

The Droves Solar Farm.

Executive Summary.

This objection is not based on opposition to renewable energy in principle. Rather, it concerns whether the Droves Solar Farm represents the most appropriate use of this land and whether its environmental, agricultural, ecological and infrastructure impacts have been fully assessed.

The principal concerns are the following:

The loss of productive agricultural land and its implications for long-term food security.

Uncertainty regarding the project's grid connection status and overall deliverability.

The environmental impact of extensive soil disturbance, transport, storage and reinstatement.

Potential long-term damage to soil structure, fertility and microbiological health.

The industrialisation of a rural landscape through the introduction of large solar arrays, fencing, battery storage facilities and associated infrastructure.

Harm to landscape character, heritage settings and visual amenity.

Reduced enjoyment of public rights of way and open countryside.

Concerns that proposed wildlife corridors may not provide genuine ecological connectivity and could potentially direct wildlife towards busy roads and other hazards.

Questions regarding the long-term management, ownership, decommissioning and restoration of the site.

Taken together, these concerns raise significant questions regarding the environmental sustainability, agricultural impact, ecological consequences and overall suitability of the proposal. These matters should be fully resolved before any planning consent is granted.

1. Solar Power Efficiency and Land Use

Solar technology remains relatively inefficient compared with other forms of electricity generation. A significant amount of land is required to generate meaningful levels of power, particularly in the UK where sunlight levels are limited for much of the year.

The proposed development would cover a large area of productive agricultural land, yet generation output will fluctuate significantly depending on weather conditions, season, and daylight hours. This raises the question of whether such a large land take is justified when more energy-dense technologies are available.

2. Winter Performance

During winter months, solar generation is at its weakest when electricity demand is often at its highest.

Snow, frost, prolonged cloud cover and shorter daylight hours can significantly reduce output. In periods of poor weather, solar panels may generate only a fraction of their rated capacity, raising concerns about reliability and overall effectiveness.

3. Carbon Footprint of Manufacturing

While solar power is often described as low-carbon, the manufacturing process should not be ignored.

Solar panels require energy-intensive production processes involving silicon extraction, purification and high-temperature furnaces. Most panels are currently manufactured overseas using industrial processes that rely heavily on conventional energy sources.

Questions therefore remain regarding:

The total embodied carbon of the panels used in this project.

The emissions associated with manufacturing, shipping and installation.

How long it will take for the project to achieve genuine carbon payback.

4. Battery Energy Storage System (BESS)

The proposal includes a Battery Energy Storage System (BESS), which raises several concerns.

Battery systems degrade over time and may require replacement multiple times during the lifetime of the solar farm.

Questions remain regarding:

The environmental impact of battery manufacture and disposal.

How replacement batteries will be sourced and recycled.

The long-term carbon footprint of repeated battery replacement.

Whether the batteries will primarily be charged by solar generation or by electricity imported from the grid during periods of low solar output.

If the batteries rely heavily on grid electricity, the overall environmental benefit of the project becomes less clear.

5. Financial Cost and Value for Money

The project is reportedly valued at around £1 billion.

Given rising construction costs, inflation, supply-chain pressures and future maintenance requirements, there is a risk that final costs could be significantly higher.

Local residents deserve clarity on:

The full lifetime cost of the project.

Who ultimately bears those costs.

Whether equivalent carbon reductions could be achieved more effectively through alternative technologies.

6. Grid Connection Uncertainty

There appears to be uncertainty regarding the project's grid connection status.

Without a guaranteed connection date, there is a risk that the development could be approved and constructed before sufficient grid capacity is available.

Residents should be informed about:

The current connection status.

Expected connection timescales.

The likelihood of delays caused by existing grid bottlenecks.

7. Alternative Technologies

Before sacrificing large areas of agricultural land, alternative energy solutions should be properly considered.

New technologies such as Small Modular Reactors (SMRs) offer the potential to generate large quantities of low-carbon

electricity from a much smaller land footprint while operating continuously regardless of weather conditions. Similarly, wind power generally delivers higher energy output per acre and allows farmland to remain in agricultural use. The question must therefore be asked:

Why is large-scale solar development being prioritised on productive farmland when alternative low-carbon technologies may offer greater efficiency, reliability and lower land use?

8. Agricultural Land and Food Security

The proposed development would remove a substantial area of land from food production for decades.

At a time when food security is becoming increasingly important, there must be a clear justification for converting agricultural land into industrial energy infrastructure.

9. Soil Removal and Environmental Impact

One of the most significant unanswered questions concerns the treatment of soil during construction.

The Environmental Impact Assessment should clearly state:

How much topsoil and subsoil will be removed.

