Written evidence submitted by Lightsource bp (FS0023)

response to EFRA Committee Inquiry: Food Security inquiry

About Lightsource bp

Lightsource bp (LSbp) is a UK-based global leader in solar energy production. In partnership with bp, we have developed solar projects across the globe with a total capacity of 5.4GW since 2010. We deployed solar projects worth approx. £2.6B in 2021 alone and – combined with projects currently under development – we aim to provide 25GW of clean renewable energy by 2025, with a focus on developing innovative sites, improving biodiversity, and developing partnerships with organisations to source renewable energy. With over 300 solar farms developed across the UK and many more in the planning phase, Lightsource bp is the largest UK solar developer and a home-grown success story.

Introduction

There is a clear danger that the short-term shock of the war in Ukraine will undermine efforts to establish a land use strategy that delivers on multiple policy objectives for the long-term. Aside from delivering food security, a land use strategy will also need to support the UK's net zero, energy security and wider environmental targets, whilst ensuring that farmers and rural communities are underpinned by sustainable income streams. This will require an evidence-based approach, a national perspective, and an acknowledgement that this is not a zero-sum game as certain types of land use can deliver against multiple policy objectives at the same time. For example, whilst a solar farm might seem of significant size when viewed from nearby, all solar farms taken together currently take up approximately 0.08% of UK land compared to 71% that is used for agriculture[1].

Additionally, to meet the government's net zero target, the Climate Change Committee estimates that we will need between 75-90GW of solar by 2050. According to a Solar Energy UK analysis, this would mean solar farms would at most account for approximately 0.4-0.6% of UK land – less than the amount currently used for golf courses Furthermore, solar farms allow for dual land use and can therefore combine food production (e.g., sheep grazing) with energy production, whilst supporting diversification and providing a steady income stream for farmers.

Overall, we urge the Committee to consider the immediate issue of food security with an evidence-based approach as part of an overarching strategy that identifies the best possible way for using our natural resources in the UK. Reflecting our position as the world's largest solar developer, our response naturally focuses on how solar interacts with food security and land use, and we hope that our contribution will support the Committee in developing this evidence-based approach.

[1] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1027599/AUK-2020-evidencepack-21oct21.pdf

Q6: "How could the Government's proposed land use strategy for England improve food security? What balance should be stuck between land use for food production and other goals – such as environmental benefit?"

The UK's land resources are too valuable to be solely viewed through the singular lens of food production. Wherever possible, the UK's future land use strategy should look at identifying and driving synergies and making the best possible use of the different qualities of land that are available to us.

The threat of climate change to best and most versatile land

The Government's United Kingdom Food Security Report 2021[2] identified climate change as the biggest risk to the UK's domestic production, with the medium emission scenario reducing the availability of BMV land by three-quarters, from 38.1% of total agricultural land in 1990 to 11.4% in 2050. Accordingly, it will be crucial that the future land use strategy enables the UK to deliver on its net zero targets. With energy production playing a significant role in achieving those targets, it will be important to ensure that the future land use strategy allows for food and energy production.

The UK's land use strategy should encourage multi-use approaches to utilising UK land

The UK's land use strategy should recognise and encourage multi-use approaches and recognise that food, energy production and biodiversity improvements can be delivered simultaneously on the same piece of land. Whilst there are a variety of models for this, solar provides a clear example.

Land used for solar farms is not lost to farming, and the multi-use of land is a key characteristic of solar developments. Panels themselves are set up on frames and only take up 1-2% of the actual land itself[3], so the grass underneath can continue to be used for animal grazing or crop production. In fact, livestock positively benefits from the shade and shelter that panels provide over open fields, and microclimates created under solar panels can protect crops from harsh weather patterns, promote water retention, minimise evaporation, and extend growing seasons[4]. This method of land use delivers continued – and indeed improved – food production alongside clean, renewable energy.

