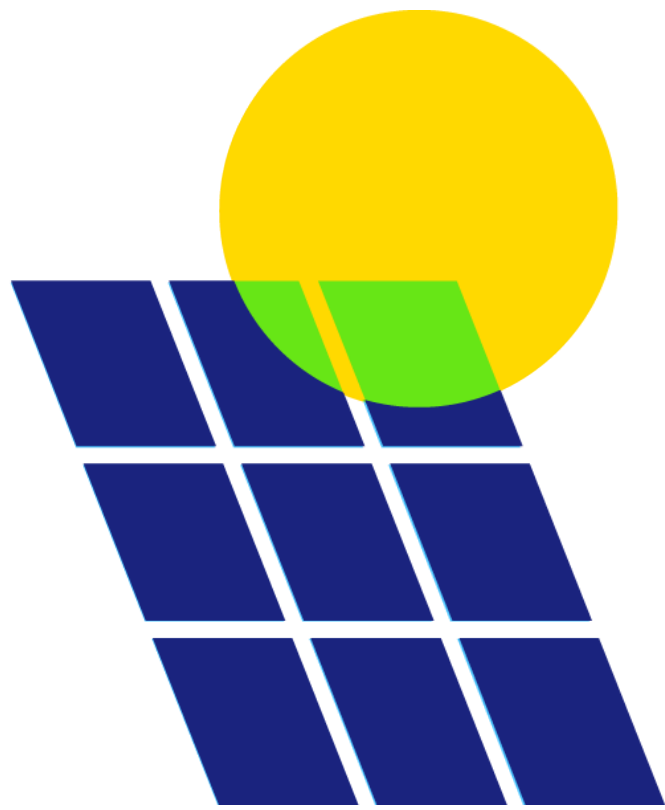




Fourth National Planning Framework Position Statement

Solar Energy Scotland Consultation Response



About us

Since 1978, Solar Energy UK has worked to promote the benefits of solar energy and to make its adoption easy and profitable for domestic and commercial users. A not-for-profit association, we are funded entirely by our membership, which includes installers, manufacturers, distributors, large scale developers, investors, and law firms.

Our mission is to empower the UK solar transformation. We are catalysing our members to pave the way for 40GW of solar energy capacity by 2030 We represent solar heat, solar power and energy storage, with a proven track record of securing breakthroughs for all three.

Solar Energy Scotland, a sub group to Solar Energy UK works to shape policy that will enable Scotland to fully realise its potential for solar and energy storage application within the power, heat and transport sectors, in contribution to the nations aim of reaching net zero by 2045.

Respondent details

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Would you like this response to remain confidential? No

Introduction

We welcome the opportunity to provide our thoughts on the National Planning Framework 4 (NPF4) position statement. The removal of key barriers could see Scotland well placed to grow solar energy deployment to 4GW by 2030, and an ambitious Government could potentially deliver as much as 6GW. These figures represent Scotland's fair share of solar and are in line with the analysis of the Climate Change Committee and Solar Energy UK's overarching UK target of 40GW by 2030.

As the Scottish Government strives to reach net zero, decentralised renewable energy generation alongside smart, flexible systems will replace centralised fossil fuel plants.⁷ Solar and storage will be key drivers in accelerating the transition.

We encourage the Government to use NPF4 as an opportunity to accelerate the deployment of renewable energy and flexible technologies to deliver the energy transition in Scotland.

We note that this consultation is not intended to be an opportunity to restate points made elsewhere, and that the Position Statement has been produced to provide an idea of the Scottish Government's direction of travel as it shapes and refines its thinking ahead of setting this out fully in draft NPF4.

Accordingly, this response seeks to clearly address (where appropriate) the questions set out on page 40 of the Position Statement. We have therefore provided detailed responses to questions 1, 5 and 7 below, outlining the most important points in bold.

Thank you for taking our responses into consideration.

1. Do you Agree with our current thinking on planning for net-zero emissions?

We were encouraged by the Scottish Government's thinking around planning for net-zero emissions and agree that placing a high importance on renewable technology is the correct approach to tackling the climate emergency.

However, we are concerned with the **absence of any reference to solar in the Position Statement. We consider there is a threat that without recognition in NPF4, solar could be considered in the same terms as wind energy for planning considerations and therefore assessed and treated similarly, despite significant differences both in terms of the physical impact and the underlying economics of the two technologies.**

The omission of any mention of solar within the position statement is noticeable and a source of some concern to our Members, as previously in the 2017 Scottish Energy Strategy, it was noted Government would "consider the role for solar and other renewable technologies under the forthcoming review of energy standards within Building Standards and the next National Planning Framework". It is therefore hugely disappointing that the position statement appears to have forgotten solar, which remains the most cost-effective renewable energy technology, as demonstrated by the UK Government's latest figures.

