

*I am writing to formally object to the proposed Great North Road (GNR) Solar and Biodiversity Park, as outlined in the Development Consent Order (DCO) application submitted by Elements Green (Reference: EN010162)*

## **Objection to Large-Scale Solar Farms: The Irreversible Loss of Prime Agricultural Land**

One of the strongest practical objections to the rapid installation of ground-mounted solar farms in the UK and *Great North Road (GNR) Solar and Biodiversity Park* in particular is that they are consuming vast areas of productive farmland at a time when domestic food security is already under pressure.

### **Scale of the Problem**

- ⬆ As of 2024–2025, the UK has approved or built utility-scale solar projects covering more than 20,000 hectares of land, with another 30,000–40,000 hectares in the planning pipeline (figures from Solar Energy UK and government planning data).
- ⬆ Much of this land is Grade 1, 2, and 3a agricultural land—the best and most versatile (BMV) soil that produces the highest yields of wheat, barley, oilseed rape, potatoes, and vegetables.
- ⬆ DEFRA’s own statistics show that England has already lost approximately 10% of its Grade 1 and 2 land since the 1950s; large solar farms are now accelerating that loss in specific regions (e.g., Lincolnshire, Suffolk, Norfolk, and Cambridgeshire—the “breadbasket” counties).

### **Food Security Implications**

- ⬆ The UK currently imports roughly 40–45% of its food (by value). Events since 2020—Brexit trade friction, the Ukraine war disrupting grain and fertiliser supplies, and extreme weather—have repeatedly exposed the fragility of that reliance.
- ⬆ Covering thousands of hectares of arable land with panels for 30–40 years removes that land from food production for a full generation of farmers. Once a solar farm is built, the soil is compacted by construction traffic, drainage is altered, and topsoil is often stockpiled or lost.
- ⬆ Even after decommissioning, restoring high-quality arable land is expensive, slow, and not guaranteed. Many sites are simply converted to low-intensity sheep grazing rather than returned to crop production.

### **Comparison with Alternatives**

- ⬆ The UK has approximately 2.6 million hectares of south-facing commercial rooftops (according to Sheffield University’s 2020 study), plus brownfield sites, contaminated land, and dual-use opportunities (e.g., solar over car parks, reservoirs, or alongside motorways).
- ⬆ Despite this, only about 10–15% of installed solar capacity is currently rooftop or brownfield; the overwhelming majority of new projects are greenfield solar farms because they are cheaper and quicker for developers to permit and build.
- ⬆ Countries such as Germany and the Netherlands have stricter policies protecting agricultural land and prioritise rooftops; the UK’s planning system (outside Scotland) effectively treats farmland as the path of least resistance.

## **Net-Zero vs. Food Security Trade-Off**

Proponents argue that solar is needed to hit net-zero targets, but sacrificing prime farmland is a false economy:

- ⤴ Each hectare of good arable land in East Midlands can produce around 8–10 tonnes of wheat per year—enough to supply bread for roughly 4,000–5,000 people annually.
- ⤴ Losing 50,000 hectares of such land is the equivalent of permanently removing food production for 200,000–250,000 people while the panels are in place.

In short, blanketing the British countryside with solar panels risks turning a reversible energy problem into an irreversible food-security problem. Prioritising rooftops, brownfield sites, would deliver de-carbonisation without forcing the country to choose between feeding itself and keeping the lights on.