The total carbon emissions associated with transporting this material.

Where the soil will be taken.

Whether it will be returned to the site in the future.

How contamination risks will be managed if soil is removed, stored or replaced.

If hundreds of thousands of tonnes of soil are moved, the associated emissions and environmental impacts should be fully accounted for in the project's carbon calculations.

10. Ownership, Financial Accountability and Grid Connection Risk

The proposed development is being promoted by Island Green Power, which is wholly owned by Macquarie Asset Management through its Green Investment funds.

Given the scale of this project, local communities and decision-makers must have confidence that the developer has both the financial commitment and long-term responsibility required to manage the site throughout its operational life and eventual decommissioning.

The ownership structure raises important questions regarding the following:

Long-term stewardship of the site.

Financial accountability over the project's lifetime.

Decommissioning obligations at the end of the project's operational life.

Whether ownership could be transferred to other investment entities in the future.

Furthermore, planning permission should not be granted until a confirmed and binding Gate 2 grid connection agreement has been secured.

Approving a project of this scale before a firm grid connection date is established risks creating uncertainty for both local communities and the wider electricity network.

A confirmed Gate 2 connection would provide greater certainty regarding:

Project viability.

Construction timescales.

Network capacity availability.

The likelihood of the scheme being delivered as proposed.

Until a binding Gate 2 connection offer has been obtained and publicly disclosed, there remains a significant risk that the project may face substantial delays or require material changes to its delivery timetable.

For these reasons, planning approval should be withheld until full Gate 2 connection status has been confirmed and independently verified.

11. Precautionary Principle and Planning Prematurity

The Drovers Solar Farm proposal appears to rely upon a number of assumptions regarding future grid availability, future battery technologies, future electricity demand and future project economics.

Where significant uncertainties remain, the precautionary principle should apply.

The planning authority should not be expected to approve a project of this scale on the basis that key issues may be resolved at a later date. Instead, applicants should demonstrate that all critical infrastructure, environmental impacts and operational requirements have been fully assessed before consent is granted.

In particular, the following matters should be resolved prior to any planning approval:

Confirmation of a binding Gate 2 grid connection agreement.

Full disclosure of the project's carbon payback calculations.

Detailed battery replacement and recycling plans.

Comprehensive soil management and restoration plans.

Evidence demonstrating why alternative technologies or lower-impact sites have been discounted.

12. Soil Microbiology and Soil Restoration Concerns

Soil is not simply an inert material that can be removed, stored, transported and replaced without consequence. Healthy agricultural soil contains complex biological communities of bacteria, fungi, earthworms and other microorganisms that are essential for soil fertility, nutrient cycling, water retention and crop productivity.

If significant quantities of topsoil and subsoil are excavated, stockpiled, transported or replaced, there is a risk that these biological systems may be disrupted or damaged.

Concerns include:

Loss of beneficial soil microorganisms during excavation, storage and transportation.

Damage to soil structure through compaction by heavy construction machinery.

Reduction in soil fertility and agricultural productivity following reinstatement.

Changes in soil chemistry and nutrient balance.

Increased risk of invasive species, weeds or pathogens being introduced through imported soils or soil mixing.

Potential impacts on drainage, water infiltration and soil carbon storage.

The applicant should therefore provide detailed evidence demonstrating:

Whether baseline surveys of soil biological health have been undertaken.

How soil microbial communities will be protected during construction.

What measures will be used to prevent soil compaction.

Whether independent monitoring of soil health will be carried out during construction, operation and decommissioning.

How the site will be restored to its original agricultural capability at the end of the project's life.

Simply replacing soil after construction does not necessarily restore the complex biological ecosystem that may have taken decades or centuries to develop. The applicant should therefore demonstrate that any impacts on soil health, biodiversity and agricultural productivity can be fully mitigated and reversed.

13. Impact on Landscape Character and Historic Environment

The proposed solar panels, reaching heights of approximately 4 metres, together with security fencing, CCTV infrastructure, access tracks, inverter stations and Battery Energy Storage Systems (BESS), would introduce substantial industrial development into what is currently a predominantly rural landscape.

Particular concern should be given to the effect of the development on the character, appearance and setting of nearby historic and heritage assets.

Even where a designated heritage asset is not physically affected, national planning policy recognises that harm can occur through impacts on its setting and surrounding landscape.

Questions requiring further assessment include:

What impact will 4-metre-high solar arrays have on important views and landscape character?

How will the development affect the setting of nearby listed buildings, conservation areas, archaeological sites and historic landscapes?

Will existing public rights of way experience a significant change in visual amenity?