In the past we have highlighted opportunities for the Scottish Government to accelerate solar deployment and the key role which solar must play to help achieve the Government's ambitious climate targets and deliver net zero by 2045 – as otherwise set out in the 'net-zero emissions' section of the document. Accordingly, we consider that **NPF4 needs to recognise the importance of solar as part of the overall renewable energy mix and provide supportive text so as to empower Local Authorities to support the wider roll-out of solar and storage technologies which are now viable without subsidy at many locations around Scotland.**

Further, although we are supportive of setting long term sustainability targets, we **also encourage Scottish Government to focus on what is deliverable over the next decade.** Solar and storage are proven, rapidly deliverable technologies. At present, the level of deployment in Scotland is considerably lower than that of the other countries within the UK. However, in recent years planning permission has secured more than 100MW of consented schemes. Given the potential that already exists, Scotland could be hugely disadvantaged if a favourable planning environment is not created for solar and auxiliary technologies by virtue of NPF4 failing to recognise these more explicitly.

5. Do you have any further suggestions on how we can deliver our strategy?

Streamlining Planning

Solar is a proven low impact and highly popular energy technology. In the last decade, the land take for ground-mounted solar projects has reduced by 30%, due largely to improvements in panel technology. Recently the UK Government exempted energy storage projects from the national planning regime due to their low impact and small footprint. In line with this, **we encourage the Scottish Government to modernise its guidance on solar installations** to further reassure Local Planning Authorities of the virtues of this technology and its minimal impact on the host environment.

Whilst we are supportive of introducing new policies to address a wider range of technologies; policy barriers which are undermining deployment opportunities must be immediately addressed. As previously stated, the removal of key barriers could see Scotland well placed to grow solar energy deployment to 4GW by 2030, and an ambitious Government could potentially deliver as much as 6GW. **Targeted changes to the development management process in relation to solar** could go a long way towards supporting this goal. Developers in Scotland face disproportionate planning fees and complex administrative process resulting in a hugely challenging planning process.

The **position statement fails to directly acknowledge that the increased demand for clean power and renewable deployment is hindered by an outdated and heavily constrained grid**, which is costly and prohibitive to the connection of new renewable generation. **It is important that the Infrastructure Investment Plan mentioned throughout the document considers grid issues as well as those of transportation etc** On-site generation and storage will need to play a central role in reducing strain on the grid and absorbing the increased demand from the electrification of heating and transport. As demonstrated in our report on Smart Solar Homes¹, energy generated and stored at a local level not only has direct benefits for consumers but can provide system level benefits, reducing peak demand and delaying the need for costly infrastructure upgrades.

We support the phrasing under the net zero emissions planning strategy that highlights “no single development or planning policy can achieve this.” The Government must work with Local Authorities to increase understanding and support them in pursuing the most appropriate renewable technology options for delivering net zero at the local level. NPF4 should amplify this point, as it is important that solar is not put into a category with all other technologies, such as onshore wind; as the planning impacts, underlying economics, and generation profile, for solar differ significantly from other renewable technologies.

The underlying economics of solar means projects can be delivered without the need for subsidy. This technology can therefore assist the Scottish Government in their aspirations to create ‘better, greener places’. Supporting opportunities for Local Authorities to deliver solar projects on social housing can also reduce energy cost for social landlords

¹ <https://solarenergyuk.org/resource/smart-solar-homes/>

and residents.²Prime projects can generate revenue and cost savings immediately, and profits generally within ten years.³ Many local authorities have invested in business parks, urban offices, warehouses, and market spaces as a valuable source of future council income. Business parks and offices often provide an ideal site for retrofitting with solar, either on-roof or, even more cost-effectively, through private wire connection to a nearby site for ground-mounted solar.

Increasing Opportunities for Co-located Solar and Storage

The position statement notes that one of the potential policy changes being considered centres around “introducing new policies that address a wider range of energy generation technologies for example for electrical and thermal storage, and hydrogen”. As noted elsewhere, it is concerning that solar itself is not referenced within the position statement. However, aligning with the above potential policy change, **it is important that both solar and associated storage should be specifically addressed as part of any new policies on renewable energy.**

As Scotland moves to an electricity generation mix based largely on renewables, energy storage will be vital to ensure the balance of supply and demand. The UK storage market, while still nascent, is growing rapidly and will undoubtedly play a central role in enabling a smart, flexible energy system with high penetration of variable renewable generation technologies. The interaction between solar and storage has the potential to be a significant building block of the clean energy transition and will be vital to meeting future demand, as well as shaping consumption curves to reduce strain on the network. Solar and storage complement one another, allowing for more energy to be available for non-productive hours, enabling homes to utilise 100% renewable energy and making storage vastly more efficient when combined with solar. This would not only support the Government’s net zero ambitions but would aid in building resilient communities.

