Solar Energy UK

Levelling-up and Regeneration Bill:

Reforms to national planning policy

Respondent details (for consultations)

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Would you like this response to remain confidential?
Yes / No

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Introduction

Solar Energy UK welcomes the review of the National Planning Policy Framework (NPPF) and the opportunity to provide comments on the reform. In our response we demonstrate how the NPPF should be viewed as one of the mechanisms to ensuring the delivery of the UK's legally binding climate and environmental targets.

Renewable technologies such as solar and storage will undoubtedly play a key role in the delivery of net zero 2050. Solar needs to be deployed at scale and speed and the NPPF should be redrafted to facilitate such projects to align with the Governments priorities to deliver, energy security, food security, reverse the loss of biodiversity, and net zero.

The planning system, including the NPPF will enable the Government to meet these ambitions and commitments. In the NPPF and associated planning documents, Government must clearly provide an in principle support for renewable energy development, together with a clear roadmap for policy support and decision making.

We have responded to questions,37,40,41,42,44,57 asked by the Department for Housing, Levelling-up and Communities and are available to discuss this in detail at the departments convenience.

We thank you for taking our response into consideration.

Questions

Q38 – Do you agree that this is the right approach to making sure that food production of high value farmland is adequately weighted in the planning process, in addition to current references in the framework on best and most versatile agricultural land?

We do not agree. The added assertion in footnote 67 on food production is subjective with no clear indication as to what is deemed appropriate for development. Whilst we agree that food production should be a consideration when reviewing planning applications, it must be weighted equally against all other planning considerations. We are concerned that footnote 67 as it stands in the draft, could result in food production being raised above all other material planning considerations. Any such change has the potential to severely restrict other necessary land uses, including the provision of much needed clean energy generation and biodiversity improvements, and would not be consistent with the growth, decarbonisation, and energy security vision of the government.

We strongly recommend that the NPPF adopt the same language as currently written in the draft National Policy Statements EN-3 stating that 'land type should not be a predominating factor in determining the suitability of the site location.' This provides significantly greater clarity and aligns with overarching net zero policy. The current NPPF drafting is not consistent with other planning documentation, which confuses the decision-making process. We strongly recommend that the wording in the current draft NPS EN-3 does not change when the NPS documents are consulted upon later on in the year.

It is not the case of a zero-sum game where energy security is in competition with food production; with solar farms you are able to support both. Solar farms in the UK can be co-located with sheep grazing and therefore food production can be maintained alongside solar. To expand further, installing a solar farm is a reversible form of land use and their deployment will help to meet the UK's energy security and climate change objectives with minimal, if any, impact on Britain's food security. In fact, the opposite is true: solar farms directly address climate change, which Defra has identified as the most important threat to UK food security.[1]

Where possible, solar farms utilise previously developed land, such as brownfield sites, and agricultural land of lower quality. This stands to reason as there is no economic incentive for solar developers to propose sites on the highest quality land in the first instance, as to do so would imply higher leasing and other costs.

The UK farming industry benefits from both rooftop and ground mount solar and there has been extensive public support for solar farms from the farming community.[2]
This is because the rental income a solar farm provides directly supports income diversification for British farmers, who operate in a challenging economic context.

As well as supporting the reduction of carbon emissions and improving long-term land quality (allowing land to lie fallow for a period, contributing to nature recovery), solar farms can also deliver significant local environmental benefits. Well designed and well-maintained solar farms have been shown to support thriving wildlife habitats, providing a range of biodiversity gains for the duration of their lifespan.[3]

1. United Kingdom Food Security Report 2021: Theme 2: UK Food Supply Sources - GOV.UK (www.gov.uk)

2. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1123572/BEIS_PAT_Autumn_2022_Energy_Sources_and_Energy_Infrastructure.pdf

3.

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We are committed to ensuring that our countryside remains a dynamic space, producing food and energy for the nation while supporting environmental benefits. The solar industry and our countryside communities stand ready to work together in support of this: promoting multi-functional land use, creating jobs, increasing biodiversity, reducing bills, and addressing climate change. Solar farms help achieve all these goals.

Solar Energy UK has produced a wide variety of information on this topic, including a briefing on solar farms and food security, and is available to discuss the issue in detail with the Department at its convenience.4 External outlets have also published, for example, fact checkers on solar farms and land use, and described the support of landowners for solar farms, and the benefits that solar farms provide them.5

Q40 – Do you have any views on how planning policy could support climate change adaptation further, including through the use of nature-based solutions which provide multifunctional benefits?

