?	Usually it is agreed in discussions between Highway Authority and Developer which impacts have resulted from the development and agreement is reached on mitigations. Perhaps the CTMP should explicitly say that impacts caused by the development will be mitigated.	A commitment to reinstate/ make good any defects that arise to highways assets/verges during the construction phase due to the Proposed Development has been added into the 'Road Condition Surveys' section of the Framework CTMP, and to the Framework DEMP (ref. TT-D1) regarding decommissioning (submitted to the Examination at Deadline 3).
TT.1.19	LCC NKDC	**Framework Public Rights of Way Management Plan** Is there sufficient clarity in the Framework Public Rights of Way Management Plan (FPRoWMP) [APP-195] to provide an understanding of what is proposed for the affected PRoWs? If not, what other details would be necessary?	With regard to the FPRoWMP, the detail seems adequate here, However, LCC would suggest that a commitment is included wherein the applicant would repair the surface, and to keep in repair, any surface of public rights of way that they are using by vehicles. It should also make clear that any crossing point will stop the construction/operation traffic and not the public; the public should not have additional gates to negotiate for these crossing points and the public use will take priority over the applicant's vehicle use. This should also involve training and site wide speed limits.	A commitment to reinstate/make good any defects that arise to PRoW where used or crossed by construction vehicles due to the construction of the Proposed Development has been added to the Framework Public Rights of Way Management Plan, and to the Framework DEMP (ref. TT-D1) regarding decommissioning (submitted to the Examination at Deadline 3) Potential measures that could be implemented at crossing points are listed in paragraph 3.2.3 of the Framework PRoWMP **[REP2-019]**. This indicates that gates *may* be used. However, it is expected that the default will be for gates to be across construction vehicle routes (not PRoW), this will be evaluated on a site by site basis at detailed design stage and only if gates were deemed necessary to maintain the safety of users would they be implemented. It is considered that it would be premature to make a blanket commitment to not utilising gates at this stage. Paragraph 3.2.3 (bullet f) also highlights that the default for management of the conflict point will be for vehicles to give way to other users.

Question Number	Question to	Question	IP Response (LCC)	Applicant Response
				A detailed PRoWMP will be developed, substantially in accordance with the Framework, as secured by Requirement 18, under Schedule 2 of the Draft DCO **[REP2-005]**. Regarding relevant training, it is considered that this is sufficiently secured by the Framework CEMP **[REP2-013]** (ref. paragraph 5.1.1) which notes: "*b. Training requirements for relevant personnel on environmental topics; c. Information on-site briefings and toolbox talks that will be used to equip relevant staff with the necessary level of knowledge to follow environmental control procedures*". Regarding site-wide speed limits, this is also secured by the Framework CEMP **[REP2-013]** (ref. AQ-C1) which notes "*a maximum-speed-limit of 15mph on surfaced and 10mph on unsurfaced haul roads and work areas (if long haul routes are required these speeds may be increased with suitable additional control measures provided, subject to the approval of the nominated undertaker and with the agreement of the local authority, where appropriate)*."
TT.1.26	National Highways LCC Applicant	**Cumulative effects** a) **National Highways** - The A46 Newark Bypass has been excluded from further consideration in Appendix 15-A [APP-177] (Long list of cumulative developments) because it is due to be complete in 2028. Is the timescale for the A46 Newark Bypass reasonable given the statement in paragraph 1.2 (b) of [RR-201] that National Highways will be working with the Department for Transport to identify delivery timescales over the coming months? b) **LCC** - The A46 Hykeham relief road has been excluded from the applicant's cumulative assessment in [APP-038] on the basis that its construction period would be prior to the peak construction period for the	The NHRR is expected to start construction in Spring 2026 and be complete by Summer 2029. AS referred to in the Councils LIR [REP1-] paragraph 19.17 Cumulative amenity impacts to local residents due to consecutive/successional construction periods, not necessarily those that overlap. The Council would wish to see this scenario to be assessed within the applicants documentation.	As per paragraph 12.10.18 of Chapter 12: Socio-Economics and Land Use of the ES **[AS-016]** during the construction phase of the Proposed Development, effects on the amenity of residential properties, business premises and community facilities are assessed to be not significant. There is limited information available on how the Cumulative Schemes might affect such assets during the construction phase, however based on the assumption that each Scheme will be designed to minimise such impacts wherever possible, it is considered that the cumulative effect is likely to remain not significant as is the case for the Proposed Development in isolation. In undertaking the cumulative effects assessment, the Applicant has considered the potential for cumulative effects with other relevant committed developments, including the NHRR. The Applicant considered the effects from cumulative schemes being built in sequence and simultaneously, however the application has reported on the worst-case effects which result from projects occurring simultaneously (i.e. in-combination). Taking traffic as an example, the potential for the highest severity impacts, and therefore the potential for the higher likely significance of effects, occur during periods where

Question Number	Question to	Question	IP Response (LCC)	Applicant Response
		proposed development (operational from 2026 – point l, page 114 in [APP-038]). Does the applicant's assumption about the time of the A46 Hykeham relief road remain correct? c) **Applicant** - If there were to be changes to the timescales concerning the delivery of the A46 highway schemes, how do you consider the regular reviews of and updates to the CTMP suggested by National Highways could be accommodated to manage the cumulative construction traffic effects?		there is overlap of construction works from different projects. Should these be sequential instead of overlapping, the severity of impact upon relevant receptors would be lower, albeit over a longer period of time. Traffic assessments in particular compare impacts against specific criterion based on % change in traffic flows, which is agnostic of duration. Although the duration of an effect is a consideration of assessment, for this assessment – and this logic is the same for other topics – the Applicant considers the cumulative assessment approach taken to be robust, where the greatest (worst-case) effects occur when considering the Proposed Development in combination with the relevant cumulative schemes being built simultaneously, whereby this has a greater potential to affect the scale (and therefore significance) of effect experienced by a relevant receptor. Where the duration of an effect may change if cumulative schemes were considered sequentially, rather than overlapping, the effect duration on a specific receptor is still likely to remain no greater than short to medium term. The Applicant is not required to assess each and every scenario that may result in lesser effects than has been presented in the ES, and therefore has not specifically outlined the difference in effects in the event that these other schemes are built sequentially, one after another after the Proposed Development.

Table 3-1c: Applicant's Responses to the responses provided by the Environment Agency to the ExA First Written Questions

Question Number	Question to	Question	IP Response (EA)	Applicant Response
Environment Agency				
DCO.1.03	Applicant NKDC LCC Environment Agency Natural England Historic England	Article 2 - interpretation Article 2 of the dDCO [APP-016] includes provisions for "permitted preliminary works". Section 5.7.21 of Advice Note 15 "Drafting Development Consent Orders" advises that such provisions have been removed by the Secretary of State (SoS) in some decisions, particularly where such advance works were themselves likely to have significant environmental effects, for example, in terms archaeological remains. a) For the applicant - comment on the nature and scope of the identified permitted preliminary works in the context of section 5.7.21 of Advice Note 15. b) Given that the permitted preliminary works could take place with just the framework plans in place, views are sought on whether the level of detail in these documents would secure adequate control and manage the likely effects arising from the preliminary works?	DCO.1.03 (b) The Environment Agency's interest is with the following "*permitted preliminary works*": *(d) remedial work in respect of any contamination or other adverse ground conditions.* Any intrusive ground investigation works must be carried out in line with all available current Environment Agency and industry best practice and be done under appropriate risk assessment method statement (RAMS). This includes installation and decommissioning of any ground gas and groundwater monitoring boreholes. If land remediation is required prior to commencement this will need to be discussed and agreed with the LPA, and Environment Agency if necessary, before said works commence. If the LPA has concerns about archaeology in the investigation area, they may request any intrusive ground investigation have an archaeological watching brief. The Environment Agency would not require this. Any fuel and chemical storage associated with these works must also be done in line with best practice. In light of this question, we request that measure GC-01, Table 10: Ground Conditions, of the Framework Construction Environmental Management Plan (FCEMP) [REP1-031 & REP1-032] is further updated by the Applicant. After the first two sentences ("*Ground investigation works will be undertaken prior to commencing construction. The scope of the ground investigation will be discussed and approved with the LPA and the Environment Agency prior to commencement*.") Add: "*This will be in accordance with BS10175:2011+A2:2017 Investigation of Potentially Contaminated Sites: Code of Practice, BS 5930:2015+A1:2020 Code of Practice for Ground Investigations, the Environment*	In response to this comment, the Applicant has updated the wording of GC-C1, as suggested by the Environment Agency, within the Framework CEMP. The updated Framework plan, reflecting this change, was submitted to the Examination at Deadline 3.

Question Number	Question to	Question	IP Response (EA)	Applicant Response
			Agency's Land contamination risk management (LCRM) guidance, and any other relevant industry guidance for site investigation works." Reason: so that the FCEMP can serve as a standalone document prior to detailed plans being produced. We have defined the standard guidance we expect to the used for site investigation works. Our list is not exhaustive, and other guidance may be necessary, as we have caveated at the end. As the FCEMP already states that the scope will be agreed with the LPA and Environment Agency prior to commencement, we are satisfied this gives enough surety of appropriate methods and designs being used. Additionally, we would point out that in response to the issue EA02 in our Relevant Representation [RR-089], the Applicant has included a sub-paragraph in Requirement 12 of the dDCO [REP1-007 & REP1-008] which means for the purposes of "commence" remedial work in respect of any contamination is now included. Such works would therefore require the detailed CEMP secured under Requirement 12 to be in placed prior to being undertaken, should this amendment be taken forward.	
PE.1.08	Applicant Environment Agency	Contaminated land Table 3.11 in the FCEMP [APP-189] identifies the proposed mitigation/enhancement measures for ground conditions, including the stopping of works if potentially contaminated land was to be encountered during the construction works. a) Environment Agency - clarify what other commitments it would expect to see to ensure that works would stop in	We assume the ExA is referring to Table 10: Ground Conditions in section 3.11 Ground Conditions in the FCEMP. We have addressed these questions insofar as it relates to impacts on controlled waters. Human health issues are a matter for the local authority. PE.1.08 (a) We have discussed this with the Applicant in the relation to the draft Statement of Common Ground and elsewhere. It is covered within the bullet points of mitigation measure ID GC-C1 in the FCEMP. In some cases we request a	In response to this comment, the Applicant has updated the wording of GC-C1, GC-O1 and GC-D1, as suggested by the Environment Agency, within the Framework CEMP, Framework OEMP and Framework DEMP. The updated Framework plans, reflecting these changes, have been submitted to the Examination at Deadline 3. This update has also been recorded within the SoCG between the Applicant and the Environment Agency, and will be submitted at Deadline 3A, in line with the Examining Authority's request in its Procedural Decision dated 22 August 2025 **[PD-005]**.

Question Number	Question to	Question	IP Response (EA)	Applicant Response
		an area where unexpected contaminated land was encountered. b) Applicant - explain why a similar provision is not included in the FOEMP [APP-190] and the Framework Decommissioning Environmental Management Plan [APP-191]?	DCO Requirement in relation to unsuspected contamination: *(1) In the event that contaminated land, including groundwater, is found at any time when carrying out the authorised development, which was not previously identified in the environmental statement, then no further development (unless otherwise approved in writing by the relevant authorities) shall be carried out within the identifiable perimeters of the area in which the suspected contamination is located. It must be reported as soon as reasonably practicable to the local planning authority, and where necessary, the Environment Agency, and the undertaker must complete a risk assessment of the contamination in consultation with the local planning authority, and where necessary, the Environment Agency.* *(2) Where the undertaker determines that remediation of the contaminated land is necessary, a written scheme and programme for the remedial measures to be taken to render the land fit for its intended purpose must be submitted to and approved in writing by the local planning authority, following consultation with the Environment Agency.* *(3) Remediation must be carried out in accordance with the approved scheme under sub paragraph (2).* *(4) Following the implementation of the remediation strategy approved under subparagraph (2), a verification report, based on the data collected as part of the remediation strategy and demonstrating the completion of the remediation measures must be produced and supplied to the relevant planning authority and the Environment Agency.* In this case, we are satisfied that the commitments covered in the requirement are included in the FCEMP [REP1-031 & REP1-032]. We have an outstanding matter with wording in GC-01, which the Applicant is aware of, and we are working to resolve this (relevant representation [RR-089] issue EA11), but we satisfied with the commitments.	

Question Number	Question to	Question	IP Response (EA)	Applicant Response
			PE.1.08 (b) While this question is to the Applicant, we wish to point out that this is included within the bullet points of mitigation measures GC-O1 and GC-D1 in the respective documents. Our comments above apply.	
WE.1.03		Swales a) Paragraphs 9.4.63 and 9.6.68 in ES Chapter 9: Water Environment [APP-034] appear to suggest that the swales around the BESS (or groups of BESS) and substation areas would just collect water, which would then be tested to determine the next course of action. However, elsewhere in [APP-034] such as paragraphs 9.6.56 and 9.7.76 and paragraph 4.1.7 of the Framework Surface Water Drainage Strategy [APP-147], it appears that the swales would collect and treat surface water before discharge. Clarify what the intended role for the proposed swales would be. If treatment is intended, explain what that would involve. b) Confirm whether the penstock valves would be automatically activated in the event of a BESS fire. If not, provide an explanation of the procedure for manually closing the valves and how risks of accidental release would be managed, as requested by the Environment Agency in its relevant representation [RR-089]. c) Paragraph 9.6.58 in ES Chapter 9: Water Environment [APP-034] states that swales around the proposed BESS areas and onsite substation area would	Regarding a) it is our understanding that swales around the BESS and Substation will be subject to the commitment in the Framework Battery Safety Management Plan (BSMP) [REP1-041 & REP1-042] paragraph 4.5.5, which has been updated to state "Further details of the contaminant testing will be outlined in the final BSMP including details of the analytical suite and sampling frequency. Any release to the environment would also be subject to the requirements of an Environmental Permit." The Framework Surface Water Drainage Strategy (SWDS) [REP1-025 & REP1-026] states in paragraph 4.11.3 that any contaminated contained water will be tankered away offsite. Regarding b) the activation of the penstocks and a manual back up is still under discussion, as per our relevant representation [RR-089] issue EA16. Regarding c) we consider Framework SWDS has clarified this detail. Regarding d) penstock maintenance could not be seen in the Framework OEMP [REP1-033 & REP1-034]. It has been updated in paragraph 3.2.12 of Framework BSMP [REP1-041 & REP1-042], but we agree it should be in the FOEMP too.	In response to this comment, the Applicant has updated the wording of paragraph 4.3.7 of the Framework BSMP, as suggested by the Environment Agency, to note "*The automatic close trigger of the penstock will be linked with fire detection, spill detection or abnormal conditions. The penstock will also have a manual option of closing should the automatic system fail*". Furthermore, the Framework OEMP at WAT-O6 has been updated to specifically reference penstock maintenance, as suggested by the Environment Agency. The updated Framework plans, reflecting these changes, have been submitted to the Examination at Deadline 3. This update has also been recorded within the SoCG between the Applicant and the Environment Agency, and will be submitted at Deadline 3A, in line with the Examining Authority's request in its Procedural Decision dated 22 August 2025 **[PD-005]**.

Question Number	Question to	Question	IP Response (EA)	Applicant Response
		be lined with an impermeable membrane or similar impermeable barrier to prevent any pollution from entering the ground. However, paragraph 4.5.5 in the Framework Battery Safety Management Plan [APP-198] proposes that runoff from the battery storage area would be contained by local bunding and attenuated within gravel subgrade of the lined permeable sustainable drainage system and attenuation swale features. Clarify which approach would be used. If gravel would be used, provide details on how the accumulation of silt and pollutants at the base of the gravel would be managed following a BESS fire event. d) The FOEMP [APP-190] should be updated to include measures for the ongoing maintenance and testing of the penstock valves.		
WE.1.04	Applicant	Assessment of effects – groundwater quality Paragraph 9.7.48 in ES Chapter 9: Water Environment [APP-034] should be updated to reflect the most recent guidance on good practice for assessing impacts on ground water quality, as identified in the Environment Agency's relevant representation [RR-089].	The Applicant has updated paragraph 9.7.48 of the ES Chapter 9: Water Environment [REP1-021 & REP1-022] to reflect the most recent guidance. However, the issue we raised in our relevant representation [RR-089], EA12, is not yet fully resolved as we have queried the Applicant's use of the wording "if and where necessary" in relation to the guidance. There is no "if" in the necessity of following relevant guidance. As such, we asked for "if" to be removed.	In response to this comment, the Applicant has updated the wording of paragraph 9.7.48 in Chapter 9: Water Environment as suggested by the Environment Agency. The updated ES chapter, reflecting this change, has been submitted to the Examination at Deadline 3. This update has also been recorded within the SoCG between the Applicant and the Environment Agency, which will be submitted at Deadline 3A, in line with the Examining Authority's request in its Procedural Decision dated 22 August 2025 **[PD-005]**.
WE.1.08	Environment Agency	Foul water In your relevant [RR-089] you have requested that more detail is provided on the foul water disposal strategy. Paragraph 7.1.4 of the Flood Risk Assessment [APP-146] states that	The issue (EA19) we raised in our relevant representation [RR-089] has been resolved following the submission of revised documents at Deadline 1. Our concern was if the Applicant had been using a septic tank which may discharge effluent to the environment. However, all documents, ES Chapter 9 [REP1-021 & REP1-022], FRA [REP1-023 & REP1-024] and Framework SWDS [REP1-	This item has been 'Agreed' within the SoCG between the Applicant and the Environment Agency, whereby the Applicant has confirmed that the sealed cesspit system would be regularly emptied under contract by a registered recycling and waste management contractor. The SoCG will be submitted to the Examination at Deadline 3A, in line with the Examining Authority's request in its Procedural Decision dated 22 August 2025 **[PD-005]**.

Question Number	Question to	Question	IP Response (EA)	Applicant Response
		drainage would be dealt with via a septic tank arrangement or similar sealed system. Paragraph 4.12.2 of the Framework Surface Water Drainage Strategy [APP-147] states that during the operational phase, foul water flows would be dealt with via a sealed cesspit. Clarify what further information you expect you require to consider this matter further.	025 & REP1-026], are now consistent and refer to a sealed cesspit with no overflow to ground pipe system. Within our discussions on the SOCG in relation to this issue (EA19) we have requested additional confirmation that cesspits will be collected/emptied by specialist licensed contractors but understand that we are a named consultee in Requirement 10, so this can be addressed post-consent, if required.	

