

## Planning and solar farms

### Westminster Hall debate briefing

19 July 2023



#### Background

- To tackle climate change and reach the UK's target of net zero carbon emissions by 2050, we must transition towards renewable sources of energy, like solar.
- The [British Energy Security Strategy](#) set a target for the UK to have at least 70GW of solar power generation capacity by 2035. This level of ambition is needed if we are to decarbonise the electricity system by 2035, as recommended by the Climate Change Committee.
- [Current UK installed capacity is around 15.5GW](#), with about two thirds of this coming from solar farms. The rest is on commercial and residential rooftops.
- There is widespread public support for the transition to renewable energy, with solar energy the most popular option, according to the Department for Energy Security and Net Zero's [Spring 2023 Public Attitudes Tracker](#).
- In the first quarter of 2023, [the number of households installing rooftop solar panels reached its highest level in more than seven years](#), with 50,700 households putting panels on their homes.
- Solar energy is frequently discussed by parliamentarians and there have been a number of debates in recent years, both in the Lords and Commons chambers, and Westminster Hall.

#### Solar and farming

- It is often suggested that solar farms are a threat to farms in the UK, as most are installed on agricultural land – however, the evidence shows this is not the case.
- [Solar farms are generally developed on low grade agricultural land](#), which does not produce as much food. Developers use the Agricultural Land Classification (ALC) metric to assess this and many solar farms are on 3b land, one of the less productive grades.
- [Solar farms currently occupy 1,400 hectares](#) which is <0.01% of farmland in England. Meeting UK Government plans to increase solar energy would mean that solar used 0.3% of UK land. This is 0.5% of the land currently used for farming and roughly half the area currently taken up by golf courses.
- [Food production can continue alongside solar panels in many cases](#). Under agrivoltaics – essentially solar panels on stilts, where crops are grown below – crop yields reduce by around 8%, but in some drier years yields may actually increase. Many solar farms are home to grazing animals, like sheep, which live alongside the panels.
- [Many farmers find that leasing some of their less productive land to a solar energy company provides a reliable income](#), which compliments their existing activities and ensures their farm remains profitable.
- Where practicable, solar farms can be built on previously developed land, however there is likely to be competition for this land from housing, businesses and industrial uses.

## Solar and nature

- [There is a public concern that solar farms have a negative impact upon local wildlife.](#) However, evidence is increasingly suggesting that solar farms can boost biodiversity, compared to when land is farmed.
- [Research from Keele University](#) has found that whilst construction of a solar farm can disturb wildlife, the natural environment quickly recovers. After construction, almost all of the site can be set aside as grassland habitat for pollinators, birds and other wildlife, the diversity of which can increase.
- Well-managed solar farms have the potential to make significant contributions to addressing biodiversity loss. In 2022, [Solar Energy UK released its Natural Capital Best Practice](#) guidance to encourage operators to grasp opportunities to increase biodiversity and enhance natural capital at all stages of a solar farm's lifecycle.
- Under the Environment Act, all new developments - including solar farms - will be required to deliver a minimum of 10% Biodiversity Net Gain from November 2023, with solar farms considered to be of national significance required to deliver this from November 2025.

## Connecting to the National Grid

- When installing any renewable source of electricity, a fundamental requirement is access to the National Grid. [Waiting times for projects to be connected can often extend to over a decade](#), so it is crucial for projects, including solar farms, to be located near to where available grid capacity currently exists if we are to decarbonise the UK electricity system by 2035.
- Grid delays and grid shortages are well-known problems and the grid operators and Ofgem are currently working on reforms. However, access to the grid is likely to remain a significant challenge for many years to come.

## What do voters think?

- The Department for Energy Security and Net Zero's [Spring 2023 Public Attitudes Tracker](#) shows that 88% of people support the use of solar energy – this is the highest level of support for any type of renewable energy, beating wind, wave and tidal sources.
- The Public Attitudes Tracker also found that 54% of people said they would be happy about a solar panel farm being built in their local area, with a further 28% saying they did not mind either way about such a development.
- 61.5% of people living in the vicinity of a solar farm strongly support solar once the farm is in operation, according to new research from Copper Consultancy. Public support for solar farms grows as projects are developed and the reality of living near a solar farm becomes apparent.