We commend the Government's onus on the importance of addressing the dual climate and biodiversity crises. Solar farms present an opportunity to fully utilise land to deliver climate, agricultural and biodiversity benefits.6 The solar industry works closely with farmers and landowners: to manage land under solar farms for continued agricultural use, to improve soil quality, and to provide flood mitigation, biodiversity gains and other ecosystem services. Solar farms in the UK can be used for sheep grazing and solar developments installed on land previously used for arable cropping can diversify local land use, adding ecosystem services such as pollinator habitats and contributing to nature recovery networks.

In addition, there is increasing interest in applications such as agri-voltaics, where solar PV modules are closely integrated with crops or pasture.7 These installations can support the production of renewable energy and food from the same land, by using the microclimates created under solar panels to protect the crops from harsh weather patterns, promote water retention and minimise evaporation, and extend growing seasons. This type of application is being explored by the industry in the UK.

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3 https://solarenergyuk.org/resource/natural-capital-best-practice-guidance/

4 https://solarenergyuk.org/wp-content/uploads/2022/09/Briefing-Solar-Farms-Food-Security_The-Facts_Sept2022.pdf

5 See, eg https://www.carbonbrief.org/factcheck-is-solar-power-a-threat-to-uk-farmland/ and https://www.theguardian.com/environment/2022/oct/22/landowners-call-for-scrapping-of-plans-to-ban-solar-energy-from-englands-farmland.

6 https://solarenergyuk.org/resource/natural-capital-best-practice-guidance/

7 https://www.solarpowereurope.org/insights/thematic-reports/agri-pv-how-solar-enables-the-clean-energy-transition-in-rural-areas

Secondly, we recommend that when designing new places, a much stronger design consideration should be given to maximising with potential to create renewable energy sources to assist in powering the development. For example, the orientation of a roof on a new building to be designed in a way that would maximise output for solar panels and minimise visual impact. We propose that paragraph 132 (previously para 130) be extended to include an additional point that says that developments 'should give consideration to the inclusion of renewable energy sources to support the development.'

Further, considerate design should also be extended to wider commercial buildings such as solar carports. These structures can be dual purpose by both providing a shelter for vehicles and delivering clean energy which can be used immediately onsite. In November last year, France approved legislation that requires all car parks with more than 80 spaces to be covered by solar panels. UK Government could look to develop similar policies to encourage all types of development to address the climate emergency.

Q41 Do you agree with the changes proposed to Paragraph 155 of the existing National Planning Policy Framework?

We somewhat agree with the proposed changes to para 157 (formerly para 155). If the UK is to reach net zero by 2050, a clear strategy on the deployment of low carbon technologies will be essential. We commend the government's commitment to delivering 70GW of solar by 2035. We are keen to work with Government to develop the details as to how this target will be achieved, with clear milestones identified.

In paragraph 157a, the distinction between repowering and life extensions needs to be clarified. We would recommend amending the wording within 157a to "...and their future repowering, life extension and maintenance of new and existing sites...". Definitions of repowering and life extensions should also be provided in the glossary and supplementary guidance to avoid ambiguity.

Secondly, we ask that the Government clarifies the language where it refers to adverse impacts of renewable developments. As it stands 'ensuring that adverse impacts are addressed satisfactorily' is unclear and is open to individual interpretation. We recommend that Government clearly explain what would be considered as adverse and how renewable developers could seek to mitigate these in a way which would support the approval of the project. We also welcome the addition of the text in support of repowering projects which we expand on further in our response to question 42.

Lastly, the paragraph refers to the identification of suitable areas for renewable and low carbon energy sources. If local planning authorities do 'identify suitable areas for renewable and low carbon energy sources', the identification of such areas should not limit the ability of applicants to obtain planning permission on areas outside of such locations. Such an approach would be regressive – reducing the number of projects brought forward and therefore delaying the achievement of net zero. If any local authorities plan to identify such area, we ask that the industry be consulted on any proposed criteria and / or methodologies,

to ensure both constraints and opportunities are fully understood and factored into the site selection process.

When applicants consider the location of a solar project, sites will be carefully selected to account for topography, land classification and condition, nearby buildings or heritage sites, economic viability, environmentally protected areas, access to the grid and numerous other factors. All considerations should be assessed on an equal footing and all applications should be assessed on a case-by-case basis, on their individual merits.

One of the most limiting factors for where projects can be developed is access to grid connections. The grid is heavily constrained and without being able to connect to the grid, renewable assets will not be able to sell the electricity they generate, and hence will not get built. If we are going to meet our net zero targets, the government, Ofgem and the grid operators will need to facilitate a significant increase in grid capacity across all areas of England, and renewable energy developers will need to be able to build renewable energy generation where grid is available.

Q42 Do you agree with the changes proposed to Paragraph 158 of the existing National Planning Policy Framework?

We somewhat agree with the proposed changes to para 160 (formerly para 158). We welcome the language in the NPPF demonstrating support for repowering and life-extension of existing renewable sites.