Table 3-1d: Applicant's Responses to the responses provided by National Highways to the ExA First Written Questions

Question Number	Question to	Question	IP Response (NH)	Applicant Response
National Highways				
TT.1.16	Applicant, NKDC, LCC, National Highways	Abnormal Indivisible Loads a) Councils and National Highways - is there sufficient detail on the abnormal indivisible loads in the application documents, such as ES Chapter 13: Traffic and Transport [APP-038], the FCTMP [AS-102] and the FCEMP [APP-189] to understand what would be required and the effects? If not, what other information do you consider would be necessary? b) Are there any implications arising from the fact that only a preliminary vehicle swept path assessment has been undertaken for the routes to the Principal Site and the Cable Corridor access points so far (paragraph 5.7.3 in [AS-102])?	a) The National Highways Abnormal Indivisible Loads (AIL) team has not had any engagement to date, nor has there been any engagement on route feasibility work. National Highways had previously understood that the Applicant had contacted NH, via their transport consultant Wynns Ltd, regarding AIL routes to the Navenby area in which An Agreement in Principle (AIP) has been provided. However, it has seen been established this AIP related to a separate nearby project. Therefore, NH seek to correct the position noted in paragraph 5.20 of its Relevant Representation (REP-1047) with this update. We have encouraged the applicant to engage with our AIL team and we have provided the relevant contact details to do so. Early route feasibility work is encouraged with National Highways to mitigate delays to project delivery. At this early stage, our primary interest regarding Abnormal Load deliveries is to agree the port of delivery and ensure compliance with the Water Preferred Policy, namely using the nearest suitable port of entry to minimise road mileage. With respect to route suitability, it is common at this stage of a project for only a high-level abnormal loads assessment to be undertaken. However, early engagement with local stakeholders is encouraged to identify any potential constraints, such as structures that could render the access route unsuitable. Early engagement with NH is encouraged to avoid any delays to the applicant's programme. b) As set out in a response at (a) above at this stage we would expect applicants to conduct a feasibility study with us to access any proposed routes. The implications if not done could impact on the programme. Once a haulier has been appointed by the applicant, they will undertake the detailed swept path analysis.	A meeting between the Applicant and National Highways was held on 12 February 2026 where a number of items, including those raised in this comment, were discussed. The Applicant contacted the National Highways Abnormal Indivisible Loads (AIL) team on 4 March 2026 and received a response from them on 5 March 2026 setting out the Special Order application process and the required route if Special Order loads for the project arrive at Immingham Docks. The Applicant notes the recommended 8-10 week timeline for Special Order applications and will liaise with the National Highways AIL team further at detailed design stage, once the port of entry has been identified. This is reflected in the SoCG with National Highways, which will be submitted at Deadline 3A, in line with the Examining Authority's request in its Procedural Decision dated 22 August 2025 **[PD-005].** Furthermore, as noted in TT.2.06 in the Applicant's Response to the Examining Authority's Second Written Questions **[EN010154/EXAM/9.19]**, paragraph 7.3.4 of the Framework CTMP has been updated (submitted to the Examination at Deadline 3) to note: "*In addition, a separate road condition survey may will be carried out for the abnormal vehicle routes (transformer and cable drums) for the transformer to the Principal Site, covering the route between the A46 junction and the proposed site access on Bassingham Road (C-009) i.e. via Haddington Lane*." This update ensures that a road condition survey will be carried out for the AIL route, for both the AIL for the transformer and also the other (cable drum) AIL routes, between the A46 junction and the proposed site access on Bassingham Road (C-009).

Question Number	Question to	Question	IP Response (NH)	Applicant Response
			National Highways must be contacted 8–10 weeks prior to the planned movement, at which point the haulier should initiate engagement. During this period, route suitability will be reassessed in coordination with all relevant structure owners and highway authorities. An application must then be submitted to National Highways and, if approved, the permit will be valid for six months. The Applicant should note that there remains a legal obligation to notify National Highways of the exact date and time of each movement at least five days in advance. Once the application has been submitted to the Abnormal Loads team, any vegetation clearance or street furniture removal required to facilitate delivery will also be coordinated with the National Highways Network Occupancy team.	
TT.1.26	National Highways, LCC, Applicant	Cumulative effects a) National Highways - The A46 Newark Bypass has been excluded from further consideration in Appendix 15-A [APP-177] (Long list of cumulative developments) because it is due to be complete in 2028. Is the timescale for the A46 Newark Bypass reasonable given the statement in paragraph 1.2 (b) of [RR-201] that National Highways will be working with the Department for Transport to identify delivery timescales over the coming months? b) LCC - The A46 Hykeham relief road has been excluded from the applicant's cumulative assessment in [APP-038] on the basis that its construction period would be prior to the peak construction period for the proposed development (operational from 2026 – point I, page	a) We continue to work with the Department for Transport to identify the most efficient and cost-effective delivery timescales for the A46 Newark Bypass. We will provide further updates on the delivery timings for the scheme following the publication of the Road Investment Strategy in due course. As this work progresses, we're not in a position to comment on the reasonableness of a specific delivery date. However, for the purposes of the traffic and transport review, the assumption for not including the A46 Newark Bypass in the cumulative impact assessment of the DCO is still reasonable. It is noted from the Applicant's updated dDCO (REP1-007), requirement 14 of Schedule 2 has been updated to include NH as a consultee to the Construction Traffic Management Plan (CTMP). As set out within NH's Relevant Representation (REP-201). NH are seeking to be an approving body to the CTMP (Requirement 14) and not just a consultee on this matter. This will ensure we can manage changes to original timescales and manage construction traffic and vehicle movements safely and	The Applicant acknowledges National Highways' view that it is reasonable at this stage not to include the A46 Newark Bypass in the DCO cumulative impact assessment since timescales for delivery of the A46 project are subject to the forthcoming Road Investment Strategy. In relation to Requirement 14 (CTMP) of Schedule 2 to the draft DCO **[REP2-005]**, the Applicant considers that the inclusion of National Highways as a consultee is sufficient and as such, does not agree to add National Highways as an approving body for this Requirement. The Applicant considers that it would be highly unusual for National Highways to be named in the DCO (if granted) as a discharging body in place of the relevant local authority. Whilst the draft DCO includes two separate discharging bodies split between the county and district's functions, this is in respect of separate Requirements, and further, it is likely that the forthcoming local government re-organisation will result in one discharging body for these DCO requirements in due course. Further, Local authorities are well versed in discharging DCO Requirements (as well as conditions of planning permissions) and

Question Number	Question to	Question	IP Response (NH)	Applicant Response
		114 in [APP-038]). Does the applicant's assumption about the time of the A46 Hykeham relief road remain correct? c) Applicant - If there were to be changes to the timescales concerning the delivery of the A46 highway schemes, how do you consider the regular reviews of and updates to the CTMP suggested by National Highways could be accommodated to manage the cumulative construction traffic effects?	efficiently, minimising disruption and potential hazards to the SRN and major projects. Please see our further comments in this regard at section 1b in the table below.	have a number of processes and procedures in place to do so, including engaging statutory consultees prior to making a discharge decision. Lincolnshire County Council will also be interested to ensure that construction of the Proposed Development does not have adverse impacts on the strategic network, because such impacts are likely to have knock-on effects to their own local highway network. In these circumstances, it is highly unlikely that a local authority would fail to discharge a Requirement (as suggested by National Highways) such that deemed approval would apply. In contrast, National Highways would not normally discharge matters under a DCO, and the Applicant is not aware of any made DCOs for solar schemes which name National Highways as a discharging authority. To add in a further discharging authority to a single plan would add unnecessary complexity and the potential for delay, especially in circumstances where one discharging authority is content to approve the Construction Traffic Management Plan (CTMP) but the other is not. In addition, National Highways would have no enforcement powers in the event of any breach of the Requirement. Accordingly, the Applicant does not propose to include any amendments to Requirement 14 of the draft DCO in relation to National Highways request.
TT.1.27	LCC, National Highways	Highways alterations Would the dDCO, the FCTMP [AS-102] and the FCEMP [APP-189] adequately secure a mechanism for the approval of the details for the proposed accesses and the other proposed highway alterations identified in the Streets, Rights of Way and Access Plans [AS-007]? If not, what amendments to the dDCO, FCTMP and the FCEMP would be necessary to establish an adequate approval mechanism?	We understand there are no proposed alterations to the layout, nor any proposed creation of accesses for operational or construction purposes, located on the SRN identified in the Streets Rights of Way and Access Plans. All such works are located on the Local Road Network (Fosse Lane and Old Haddington Lane). Therefore, approval of these details will fall under the jurisdiction of the local highway authority (Lincolnshire County Council). Any temporary traffic management measures required on the SRN to facilitate LRN roadworks will be agreed and approved under our protective provisions. We note the current dDCO (REP1-007) does provide the applicant with powers to alter the layout of any street	For all alterations to the road layout or creation of accesses at Fosse Lane and Old Haddington Lane, the Applicant will obtain approval from the relevant planning authority in consultation with the local highway authority (Lincolnshire County Council) in accordance with Requirement 6 of Schedule 2 to the draft DCO **[REP2-005]**. Under the heading 'Prior approvals and security' (paragraph 42) of the Protective Provisions for the benefit of National Highways set out in Part 5 of Schedule 14 provide that the undertaker must not exercise its powers under Article 10 (power to alter layout etc. of streets) of the draft DCO **[REP2-005]** over any part of the SRN, or land in which National Highways has an interest, without National Highways' consent and approval by National Highways of any road space bookings or scheme of traffic management. This provision ensures that the SRN is suitably protected.

Question Number	Question to	Question	IP Response (NH)	Applicant Response
			within the order limits, which goes above those alterations identified in the Streets, Rights of Way and Access Plans. The SRN does fall within the extent of the order limits. National Highways is seeking the inclusion of protective provisions which would protect the SRN should the applicant seek to rely on those powers. Discussions on the protective provisions are progressing well and we will update the ExA on those discussions at the next deadline.	The Applicant confirms that Protective Provisions have been agreed with National Highways and these have been incorporated into the iteration of the draft DCO **[REP2-005]** submitted to the Examination at Deadline 3A.

Table 3-1e: Applicant's Responses to the responses provided by Natural England to the ExA First Written Questions

Question Number	Question to	Question	IP Response (NE)	Applicant Response
Natural England				
DCO.1.03	Applicant NKDC LCC Environment Agency Natural England Historic England	**Article 2 - interpretation** Article 2 of the dDCO [APP-016] includes provisions for *"permitted preliminary works"*. Section 5.7.21 of Advice Note 15 "Drafting Development Consent Orders" advises that such provisions have been removed by the Secretary of State (SoS) in some decisions, particularly where such advance works were themselves likely to have significant environmental effects, for example, in terms archaeological remains. c) **For the applicant** - comment on the nature and scope of the identified permitted preliminary works in the context of section 5.7.21 of Advice Note 15. d) Given that the permitted preliminary works could take place with just the framework plans in place, views are sought on whether the level of detail in these documents would secure adequate control and manage the likely effects arising from the preliminary works?	Without further information regarding what the 'permitted preliminary works' may include, NE are unable to provide substantive comment. Nonetheless, it is relevant to state that in other cases our advice has been that certain works, for example establishing construction compounds or welfare cabin installation, which require soil stripping and storage, should not be included in any pre-commencement works, as there is a risk of soil damage without being in accordance with a finalised Soil Management Plan. Some minor preliminary works may be suitable, but these should be defined to avoid accidental damage. Framework plans are not designed to be relied upon to avoid impacts & detailed plans should always be established prior to works that may be damaging in the absence of mitigation. Where measures set out within a framework plan are required to avoid impacts, NE would advise that these works should not be considered as 'permitted preliminary works', and the final plan must be completed and agreed prior to works starting.	As stated in the Applicant's Response to Post Hearing Summaries **[REP2-032]** the "permitted preliminary works" include pre-commencement activities such as surveys, site investigations and site clearance which are required to ascertain further information which is necessary for the undertaker to submit in order to obtain approval under some of the requirements at Schedule 2 to the Draft DCO **[REP2-005]**. However, as per the Applicant's oral submissions during Issue Specific Hearing 4 (ISH4) on Friday 13 March 2026, the Applicant has reviewed the inter-relationship between the drafting in relation to the Permitted Preliminary Works (PPW) and recognises that it is necessary to ensure mitigation required for any PPW is properly secured. The Applicant proposes to re-order the definition of the PPW to distinguish between intrusive and non-intrusive works, such that Requirement 11 can be amended to allow non-intrusive works to be undertaken in advance of the archaeological trial trenching works and approval of the Written Schemes of Investigation. The Applicant is proposing to prepare a new detailed plan (to be known as the PPW EMP) which is to be submitted to the Examination at or before Deadline 5. This PPW EMP will set out the full mitigation in accordance with which the PPW must be undertaken and will be a certified document under Article 41. Compliance with the mitigation contained in the PPW EMP will be secured within the Requirements of the draft DCO. As this will be a detailed plan, no approval mechanism will be necessary under the Requirements. The relevant amendments to the draft DCO will be incorporated in the version to be submitted at Deadline 3A (24 March 2026).
ENC.1.26	Applicant LCC NKDC	**BNG Report [APP-194] – strategic significance**	The Biodiversity net gain for nationally significant infrastructure projects consultation, which ran from 28th May to 24th July 2026, states that LNRS should be used	The Applicant will continue to use the currently adopted methodology to define Strategic Significance and not use the draft LNRS to inform the BNG strategy.

Question Number	Question to	Question	IP Response (NE)	Applicant Response
	Natural England	Paragraph 2.6.2 of the BNG Report sets out that NKDC has yet to produce a Local Nature Recovery Strategy and because of that strategic significance has been assigned to habitats using the alternative methodology in line with guidance set out in the Statutory Biodiversity Metric User Guide. LCC, in its relevant representation [RR-157], considers that significance has not been applied in accordance with the Statutory Biodiversity Metric User Guide, as NKDC has identified criteria for assessing strategic significance (Central Lincolnshire Biodiversity Opportunity Mapping). NKDC, in its relevant representation [RR-210] also refers to a failure to apply locally adopted strategic significance criteria. a) Comment on what would be the most appropriate approach for assigning strategic significance within the context of the advice stated in the Statutory Biodiversity Metric User Guide. b) **NKDC** - provide an update on when the council's Local Nature Recovery Strategy is expected to be published.	to define strategic significance. However, footnote 22 specifically addresses the scenario prior to publication of an LNRS: *'Before an LNRS is published, applicants should refer to the alternative document for assigning strategic significance, which the local planning authority must specify. This document could be one of a list of examples included in the biodiversity metric user guide'* As such, in this scenario it appears the Local Planning Authority have specified that the Central Lincolnshire Biodiversity Opportunity Mapping should be used to define strategic significance.	Schedule 2, Requirement 8 of the draft DCO provides for the delivery of biodiversity net gain. Any adopted changes to the guidance for defining Strategic Significance will be applied, as necessary, when discharging Requirement 8 post-consent.
FS.1.11	Applicant LCC NKDC Natural England	**Framework Soil Management Plan** Within the Framework Soil Management Plan [AS-100] mention is made of a number of documents that would need to be referred to for the management of soils, for example, the soil resource survey, DEFRA's Construction Code of Practice for the Sustainable Use of Soils on	The items requested in part 'a)' of this question are considered the primary matters that must be included in the final SMP, as set out in the DEFRA Construction Code of Practise for the Sustainable Use of Soils on construction Sites. It is also important that the SMP includes:	As noted in the Applicant's Response to the Examining Authority's First Written Questions **[REP2-029]**, it is intended that the detailed SMP would provide this level of detail, whereby this level of detail at this stage goes beyond the purpose of a framework management plan and is requiring more detail at this stage than has been necessary in previously made DCOs. Paragraphs 3.1.2 and 3.1.3 of the Framework SMP **[REP1-037]** detail the guidance in place to protect soil resources during the construction

Question Number	Question to	Question	IP Response (NE)	Applicant Response
		Construction Sites document, as well as the SMP. a) **Applicant** - for each element of the proposed development, explain the approach to managing soils during construction, operation and decommissioning. This should include the methods for stripping, storing and replacing soils, including during wet weather, and activities during the aftercare period. b) Comment on other matters which you consider should be included in a final soil management plan to ensure that it provides an appropriate basis for the preparation of a detailed plan for the management of soils during construction, operation and decommissioning.	- Details of the soils on the site (following the final pre-construction ALC survey), which will inform the relevant management practises. NE have few additional comments to make; advise that the final SMP is written in accordance with this guidance. We also note that NE have been added as a consultee on the final SMP, so will have the opportunity to review and comment on the content at a later stage.	of the Proposed Development, which includes the DEFRA Construction Code of Practice for the Sustainable Use of Soils on construction Sites, and also the details of what will be included within the detailed SMP, including "*Methods for stripping, stockpiling, respreading and ameliorating landscape soils*". Regarding protocols to be followed during wet weather, this is also noted in paragraph 5.4.1 and 5.5.1 regarding topsoil and subsoil respectively. Furthermore, Section 6.9 sets out the soil maintenance/aftercare protocols to be followed. Regarding the comment that the SMP must include details of the soils on site which will inform the relevant management practises, as noted at paragraph 4.1.1 "*A Soil Resource Survey (SRS) is required to be carried out by a suitably qualified and experienced soil scientist or practitioner to inform the site working strategies, i.e. the SMP*". Furthermore, paragraph 5.7.2 states: *"the SMP must contain details for the following:* - *Maps of topsoil/subsoil types, areas to be stripped and areas to be left in-situ (where applicable);* - *Confirmed methods for soil stripping, stockpiling, respreading and amelioration;* - *Stockpiling locations with specific contents i.e. Topsoil Type A, Subsoil Type B etc; and* - *Schedule of volumes for each material."* The detailed SMP is secured by the Framework SMP **[REP1-037]** (which is to be developed into a detailed SMP, substantially in accordance with the Framework Plan, secured under Requirement 15 (soil management plan) at Schedule 2 of the Draft DCO **[REP2-005]**).
FS.1.12	Applicant Natural England	**Framework Soil Management Plan – topsoil** Paragraph 5.4.1 of the Framework Soil Management Plan (FSMP) [AS-100] refers to any significant vehicular movement over topsoil being restricted. a) **Applicant** - explain how "significant" would be defined, for example, by type of vehicle, by number.	All vehicle movement on topsoil, and subsoil, should be avoided where possible. The DEFRA Construction Code of Practise for the Sustainable Use of Soils on construction Sites states that a detailed stripping plan should show soil units to be stripped, haul routes and the phasing of vehicle movements. This applies to both top soil and subsoil stripping and is intended to avoid vehicle movements and subsequent compaction.	The Framework SMP **[REP1-037]** provides an outline of commitments which will be further developed in the detailed SMP to be provided post-consent. Regarding haulage vehicle movements, it should be noted that the Framework SMP **[REP1-037]** notes: - Ref. paragraph 5.6.1: "*Vehicles are to keep to designated haulage roads only*" - Ref. paragraph 5.6.2: "*Predetermined haulage routes must be agreed within the SMP prior to confirmation of site layouts*."