How effective will proposed screening measures be throughout the year, particularly during winter months when vegetation cover is reduced?

What cumulative impact will this development have when considered alongside existing and proposed energy infrastructure in the wider area?

The applicant should provide clear visualisations from representative viewpoints demonstrating the appearance of the development during all seasons and from locations where historic assets are experienced by the public.

The planning authority must carefully consider whether the industrialisation of a rural landscape for several decades would cause unacceptable harm to local character, visual amenity and the setting of heritage assets.

14. Impact on Public Access, Wellbeing and Wildlife Movement

The proposed development would transform a large area of open agricultural landscape into a network of fenced compounds, security infrastructure and restricted-access corridors.

For local residents, walkers, cyclists and other users of public rights of way, this represents a significant change in how the landscape is experienced.

Many existing routes currently pass through open countryside with expansive views and a strong sense of space. The introduction of extensive fencing and solar infrastructure may create the perception of being channelled through enclosed corridors surrounded by industrial development.

Concerns include:

Loss of openness and rural character along public rights of way.

Reduced enjoyment of recreational routes used by local residents and visitors.

Potential impacts on mental wellbeing associated with the loss of accessible open countryside.

Visual intrusion from fencing, solar arrays, substations and associated infrastructure.

The cumulative effect of multiple fenced areas across the landscape.

There are also concerns regarding wildlife movement.

While mitigation measures may be proposed, extensive fencing has the potential to alter natural movement patterns and fragment habitats that have historically existed within an open agricultural landscape.

The applicant should therefore provide evidence demonstrating:

How public access and recreational enjoyment will be maintained throughout the lifetime of the project.

Whether the development will result in a significant change in the experience of users of public rights of way.

How wildlife corridors will be protected and maintained.

What measures will be implemented to prevent habitat fragmentation?

How the effectiveness of these measures will be monitored over the operational life of the site.

The planning authority should carefully consider whether the cumulative effect of extensive fencing, restricted areas and associated infrastructure would fundamentally alter the character of the landscape and the way it is used by both people and wildlife.

15. Effectiveness of Proposed Wildlife Corridors

The applicant may propose wildlife corridors and gaps within fencing as mitigation measures to maintain animal movement across the site. However, the effectiveness of these measures requires careful scrutiny.

A key concern is whether these corridors genuinely connect suitable habitats or simply direct wildlife towards surrounding roads and other hazards.

If wildlife movement routes ultimately lead towards busy roads, the proposed mitigation could have unintended consequences, including:

Increased risk of road traffic collisions involving wildlife.

Disruption of established movement patterns and foraging routes.

Fragmentation of habitats that are currently connected across open farmland.

Increased stress and energy expenditure for animals attempting to navigate fenced infrastructure.

Reduced effectiveness of ecological mitigation measures over time.

The applicant should therefore provide evidence demonstrating:

Where wildlife using the proposed corridors is expected to travel beyond the site boundary.

Whether those routes connect to suitable habitats or ecological networks.

The proximity of wildlife corridors to major roads and traffic routes.

Any assessment of increased wildlife mortality associated with nearby roads.

How the long-term effectiveness of the corridors will be monitored and managed.

It should not be assumed that a corridor automatically delivers a biodiversity benefit simply because it exists. The quality,

connectivity and destination of those corridors are equally important considerations.

The planning authority should therefore require robust evidence that the proposed wildlife corridors provide genuine ecological connectivity rather than merely displacing wildlife towards less suitable or more hazardous environments. Until these matters are satisfactorily addressed, granting planning permission would be premature and could expose both local communities and the planning authority to significant long-term risks and uncertainties.

For the reasons set out above, I respectfully request that the planning authority either refuse the application or defer any decision until the applicant has provided satisfactory evidence addressing the concerns identified in this submission. The burden of proof should rest with the developer to demonstrate that the environmental, agricultural, ecological, heritage and infrastructure impacts can be adequately mitigated throughout the lifetime of the project and upon decommissioning.

Questions Requiring Answers

Why have the carbon emissions associated with the removal, transportation and storage of large quantities of soil not been fully included in the project's carbon assessment?

Exactly how much topsoil and subsoil will be removed from the site?

Where will this material be transported and stored?

How much of the original soil will be returned after decommissioning?

What measures will be taken to prevent soil contamination, degradation or loss of fertility?

What is the expected grid connection date and what guarantees exist that the project will be connected within the stated timescale?

What assessment has been undertaken comparing this proposal with alternative low-carbon technologies such as wind power or small modular reactors?

These questions should be answered transparently before any decision is made on the future of the Drovers Solar Farm project.