We do have concerns as to the interaction of paragraphs 160b and 157b and whether this could create a general precondition that does not consider the specific individual characteristics of a project. The result of this is that any proposals outside of those specified in 157b are unreasonably required to demonstrate that they meet the criteria for inclusion within suitable areas. This could implement a presumption against the approval of most, if not all, applications that are outside sites identified by local planning authorities.

Innovation in solar technology has resulted in approximately a 3-4% increase in the efficiency of solar panel technology every 10 years, and we can continue to expect incremental improvements. Further improvements are being made on a rolling basis in cable technology, the quality of industrial grade glass, inverters, and other solar system components, all of which are helping to reduce electrical losses and ultimately improve performance. These improvements make a more attractive business case for solar, driving investments towards clean technology, whilst also supporting economic growth and the delivery of net zero. In addition, this is hugely beneficial as improvements in efficiency allow utility scale solar PV projects to achieve net zero in a sustainable manner as less land is needed to produce the same output of electricity.

Repowering solar farms can provide continued benefits to the community throughout the operational lifespan of the project. These could include a community benefit fund, provide educational and recreational opportunities for schools and local community groups and support local conservation priorities e.g., tree planting/orchards and flood mitigation and prevention.

Lastly, repowering solar sites will utilise the existing grid infrastructure which is already significantly constrained. The NPPF and proposed amendments should go further in recognising the commercial realities of repowering and delivering renewable energy projects more widely, where there is scarcity of grid connections.

The lack of transmission and distribution network capacity is a major limitation on the deployment of solar and other onshore renewable generation technology in the UK. There is not enough physical electricity network infrastructure (such as cables, transformers, and substations) available to distribute electricity to where it is needed. This is a challenge at every scale of project, down to residential and commercial rooftop systems.

Q44. Do you agree with our proposed new paragraph 161 in the National Planning Policy Framework to give significant right to proposals which allow the adaption of existing buildings to improve their energy performance?

We agree. The potential for solar to deliver energy efficiency improvements, reduced running costs and reduce carbon emissions is vast. Solar Energy UK research has shown how 4.4 million homes with solar on the roof and a domestic energy storage system, such as a battery, could eliminate the evening peak in demand during winter.8 There is also major potential generation capacity in commercial and industrial rooftop solar. For example, a recent report demonstrated that there is the potential for 15GW of solar to be deployed on warehouse roof space alone.9

We recommend the text is expanded to recognise wider solar technologies for example PVT (Photovoltaic Thermal technology) and solar thermal which can help to reduce electricity and heating bills and carbon emissions. 10

We ask that Government clarifies what would be considered as 'significant' weight to supporting energy efficiency improvements. Given the BEIS forecast that the UK may need to increase electricity generation capacity to around 400GW by 2050, the role for distributed solar should be maximised in the UK's future energy system at all scales. Solar projects can sometimes be deployed in a matter of months, and so can make an immediate contribution to addressing the UK's energy needs and reducing consumer energy bills.

Secondly, we would recommend that paragraph 161 is expanded further to consider energy efficiency in both new and existing homes. If we are to meet our ambitious net zero targets, the role of building regulations in both new and existing homes will be very important. The NPPF, Future Homes and Future Buildings Standards should be designed to ensure that solar is incorporated as standard on all new domestic and non-domestic buildings when

[8] https://solarenergyuk.org/resource/smart-solar-homes/

[9] https://www.ukwa.org.uk/wp-content/uploads/2022/09/Investment-Case-for-Rootop-Solar-Power-in-Warehousing-August-2022.pdf

[10] https://solarenergyuk.org/resource/the-value-of-solar-heat/

these Standards are introduced. More widely, this aligns on the ambition outlined in the energy security strategy to strengthen planning and other policy in favour of rooftop capacity.

As discussed elsewhere in our response, one of the major challenges to the uptake of distributed solar is network congestion and constraints. Solar Energy UK members installing rooftop solar projects at every scale have repeatedly stressed the degree to which these are now restricting the size of rooftop solar projects that would otherwise be viable. Without coordinated investment to expand and re-enforce our grid network, we will not be able to meet net zero.

Q57. Are there any specific approaches or examples of best practice which you think we should consider to improve the way that national planning policy is presented and accessed?

In Chapter 12: "Wider changes to national planning policy in the future", the consultation document mentions the introduction of Environmental Outcome Reports (EORs). However, there has been no formal consultation or further communication to industry on the introduction of EORs to date. We strongly recommend that a consultation on the introduction of EORs is published before moving away from internationally recognised and widely understood environmental assessments, such as Environmental Impact Assessments (EIAs) and Strategic Environmental Assessments (SEAs), as a matter of best practice, to help ensure that EORs would streamline environmental assessments for development in practice.