Question Number	Question to	Question	IP Response (NE)	Applicant Response
		b) Should this requirement be more definitive, for example, it should not happen except for the purposes of stripping operations?	This stripping plan should provide the necessary detail to avoid vehicle movements and compaction during soil handling works. Where avoidance of vehicular movements on topsoil and subsoil is not possible, appropriate mitigation should be implemented, such as track-mats, with reinstatement and/or aftercare including relief of compaction where required.	- Ref. paragraph 6.8.2: "*Over-compaction must be strictly avoided by restricting movement of vehicles over the reinstated area"* Stockpiles will be designed such that trafficking of the pile by vehicles is generally not required and trafficking will not be allowed except for specified operations. As such, it is considered that the Framework SMP [**REP1-037**] secures the necessary measures to protect soils from vehicle movements as relevant. Regarding reference to a detailed stripping plan, it is noted that the Framework SMP **[REP1-037]** sets out the requirements (to be included within the detailed SMP) which fulfil the provisions of such a plan noted in this comment. For example, paragraph 5.7.2 states: *"the SMP must contain details for the following:* - *Maps of topsoil/subsoil types, areas to be stripped and areas to be left in-situ (where applicable);* - *Confirmed methods for soil stripping, stockpiling, respreading and amelioration;* - *Stockpiling locations with specific contents i.e. Topsoil Type A, Subsoil Type B etc; and* - *Schedule of volumes for each material."* Furthermore, paragraph 3.1.2 of the Framework SMP **[REP1-037]** details the guidance in place to protect soil resources during the construction of the Proposed Development, and paragraph 3.13 details what will be included within the detailed SMP including: "*areas of soil to be protected from earthworks and construction activities; areas and types of topsoil/subsoil to be stripped, haulage routes and stockpile locations; and methods for stripping, stockpiling, respreading and ameliorating landscape soils*." As such, it is considered that the requirements of the suggested 'detailed stripping plan' noted are appropriately fulfilled by the measures to be covered within the detailed SMP, as secured by the Framework SMP **[REP1-037]**. The detailed SMP is secured by the Framework SMP **[REP1-037]** (which is to be developed into a detailed SMP, substantially in accordance with the Framework Plan, secured under Requirement 15

Question Number	Question to	Question	IP Response (NE)	Applicant Response
				(soil management plan) at Schedule 2 of the Draft DCO **[REP2-005]**). It is noted that Natural England are a named consultee on Requirement 15(1) of the Draft DCO **[REP2-005]**, and as such Natural England will have the opportunity to review the detailed SMP (which will specify haulage routes, maps of topsoil/subsoil types, methods of soil stripping, and stockpiling locations and types, as set out above) prior to any approval.

Table 3-1f: Applicant's Responses to the responses provided by the Forestry Commission to the ExA First Written Questions

Question Number	Question to	Question	IP Response (FC)	Applicant Response
Forestry Commission				
ENC.1.08	NKDC LCC Forestry Commission Natural England Lincolnshire Wildlife Trust Environment Agency	**Mitigation commitments** Table 8-13 in ES Chapter 8: Ecology and Nature Conservation [APP-033] sets out the proposed development's mitigation commitments. Comment on the extent of mitigation measures proposed and whether they would be sufficient to achieve their objectives?	The proposed level of tree planting and woodland created for this project, at around 200 individual trees represents a very small proportion of the whole site. 200 trees would equate to around 0.1 to 0.2ha of area if they were all being planted on one site. (Approximately 0.016% of the whole site) Therefore it would not meet the Governments definition of woodland; which would typically be: - a minimum area of 0.5ha - a minimum width of 20m - a potential tree canopy cover of at least 20% - a canopy consisting of specimens that meet the definition of trees EN-1 Overarching National Policy Statement for Energy Section 4.3.20 states: *'The Government has set 13 legally binding targets for England under the Environment Act 2021, covering the areas of: biodiversity; air quality; water; resource efficiency and waste reduction; tree and woodland cover; and Marine Protected Areas. Meeting the legally binding targets will be a shared endeavour that will require a whole of government approach to delivery. The Secretary of State should have regard to the ambitions, goals and*	The Applicant considers that the proposed level of planting and landscaping is appropriate for the Proposed Development, balancing the land required for infrastructure whilst also recognising other uses for the land (such as land required for bird mitigation purposes or land that is retained in arable use to allow for ongoing farming operations). It should be noted that the mitigation and enhancement measures proposed (as set out in Section 8-13 of Chapter 8: Ecology and Nature Conservation of the ES **[REP1-019]**) are assessed to result in significant beneficial effects upon woodland and tree habitats (ref. Table 8-18 of Chapter 8: Ecology and Nature Conservation of the ES **[REP1-019]**), whereby it is set out that the natural re-generation of areas surrounding woodland within the DCO Site, along with enhanced planting, will allow the expansion of existing woodlands, as well as providing further natural buffers to existing mature woodlands. New areas of tree planting will be allowed to grow tall and wide to provide maximum benefits for biodiversity and will be created as screening from Proposed Development infrastructure, to improve habitat connectivity (for species such as bats and birds) and increase the area of hedgerow (and woodland habitat) within the DCO Site. Tree planting, however, will be avoided in any areas where there may be ecological features, such as ground-nesting birds, that require open landscapes. This will further secure the long-term future of these woodlands and is in line with the expectations of national and local

Question Number	Question to	Question	IP Response (FC)	Applicant Response
			targets set out in the Government's Environmental Improvement Plan for improving the natural environment and heritage. This includes having regard to the achievement of statutory targets set under the Environment Act.' A greater extent of woodland creation that is well-designed and managed is encouraged as more proportionate to the scale of development in the context of national targets, local biodiversity policies and targets (including the local nature recovery strategy) and could help to avoid the impacts to ancient woodland. There are numerous fragmented mixed deciduous woodlands both within and adjacent to the site. There are no plans to improve habitat connectivity between these fragmented woodlands. Fragmentation is one of the greatest threats to mixed deciduous woodland. Woodlands can suffer loss or deterioration from nearby development through damage to soils, roots and vegetation and changes to drainage and air pollution from an increase in traffic and dust, particularly during the construction phase of a development. Woodlands that become isolated in their landscape and surrounded by development will deteriorate over time if habitat connectivity is not considered and provided. Inclusion of better connectivity and habitat corridors can also help to promote diversity and healthy populations of other species groups such as birds. A study by Copping et al,. 2025 (Solar farm management influences breeding bird responses in an arable dominated landscape) highlighted that well managed solar farms, which included areas of wildflower meadow, habitat corridors (e.g. hedgerows) and wooded areas, can have a high diversity of bird species and biomass. Therefore protection, enhancement and creation of these features will benefit a wide variety of taxa, which can be considered as an integral part of a woodland ecosystem.	planning policy. It should also be noted that, whilst not mandatory for NSIPs, the Applicant has committed to deliver a minimum of 30% biodiversity net gain in habitat units, 50% biodiversity net gain in hedgerow units and 10% biodiversity net gain in watercourse units using DEFRA's Statutory Biodiversity Metric (SBM) (Version 1.0.4) for the Proposed Development, as secured by Requirement 8 of Schedule 2 to the Draft DCO **[REP2-005]**. With the embedded avoidance and mitigation measures as stated in the Chapter 8: Ecology and Nature Conservation of the ES [**REP1-019**] (ref. Table 8-13, see page 8-117), as secured by management plans such as the Framework LEMP [**REP2-021**] and the Framework CEMP [**REP2-013**], there are no potential impacts upon Ancient Woodland (located immediately north of the DCO Site, comprising Tunman Wood and Housham Woods), or other woodland (ref. Table 8-15, see page 8-144). These woodlands are retained (as relevant) and suitably buffered by up to 30m from the Proposed Development. The main loss of habitat is cropland and grassland, with minor loss of hedgerows and trees to facilitate access. The Framework LEMP [**REP2-021**] focuses on the creation of species-rich and permanent grassland, and new hedges to provide valuable new habitat including functioning as screening and habitat connectivity. In summary this comprises: a. Approximately 20km of new native hedgerows; b. Over 200 new trees; c. Approximately 20ha of species rich grassland (outside of Solar PV areas); d. Approximately 5ha of land for natural regeneration; e. Approximately 83ha of permanent grassland for bird mitigation purposes; and f. Approximately 1.8ha of community orchard. Furthermore, please see the Applicant's response below regarding the updates made to the Framework LEMP **[REP2-021]**, submitted to the Examination at Deadline 3, in recognition of comments and discussions with the Forestry Commission, Lincolnshire Wildlife Trust and Natural England. The implementation and long-term management of the 'Natural Regeneration Buffer to Woodland' habitat

Question Number	Question to	Question	IP Response (FC)	Applicant Response
			This once again highlights the need for larger buffers, with greater ecologically focused enhancement and connectivity, which will not only protect the woodlands directly, but will also benefit the species associated to them. Our view is that significantly larger and well designed buffers with an enhanced woodland edge habitat and improved connectivity more broadly (through habitat creation and enhancement) is required to avoid degrading all affected woodland habitat.	type outlined below will protect the Ancient Woodlands adjoining the DCO Site, whilst also benefitting species associated with them. Regarding the comment that there are "*no plans to improve habitat connectivity between these fragmented woodlands*", the hedges, species rich grassland, grassland margins (as opposed to cropland) and woodland buffers will improve habitat connectivity – as assessed in Chapter 8: Ecology and Nature Conservation of the ES **[REP1-019]** (ref. Table 8-18), this results in significant beneficial effects upon woodland and tree habitats. An example is shown on Sheet 3 of 16 of the Landscape Mitigation Plan within the Framework LEMP **[REP2-021]**, which shows an area of previously isolated woodland (adjacent to the DCO Site) surrounded by intensively managed cropland with proposed species rich grassland either side along with new/improved hedgerow connections.
ENC.1.14	Forestry Commission	**Mitigation – ancient woodland** Natural England and Forestry Commission's Standing Advice on Ancient Woodland (NE/FC Standing Advice) recommends for ancient woodlands, proposals should have a buffer zone of at least 15m from the boundary of the woodland to avoid root damage. Table 8-13 in ES Chapter 8: Ecology and Nature Conservation [APP-033] identifies that the proposed development's design includes undeveloped areas of at least 15 metre (m) between woodlands, which includes ancient woodlands, thereby avoiding any direct impact on these habitats. a) Provide an update for when the revised NE/FC Standing Advice is likely to be published. b) Explain why there is reasonable doubt that deterioration of the ancient woodlands could still occur	a) The Standing Advice is still under review and we have no update as to when it may be published. b) A 15m buffer is a minimum starting point designed for tree root impacts. There are other impacts that need to be considered before direct and indirect effects of irreplaceable habitat, and deterioration of condition can be considered avoided. Measures need to be effective for the specific site and proportionate to the project's landscape scale and the cumulative effects on blocks of ancient woodland, connectivity and functionally linked habitat, especially considering the project would almost enclose the ancient woodland on three sides. We have however met with the Developer to discuss their plans and the buffer area around the ancient woodland. We are satisfied that the buffer area is nearer to 30m for most of the site with only some areas encroaching in closer, mostly for access purposes. However concerns remain that none of the planting proposals for the site are located near the ancient woodland which is being afforded a grass buffer.	As noted in the comment, the Applicant has met with the Forestry Commission to discuss this item further. Furthermore, it is noted that the benefits of an Ancient Woodland have also been raised by the Lincolnshire Wildlife Trust within their Deadline 2 Submission **[REP2-055]**, and from subsequent email correspondence from Natural England supporting this point. As such, the Framework LEMP **[REP2-021]** has been updated, submitted to the Examination at Deadline 3, to recognise this request from the Forestry Commission, Lincolnshire Wildlife Trust and Natural England. A new sub-section titled 'Natural Regeneration Buffer to Woodland' has been inserted at Section 5.3.13 of the Framework LEMP **[REP2-021]**, setting out the function, implementation and long-term management of this habitat type, as follows: *"**Natural Regeneration Buffer to Woodland*** *A natural regeneration woodland buffer of up to 30m wide will be provided to the west, south and east of Tunman Wood and Housham Wood that will be encouraged to naturally regenerate from grassland and former cropland. Natural regeneration allows native trees to recolonise areas naturally, offering superior biodiversity, and better climate resilience compared to active tree planting. While planting allows for species selection and faster initial coverage, natural regeneration often results in stronger, better-adapted woodland with*

Question Number	Question to	Question	IP Response (FC)	Applicant Response
		as a result of the proposed development if they were only afforded a 15m minimum buffer and what difference a 30m buffer would make.	The LNRS identifies the fields around the Ancient Woodland for buffering of the ancient woodland which would involve supplementary planting. A larger wooded area, including woodland planting, scrub and woodland edge would provide better protection for the ancient woodland. Species such as bats, birds and invertebrates rely on woodland edge as foraging and commuting habitat. A bigger, better quality and better-connected buffer should be designed and maintained to protect the highly valuable woodland edge and maintain suitable habitat. If the habitat becomes unsuitable for woodland associated species (e.g. invertebrate woodland pollinators), this could have a knock-on effect on the woodland health and could lead to further degradation.	*higher carbon sequestration potential. Outside of this buffer within and surrounding the solar infrastructure will be grassland habitat that will provide additional benefits for biodiversity, including pollinators and new foraging habitats for species associated with the adjacent woodland*s *<u>Function</u>* *Natural regeneration will further increase biodiversity, create a buffer between the Site and the woodlands and provide an opportunity to observe the gradual structural transition from grassland to scrub and woodland habitats.* *<u>Implementation</u>* *During construction the areas identified for natural regeneration will be protected to ensure the soils do not become compacted and the natural process required to develop the area can operate. Additional fencing may be required during establishment to restrict grazing pressures (e.g. from rabbits and deer).* *<u>Long-term management</u>* *These areas are not expected to be subject to routine management. Annual inspection and survey during establishment at agreed intervals (as set out at paragraph 7.1.9) will be carried out to record growth and development of the area. If required, litter, rubbish and debris will also be removed and mowing, and cutting will be used to manage scrub / trees at the edge of the buffer where required."* The implementation of this habitat type aligns with the request of the buffer at the boundary of the DCO Site with the adjoining Ancient Woodland and Tunman and Housham Wood, with the corresponding enhancement and protection of the woodland. Furthermore, the Landscape Mitigation Plan, which forms Appendix A of the Framework LEMP **[REP2-021]**, has been updated (ref. Sheet 1) to reflect this, illustrating the naturally regenerating buffer area around Tunman Wood and Housham Wood to be implemented. The provision of a detailed LEMP, which is to be substantially in accordance with the Framework LEMP, is secured under

Question Number	Question to	Question	IP Response (FC)	Applicant Response
				Requirement 8 of Schedule 2 to the Draft DCO **[REP2-005]**. By virtue of the same Requirement, the detailed LEMP must be submitted to the relevant planning authority for approval in consultation with Lincolnshire County Council, Natural England and the Environment Agency. It must be implemented as approved and maintained throughout the operational lifetime of the Proposed Development.

Table 3-1g: Applicant's Responses to the responses provided by National Grid Electricity Transmission to the ExA First Written Questions

Question Number	Question to	Question	IP Response (NGET)	Applicant Response
National Grid Electricity Transmission				
GC.1.13	Applicant and NGET	Section 3.7 of ES Chapter 3: The Proposed Development [APP-028] identifies that the proposed development would connect to the national electricity transmission network at National Grid's proposed substation near Navenby, which is subject to a separate planning application. Provide an update on the anticipated date for submitting a planning application for the proposed Navenby substation and how that compares with the timings described in paragraph 3.4.2 of the Grid Connection Statement [APP-200]	NGET is currently due to submit the planning application for the proposed Navenby substation in mid-March 2026. NGET understands that the timings in paragraph 3.4.2 of the Grid Connection Statement were based upon the planning application for the proposed Navenby substation being submitted in late 2025. The change in the planning application submission date from late 2025 to mid- March 2026 will likely result in a corresponding change to the timings in paragraph 3.4.2 of the Grid Connection Statement.	Notwithstanding NGET confirmed in their Deadline 2 submission [**REP2-051**] that the planning application for the proposed Navenby substation will be submitted to NKDC in mid-March 2026, the position was further updated by NKDC who stated in Issue Specific Hearing 4 that the planning application would be submitted at the end of April 2026. Based on the planning application requiring an Environmental Impact Assessment, the target determination timescale would be 16 weeks from submission. The Applicant would like to reiterate that it does not have any information beyond that which is in the public domain, and that this anticipated timeline based on National Grid's estimates, although accurate at the time of writing, may be subject to change. As stated above, according to National Grid, the currently estimated completion date remains in late 2029 which is around 3.5 years ahead of the current planned connection date for the Proposed Development. The Applicant therefore assesses that any timing changes as currently identified related to early stages of development as described in Paragraph 3.4.2 of the Grid Connection Statement [**APP-200]** are highly unlikely to impact the Proposed Development.
GC.1.14	Applicant and NGET	If the proposed development was to be consented but the proposed Navenby substation did not receive permission and/or the approved substation was not built, what implications would the unavailability of a new substation at Navenby have for the delivery of the proposed solar farm?	NGET considers that the deliverability of the proposed solar farm in the event that the proposed Navenby substation did not receive planning permission or was not built is a matter for the Applicant to clarify.	As set out previously, there are no obvious reasons known to the Applicant why planning permission for the Navenby substation and associated overhead lines to connect it into the national grid would not be granted. The Applicant has prepared a Technical Note on the proposed National Grid substation near Navenby, submitted to the Examination at Deadline 3, which includes a high level policy appraisal of the proposed Navenby substation, which supports the Applicant's position. Under the commercial agreement between the Applicant and NGET, should no new substation at Navenby be available, it would fall to NGET to find an alternative point of connection for the Proposed Development.

Appendix A Figures

Revision: 01 Drawn: HW Checked: AM Approved: MP Date: 2026-03-02

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Fosse Green Energy

PROJECT

Fosse Green Energy

CLIENT

Fosse Green Energy Ltd

CONSULTANT

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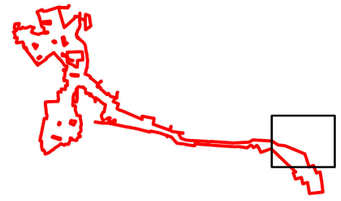
www.aecom.com

LEGEND

- DCO Site Boundary
- Local Wildlife Site (LWS) - Boothby Graffoe Road Verge
- Local Wildlife Site (LWS) Boothby Graffoe Road Verge - 100m Buffer



NOTES

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LEGISLATION

Regulation 5(2)(a) Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009.

ISSUE PURPOSE

Examination Submission

FIGURE TITLE

Proximity of Local Wildlife Sites to the Proposed Development - Boothby Graffoe Road Verges

FIGURE NUMBER	REV.
Figure 1a	01

DOCUMENT REFERENCE

EN010154/EXAM/9.22

Revision: 01 Drawn: HW Checked: AM Approved: MP Date: 2026-03-02

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LEGEND

- DCO Site Boundary
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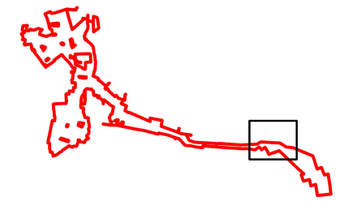
- Local Wildlife Site (LWS) High Dike, Coleby Mill to Harmston Verges - 100m Buffer



NOTES

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© Natural England copyright. Contains Ordnance Survey data © Crown Copyright and database right 2024, NB This national dataset is "indicative" not "definitive". Definitive information can only be provided by individual local authorities and you should refer directly to their information for all purposes that require the most up to date and complete dataset.

LEGISLATION

Regulation 5(2)(a) Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009.

