Solar Energy Scotland

National Planning Framework 4

Local Government, Housing and Planning Committee

March 2025

About us

Solar Energy Scotland is the trusted industry trade body for solar energy in Scotland. Alongside Solar Energy UK, we represent a thriving member-led community of businesses and associates, ranging from ambitious and innovative SMEs to global brands.

Together with our members, Solar Energy Scotland works to shape policy to realise the potential of solar and energy storage in Scotland, to deliver 4-6GW of solar in Scotland by 2030 and to work with Government and all stakeholders to deliver on climate change obligations and net zero greenhouse gas emissions by 2045.

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- **Would you like this response to remain confidential**: No
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Introduction

We welcome the opportunity to provide feedback on the Local Government, Housing and Planning Committees review of the Fourth National Planning Framework (NPF4). When published in February 2023, the industry welcomed the document, recognising it as a key instrument in supporting Scotland to deliver a fair and just transition.

Renewable technologies such as solar power and energy storage will be essential if Scotland is to reach net zero by 2045, and the planning system plays a critical role in enabling the government to meet these targets. Since the NPF4 came into effect, it is our understanding that 30 ground mounted solar projects (with a generating capacity of 835MW) have been approved planning; however, the vast majority of these projects are awaiting construction.

In our response, we review how effective the NPF4 has been in practice with a specific focus on its application to solar projects. We have provided examples from the solar industry which we hope are helpful in illustrating both the success and areas of improvements needed under the NPF4.

Application of NPF4 in Practice

The industry remains for the most part very supportive of the NPF4 and in many respects, we feel it has delivered on its objectives. We welcome the onus of placing climate change and renewable energy at the forefront of planning policy with the inclusion of *"significant weight will be placed on the contribution of the proposal to renewable energy generation targets and on greenhouse gas emissions reduction targets."* under Policy 11. This crucial advancement in Scottish planning policy refines the weighting criteria for energy generation and emissions reduction, strengthening Scotland's commitment to net-zero goals.

Inconsistent interpretation and application of policy

Application of policy and misinformation

As discussed above, the industry remains very positive on the intentions of the NPF4, and we recognise that some inconsistencies in its application should be expected as per the introduction of any new policy document. However, whilst the NPF4 is promising in principle, its overarching objectives to support climate and nature targets are not consistently reflected in the decision-making process. Despite being a national framework, its application has varied across different levels of decision-

makers, from the Scottish Government to Local Planning Authorities.

At the highest level, the Scottish Government plays a crucial role in setting a precedent for the consistent application of NPF4 across the planning system. It is important that a clear and well-informed approach is taken to ensure the policy is effectively implemented. We believe there is a need across planning authorities and within the Scottish Government to ensure there is consistency and clarity in decision making, particularly regarding how NPF4 should be applied to solar farms.

A key challenge is the inconsistent application of NPF4 by local planning authorities, where subjective interpretations are being applied in a manner that deviates from national guidance. Misinformation, particularly around solar technologies, has contributed to this issue. For example, concerns that solar farm projects are affecting food security have influenced decision-making, despite evidence that clearly states the biggest threat to food security is climate change, which solar farms actively help to address. The amount of land required to achieve targets of 6GW of solar deployment (3.5GW likely ground mount) would only use approximately 0.08% of total Scottish land (figure 1), and the role a solar farm can play in stabilising a farming business is also not appreciated in the misinformation merry-go-round. Removing misconceptions in the decision-making process is essential to proper implementation of the NPF4 and reducing projects being held up or stopped entirely, unnecessarily.

Market Hill solar farm,(Perth and Kinross region), currently under review, illustrates how misconceptions and inconsistencies in approach can significantly delay projects. Initially refused by Perth and Kinross Council due to concerns over the loss of prime agricultural land, food security, and landscape impact—citing Policy 5 of NPF4—the project has since been called in for review by Ministers. This case highlights the need for a more uniform and well-informed application of NPF4 to support Scotland's renewable energy ambitions.

