

ISEP advice note Solar PV on Agricultural Land compared to Green Hill Solar DCO

Background

The ISEP (Institute of Sustainability and Environmental Professionals) have published an advice note **Solar PV on Agricultural Land** in response to current inconsistencies in EIAs and Strategic Environmental Assessments (SEAs) for large-scale solar photovoltaic (PV) projects on agricultural land, of a sufficient size to be NSIPs.

Inconsistencies in Environmental Impact Assessments for large-scale solar power projects on UK farmland has compelled The Institute of Sustainability and Environmental Professionals (ISEP) to issue new advice to protect agricultural land and biodiversity, while balancing the growing demand for renewable energy. Their conclusion was.....

The “best and most versatile” farmland should be protected amid rapid expansion of UK solar power.

When comparing the ISEP advice guidance with the DCO submission from IGP for Green Hill Solar, there are several areas of inconsistency/non-compliance, SGHS have highlighted, which the ExA may wish to consider in relation to the IGP application for a DCO.

ISEP - Panels could be damaged during installation, operation or decommissioning and it should be demonstrated in the EIA that this been considered as a potential introduced source of pollution and proposals made for remediation.

Case Study “Recent events at Porth Wen on Anglesey, when solar panels were destroyed by strong winds, have shown that significant contamination by broken glass and chemical pollution can arise because of exceptional weather events that may be on the increase.”

ADAS, The impact of solar photovoltaic (PV) sites on agricultural soils and land 2025.

DCO - The ES acknowledges that damaged solar panels would be removed and disposed of, but does not consider the increased risk of contamination from panel breakage during flood events. The Green Hill Solar Site F experiences regular flooding, and the soil compaction and solar arrays will only increase the risk of increased flooding downstream. This flood water flows into local ditches and brooks and ultimately the River Nene/RAMSAR/SSSi. Floodwaters passing between panel arrays and at panel edges, could mobilise broken glass, or metals into soil and watercourses. The risk of contamination under these conditions has not been assessed, and no monitoring or mitigation therefore proposed. (despite the recent Porth Wen example). This represents a significant unquantified environmental risk, particularly given the presence of Best and Most Versatile agricultural land and the proximity to sensitive watercourses.

ISEP - Lack of clarity as to how the condition of the land will be assessed after decommissioning and its suitability for farming.

DCO - The Outline Soil Management plan states there will need to be a detailed SMP at the decommissioning phase i.e. AFTER DCO consent. This means the impacts will not be considered BEFORE approval, so the ES assumes restoration WITHOUT any evidence.

This is contrary to precautionary planning principles.

The OSMP submitted by the Applicant acknowledges that construction and operation of the scheme could affect soils through stripping, storage, compaction and long-term management requirements. This confirms that the applicant acknowledges risks to soil structure and function. It is not sufficiently detailed to demonstrate that Best and Most Versatile land will be protected or restored. This approach conflicts with the National Planning Policy Framework, which requires recognition of the value of BMV land and protection of soil resources, and with Natural England guidance on safeguarding soil structure and function.

ISEP - Is there a methodology by which the applicant intends to restore affected areas to agricultural use and base line ALC/LCA grade/class on decommissioning?

DCO - No methodology provided. The OSMP does acknowledge the need for soil stripping, stockpiling, compaction mitigation and long-term soil management, which demonstrates that the development has potential to harm soil structure and function. However, the plan provides no evidence that soil quality and agricultural classification can be fully restored after decades of solar development, particularly on BMV land.

A report by ADAS, commissioned by the Welsh Government *The impact of solar photovoltaic (PV) sites on agricultural soils and land 2023*, found:

“The main issues influencing reversion to agriculture at decommissioning is all materials are expected to be removed including the removal of piles from the soil. Most standard steel products corrode, particularly in the upper part of the pile and this may adversely affect the ability to extract the piles after 40 years. (Non-corrosive materials could be used but have cost implications). It may be that piles fracture and are difficult to extract without additional digging.”

DCO - The ES refers to solar panel mounting structures supported by driven steel piles but does not specify the alloy composition or corrosion protection treatments to be used. Without this information, the assessment of long-term soil contamination risk is incomplete, particularly on Best and Most Versatile agricultural land. The piles may be zinc coated which could cause soil contamination by leaching No monitoring plan is included, so no requirement for soil testing to monitor any metal contamination.

ISEP - The most recent EIA guidance for agricultural land and soils is in ISEP's 2022 guidelines *A New Perspective on Land and Soil in Environmental Impact Assessment* states:

‘Consideration of the development impacts on the soil resource and soil function should be made alongside agricultural land-take.’

DCO - The ES notes soil structure could be damaged by construction activities and heavy machinery. Compaction changes soil hydrological function, thereby increasing flood risk. However, the assessment concludes impacts are minor without providing evidence that soil structure and fertility can be fully restored after decades of development. Given the high proportion of Best and Most Versatile land affected, this represents a potentially significant and long-term loss of soil resource and agricultural productivity.

ISEP - Incomplete assessment of the socio-economic impacts of a large-scale solar PV, such as displacement of tenant farmers and redundancy of the agricultural workforce.

DCO- SGHS are aware of at least 2 displaced tenant farmers and resultant workers as a result of this proposal.

In addition, there are several local businesses that will be negatively impacted as a result of the development, including, but not limited to, farm shops, (e.g. Glebe Farm, Scotch Lodge, Beckworth Emporium), livery businesses (eg John Hope, Top Lodge Farm, Parkhill Livery), riding schools (Manor Farm), Sports and recreation facilities (eg Grendon Sapphires), tourist businesses (Waendel Walk, Castle Ashby,) and many others.

ISEP - What is the risk of carbon loss or fugitive greenhouse gas emissions during the construction and operational phases of development, relative to other sites assessed?

DCO - There were no alternative sites assessed and compared. The ES only considers direct, on-site emissions and provides only a limited assessment of alternative sites.