ISSUE PURPOSE

Examination Submission

FIGURE TITLE

Proximity of Local Wildlife Sites to the Proposed Development - High Dike, Coleby Mill to Harmston Verges

FIGURE NUMBER	REV.
Figure 1b	01

DOCUMENT REFERENCE

EN010154/EXAM/9.22

Revision: 01 Drawn: HW Checked: AM Approved: MP Date: 2026-03-02

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LEGEND

- DCO Site Boundary
- Local Wildlife Site (LWS) - Gorse Lane
- Local Wildlife Site (LWS) Gorse Lane - 100m Buffer

NOTES

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LEGISLATION

Regulation 5(2)(a) Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009.

ISSUE PURPOSE

Examination Submission

FIGURE TITLE

Proximity of Local Wildlife Sites to the Proposed Development - Gorse Lane

FIGURE NUMBER	REV.
Figure 1c	01

DOCUMENT REFERENCE

EN010154/EXAM/9.22

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Revision: 01 Drawn: HW Checked: AM Approved: MP Date: 2026-03-02

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LEGEND

- DCO Site Boundary
- Local Wildlife Site (LWS) - Navenby Heath Road Verges
- Local Wildlife Site (LWS) Navenby Heath Road Verges - 100m Buffer

NOTES

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LEGISLATION

Regulation 5(2)(a) Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009.

ISSUE PURPOSE

Examination Submission

FIGURE TITLE

Proximity of Local Wildlife Sites to the Proposed Development - Navenby Heath Road Verges

FIGURE NUMBER	REV.
Figure 1d	01

DOCUMENT REFERENCE

EN010154/EXAM/9.22

Appendix B Environmental Product Declarations

epd-norge.no
The Norwegian EPD Foundation

ENVIRONMENTAL PRODUCT DECLARATION

in accordance with ISO 14025 and EN 15804+A1

Owner of the declaration:	SunPower
Program operator:	The Norwegian EPD Foundation
Publisher:	The Norwegian EPD Foundation
Declaration and registration number:	NEPD-3087-1726-EN
Issue date:	09.09.2021
Valid to:	09.09.2026

MAXEON 3 MONO-CRYSTALLINE PHOTOVOLTAIC MODULE

SunPower

SUNPOWER®

www.epd-norge.no

General information

Product

MAXEON 3
MONO-CRYSTALLINE PHOTOVOLTAIC MODULE

Program holder

The Norwegian EPD Foundation

Post Box 5250 Majorstuen, 0303 Oslo, Norway
Phone: (+47) 23 08 80 00
e-mail: post@epd-norge.no

Declaration number

NEPD-3087-1726-EN

This declaration is based on Product Category Rules:

NPCR 029 version 1.1

Statements

The owner of the declaration shall be liable for the underlying information and evidence.
EPD Norway shall not be liable with respect to manufacturer, life cycle assessment data and evidences.

Declared unit:

1m² of mono-crystalline solar panel

Declared unit with option:

N/A

Functional unit:

1 Wp of manufactured photovoltaic module, from cradle-to-grave, with activities needed for a study period for a defined reference service life (≥80% of the labelled power output)

Verification:

Independent verification of the declaration and data, according to ISO14025:2010

☐ internal ☒ external

[redacted]

Third party verifier:

Michael M. Jenssen, Asplan Viak AS
(Independent verifier approved by EPD Norway)

Owner of the declaration

SunPower

Manufacturer

SunPower

12 Allée du Levant, 69890 La Tour de Salvagny, France
Phone: (+[redacted]
e-mail: [redacted]@sunpower.com
Web: www.sunpower.com

Place of production:

Prolongación Lazaro Cardenas, Agustín Sanguines 3101, Huertas de La Progreso, 21188 Mexicali, B.C
Mexico

Management system:

ISO 14001, ISO 9001

Organisation no:

FR52344584818

Issue date

09.09.2021

Valid to

09.09.2026

Year of study:

2020

Comparability:

EPD of construction products may not be comparable if they do not comply with EN15804 and are seen in a building context

The EPD has been worked out by:

EVEA
11 rue Voltaire
44000 NANTES
FRANCE

Approved [redacted]

Managing Director of EPD-Norway

Product

Product description:
400Wp mono-crystalline solar photovoltaic module with back-contact conductivity, solid metal backing and thick connectors. The panels are designed to be installed on roofs or as stand-alone systems for local power production.

The 2 other products covered by the PEP differ only in colour for the BLK product and the connector type for the COM product.

As the differences between products is minor, no averaging has been performed.

To produce their panels, SunPower sources silicon wafers from Norway and the US, which are sent to their factory in the Phillipines to produce the solar cells. These cells are then sent to their factory in Mexico, where they are assembled with the backsheet, frame and electrical connections to produce the finished solar module.

Technical data:
The panel considered for this EPD has a power rating of 400W.
1 complete panel has a mass of 19 kg without packaging.
The packaging per panel weighs 1.36 kg.
The overall dimensions are 1690x1046x40 mm.

Certified: IEC 61215, IEC 61730 Class 1 fire rated per UNI 9177

Market:
Norway / Europe / World

Reference service life:
25 years

Product specification
Sold as individual panels, with an effective surface area of 1.77m². The packaging consists of LDPE film, PP, PET and a cardboard box, and the panels are delivered on a wooden pallet.

The product consists of the following materials per functional unit:

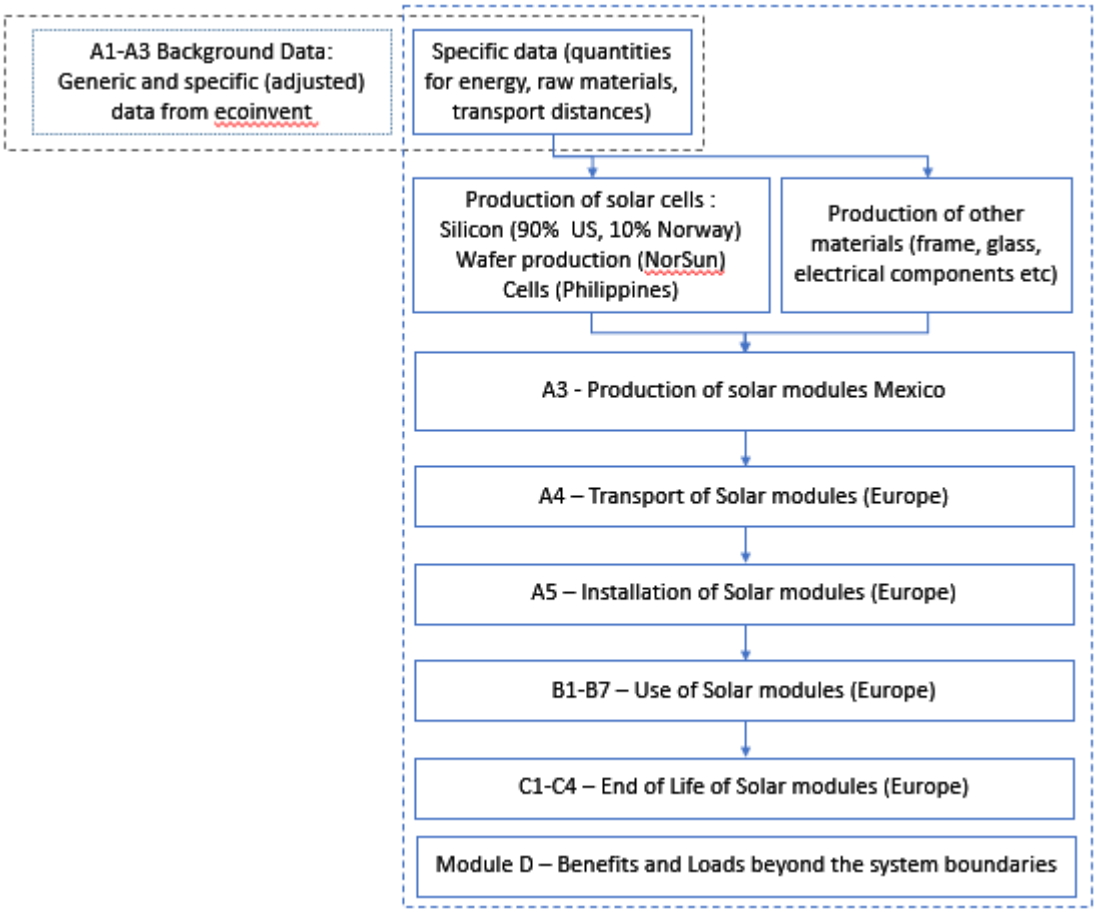
Materials	kg / FU	%
Copper	1,63E-04	0,31%
Tin	6,52E-06	0,01%
Silver	2,72E-07	0,00%
Cell	1,19E-03	2,29%
Label	1,23E-05	0,02%
Junction BOX	5,49E-04	1,06%
Backsheet PET	8,14E-04	1,57%
EVA	3,52E-03	6,80%
Aluminium	3,99E-03	7,72%
Solar glass	3,81E-02	73,58%
Packaging : LDPE Film	3,85E-07	0,00%
Packaging : PP	4,09E-04	0,79%
Packaging : PET	8,14E-04	1,57%
Packaging : Cardboard	2,56E-05	0,05%
Packaging : Pallet	2,17E-03	4,20%

LCA: Calculation rules

Functional unit:
1 Wp of manufactured photovoltaic module, from cradle-to-grave, with activities needed for a study period for a defined reference service life (≥80% of the labelled power output)

Declared unit:
1 m² of photovoltaic module – 1 m² = 226 Wp

System boundary:
The flow chart for the life cycle of SunPower Maxeon panels is shown below.



Data quality:
Specific data provided by SunPower for the year 2019.

The procedures defined by the PCR regarding the data quality have been respected according to the following criteria:
• Temporal factor: LCI data has been sourced from the database ecoinvent 3.6, which was updated in 2019, and ELCD, updated in 2018. As such all LCI data has been updated within the last 10 years All primary data dates from product specific data collections from within the last 5 years.
• Geographical factor: Datasets appropriate to the location of the modelled flow have been selected when available. Certain datasets have been modified to better reflect the specific energy consumptions (see Appendix 2) of certain countries which are not available in the database. When specific data for a country is not available and could not be created, European processes were selected for flows attributed to Europe, and Global or Rest of World flows were used for all other flows.
• Technological factor: Datasets have been selected according to the actual processes used by the manufacturer. For generic products where no upstream data is available (e.g. packaging), manufacturing has been modelled according current practices.

Allocation:
The allocation is made in accordance with the provisions of ISO 14025. Incoming energy and water and waste production in-house is allocated equally among all products through mass allocation. Effects of primary production of recycled materials allocated to the main product in which the material was used. The recycling process and transportation of the material is allocated to this analysis.

Cut-off criteria:
All major raw materials and all the essential energy is included. The production process for raw materials and energy flows that are included with very small amounts (<1%) are not included – this included certain packaging materials used for the transport of components to the main production facility. The infrastructure relating to the manufacturing facility has also been exclude as it has negligeable impacts when considering the quantity of panels produced.

This cut-off rule does not apply for hazardous materials and substances.

LCA: Scenarios and additional technical information

The following information describe the scenarios in the different modules of the EPD. All data is provided per functional unit
The transports step A4 covers the transport from the factory in Mexico to Europe by boat and truck.

Transport from production place to assembly/user (A4)

Type	Capacity utilisation (incl. return) %	Type of vehicle	Distance km	Fuel/Energy consumption	Value (tkm)
Truck	36	EURO5 16-32T	1000	0.0375 kg/tkm	0.09
Boat	50	Transoceanic Freight	8800	0.002 kg/tkm	0.79

Assembly (A5)
The installation of the product requires some metallic fasteners (screws).
The waste from the products packaging is counted in this stage.

	Unit	Value
Auxiliary (screws)	kg	2.34E-05
Material loss	kg	-
Output materials from waste treatment	kg	3.42E-03

Operational energy (B6) and water consumption (B7)
The panels produce electricity during their lifetime but require no inputs/outputs.

To calculate the expected energy production over the lifetime of the panels, the following formula may be used:

$$Energy = \sum_{k=1}^{25} P_{yield} \times \frac{P_{rated}}{1000} \times (\eta_r - 0.0025k)$$

Where:

Energy = Total energy produced by one panel (kWh)
P_{yield} = Average electricity produced per kWp (kWh/kWp – values available from IEC 61853-3)
P_{rated} = Energy rating of the panel (kWp)
η_r = 1 - Efficiency of the panel, assumed to consistently decrease by 0,25% per year for 25 years (initial value at k=1 of 99,75% efficiency assumed for the degradation during the first year)

End of Life (C1, C3, C4)
The end of life scenario taken into account is that of the program PVCYCLE, to which SunPower subscribe. Panels are sent for processing and separated into their component parts for recycling or elimination.

	Unit	Value
Hazardous waste disposed	kg	-
Collected as mixed construction waste	kg	4,83E-02
Reuse	kg	-
Recycling	kg	4,34E-02
Energy recovery	kg	4,88E-03
To landfill	kg	1,23E-05

Transport to waste processing (C2)

Type	Capacity utilisation (incl. return) %	Type of vehicle	Distance km	Fuel/Energy Consumption	Value (tkm)
Truck	36	EURO5 16-32T	100	0.0375 kg/tkm	0.084

LCA: Results

The LCA results show the environmental impacts and resource input and output flows calculated according to EN 15804:2012+A1.
The results are shown per functional unit, which for this declaration is 1Wp, as well as per declared unit, which for this declaration is 1 m².
The LCA results have been calculated using the LCA software SimaPro 9.

System boundaries (X=included, MND=module not declared, MNR=module not relevant)

Product stage			Assembly stage		Use stage							End of life stage				Beyond the system boundaries
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	X	MNR	MNR	MNR	MNR	MNR	MNR	MNR	MNR	X	X	X	X

Environmental impact – Functional Unit

Parameter	Unit	A1 – A3	A4	A5	C2	C3	C4	D
GWP	kg CO_2 -eqv	3,42E-01	1,35E-02	8,56E-04	7,97E-04	5,73E-04	6,39E-06	-1,38E-01
ODP	kg CFC11-eqv	3,47E-07	2,28E-09	2,07E-11	1,46E-10	5,87E-11	4,56E-14	-9,02E-09
POCP	kg C_2H_4 -eqv	2,89E-04	1,13E-05	1,26E-07	4,15E-07	1,65E-07	2,58E-10	-4,84E-05
AP	kg SO_2 -eqv	1,86E-03	1,33E-04	7,42E-07	2,55E-06	2,18E-06	2,74E-09	-5,57E-04
EP	kg PO_4^{3-}-eqv	2,60E-04	1,37E-05	1,55E-07	4,15E-07	3,05E-07	8,93E-10	-6,88E-05
ADPM	kg Sb-eqv	5,23E-05	2,39E-07	3,69E-09	2,18E-08	3,27E-09	3,58E-12	-1,43E-05
ADPE	3,95E+00	1,90E-01	2,06E-03	1,19E-02	5,37E-03	3,83E-06	-1,35E+00	3,83E-06

GWP Global warming potential; ODP Depletion potential of the stratospheric ozone layer; POCP Formation potential of tropospheric photochemical oxidants; AP Acidification potential of land and water; EP Eutrophication potential; ADPM Abiotic depletion potential for non fossil resources; ADPE Abiotic depletion potential for fossil resources

Resource use – Functional Unit

Parameter	Unit	A1 – A3	A4	A5	C2	C3	C4	D
RPEE	MJ	1,41E+00	3,53E-03	1,81E-04	1,71E-04	1,73E-03	1,31E-07	-4,73E-01
RPEM	MJ	4,11E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
TPE	MJ	1,61E+00	3,53E-03	1,81E-04	1,71E-04	1,73E-03	1,31E-07	-4,73E-01
NRPE	MJ	4,56E+00	1,95E-01	2,40E-03	1,21E-02	9,37E-03	4,01E-06	-1,55E+00
NRPM	MJ	2,09E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
TRPE	MJ	4,77E+00	1,95E-01	2,39E-03	1,21E-02	9,37E-03	4,01E-06	-1,55E+00
SM	kg	2,85E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
W	m^3	1,63E-02	2,17E-05	2,19E-06	1,25E-06	1,11E-05	1,43E-08	-1,15E-03

RPEE Renewable primary energy resources used as energy carrier; RPEM Renewable primary energy resources used as raw materials; TPE Total use of renewable primary energy resources; NRPE Non renewable primary energy resources used as energy carrier; NRPM Non renewable primary energy resources used as materials; TRPE Total use of non renewable primary energy resources; SM Use of secondary materials; RSF Use of renewable secondary fuels; NRSF Use of non renewable secondary fuels; W Use of net fresh water

End of life - Waste – Functional Unit

Parameter	Unit	A1 – A3	A4	A5	C2	C3	C4	D
HW	kg	2,51E-02	1,46E-04	3,44E-05	7,81E-06	3,28E-05	3,28E-06	-1,34E-03
NHW	kg	1,77E-01	7,54E-03	4,35E-04	6,38E-04	1,77E-04	1,56E-07	-3,92E-02
RW	kg	1,67E-05	1,31E-06	1,29E-08	8,28E-08	6,79E-08	1,42E-11	-4,46E-06

HW Hazardous waste disposed; NHW Non hazardous waste disposed; RW Radioactive waste disposed

End of life - Output flow – Functional Unit

Parameter	Unit	A1 – A3	A4	A5	C2	C3	C4	D
CR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MR	kg	3,76E-03	0,00E+00	2,21E-03	0,00E+00	4,32E-02	0,00E+00	0,00E+00
MER	kg	1,61E-04	0,00E+00	5,68E-04	0,00E+00	4,88E-03	0,00E+00	0,00E+00
EEE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
ETE	MJ	5,97E+00	1,99E-01	2,58E-03	1,23E-02	1,11E-02	4,14E-06	-2,02E+00

CR Components for reuse; MR Materials for recycling; MER Materials for energy recovery; EEE Exported electric energy; ETE Exported thermal energy

Reading example: 9,0 E-03 = $9,0*10^{-3}$ = 0,009

Environmental impact – Declared Unit (1 m²)

Parameter	Unit	A1 – A3	A4	A5	C2	C3	C4	D
GWP	kg CO_2 -eqv	7,72E+01	3,04E+00	1,93E-01	1,80E-01	1,29E-01	1,45E-03	-3,12E+01
ODP	kg CFC11-eqv	7,84E-05	5,15E-07	4,67E-09	3,30E-08	1,33E-08	1,03E-11	-2,04E-06
POCP	kg C_2H_4 -eqv	6,53E-02	2,56E-03	2,84E-05	9,37E-05	3,73E-05	5,84E-08	-1,09E-02
AP	kg SO_2 -eqv	5,87E-02	3,09E-03	3,51E-05	9,38E-05	6,90E-05	2,02E-07	-1,55E-02
EP	kg PO_4^{3-}-eqv	5,87E-02	3,09E-03	3,51E-05	9,38E-05	6,90E-05	2,02E-07	-1,55E-02
ADPM	kg Sb-eqv	1,18E-02	5,39E-05	8,35E-07	4,93E-06	7,38E-07	8,08E-10	-3,23E-03
ADPE	8,92E+02	4,29E+01	4,65E-01	2,69E+00	1,21E+00	8,65E-04	-3,06E+02	8,65E-04