At the same time, land used for solar farms can also deliver significant biodiversity improvements, with some solar farms achieving a biodiversity net gain of over 100%[5]. With lower human or mechanical disturbance, there are significant opportunities for pollinator recovery, shading for farm and wildlife, wildflower meadows and improved drainage and flood management. Moreover, pollinator recovery has a direct beneficial effect on nearby food production. With pollinator numbers

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[2] United Kingdom Food Security Report 2021: Theme 2: UK Food Supply Sources - GOV.UK (www.gov.uk) "The biggest medium to long term risk to the UK's domestic production comes from climate change and other environmental pressures like soil degradation, water quality and biodiversity."

[3] https://solarenergyuk.org/wp-content/uploads/2022/03/Briefing-Fact-Checker-1.pdf

[4] https://www.linkedin.com/posts/lightsourcebp_lightsource-bp-sheep-dog-tour-activity-6943534394129190912-wDrK/?utm_source=linkedin_share&utm_medium=member_desktop_web

[5] https://solarenergyuk.org/wp-content/uploads/2022/03/Briefing-Fact-Checker-1.pdf

in sharp decline, efforts to increase numbers can be vital in securing high yields of crops in the surrounding farms[6] [7].

While not strictly multi-use, solar farms can be installed on land that has been intensively farmed and is then in effect, left fallow. This enables the quality of the soil and nutrients underneath to recover, and potentially improve, thus securing the availability of agricultural land once the farm has come to the end of its c.30-year lifecycle[8].

The UK land use strategy should support diversification of rural income streams

With many farmers struggling to make a profit with the higher prices of energy and fertilisers and other commodities, it is even more important to ensure that the UK's land use strategy enables them to diversify their income streams and put their farming business on a more sustainable footing. Solar again provides a good example, as it provides farmers with a steady, long-term income stream from leasing arrangements. This positive impact on general profitability has been recognised by the NFU and such a diversified strategy also enables long-term food security as such income supports the future viability of the farming businesses and improves its capability of surveying crop failure or sever weather impacts.

The UK land use strategy should clarify and reinforce land quality categorisation

We are concerned by recent misunderstandings about the definition of "Best and Most Versatile" land. In a recent planning decision on a LSbp project in County Durham, permission was refused by the Council partly on the basis of an incorrect statement made by the Chair of the Environmental Audit Committee.

At the Environmental Audit Committee[9], in the debate on the Food Strategy[10], and at DEFRA Questions[11], Mr Eustice described BMV land (and, therefore, land with a strong presumption against solar) as including Classification 3b and above. However, the National Planning Policy Framework[12] defines BMV as 3a and above. Fortunately, the statement was corrected by Mr Eustice on 6 September 2022 but it did create uncertainty in the market whilst such correction was issued.

Given the minimal and temporary nature of solar's impact on land, the benefits it brings more broadly, and the urgent need to decarbonise our electricity system, the strategy should not extend the amount of land on which solar is unlikely to be approved.

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[6] https://www.bbc.co.uk/news/science-environment-47698294
[7] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1077015/United_Kingdom_Food_Security_Report_2021_19may2022.pdf
[8] https://solarenergyuk.org/wp-content/uploads/2022/03/Briefing-Fact-Checker-1.pdf
[9] https://committees.parliament.uk/oralevidence/10501/pdf/
[10] https://hansard.parliament.uk/commons/2022-06-13/debates/2C65A0A7-CA1E-48D2-9610-08DDC40DEEB5/GovernmentFoodStrategy
[11] https://hansard.parliament.uk/commons/2022-06-23/debates/C76F90F9-7158-4A1C-A6A7-F89EA175FAB5/OralAnswersToQuestions
[12] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1005759/NPPF_July_2021.pdf

Conclusion

We urge the Committee to consider the issue of food security as part of an evidence-based approach that identifies the best possible way for using our natural resources in the UK. A future-proof land use strategy can deliver on multiple policy objectives, encourage multi-use cases and be aware of interdependencies between net zero, energy security, wider environmental targets, and the need to support rural communities financially. Whilst outside of the remit of the Committee inquiry, such a land use strategy would need to be complemented with an appropriate interpretation of the existing planning and environmental policy.

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