There is more beyond the planning and co-location opportunities identified thus far that the Government can do to support the deployment of renewable technologies. **We agree that it is important to strengthen support for re-powering and expanding existing wind farms as suggested in the position statement, however an identical level of support should be shown by Scottish Government for the expansion of solar projects.** Government must recognise the importance of supporting multiple renewable technologies to achieve their ambitious climate targets.

We support Scotland’s ambitious targets to enhance building standards to deliver zero carbon homes. The implementation of new standards focusing on reducing energy demand and carbon emissions within new buildings by 2021 is a crucial step. The requirement to power new build homes with renewable or low carbon heating from 2024 is also a considerable step toward delivering infrastructure that reduces emissions as referenced in the consultation. To deliver net zero by 2045, we encourage the Government to introduce the necessary measures as quickly as possible, setting 2024 as the deadline for implementation.

In addition, to facilitate the decarbonisation of heating, **NPF4 must recognise the importance of on-site generation and storage to meet the increased demand projected from the electrification of heat provision.** Renewable technologies such as solar and storage can

² <https://www.cse.org.uk/downloads/file/bringing-local-energy-benefits-to-deprived-communities.pdf>

³ <https://www.solar-trade.org.uk/wp-content/uploads/2018/04/local-authority-solar-guide-WEB.pdf>

and must play a critical enabling role in supporting the ambition to roll out heat pumps at a mass scale.

Natural Capital and Ecosystem Services Benefits

We fully support the promotion of nature-based solutions as set out within the position statement, and the Government should help planners and decision makers to understand the natural capital and ecosystem services benefits that solar parks can deliver alongside clean renewable energy. Solar parks are a temporary and, in most cases, completely reversible land use. For almost all ground-mounted solar installations, panels are set on posts and there is minimal disturbance to the ground (typically less than 5%). The remainder of a field utilised for solar park development is still accessible for plant growth and potentially for wildlife enhancements and complementary agricultural activities such as conservation grazing of sheep or for the planting of wildland meadow to encourage greater biodiversity.

The NPF4 should recognise that under the different planning regime elsewhere in the UK well designed and well-maintained solar farms have been shown to deliver biodiversity net gain, alongside other natural capital benefits such as air and water filtration, flood mitigation, and more.

Solar parks are secured facilities and long-term installations (with 25-40-year operational lifespans), requiring minimal human disturbance of the grounds, and with a very small infrastructure footprint – all attributes that engender them as good areas to enhance the ecological value of the landscape. Solar farms can also benefit the surrounding areas through increased pollination by providing environments such as wildflower meadows which attract insects and birds.

Several of our members have reported that threatened and endangered species regularly make use of their large-scale solar sites as habitat. For more information, we would refer you to our recent report on the [Natural Capital Value of Solar](#), case studies in which describe the natural and constructed habitat.

7. Do you have any other comments on the content of the Position Statement?

Within the section 'A Plan for Better, Greener Places', it notes that one of the proposed policy changes under consideration is: "Updating our green belt policy to provide greater clarity on acceptable uses whilst also recognising its role as part of multifunctional natural infrastructure". We support this commitment to look again at the purpose and function of the green belt, and would urge Scottish Government to reflect on the different characteristics of different types of renewable energy generating developments, and to acknowledge that solar is a development type that can assimilate very well into most host landscapes.

Accordingly, while there may be some reservations in providing a completely permissive policy for all types of renewable energy developments in the green belt, **any update to green belt policy should include solar as an appropriate development type within the multifunctional natural infrastructure that green belt provides.** Subject to site specific considerations, it is not considered that there are any aspects of solar development that are contrary to the functioning of green belt in Scotland as currently defined in SPP. There therefore seems no reason to not support this type of development in these types of spaces.

We support the recommended policy change to accelerate the transition to zero emissions and to **create better, greener places through prioritising the utilisation of derelict land. We consider that such land could be put to productive and creative new-use if the deployment of ground mounted solar was actively encouraged in such places, as has been done elsewhere.** Government should review this cheap and accessible land space with a view that solar deployment will not only provide a source of renewable energy but additionally promote biodiversity and increase the natural capital value of these sites.