GWP Global warming potential; ODP Depletion potential of the stratospheric ozone layer; POCP Formation potential of tropospheric photochemical oxidants; AP Acidification potential of land and water; EP Eutrophication potential; ADPM Abiotic depletion potential for non fossil resources; ADPE Abiotic depletion potential for fossil resources

Resource use – Declared Unit (1 m²)

Parameter	Unit	A1 – A3	A4	A5	C2	C3	C4	D
RPEE	MJ	3,19E+02	7,98E-01	4,09E-02	3,87E-02	3,90E-01	2,95E-05	-1,07E+02
RPEM	MJ	9,29E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
TPE	MJ	3,64E+02	7,98E-01	4,09E-02	3,87E-02	3,90E-01	2,95E-05	-1,07E+02
NRPE	MJ	1,03E+03	4,41E+01	5,41E-01	2,74E+00	2,12E+00	9,06E-04	-3,50E+02
NRPM	MJ	4,73E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
TRPE	MJ	1,08E+03	4,41E+01	5,41E-01	2,74E+00	2,12E+00	9,06E-04	-3,49E+02
SM	kg	6,45E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
W	m^3	3,69E+00	4,91E-03	4,96E-04	2,83E-04	2,50E-03	3,22E-06	-2,61E-01

RPEE Renewable primary energy resources used as energy carrier; RPEM Renewable primary energy resources used as raw materials; TPE Total use of renewable primary energy resources; NRPE Non renewable primary energy resources used as energy carrier; NRPM Non renewable primary energy resources used as materials; TRPE Total use of non renewable primary energy resources; SM Use of secondary materials; RSF Use of renewable secondary fuels; NRSF Use of non renewable secondary fuels; W Use of net fresh water

End of life - Waste – Declared Unit (1 m²)

Parameter	Unit	A1 – A3	A4	A5	C2	C3	C4	D
HW	kg	5,68E+00	3,29E-02	7,78E-03	1,76E-03	7,41E-03	7,42E-04	-3,04E-01
NHW	kg	3,99E+01	1,70E+00	9,83E-02	1,44E-01	4,01E-02	3,52E-05	-8,86E+00
RW	kg	3,78E-03	2,96E-04	2,91E-06	1,87E-05	1,53E-05	3,21E-09	-1,01E-03

HW Hazardous waste disposed; NHW Non hazardous waste disposed; RW Radioactive waste disposed

End of life - Output flow – Declared Unit (1 m²)

Parameter	Unit	A1 – A3	A4	A5	C2	C3	C4	D
CR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MR	kg	8,49E-01	0,00E+00	5,00E-01	0,00E+00	9,77E+00	0,00E+00	0,00E+00
MER	kg	3,63E-02	0,00E+00	1,28E-01	0,00E+00	1,10E+00	0,00E+00	0,00E+00
EEE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
ETE	MJ	1,35E+03	4,49E+01	5,82E-01	2,78E+00	2,51E+00	9,35E-04	-4,56E+02

CR Components for reuse; MR Materials for recycling; MER Materials for energy recovery; EEE Exported electric energy; ETE Exported thermal energy

Additional Norwegian requirements

Greenhouse gas emission from the use of electricity in the manufacturing phase

National production mix from import, medium voltage (production of transmission lines, in addition to direct emissions and losses in grid) of applied electricity for the manufacturing process (A3).

Data source	Process	Amount	Unit
Mexico: Ecoinvent v3.6	Electricity, medium voltage {MX}| market for | Cut-off, U	0.583	CO_2-eqv/kWh
Phillipines: Ecoinvent v3.6	Electricity, medium voltage {PH}| market for electricity, medium voltage | Cut-off, U	0.723	CO_2-eqv/kWh
Germany: Ecoinvent v3.6	Electricity, medium voltage {DE}| market for | Cut-off, U	0.168	CO_2-eqv/kWh
Norway: Ecoinvent v3.6	Electricity, medium voltage {NO}| market for | Cut-off, U	0.020	CO_2-eqv/kWh
USA: Ecoinvent v3.6	Electricity, medium voltage {US}| market group for | Cut-off, U	0.558	CO_2-eqv/kWh

Dangerous substances

☑ The product contains no substances given by the REACH Candidate list or the Norwegian priority list.

Indoor environment

No tests have been carried out on the product concerning indoor climate.

Carbon footprint

Carbon footprint has not been worked out for the product.

Bibliography

ISO 14025:2010	*Environmental labels and declarations - Type III environmental declarations - Principles and procedures*
ISO 14044:2006	*Environmental management - Life cycle assessment - Requirements and guidelines*
EN 15804:2012+A1:2013	*Sustainability of construction works - Environmental product declaration - Core rules for the product category of construction products*
ISO 21930:2007	*Sustainability in building construction - Environmental declaration of building products*
LCA Report	*SUNPOWER MAXEON 3 MONO-CRYSTALLINE PHOTOVOLTAIC MODULE REPORT (EVEA, 2021)*
LCA Report	*Life Cycle Assessment – Modules production in Mexico, Ensenada (Solstyce SAS, 2018)*
PCR	*NPCR 029 version 1.1* *PCR – Part B for photovoltaic modules used in the building and construction industry, including production of cell, wafer, ingot block, solar grade silicon, solar substrates, solar superstrates and other solar grade semiconductor materials*
Other references	-

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Jinko Solar Holding Co., Ltd

ENVIRONMENTAL PRODUCT DECLARATION

Product name:
Mono-crystalline silicon photovoltaic (PV) modules

Site Plants:
Shangrao, Jiangxi Province, China
Haining, Zhejiang Province, China

in compliance with ISO 14025

Program Operator	EPDITALY
Publisher	EPDITALY
Declaration Number	V. 1
Registration Number	EPDITALY0156
Issue Date	16/06/2021
Valid to	16/06/2026

1. GERNERAL INFORMATIONS

EPD OWNER:	Jinko Solar Holding Co., Ltd Add: 1 Jingke Road. Shangrao Economic Development Zone. Jiangxi Province, China
PRODUCT NAME:	Mono-crystalline silicon photovoltaic (PV) modules
PRODUCTION SITE:	Shangrao, Jiangxi Province, P.R.C. and Haining, Zhejiang Province, P.R.C.
FIELD OF APPLICATION:	Electricity generation
PROGRAM OPERATOR:	EPDITALY (www.epditaly.it) Add: via Gaetano De Castillia n° 10 - 20124 Milano, Italy
CPC CODE:	171 “Electrical energy”
COMPANY CONTACT:	[redacted]@jinkosolar.com)
EXTERNAL AUDIT:	This declaration has been developed referring to EPDItaly, following the General Program Instruction; further information and the document itself are available at: www.epditaly.it. Independent verification of the declaration and data, according to EN ISO 14025:2010. ☐ INTERNAL ☒ EXTERNAL Third party verifier: Michele Paleari, ICMQ spa, Via Gaetano De Castillia, 10 202124 MILANO
LCA Consultant	This life cycle assessment was conducted in accordance with ISO 14044 and the reference PCR by: Ecovane Environmental Co., Ltd (www.ecovane.cc) TÜV Rheinland (China)（www.tuv.com）
PRODUCT CATEGORY RULES (PCR):	EPDItaly014: Core PCR for electricity produced by photovoltaic modules (March 2020, Revision REV.1)
COMPARABILITY:	EPDs from different programs may not be comparable. Full conformance with a PCR allows EPD comparability only when all stages of a life cycle have been considered. However, variations and deviations are possible. Example of variations: Different LCA software and background LCI datasets may lead to differences results for upstream or downstream of the life cycle stages declared.
LIABILITY:	The owner of the declaration will be responsible for the information and supporting evidence. EPDItaly disclaims any liability regarding the manufacturer's information data.
REFERENCE DOCUMENT:	This declaration is based on the EPDItaly regulation, available on the website www.epditaly.com

2. COMPANY INTRODUCTION

Jinko Solar (NYSE: JKS) is one of the largest and most innovative solar module manufacturers in the world. Jinko Solar distributes its solar products and sells its solutions and services to a diversified international utility, commercial and residential customer. As an industry leader in module efficiency, yield, performance and reliability, Jinko Solar has built a vertically integrated solar product value chain, with an integrated annual capacity of 17.5 GW for mono wafers, 10.6 GW for solar cells, and 16 GW for solar modules, as of March 31, 2020.

JinkoSolar has 9 productions facilities globally, 14 overseas subsidiaries in Japan, South Korea, Vietnam, India, Turkey, Germany, Italy, Switzerland, United States, Mexico, Brazil, Chile and Australia, and global sales teams in China, United Kingdom, France, Spain, Bulgaria, Greece, Ukraine, Jordan, Saudi Arabia, Tunisia, Morocco, Kenya, South Africa, Costa Rica, Colombia, Panama, Kazakhstan, Malaysia, Myanmar, Sri Lanka, Thailand, Vietnam, Poland and Argentina.

3. SCOPE AND TYPE OF EPD

3.1 Scope of EPD

The entire life cycle stages of the product (type of EPD: « cradle-to-grave ») are considered in the LCA study, which include all stages from extraction of raw materials, manufacturing, transportation and installation, maintenance and end-of-life. Table 1 below shows the various stages that are included in this LCA study. The terms of defining life cycle stages from the core PCR, EN15804 and EN50693 are adopted and shown respectively.

Table 1 Life Cycle Stages

Life cycle stages according to EPDItaly PCR	*Life cycle stages according to EN50693*	-	Life cycle stages according to EN15804	
Upstream Module	*Manufacturing Stage*	X	A1	Raw material supply
		X	A2	Transport (to the manufacturer)
Core Module		X	A3	Manufacturing
	Distribution Stage	X	A4	Transport
	Installation Stage	X	A5	Construction – installation process
	Use Stage	X	B1	Use
		X	B2	Maintenance
		X	B3	Repair
		X	B4	Replacement
		X	B5	Refurbishment
		X	B6	Operational energy use
		X	B7	Operational water use
	De-installation Stage	X	C1	De-construction and demolition
Downstream Module	*End of Life Stage*	X	C2	Transport (to waste processing)
		X	C3	Waste processing
		X	C4	Disposal
		X		Voltage drop of electricity distribution to the grid
	Benefits and avoided loads beyond the product system boundary	MND	D	reuse, recovery and/or recycling potentials
Note: X=Declared Module, MND=Module not Declared in this LCA study				

3.2 Type of EPD

This EPD is a product-specific EPD. The declaration covers in total 5 series of PV modules, including JKMXXXM-72H-TV, JKMXXXM-72H-V, JKMXXXM-7RL3-V, JKMXXXM-7RL3-TV and JKMXXXM-78H-V.

3.3 Geographical Validity

The PV modules that are analyzed within this study are manufactured in two factories located in Shangrao, Jiangxi Province and Haining, Zhejiang Province. The reference market is "global".

3.4 Database used

In this study, generic data for materials, energy as well as waste disposal and transportation were taken from the LCI-database Ecoinvent 3.4 with adaptation of regional energy and material data by Ecovane.

3.5 Software

For the modeling and calculation, the LCA-software SimaPro 9.1 was used.

4. DETAILED PRODUCT DESCRIPTION

4.1 Description of the Product

Jinko Solar produces more than a dozen series of mono-crystalline silicon photovoltaic (PV) modules. Within this project, in total there are 5 series of PV modules that were analyzed, including JKMXXXM-72H-TV, JKMXXXM-72H-V, JKMXXXM-7RL3-V, JKMXXXM-7RL3-TV and JKMXXXM-78H-V.

The module series under analysis can generate maximum power output of up to 475Wp (brand model Tiger), and up to 23.7% module efficiency. All the high energy density modules use innovative multi-wire 9BB and TR tiling ribbon technology to reach significantly improved performance with conversion efficiency. In addition to their unparalleled power generation performance and outstanding output temperature coefficient, other advantages of the Tiger Pro module series include lower power attenuation rate (at 2% for the first year) and better open-circuit voltage.

4.2 Technical Data

Table 2 Technical Data

Series (brand name)	Dimensions (inch^3)	Module efficiency (%)	Power output range (W)
JKMXXXM-72H-TV (Swan)	79.96*39.69*1.18	21.8-22.5	385-395
JKMXXXM-72H-V (Cheetah)	79.06*39.45*1.18	22.4-22.7	395-400
JKMXXXM-7RL3-V (Tiger)	85.91*40.51*1.57	22.7-23.3	455-475
JKMXXXM-7RL3-TV (Tiger)	86.81*40.63*1.38	22.5-23.7	450-470
JKMXXXM-78H-V (Cheetah)	85.28*39.45*1.38	21.6-22.7	435-445

Note: H: half-cut series module, V: module with 1500V, TV: SWAN bifacial module

4.3 Material Composition

Table 3 Material Composition

Components	Main substance	CAS No. of main substance	Units	JKMxx xM-72H-V	JKMxxx M-72H-TV	JKMxxx M-7RL3-V	JKMxxx M-7RL3-TV	JKMxx xM-78H-V
Solar cell	Si	7440-21-3	pcs	72	72	78	78	78
Junction box	Cu	7440-50-8	kg	0.2107	0.2107	0.2107	0.2107	0.2107
Bus bar	Cu	7440-50-8	kg	0.1751	0.1706	0.1752	0.1752	0.2051
Aluminum Frame	Al	7429-90-5	kg	2.7368	2.84	2.92	2.96	2.954
Solar glass	$Na_2O{\cdot}nSiO_2$	1344-09-8;106985-35-7	kg	15.65	16.22	17.84	17.93	16.81
Back sheet	$(C_{10}H_8O_4)n$	25038-59-9	kg	0.8984	0.96	0.98	0.99	0.9654
EVA	$(C_2H_4)x.(C_4H_6O_2)y$	24937-78-8	kg	0.0045	0	2.545	2.545	1.9357
Silica gel	SiO_2	112926-00-8	kg	0.2507	0.2892	0.3372	0.3372	0.2892
Solder	Sn	7440-31-5	kg	0.002	0.002	0.002	0.002	0.002
POE	/	/	kg	0	0.8	0	0	0

4.4 Description of The Production Process

The solar module product under study includes five series models (see Table 2). All of the various models are manufactured following the same manufacturing processes.

A flowchart depicting the production process stages of Jinko Solar PV module products is shown in Figure 1 below. For simplification purpose, only main stages of manufacturing are presented, raw material, auxiliary processes considered in the LCA but not shown in the flow chart below include:

- Raw and auxiliary material production and transportation;
- Recycling of waste materials;
- Waste water and off-gas treatment;
- Water recycling and reuse system;
- Supply of natural gas/water/electricity.

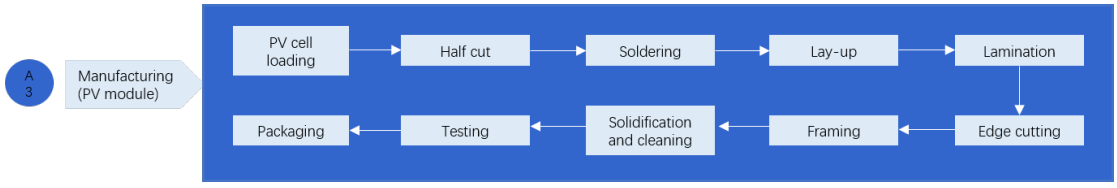

Figure 1 Production Process Flowchart of Jinko Solar PV module products

A brief introduction to the PV module manufacturing process is shown below:

Solar Cells Process

Step 1 Texturing: In this process, a mixture of acidic liquid is applied for silicon etching in order to fabricate a honeycombed surface texture. The texturing process aims to form a pyramid structure to increase the absorption of sunlight.

Step 2 Diffusion: In the diffusion process, $POCl_3$ (Phosphorus Oxychloride) is decomposed under high temperature and generates phosphorus. Then, the phosphorus diffuses on the P-type substrate to form a PN junction, which is solar cells core unit.

Step 3 Etching: In this process, a mixture of HF (Hydrofluoric Acid), HNO_3 (Nitric Acid) and H_2SO_4 (Sulfuric Acid) is applied to etch wafer edge.

Step 4 Thermal oxygen: Oxygen atoms combine with unsaturated silicon atoms on the silicon surface to form a SiO_2 film, thereby reducing the density of dangling bonds on the surface of the silicon wafer, well controlling interface traps and fixed charges, and serving to passivate the surface of the solar cell.

Step 5 PECVD (Plasma Enhanced Chemical Vapor Deposition): PECVD is a batch type reactor using parallel plate boats and low frequency plasma excitation. At low pressure and elevated temperature, a plasma burns directly between the substrates fixed at the plates of the boat. SiH_4 (silane)and NH_3 (ammonia) react to silicon nitride that is deposited on the substrate. The silicon nitride thin film is anti-reflective and serves as surface passivation. It also provides excellent chemical stability and isolation properties from metal ions and humidity.

Step 6 Laser grooving: Using laser grooving to form local back field contact, current collection.

Step 7 Screen printing: Using screen printing process, the corresponding metal electrodes are printed on the upper and lower surfaces of the fabricated p-n junction silicon wafer to collect and conduct the photocurrent generated by illumination.

Step 8 Sintering: Drying the paste on the silicon wafer, burning off the organic components of the paste, forming good ohmic contact between the paste and the silicon wafer, so as to improve the open circuit voltage and short circuit current and making it have strong adhesion and good solderability.

Step 9 Test sorting: Pick out the cells with bad appearance, and classify the cells with similar color together to make the final components have the same color and beautiful appearance.

PV module process

***Step 1 Half-cut*:** to improve the efficiency of the solar module, the loaded PV cell is cut half because the electrical resistance of half-sliced cell modules is smaller than that of uncut cell modules, the cell is cut in half by a spline-machine according to the technical requirements.

***Step 2 soldering*:** Welding machine is used to weld tin-plated belt on the main grid line using multi-point form. Welding heat source is generated from an infrared lamp powered by electricity.

Step 3 Lay-up for Lamination: Solar cell string, glass, EVA and backing (TPO, or POE…) are laid accordingly for preparation of lamination. A layer of primer is pasted on the glass to strengthen bonding strength. Solar cell string, glass and other materials are properly positioned to prepare for lamination process.

Step 4 Lamination: Solar string is laid into the laminating machine. The air between layers will be extracted out by vacuum process. A heating process is applied to melt EVA, cell string and backing so that they are bonded together.

Step 5 Framing: Aluminum frame is installed to the laminated piece to enhance the module strength and form a good sealing. The gap between aluminum frame and glass is filled with silicone glue. A horn button is used to connect frames. A junction box is welded on the back of solar module.

Step 6 High-pressure test: High-pressure test is conducted to test the pressure resistance and insulation strength of module. Standard IV test is also conducted to calibrate the power output rate of module.

Step 7 Packing: The tested modules will be packed into a carton, and put them on the wooden pallet, so that they are convenient for storage and shipment.

4.5 Transportation

In the LCA modelling, the transportation data was collected using the scenario that the PV modules are transported to a real ground-mounted PV plant in Shanxi Province.

4.6 Installation and operation

The materials used for PV plant construction are listed in Table 4. In terms of solar plant, the electricity generation data was taken from a real ground-mounted PV plant in Ruicheng, Shanxi Province, with energy yield capacity at 50MW.

Table 4 components for solar plant installation (per 50MWcapacity)

Components		**Unit**	**Value**
Module required per series	JKMxxxM-72H-V	pcs	1.25E+05
	JKMxxxM-72H-TV	pcs	1.27E+05
	JKMxxxM-7RL3-V	pcs	1.05E+05
	JKMxxxM-7RL3-TV	pcs	1.06E+05
	JKMxxxM-78H-V	pcs	1.12E+05
Inverter, 50kw		pcs	997
Bracket		ton	2806.7974
Cable, 1kv		km	675
Cable, 35kv		km	12
Compact sub-station		kg	149000
Steel		t	654.7
Concrete		m^3	5565.15
Transformer		kg	66260

Note: As for weight of cable, the mass is calculated with density 70kg/km for 1 kV cable, and 2000kg/km for 35kV cable. For concrete, the density is 2360kg/m3.

4.7 Reference Service Life

The reference service life for the PV modules is 30 years.

The total electricity generation from the plant to the grid during RSL is listed in Table 5. A 66.7 tonne booster station is used for the electricity transformation.

In this study, the distribution loss is 0.8% from the station to the grid, which is 21,648,000 kWh per year provided by Jinko Solar, and the electricity consumption for operation and maintenance is 721,600 kWh per year.

Table 5 Electricity generation during RSL

	Units	JKMxxxM-72H-V	JKMxxxM-72H-TV	JKMxxxM-7RL3-V	JKMxxxM-7RL3-TV	JKMxxxM-78H-V
Deg, first year	%	2.5	2.5	2	2	2.5
Deg, rest years	%	0.6	0.55	0.55	0.45	0.6
$E_{operation\ and\ maintenance}$	kWh	21,648,000.0	21,648,000.0	21,648,000.0	21,648,000.0	21,648,000.0
Distribution loss	%	0.8	0.8	0.8	0.8	0.8
$E_{RSL,net}$	kWh	1,702,490,657.5	1,713,881,097.2	1,722,453,201.7	1,745,659,779.1	1,702,490,657.5

4.8 End-of-life

For the end-of-life stage, De-construction (C1) of the PV plant during the disposal stage was assumed to consume mainly electricity, and the electricity consumption was assumed the same as the construction stage (A5). 100km transportation distance from plant site to waste treatment site (C2) was assumed. Electricity used for PV module demolition during waste processing (C3) stage was assumed the same as PV module manufacturing stage (A3). For end-of-life disposal treatment process (C4), the infrastructures of PV plants such as inverters were considered fully reused and following the end of life load and benefit allocation approach, therefore being cut off from the analysis. Since there was lack of existing data of recycling rate for PV module, this study referred to legal requirements issued by Waste Electrical and Electronic Equipment (WEEE). In 2012/19/EU-Article 11 & ANNEX V, the required recycling rate for waste PV module is 85%. Therefore, 15% of waste PV module end up with waste disposal (20% landfill and 80% incineration).

5. LCA RESULTS

This LCA follows the requirements of PCR *EPDItaly014: Core-PCR for electricity produced by photovoltaic modules* and uses the recommended impact analysis method for the calculation. Environmental impact indicators follow the characterization factors as stated in EN 15804:2012+A2:2019.

Table 6. LCA Results- Environmental impacts for PV module JKMXXXM-72H-V

Impact Category	Unit	Upstream Module		Core Module												Downstream Module	
		A 1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4
		Raw material Supply	Raw material transportation	Manufacturing	Product transportation	Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-installation	Waste transportation	Waste treatment	Waste disposal
Climate change - Total	kg CO_2 eq.	4.29E-03	1.39E-04	2.25E-03	3.29E-04	3.12E-03	0.00E+00	0.00E+00	0.00E+00	3.72E-05	0.00E+00	0.00E+00	9.55E-08	2.40E-06	6.22E-05	5.90E-09	3.34E-06
Climate change - Fossil	kg CO_2 eq.	5.11E-03	1.39E-04	2.27E-03	3.29E-04	3.14E-03	0.00E+00	0.00E+00	0.00E+00	4.12E-05	0.00E+00	0.00E+00	9.45E-08	2.41E-06	6.23E-05	5.95E-09	3.27E-06
Climate change - Biogenic	kg CO_2 eq.	-8.20E-04	-1.15E-07	-1.76E-05	-2.73E-07	-2.79E-05	0.00E+00	0.00E+00	0.00E+00	-4.12E-06	0.00E+00	0.00E+00	1.02E-09	-1.86E-08	-5.17E-08	-4.58E-11	8.82E-09
Climate change - Land use and Land use change	kg CO_2 eq.	2.76E-06	2.71E-08	2.77E-08	6.40E-08	7.55E-06	0.00E+00	0.00E+00	0.00E+00	6.29E-08	0.00E+00	0.00E+00	1.63E-11	6.32E-11	1.21E-08	1.56E-13	6.48E-08
Ozone depletion	kg CFC-11 eq.	4.31E-10	2.67E-11	2.75E-11	6.32E-11	1.08E-09	0.00E+00	0.00E+00	0.00E+00	5.72E-12	0.00E+00	0.00E+00	7.44E-15	7.80E-15	1.20E-11	1.92E-17	1.69E-12
Acidification	moli di H+ eq.	5.00E-05	7.12E-07	1.24E-05	1.68E-06	7.46E-05	0.00E+00	0.00E+00	0.00E+00	4.59E-07	0.00E+00	0.00E+00	7.28E-10	1.40E-08	3.18E-07	3.46E-11	2.60E-08
Eutrophication	kg PO_4 eq.	1.66E-05	1.11E-07	1.51E-06	2.63E-07	4.06E-05	0.00E+00	0.00E+00	0.00E+00	1.81E-07	0.00E+00	0.00E+00	1.07E-10	1.65E-09	4.97E-08	4.07E-12	4.95E-09
Photochemical ozone formation	kg di NMVOC eq.	2.08E-05	7.66E-07	5.87E-06	1.81E-06	2.17E-05	0.00E+00	0.00E+00	0.00E+00	1.84E-07	0.00E+00	0.00E+00	3.26E-10	6.78E-09	3.43E-07	1.67E-11	2.25E-08
Depletion of abiotic resources – minerals and materials	kg Sb eq.	1.38E-05	9.60E-09	5.10E-09	2.27E-08	1.67E-06	0.00E+00	0.00E+00	0.00E+00	7.23E-08	0.00E+00	0.00E+00	2.54E-11	4.39E-12	4.30E-09	1.08E-14	4.79E-10
Resource use-fossil resources	MJ, net calorific value	5.10E-02	2.12E-03	1.99E-02	5.01E-03	4.71E-02	0.00E+00	0.00E+00	0.00E+00	4.75E-04	0.00E+00	0.00E+00	9.46E-07	1.83E-05	9.47E-04	4.50E-08	8.58E-05
Water resource depletion	m3 eq.	1.17E-04	2.87E-08	1.79E-06	6.78E-08	3.03E-06	0.00E+00	0.00E+00	0.00E+00	5.77E-07	0.00E+00	0.00E+00	1.65E-07	-3.24E-10	1.28E-08	-7.98E-13	1.37E-08

Table 7 LCA Results- Environmental impacts for PV module JKMxxxM-72H-TV

Impact Category	Unit	Upstream Module		Core Module											Downstream Module	
		A 1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4
		Raw material Supply	Raw material transportation	Manufacturing	Product transportation	Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-installation	Waste transportation	Waste treatment	Waste disposal
Climate change - Total	kg CO_2 eq.	4.55E-03	1.48E-04	2.26E-03	3.35E-04	3.10E-03	0.00E+00	0.00E+00	0.00E+00	3.81E-05	0.00E+00	0.00E+00	9.61E-08	2.38E-06	6.25E-05	5.87E-09	3.48E-06
Climate change - Fossil	kg CO_2 eq.	5.33E-03	1.48E-04	2.28E-03	3.36E-04	3.12E-03	0.00E+00	0.00E+00	0.00E+00	4.19E-05	0.00E+00	0.00E+00	9.51E-08	2.40E-06	6.25E-05	5.91E-09	3.40E-06
Climate change - Biogenic	kg CO_2 eq.	-7.79E-04	-1.23E-07	-1.77E-05	-2.78E-07	-2.77E-05	0.00E+00	0.00E+00	0.00E+00	-3.87E-06	0.00E+00	0.00E+00	1.03E-09	-1.85E-08	-5.19E-08	-4.55E-11	9.20E-09
Climate change - Land use and Land use change	kg CO_2 eq.	2.85E-06	2.87E-08	2.78E-08	6.52E-08	7.50E-06	0.00E+00	0.00E+00	0.00E+00	6.29E-08	0.00E+00	0.00E+00	1.64E-11	6.27E-11	1.22E-08	1.55E-13	6.75E-08
Ozone depletion	kg CFC-11 eq.	4.40E-10	2.84E-11	2.77E-11	6.44E-11	1.07E-09	0.00E+00	0.00E+00	0.00E+00	5.73E-12	0.00E+00	0.00E+00	7.49E-15	7.75E-15	1.20E-11	1.91E-17	1.76E-12
Acidification	moli di H+ eq.	5.12E-05	7.56E-07	1.24E-05	1.72E-06	7.42E-05	0.00E+00	0.00E+00	0.00E+00	4.61E-07	0.00E+00	0.00E+00	7.32E-10	1.39E-08	3.20E-07	3.43E-11	2.71E-08
Eutrophication	kg PO_4 eq.	1.67E-05	1.18E-07	1.52E-06	2.68E-07	4.03E-05	0.00E+00	0.00E+00	0.00E+00	1.80E-07	0.00E+00	0.00E+00	1.08E-10	1.64E-09	4.99E-08	4.04E-12	5.16E-09
Photochemical ozone formation	kg di NMVOC eq.	2.18E-05	8.14E-07	5.90E-06	1.85E-06	2.15E-05	0.00E+00	0.00E+00	0.00E+00	1.87E-07	0.00E+00	0.00E+00	3.27E-10	6.74E-09	3.44E-07	1.66E-11	2.34E-08
Depletion of abiotic resources – minerals and materials	kg Sb eq.	1.43E-05	1.02E-08	5.13E-09	2.31E-08	1.66E-06	0.00E+00	0.00E+00	0.00E+00	7.38E-08	0.00E+00	0.00E+00	2.55E-11	4.36E-12	4.31E-09	1.08E-14	4.99E-10
Resource use-fossil resources	MJ, net calorific value	5.64E-02	2.25E-03	2.00E-02	5.10E-03	4.68E-02	0.00E+00	0.00E+00	0.00E+00	4.97E-04	0.00E+00	0.00E+00	9.52E-07	1.81E-05	9.51E-04	4.47E-08	8.95E-05
Water resource depletion	m3 eq.	1.18E-04	3.04E-08	1.80E-06	6.91E-08	3.01E-06	0.00E+00	0.00E+00	0.00E+00	5.75E-07	0.00E+00	0.00E+00	1.66E-07	-3.22E-10	1.29E-08	-7.93E-13	1.42E-08

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Table 8 LCA Results- Environmental impacts for PV module JKMxxxM-7RL3-V

Impact Category	Unit	Upstream Module		Core Module											Downstream Module	
		A 1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4
		Raw material Supply	Raw material transportation	Manufacturing	Product transportation	Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-installation	Waste transportation	Waste treatment	Waste disposal
Climate change - Total	kg CO_2 eq.	4.28E-03	1.37E-04	2.00E-03	3.11E-04	3.08E-03	0.00E+00	0.00E+00	0.00E+00	4.14E-05	0.00E+00	0.00E+00	7.95E-08	2.37E-06	6.04E-05	5.84E-09	3.17E-06
Climate change - Fossil	kg CO_2 eq.	5.00E-03	1.37E-04	2.02E-03	3.11E-04	3.10E-03	0.00E+00	0.00E+00	0.00E+00	4.56E-05	0.00E+00	0.00E+00	7.87E-08	2.39E-06	6.05E-05	5.88E-09	3.10E-06
Climate change - Biogenic	kg CO_2 eq.	-7.18E-04	-1.14E-07	-1.57E-05	-2.58E-07	-2.76E-05	0.00E+00	0.00E+00	0.00E+00	-4.28E-06	0.00E+00	0.00E+00	8.51E-10	-1.84E-08	-5.02E-08	-4.53E-11	8.37E-09
Climate change - Land use and Land use change	kg CO_2 eq.	2.45E-06	2.67E-08	2.46E-08	6.05E-08	7.46E-06	0.00E+00	0.00E+00	0.00E+00	6.32E-08	0.00E+00	0.00E+00	1.36E-11	6.24E-11	1.18E-08	1.54E-13	6.15E-08
Ozone depletion	kg CFC-11 eq.	4.05E-10	2.63E-11	2.44E-11	5.98E-11	1.07E-09	0.00E+00	0.00E+00	0.00E+00	5.99E-12	0.00E+00	0.00E+00	6.20E-15	7.71E-15	1.16E-11	1.90E-17	1.60E-12
Acidification	moli di H+ eq.	4.62E-05	7.01E-07	1.10E-05	1.59E-06	7.38E-05	0.00E+00	0.00E+00	0.00E+00	4.83E-07	0.00E+00	0.00E+00	6.06E-10	1.39E-08	3.09E-07	3.42E-11	2.47E-08
Eutrophication	kg PO_4 eq.	1.48E-05	1.10E-07	1.34E-06	2.49E-07	4.01E-05	0.00E+00	0.00E+00	0.00E+00	1.85E-07	0.00E+00	0.00E+00	8.92E-11	1.63E-09	4.83E-08	4.02E-12	4.70E-09
Photochemical ozone formation	kg di NMVOC eq.	2.01E-05	7.55E-07	5.21E-06	1.71E-06	2.14E-05	0.00E+00	0.00E+00	0.00E+00	2.00E-07	0.00E+00	0.00E+00	2.71E-10	6.70E-09	3.33E-07	1.65E-11	2.13E-08
Depletion of abiotic resources – minerals and materials	kg Sb eq.	1.24E-05	9.46E-09	4.53E-09	2.15E-08	1.65E-06	0.00E+00	0.00E+00	0.00E+00	7.65E-08	0.00E+00	0.00E+00	2.11E-11	4.34E-12	4.17E-09	1.07E-14	4.54E-10
Resource use-fossil resources	MJ, net calorific value	5.06E-02	2.09E-03	1.77E-02	4.73E-03	4.66E-02	0.00E+00	0.00E+00	0.00E+00	5.61E-04	0.00E+00	0.00E+00	7.88E-07	1.80E-05	9.20E-04	4.45E-08	8.14E-05
Water resource depletion	m3 eq.	1.10E-04	2.82E-08	1.60E-06	6.41E-08	2.99E-06	0.00E+00	0.00E+00	0.00E+00	6.41E-07	0.00E+00	0.00E+00	1.37E-07	-3.20E-10	1.25E-08	-7.89E-13	1.30E-08

Table 9 LCA Results- Environmental impacts for PV module JKMxxxM-7RL3-TV

Impact Category	Unit	Upstream Module		Core Module											Downstream Module	
		A 1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4
		Raw material Supply	Raw material transportation	Manufacturing	Product transportation	Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-installation	Waste transportation	Waste treatment	Waste disposal
Climate change - Total	kg CO_2 eq.	4.27E-03	1.38E-04	2.18E-03	3.10E-04	3.04E-03	0.00E+00	0.00E+00	0.00E+00	4.19E-05	0.00E+00	0.00E+00	7.93E-08	2.34E-06	5.99E-05	6.33E-09	3.18E-06
Climate change - Fossil	kg CO_2 eq.	5.00E-03	1.38E-04	2.20E-03	3.10E-04	3.06E-03	0.00E+00	0.00E+00	0.00E+00	4.61E-05	0.00E+00	0.00E+00	7.84E-08	2.35E-06	5.99E-05	6.38E-09	3.11E-06
Climate change - Biogenic	kg CO_2 eq.	-7.24E-04	-1.14E-07	-1.72E-05	-2.58E-07	-2.72E-05	0.00E+00	0.00E+00	0.00E+00	-4.28E-06	0.00E+00	0.00E+00	8.49E-10	-1.81E-08	-4.97E-08	-4.91E-11	8.39E-09
Climate change - Land use and Land use change	kg CO_2 eq.	2.50E-06	2.68E-08	2.68E-08	6.03E-08	7.37E-06	0.00E+00	0.00E+00	0.00E+00	6.26E-08	0.00E+00	0.00E+00	1.35E-11	6.16E-11	1.16E-08	1.67E-13	6.16E-08
Ozone depletion	kg CFC-11 eq.	4.05E-10	2.65E-11	2.54E-11	5.96E-11	1.05E-09	0.00E+00	0.00E+00	0.00E+00	5.92E-12	0.00E+00	0.00E+00	6.18E-15	7.60E-15	1.15E-11	2.06E-17	1.61E-12
Acidification	moli di H+ eq.	4.62E-05	7.06E-07	1.16E-05	1.59E-06	7.28E-05	0.00E+00	0.00E+00	0.00E+00	4.82E-07	0.00E+00	0.00E+00	6.04E-10	1.37E-08	3.06E-07	3.70E-11	2.48E-08
Eutrophication	kg PO_4 eq.	1.47E-05	1.10E-07	1.43E-06	2.48E-07	3.96E-05	0.00E+00	0.00E+00	0.00E+00	1.83E-07	0.00E+00	0.00E+00	8.89E-11	1.61E-09	4.79E-08	4.36E-12	4.71E-09
Photochemical ozone formation	kg di NMVOC eq.	2.01E-05	7.59E-07	5.41E-06	1.71E-06	2.11E-05	0.00E+00	0.00E+00	0.00E+00	1.99E-07	0.00E+00	0.00E+00	2.70E-10	6.61E-09	3.30E-07	1.79E-11	2.14E-08
Depletion of abiotic resources – minerals and materials	kg Sb eq.	1.25E-05	9.52E-09	4.88E-09	2.14E-08	1.63E-06	0.00E+00	0.00E+00	0.00E+00	7.63E-08	0.00E+00	0.00E+00	2.10E-11	4.28E-12	4.13E-09	1.16E-14	4.55E-10
Resource use-fossil resources	MJ, net calorific value	5.71E-02	2.10E-03	1.94E-02	4.72E-03	4.60E-02	0.00E+00	0.00E+00	0.00E+00	5.65E-04	0.00E+00	0.00E+00	7.86E-07	1.78E-05	9.12E-04	4.82E-08	8.16E-05
Water resource depletion	m3 eq.	1.09E-04	2.84E-08	1.81E-06	6.39E-08	2.95E-06	0.00E+00	0.00E+00	0.00E+00	6.34E-07	0.00E+00	0.00E+00	1.37E-07	-3.16E-10	1.23E-08	-8.55E-13	1.30E-08

Table 10 LCA Results- Environmental impacts for PV module JKMxxxM-78H-V

Impact Category	Unit	Upstream Module		Core Module											Downstream Module	
		A 1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4
		Raw material Supply	Raw material transportation	Manufacturing	Product transportation	Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-installation	Waste transportation	Waste treatment	Waste disposal
Climate change - Total	kg CO_2 eq.	4.39E-03	1.41E-04	2.36E-03	3.22E-04	3.12E-03	0.00E+00	0.00E+00	0.00E+00	4.18E-05	0.00E+00	0.00E+00	8.59E-08	2.40E-06	6.17E-05	6.49E-09	3.22E-06
Climate change - Fossil	kg CO_2 eq.	5.19E-03	1.42E-04	2.38E-03	3.23E-04	3.14E-03	0.00E+00	0.00E+00	0.00E+00	4.61E-05	0.00E+00	0.00E+00	8.49E-08	2.41E-06	6.18E-05	6.54E-09	3.15E-06
Climate change - Biogenic	kg CO_2 eq.	-7.95E-04	-1.17E-07	-1.86E-05	-2.68E-07	-2.79E-05	0.00E+00	0.00E+00	0.00E+00	-4.44E-06	0.00E+00	0.00E+00	9.19E-10	-1.86E-08	-5.13E-08	-5.03E-11	8.52E-09
Climate change - Land use and Land use change	kg CO_2 eq.	2.68E-06	2.75E-08	2.91E-08	6.27E-08	7.55E-06	0.00E+00	0.00E+00	0.00E+00	6.41E-08	0.00E+00	0.00E+00	1.47E-11	6.32E-11	1.20E-08	1.71E-13	6.25E-08
Ozone depletion	kg CFC-11 eq.	4.27E-10	2.72E-11	2.75E-11	6.20E-11	1.08E-09	0.00E+00	0.00E+00	0.00E+00	5.99E-12	0.00E+00	0.00E+00	6.69E-15	7.80E-15	1.19E-11	2.11E-17	1.63E-12
Acidification	moli di H+ eq.	4.95E-05	7.24E-07	1.26E-05	1.65E-06	7.46E-05	0.00E+00	0.00E+00	0.00E+00	4.91E-07	0.00E+00	0.00E+00	6.54E-10	1.40E-08	3.16E-07	3.80E-11	2.51E-08
Eutrophication	kg PO_4 eq.	1.64E-05	1.13E-07	1.54E-06	2.58E-07	4.06E-05	0.00E+00	0.00E+00	0.00E+00	1.90E-07	0.00E+00	0.00E+00	9.63E-11	1.65E-09	4.93E-08	4.47E-12	4.78E-09
Photochemical ozone formation	kg di NMVOC eq.	2.10E-05	7.79E-07	5.86E-06	1.78E-06	2.17E-05	0.00E+00	0.00E+00	0.00E+00	2.00E-07	0.00E+00	0.00E+00	2.93E-10	6.78E-09	3.40E-07	1.84E-11	2.17E-08
Depletion of abiotic resources – minerals and materials	kg Sb eq.	1.34E-05	9.77E-09	5.29E-09	2.23E-08	1.67E-06	0.00E+00	0.00E+00	0.00E+00	7.78E-08	0.00E+00	0.00E+00	2.28E-11	4.39E-12	4.26E-09	1.19E-14	4.62E-10
Resource use-fossil resources	MJ, net calorific value	5.76E-02	2.15E-03	2.11E-02	4.91E-03	4.71E-02	0.00E+00	0.00E+00	0.00E+00	5.56E-04	0.00E+00	0.00E+00	8.51E-07	1.83E-05	9.40E-04	4.95E-08	8.29E-05
Water resource depletion	m3 eq.	1.14E-04	2.92E-08	1.96E-06	6.65E-08	3.03E-06	0.00E+00	0.00E+00	0.00E+00	6.27E-07	0.00E+00	0.00E+00	1.48E-07	-3.24E-10	1.27E-08	-8.77E-13	1.32E-08

Table 11. LCA Results - Resource use of JKMxxxM-72H-V

Impact Category	Unit	Upstream Module		Core Module												Downstream Module	
		A 1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4
		Raw material Supply	Raw material transportation	Manufacturing	Product transportation	Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-installation	Waste transportation	Waste treatment	Waste disposal
PENRE	MJ, lower calorific value	6.30E-02	2.05E-03	2.92E-02	4.86E-03	4.47E-02	0.00E+00	0.00E+00	0.00E+00	5.50E-04	0.00E+00	0.00E+00	1.21E-06	2.98E-05	9.19E-04	7.34E-08	6.10E-05
PERE	MJ, lower calorific value	2.81E-02	1.10E-05	2.03E-03	2.61E-05	3.79E-03	0.00E+00	0.00E+00	0.00E+00	1.51E-04	0.00E+00	0.00E+00	9.93E-08	7.78E-07	4.94E-06	1.92E-09	6.22E-06
PENRM	MJ, lower calorific value	3.55E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERM	MJ, lower calorific value	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ, lower calorific value	6.30E-02	2.05E-03	2.92E-02	4.86E-03	4.47E-02	0.00E+00	0.00E+00	0.00E+00	5.50E-04	0.00E+00	0.00E+00	1.21E-06	2.98E-05	9.19E-04	7.34E-08	6.10E-05
PERT	MJ, lower calorific value	2.81E-02	1.10E-05	2.03E-03	2.61E-05	3.79E-03	0.00E+00	0.00E+00	0.00E+00	1.51E-04	0.00E+00	0.00E+00	9.93E-08	7.78E-07	4.94E-06	1.92E-09	6.22E-06
FW	m^3	1.65E-01	1.12E-05	5.62E-05	2.64E-05	1.15E-02	0.00E+00	0.00E+00	0.00E+00	8.25E-04	0.00E+00	0.00E+00	1.11E-06	4.90E-08	5.00E-06	1.21E-10	1.94E-06
SM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water																

Table 12 LCA Results - Resource use of JKMxxxM-72H-TV

Impact Category	Unit	Upstream Module		Core Module												Downstream Module	
		A 1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4
		Raw material Supply	Raw material transportation	Manufacturing	Product transportation	Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-installation	Waste transportation	Waste treatment	Waste disposal
PENRE	MJ, lower calorific value	6.82E-02	2.18E-03	2.93E-02	4.95E-03	4.44E-02	0.00E+00	0.00E+00	0.00E+00	5.70E-04	0.00E+00	0.00E+00	1.22E-06	2.96E-05	9.23E-04	7.29E-08	6.36E-05
PERE	MJ, lower calorific value	2.79E-02	1.17E-05	2.04E-03	2.66E-05	3.77E-03	0.00E+00	0.00E+00	0.00E+00	1.48E-04	0.00E+00	0.00E+00	9.99E-08	7.73E-07	4.96E-06	1.90E-09	6.48E-06
PENRM	MJ, lower calorific value	6.10E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERM	MJ, lower calorific value	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ, lower calorific value	6.82E-02	2.18E-03	2.93E-02	4.95E-03	4.44E-02	0.00E+00	0.00E+00	0.00E+00	5.70E-04	0.00E+00	0.00E+00	1.22E-06	2.96E-05	9.23E-04	7.29E-08	6.36E-05
PERT	MJ, lower calorific value	2.79E-02	1.17E-05	2.04E-03	2.66E-05	3.77E-03	0.00E+00	0.00E+00	0.00E+00	1.48E-04	0.00E+00	0.00E+00	9.99E-08	7.73E-07	4.96E-06	1.90E-09	6.48E-06
FW	m^3	1.66E-01	1.19E-05	5.66E-05	2.69E-05	1.14E-02	0.00E+00	0.00E+00	0.00E+00	8.19E-04	0.00E+00	0.00E+00	1.12E-06	4.86E-08	5.02E-06	1.20E-10	2.02E-06
SM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water																

Table 13 LCA Results - Resource use of JKMXXXM-7RL3-V

Impact Category	Unit	Upstream Module		Core Module												Downstream Module	
		A 1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4
		Raw material Supply	Raw material transportation	Manufacturing	Product transportation	Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-installation	Waste transportation	Waste treatment	Waste disposal
PENRE	MJ, lower calorific value	6.78E-02	2.02E-03	2.59E-02	4.59E-03	4.41E-02	0.00E+00	0.00E+00	0.00E+00	6.39E-04	0.00E+00	0.00E+00	1.01E-06	2.94E-05	8.93E-04	7.26E-08	5.78E-05
PERE	MJ, lower calorific value	2.56E-02	1.09E-05	1.76E-03	2.47E-05	3.75E-03	0.00E+00	0.00E+00	0.00E+00	1.62E-04	0.00E+00	0.00E+00	8.27E-08	7.69E-07	4.80E-06	1.89E-09	5.90E-06
PENRM	MJ, lower calorific value	9.35E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERM	MJ, lower calorific value	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ, lower calorific value	6.78E-02	2.02E-03	2.59E-02	4.59E-03	4.41E-02	0.00E+00	0.00E+00	0.00E+00	6.39E-04	0.00E+00	0.00E+00	1.01E-06	2.94E-05	8.93E-04	7.26E-08	5.78E-05
PERT	MJ, lower calorific value	2.56E-02	1.09E-05	1.76E-03	2.47E-05	3.75E-03	0.00E+00	0.00E+00	0.00E+00	1.62E-04	0.00E+00	0.00E+00	8.27E-08	7.69E-07	4.80E-06	1.89E-09	5.90E-06
FW	m^3	1.53E-01	1.10E-05	5.00E-05	2.50E-05	1.14E-02	0.00E+00	0.00E+00	0.00E+00	9.05E-04	0.00E+00	0.00E+00	9.23E-07	4.84E-08	4.85E-06	1.19E-10	1.84E-06
SM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water																

Table 14 LCA Results - Resource use of JKMXXXM-7RL3-TV

Impact Category	Unit	Upstream Module		Core Module												Downstream Module	
		A 1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4
		Raw material Supply	Raw material transportation	Manufacturing	Product transportation	Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-installation	Waste transportation	Waste treatment	Waste disposal
PENRE	MJ, lower calorific value	6.78E-02	2.04E-03	2.81E-02	4.58E-03	4.35E-02	0.00E+00	0.00E+00	0.00E+00	6.45E-04	0.00E+00	0.00E+00	1.01E-06	2.91E-05	8.84E-04	7.87E-08	5.80E-05
PERE	MJ, lower calorific value	2.57E-02	1.09E-05	1.17E-03	2.46E-05	3.70E-03	0.00E+00	0.00E+00	0.00E+00	1.57E-04	0.00E+00	0.00E+00	8.24E-08	7.58E-07	4.75E-06	2.05E-09	5.91E-06
PENRM	MJ, lower calorific value	9.34E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERM	MJ, lower calorific value	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ, lower calorific value	6.78E-02	2.04E-03	2.81E-02	4.58E-03	4.35E-02	0.00E+00	0.00E+00	0.00E+00	6.45E-04	0.00E+00	0.00E+00	1.01E-06	2.91E-05	8.84E-04	7.87E-08	5.80E-05
PERT	MJ, lower calorific value	2.57E-02	1.09E-05	1.17E-03	2.46E-05	3.70E-03	0.00E+00	0.00E+00	0.00E+00	1.57E-04	0.00E+00	0.00E+00	8.24E-08	7.58E-07	4.75E-06	2.05E-09	5.91E-06
FW	m^3	1.53E-01	1.11E-05	5.30E-05	2.49E-05	1.12E-02	0.00E+00	0.00E+00	0.00E+00	8.93E-04	0.00E+00	0.00E+00	9.20E-07	4.78E-08	4.81E-06	1.29E-10	1.85E-06
SM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water																

Table 15 LCA Results - Resource use of JKMXXXM-78H-V

Impact Category	Unit	Upstream Module		Core Module												Downstream Module	
		A 1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4
		Raw material Supply	Raw material transportation	Manufacturing	Product transportation	Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-installation	Waste transportation	Waste treatment	Waste disposal
PENRE	MJ, lower calorific value	6.90E-02	2.09E-03	3.04E-02	4.76E-03	4.47E-02	0.00E+00	0.00E+00	0.00E+00	6.37E-04	0.00E+00	0.00E+00	1.09E-06	2.98E-05	9.12E-04	8.07E-08	5.89E-05
PERE	MJ, lower calorific value	2.74E-02	1.12E-05	1.27E-03	2.56E-05	3.79E-03	0.00E+00	0.00E+00	0.00E+00	1.59E-04	0.00E+00	0.00E+00	8.93E-08	7.78E-07	4.90E-06	2.11E-09	6.00E-06
PENRM	MJ, lower calorific value	8.36E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERM	MJ, lower calorific value	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ, lower calorific value	6.90E-02	2.09E-03	3.04E-02	4.76E-03	4.47E-02	0.00E+00	0.00E+00	0.00E+00	6.37E-04	0.00E+00	0.00E+00	1.09E-06	2.98E-05	9.12E-04	8.07E-08	5.89E-05
PERT	MJ, lower calorific value	2.74E-02	1.12E-05	1.27E-03	2.56E-05	3.79E-03	0.00E+00	0.00E+00	0.00E+00	1.59E-04	0.00E+00	0.00E+00	8.93E-08	7.78E-07	4.90E-06	2.11E-09	6.00E-06
FW	m^3	1.61E-01	1.14E-05	5.74E-05	2.59E-05	1.15E-02	0.00E+00	0.00E+00	0.00E+00	8.91E-04	0.00E+00	0.00E+00	9.96E-07	4.90E-08	4.96E-06	1.33E-10	1.87E-06
SM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water																

Table 16 LCA Results - Output flows and waste categories of JKMXXXM-72H-V

Impact Category	Unit	Upstream Module		Core Module												Downstream Module	
		A 1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4
		Raw material Supply	Raw material transportation	Manufacturing	Product transportation	Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-installation	Waste transportation	Waste treatment	Waste disposal
HWD	kg	2.79E-03	0.00E+00	5.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.36E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NHWD	kg	2.88E-11	0.00E+00	1.44E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.42E-04
RWD	kg	1.19E-15	2.39E-11	2.98E-11	5.64E-11	1.67E-10	0.00E+00	0.00E+00	0.00E+00	2.05E-12	0.00E+00	0.00E+00	3.67E-15	2.50E-15	1.07E-11	6.17E-18	4.50E-16
MFR	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MER	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CRU	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0,00E+00	3.73E-03
ETE	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EEE	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; MFR = Materials for recycling; MER = Materials for energy recovery; CRU = Components for re-use; ETE = Exported thermal energy; EEE = Exported electrical energy																

Table 17 LCA Results - Output flows and waste categories of JKMxxxM-72H-TV

Impact Category	Unit	Upstream Module		Core Module												Downstream Module	
		A 1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4
		Raw material Supply	Raw material transportation	Manufacturing	Product transportation	Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-installation	Waste transportation	Waste treatment	Waste disposal
HWD	kg	3.11E-06	0.00E+00	5.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NHWD	kg	2.57E-11	0.00E+00	6.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.37E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.19E-04	2.19E-04
RWD	kg	1.07E-15	2.53E-11	3.00E-11	5.75E-11	1.66E-10	0.00E+00	0.00E+00	0.00E+00	2.07E-12	0.00E+00	0.00E+00	3.69E-15	2.49E-15	1.07E-11	6.13E-18	4.69E-16
MFR	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MER	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CRU	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.82E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0,00E+00	3,59E-03
ETE	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EEE	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; MFR = Materials for recycling; MER = Materials for energy recovery; CRU = Components for re-use; ETE = Exported thermal energy; EEE = Exported electrical energy																

Table 18 LCA Results - Output flows and waste categories of JKMXXXM-7RL3-V

Impact Category	Unit	Upstream Module		Core Module												Downstream Module	
		A 1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4
		Raw material Supply	Raw material transportation	Manufacturing	Product transportation	Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-installation	Waste transportation	Waste treatment	Waste disposal
HWD	kg	2.80E-03	0.00E+00	4.66E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.46E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NHWD	kg	2.89E-11	0.00E+00	1.99E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.36E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.76E-04
RWD	kg	1.20E-15	2.35E-11	2.65E-11	5.34E-11	1.65E-10	0.00E+00	0.00E+00	0.00E+00	2.21E-12	0.00E+00	0.00E+00	3.06E-15	2.48E-15	1.04E-11	6.10E-18	4.27E-16
MFR	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MER	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CRU	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0,00E+00	3,89E-03
ETE	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EEE	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; MFR = Materials for recycling; MER = Materials for energy recovery; CRU = Components for re-use; ETE = Exported thermal energy; EEE = Exported electrical energy																

Table 19 LCA Results - Output flows and waste categories of JKMXXXM-7RL3-TV

Impact Category	Unit	Upstream Module		Core Module											Downstream Module	
		A 1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4
		Raw material Supply	Raw material transportation	Manufacturing	Product transportation	Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-installation	Waste transportation	Waste treatment	Waste disposal
HWD	kg	2.51E-03	0.00E+00	4.65E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.44E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NHWD	kg	2.39E-11	0.00E+00	5.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.26E-04
RWD	kg	9.92E-16	2.37E-11	2.98E-11	5.32E-11	1.63E-10	0.00E+00	0.00E+00	0.00E+00	2.21E-12	0.00E+00	0.00E+00	3.05E-15	2.44E-15	1.03E-11	6.62E-18	4.28E-16
MFR	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MER	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CRU	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.06E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0,00E+00	3,58E-03
ETE	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EEE	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; MFR = Materials for recycling; MER = Materials for energy recovery; CRU = Components for re-use; ETE = Exported thermal energy; EEE = Exported electrical energy																

Table 20 LCA Results - Output flows and waste categories of JKMXXXM-78H-V

Impact Category	Unit	Upstream Module		Core Module											Downstream Module	
		A 1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4
		Raw material Supply	Raw material transportation	Manufacturing	Product transportation	Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-installation	Waste transportation	Waste treatment	Waste disposal
HWD	kg	2.71E-03	0.00E+00	5.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NHWD	kg	2.59E-11	0.00E+00	1.09E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.25E-04
RWD	kg	1.07E-15	2.43E-11	3.23E-11	5.53E-11	1.67E-10	0.00E+00	0.00E+00	0.00E+00	2.20E-12	0.00E+00	0.00E+00	3.30E-15	2.50E-15	1.06E-11	6.78E-18	4.34E-16
MFR	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MER	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CRU	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0,00E+00	3,63E-03
ETE	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EEE	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; MFR = Materials for recycling; MER = Materials for energy recovery; CRU = Components for re-use; ETE = Exported thermal energy; EEE = Exported electrical energy																

The contribution analysis of the PV module products on various impact categories reveals that production stage of the PV module including raw components and PV plant construction stage are the main contributions to environmental impact categories. In terms of production stage, electricity consumption for ingot, wafer, cell and PV module and supply of solar glass are two key impact factors. And for the PV plant construction stage, cable used for PV plant infrastructure is the key impact factor.

6. CALCULATION RULES

6.1 Functional Unit

In this study the functional unit is 1 kWh of electricity generated as output from the solar PV plant. The environmental impact from this study was calculated and reported per functional unit.

In order to report the environmental impacts generated by the Jinko Solar PV modules during its life cycle per functional unit, the total energy produced by the solar PV plant during the reference service life needs to be calculated. Once total energy has been calculated, the overall environmental impacts generated throughout the entire life cycle are divided by this value to return the results in the individual kWh produced. The total energy produced by the plant will therefore be equal to

$$E_{tot}[kWh] = E_{year} * RSL$$

Where:
E_{tot} represents the total energy produced by the plant (or, in an extreme case, by the individual module) during its entire life cycle;

E_{year} represents the energy produced annually by the plant. In the case of already installed plants, this figure can be calculated from the actual measurement of the energy produced. In the case of plants under construction but not yet operational, an estimate can be provided of the annual production of the plant, which will be a function of various parameters (average irradiation, exposure, temperature, optical factors, performance ratio / coefficient for losses, degradation rate and etc.) however known at the design stage. In this study, the study adopts a calculation method using the following approach from *Design specification for photovoltaic power station (GB-50797-2012)*.

Energy production in the first year of operation:

$$E_1 = H_A \times P / E_s \times K$$

E_1 = Energy produced in the first year of operation, kWh/year
H_A = Site specific annual average solar radiation on module (shadings not included), kWh/m². The annual radiation must take into consideration the specific inclination (slope, tilt) and orientation.
P = Installed capacity of the plant, 50,000kW
E_s= radiation at standard testing condition (STC), kWh/m²; STC: The ratio is given for standard test conditions: radiation 1000 W/m², cell temperature 25 °C, wind speed 1 m/s, AM 1.5.
K = Overall efficiency coefficient, 81.4% in this study as provided by Jinko Solar;

Energy production over reference service life of module, assuming linear annual degradation:

$$E_{RSL} = E_1 * (1 + \sum_{n=1}^{RSL-1}(1 - \mathrm{deg})^n)$$

n = year of operation, here 0<n<30
deg = yearly degradation rate.
RSL = Reference service life, 30 years according to PCR.
Please see Table 5 for the total electricity generation during RSL.

Table 21 Parameters per functional unit

Parameters	**Value**		**Source**
	Amount	**Unit**	
Peak power of the plant	50	MW	Jinko
Plant latitude and longitude	34°35'~34°51'N, 110°16'~ 111°58' E	°	Jinko
Plant altitude	26	m	Jinko
Nominal solar irradiance	1580000	Wh/m²/year	Jinko

6.2 Period under review

The study used primary data collected from August 1st, 2019 to August 1st, 2020.

6.3 System boundaries

This LCA study includes life cycle information from cradle-to-grave (see Table 1 for reference). According to the PCR, the life cycle stages must refer to segmentation in the following three modules:

1. *Upstream module* which includes all the processes upstream of the production of the photovoltaic module and/or solar park. In this study the upstream ends at the beginning of PV modules manufacturing, including extraction and processing of raw materials including silicon, ingot block, wafer, PV cell with packaging (A1), and the transportation of the raw material to the factory (A2) and etc.;

2. *Core module* which includes all the relevant processes managed by the Organization proposing the EPD. The core module in this study includes manufacturing of the solar cells and PV modules (A3) with the supply of the raw material, energy and auxiliary material input, and treatment and emission of off gas, wastewater and solid wastes during the PV module manufacturing; considering that the functional unit is energy generated by solar plant utilizing the PV modules, the core module is extended to include the transportation of PV modules to solar plant (A4), the construction of the solar plant (A5), the use (B1), maintenance (B2), repair (B3), replacement (B4), refurbishment (B5) and the operational energy use (B6) and water use (B7) during the RSL (30 years) period, de-construction and demolition of the solar plant (C1), transport to waste processing (C2). However, considering that the installation and operation is beyond the control of Jinko Solar, for simplification purpose, assumption was made on the life cycle inventory (LCI) data during the modeling of core modules;

3. *Downstream module* which includes all the relevant processes that take place outside of the control of the Organization proposing the EPD. In this study, the downstream module includes waste processing (C3) and disposal (C4). According to the PCR, the benefit and avoided loads beyond the product system boundary were not reported in module D separately within this study, neither were the benefit and loads be reported in other stages by following a cut off allocation approach. Due to the fact that it will take 30 years to enter the end of life stage for the PV modules, scenarios have to be developed for end of life treatment. For simplification purpose, assumption was made during the modeling of downstream modules.

Figure 2 below illustrates the system boundaries of the LCA study for the Jinko solar PV modules, including raw material production and transportation, manufacture, delivery, solar plant installation, and waste disposal.

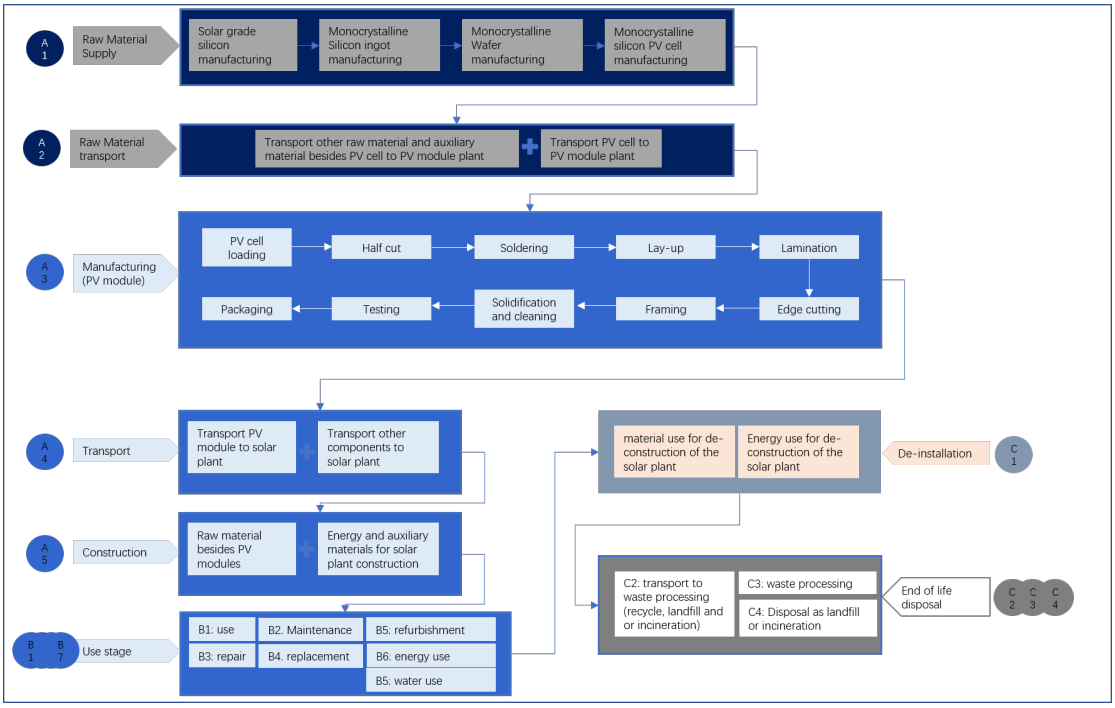

Figure 2 System boundary of the LCA study

6.4 Assumptions

The key assumptions of this LCA study are as follows：

- For missing background data, substitution of missing data using similar background data approach was taken to shorten the gap. A sensitivity analysis was conducted;
- During development of the raw material LCI data, the production of silicon ingot and silicon wafer was based on the inventory from Sichuan factory, while the electricity used the electricity data of Sichuan and Xinjiang respectively;
- The purchased solar cells from the market adopted the same production data (materials use) from Jinko's manufacturing data of solar cell, while the electricity data was replaced by the China grid average mix;
- Besides transportation of PV module, transportation of other infrastructures for the installation of the solar plant used assumed distance (100km) and transportation vehicles (Euro 4 truck) for simplification purpose. A sensitivity analysis was conducted;
- The number of PV module employed in PV plant construction (A5) was calculated by dividing the total power capacity of the PV plant (50MW) by the peak power output of each PV module;
- The electricity consumption during PV plant construction stage was scaled up based on the data from Ecoinvent database value (36.03 kWh/570kWp) according to the power capacity;
- Electricity used during the PV plant operation was assumed to be powered by the plant itself, water used for cleaning the PV panels was assumed to be 0.23L (source: www.polywater.com) per module per time and two times per year;
- Replacements: PV modules: 20 pcs/year, inverter: 1 pcs/2years;
- The electricity consumption during deconstruction of PV plant (C1) was assumed the same as the electricity consumption of construction stage (A5), and electricity consumption for PV module demolition at waste processing stage (C3) was assumed the same as the electricity consumption of PV module manufacturing stage (A3);
- During the end-of-life stage, the transportation distance of the waste PV modules and other equipment from the solar PV plant to treatment facilities including recycling, landfill or

incineration center was assumed to be 100 km for simplification purposes. A sensitivity analysis was conducted.

6.5 Excluded processes

The following main steps/stages were not included in the system boundary due to the reason that the elements below were considered irrelevant or not within the boundary of the LCA study of PV module relevant products：

- Production and disposal of the infrastructure and capital equipment (buildings, machines, transport media, roads, etc.) and their maintenance during PV module manufacturing, installation, and maintenance;
- The load and benefit of recycling waste solar module as well as waste equipment from solar plant was excluded from the analysis (see Section 6.8 allocation for further explanation);
- The packaging for ingot, wafer and solar cell is reused internally and its impact was excluded from the system;
- Storage phases and sales of PV products;
- Product losses due to abnormal damage such as natural disaster or fire accident. These losses would mostly be accidental;
- Recycling process of defective products;
- Handling operations at the distribution center and retail outlet.

Table 22 Life cycle inventories that are included and excluded

Included	Excluded
Upstream(A1-A2)	
• Raw material, energy and fuels • Capital goods for PV module production (implemented in generic LCI-data) • Silicone production • Wafer production • Solar cell fabrication • production of components (inverters, mounting and cable). • Transports of components	• Labor • Transport of personnel • Occupation of land in production • The packaging for ingot, wafer and solar cell
Core (A3-C2)	
• PV module fabrication • Mounting and installation • Electricity consumption • Transports of component to solar plant, installation and electricity generation services. • Occupation of land in use • De-construction and demolition of the solar plant • Transport to waste processing	• Labour • Transport of personnel • Occupation of land in production • Handling operations at the distribution center and retail outlet. • Storage phases of PV products. • Capital goods for solar plant installation, operation and de-construction
Downstream (C3-C4)	
• Waste processing, and • Disposal including landfill and incineration	• Labour • Transport of personnel • Occupation of land in production • Capital goods for solar plant de-construction and waste processing • Load and benefit from recycling and waste to energy treatment

6.6 Cut-off rules

The following procedures were followed for the exclusion of inputs and outputs:

- All inputs and outputs to a (unit) process were included in the calculation where data was available. Data gaps were filled by conservative assumptions with average or generic data. Any assumptions for such choices were documented;
- In case of insufficient input data or data gaps for a unit process, according to the PCR requirement, the cut-off criteria chosen was 2% of the total mass and energy of that unit process (Respectively, of the photovoltaic module's unit weight and the energy needed to produce and assemble it).
- The total neglected input flows of the cradle-to-grave stage, e.g. per module A1-A3, A4-A5, B1-B7, C1-C4 shall be a maximum of 2% of energy usage and mass, in this study, the neglected flow is demonstrated in table below.

Table 23 Cut-off flows

Flow name	**Process stage**	**Reason for cut-off**	**Total cut off mass % estimated**
Packaging material for raw material e.g. wafer, cell and etc	A1	Used repeatedly inside the plant	<0.1%
Raw materials (Bom) trace elements	A1	Mass <2%	0%-0.4%
Transportation and storage within the plant	A3	Energy<2%	0%-0.7%
Inspection during operation of solar plant	B	Cut off due to small impact according to PCR	<0.1%
Packaging material for waste transportation	C4	<2%	<1%
Total			**<2%**

Material and energy flows known to have the potential to cause significant emissions into air, water or soil related to the environmental indicators of this study were included in the assessment. After reviewing the Material Safety Data Sheets and relevant physical, chemical, and other information of the flows listed in table above, no significant negative emission to the environment from above listed flows was identified.

6.7 Data quality

The data quality requirements for this study were as follows:

- Existing LCI data were, at most, 10 years old. Newly collected LCI data were current or up to 3 years old;
- The LCI data related to the geographical locations where the processes took place, e.g. electricity and transportation data from China were utilized;
- The scenarios represented the average technologies at the time of data collection.

In the study, the key parameters for producer-specific foreground data were based on yearly production amounts and extrapolations of measurements on specific machines and plants. The specific production data referred to an average of 12 months from August 2019 to July 2020 for PV modules including raw materials such as ingot, wafer and cells, and the input data of raw material and transportation referred to an average of production scenario using data from bill of material (BOM) sheet. For the data regarding the solar plant installation, operation, maintenance and disposal, scenarios based on representative data and situation were developed. Most of the necessary life cycle inventories for the basic materials were available in the SimaPro database

using generic data. The last update of the database was in 2020 by Ecovane Environmental. Further LCIs for materials of the supply chain of the basic materials were approximated with LCIs of similar materials or estimated by the combination of available LCIs.

6.8 Allocations

Multi-input processes

For data sets in this study, the allocation of the inputs from coupled processes was generally carried out via the mass. The consumption and transportation of raw materials was allocated by mass ratio. For PV module production, the total consumption of energy and water during manufacturing was equally allocated to per unit watt of energy yield capacity. No other approach was taken for the allocation of energy and water consumption for each model of PV module product.

Multi-output processes

Multi-output allocation is based on a quantitative calculation of the resource consumption and the emissions for example in relation to the distribution of functions, physical properties or economic aspects. Physical properties, such as mass, net calorific values, etc., shall be preferred, otherwise economic aspects, such as man-hours, operating hours or manufacturing cost may be used.

In this study, there were no by-products from the PV module production line, hence, there was quite little occasion that required allocation for multi-output processes. One allocation occurred on the environmental emissions allocation, especially in the area of waste treatment. The environmental emissions of PV module product were allocated by energy yield capacity (watt) to each unit module product.

Allocation for recovery processes

For the allocation of residuals, the model “allocation cut-off by classification” according to ISO standard (called “Allocation Recycled Content”, alloc rec, by Ecoinvent) was used. The underlying philosophy of this approach is that primary (first) production of materials is always allocated to the primary user of a material. If a material is recycled, the primary producer does not receive any credit for the provision of any recyclable materials. Consequently, recyclable materials are available burden-free for recycling processes, and secondary (recycled) materials bear only the impacts of the recycling processes.

During the end-of-life stage of the solar plant, the extra benefit of recycling the waste modules as well as other equipment was cut off from the boundary, following the PCR’s recommendation on end-of-life scenario. Along with the benefit, the load from waste treatment for recycling purpose such as de-pollution and crushing etc. was also allocated to the next life cycle of substituted products, but not the primary producers of PV modules, hence no burden or benefit was allocated to the primary producer of the PV module or solar plant

7 LCA SCENARIOS

The processes included in modules A1-A3 are described in Section 4.

7.1 Transport (A4)

Table 24 Scenario and additional technical information of transport to the operation site

Name	Value	Unit
	Road	
Fuel type	Diesel	
Consumption of fuel	31.11	l/100km
Vehicle type	Lorry (20t)	/
Transport distance	1300	km
Capacity utilization (including empty runs, mass based)	100	%
Gross density of products transported	N/A	kg/m^3
Capacity utilization volume factor (factor: =1 or <1 or ≥ 1 for compressed or nested packaging products)	1	-

7.2 Installation (A5)

Table 25 Scenario and additional technical information of installation

Name	Value	Unit
Ancillary materials	1.70E+07	kg
Net freshwater consumption specified by water source and fate (amount evaporated, amount disposed to sewer)	0	m^3
Other resources	0	kg
Electricity consumption	3,160	kWh
Other energy carriers	0	MJ
Product loss per functional unit	N/A	kg
Waste materials at the construction site before waste processing, generated by product installation	N/A	kg
Output materials resulting from on-site waste processing (specified by route; e.g. for recycling, energy recovery and/or disposal)	N/A	kg
Direct emissions to ambient air, soil and water	0	kg

7.3 Use Stage

Table 26 Scenarios and additional technical information of use stage

Scenario Information	Unit	Value
B1-Use		
Electricity use	kWh/day	N/A
B2-Maintenance		
Maintenance process	/	Cleaning Panels
Maintenance cycle	Number per RSL or year	twice per year
Ancillary materials for maintenance, e.g. cleaning agent, specify materials	kg/cycle	0
Waste material resulting from maintenance (specify materials)	kg	0
Net fresh water consumption during maintenance	m^3	1730
Energy input during maintenance, e.g. vacuum cleaning, energy carrier type, e.g. electricity, and amount, if applicable and relevant	kWh/year	1977
B3-Repair	N/A	
B4-Replacement	Inverter, pcs	0.5pcs/year
B5-Refurbishment	Module, pcs	20pcs/year
B6-Operational energy use	N/A	
B7-Operational water use	Same as *B2: Maintenance*	

7.4 End-of-life

Table 27 End-of-life scenarios

Process	Unit (expressed per functional unit or per declared unit of components products or materials and by type of material)	Value
Collection process specified by type	kg collected separately	0
	kg collected with mixed construction waste	N/A
Recovery system specified by type	kg for re-use	3.73E-03
	kg for recycling	1.18E-03
	kg for energy recovery	0
Disposal specified by type	kg product or material for final deposition	1.75E-04
Assumptions for scenario development, e.g. transportation	units as appropriate	100 km for the road transportation (C2) required from an installation site to an MSW treatment site

8 OTHER ADDITIONAL ENVIRONMENTAL INFORMATION

An additional indicator is the Return On Energy (RoE). This parameter gives an estimate of the efficiency of the photovoltaic park's solar energy production. The results are shown in Table 29.

The calculation of RoE is done using the following formula:

$$\text{RoE [years]} = E_{invested} / E_{produced,annual}$$

where:

$E_{invested}$ = PENRT+PERT

$E_{produced,annual}$= total amount of electricity generated in a year by the solar park

Table 28 RoE results of Trina Solar PV modules

Modules	JKMXXXM-72H-V	JKMXXXM-72H-TV	JKMXXXM-7RL3-V	JKMXXXM-7RL3-TV	JKMXXXM-78H-V
RoE	1.46	1.50	1.44	1.45	1.50

9 Reference

EPDItaly

Regulations of the EPDItaly Programme, version 5 (01/07/2020)

EPDItaly014: Core-PCR for electricity produced by photovoltaic modules (March 2020, Revision REV.1)

SUSTAINABILITY REPORTING STANDARDS

European Standards. (2019). EN 15804:2012+A2:2019 Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products.

European Standards. (2019). EN 50693:2019 Product category rules for life cycle assessments of electronic and electrical products and systems

ISO. (2006). ISO 14044: Environmental management - Life cycle assessment - Requirements and guidelines.

ISO. (2009). ISO 14040: Environmental management - Life cycle assessment - principles and frameworks.

ISO. (2011). ISO 14025: Environmental labels and declarations - Type III environmental declarations - principles and procedures.

LCA report

LCA report for photovoltaic modules (report number: PJ-JINKO-20001), by Ecovane Environmental Co., Ltd& TÜV Rheinland (China), June 2021

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