Some of our members have reported concerns regarding decision making timescales for projects that have been called in by Ministers. In such cases, developers are often not provided with a clear timeframe for when they can expect a decision. This lack of clarity creates uncertainty, which, in turn, can deter investors and ultimately affect the overall deliverability of projects. If developers and investors cannot trust the planning system to be fair and efficient, projects will stall or fail to move forward. Improving transparency and communication around expected decision-making timelines would help address these concerns, giving developers and investors the confidence to move projects forward.

Finally, NPF4 is the central planning guidance in Scotland, setting the strategic direction for sustainable development, rural diversification, and the just transition to a net zero. It is essential that any new policy, whether introduced at a UK or Scottish level, does not supersede or contradict the framework but is in alignment (for example the implementation of the Strategic Spatial Energy Plan (SSEP) must be fully aligned with NPF4). It is critically important that climate mitigation and renewable energy remain a high priority for NPF4. Any weakening of the NPF4, risks weakening opportunities for investment and sustainable economic development, and set back the objective of a just transition.

Inconsistencies in NPF4

For the most part the intentions and applications of policies under NPF4 are clear. However, there are some areas within the NPF4 which contradict one another. This has led to inconsistent policy interpretation by planning professionals, resulting in variability in how planning applications are assessed and decided.

Throughout the NPF4, setting, landscape, and visual impacts of developments are discussed, but the messaging is often inconsistent. Under Policy 4 a) a planning authority may deem a development to be unacceptable if *"by virtue of type, location or scale will have an unacceptable impact on the natural environment, will not be supported."* However, under the energy section in Policy 11 it states, *"Development proposals in rural areas should be suitably scaled, sited and designed to be in keeping with the character of the area."* Further on under policy 11 it states that landscape and visual impacts for example *"are to be expected for some forms of renewable energy. Where impacts are localised and/ or appropriate design mitigation has been applied, they will generally be considered to be acceptable"*.

Given that such policy checks and balances on visibility do not apply to other land uses it does seem partial against renewable energy. These sections of the NPF4 could be refined to ensure greater consistency and reduce the risk of misinterpretation.

Delays in processing planning applications

A lack of resources in the decision-making process such as local planning authorities', statutory consultees, and in the Reporters Unit of Scottish Government are causing significant delays in processing applications. Without sufficient staffing and funding, the timely assessment and approval of projects may be hindered, undermining the framework's effectiveness in delivering sustainable economic

development.

Resource constraints across the planning system

To fully accelerate the consenting process and proper implementation of NPF4, resource gaps within planning departments and statutory consultees must be addressed. This could be achieved by securing additional funding for training and upskilling officers in Local Planning Authorities (LPAs) and statutory consultees to ensure they have the necessary expertise and resources to make informed decisions on solar planning applications.

There is a specific shortfall in expertise within ecology and biodiversity, landscape, and archaeology. This is particularly concerning given the National Planning Framework 4's requirements for developments to deliver positive effects for biodiversity. Given the current skills gap, it is likely that this will cause additional pressure on Local Planning Authorities who will need to outsource expertise.

The role of statutory consultees ought to be more efficient, clear and consistent, and the ongoing review of the Scottish consenting regime which is currently in train, should be referred to in the committee's deliberations. There is a question mark over the role that bodies such as NatureScot and Historic Environment Scotland play in the decision-making process when it comes to highly 'subjective' issues such as visibility or effects on 'setting'. Rather than object to such subjective matters, we recommend it is better for the decision-maker to be made aware of the extent of perceived effects of a development by these bodies, but the judgement on acceptability of subjective effects should be with the decision-maker. This could help reduce the number of projects going to long and expensive public inquiries and could foster greater consistency and efficiency in application determinations, ultimately reducing delays.

The Scottish Government's proposals for reforming the consenting process under the Electricity Act 1989 suggest introducing a forum for the Energy Consents Unit and statutory consultees to share knowledge and best practices. We believe this initiative could be an effective tool to support planning professionals in properly applying the policies within NPF4 for all developments.

NPF4's commitment to addressing climate and nature emergencies is manifesting in individual planning decisions

Solar Energy Scotland strongly supports the NPF4s prioritisation of climate and nature goals. The climate and nature emergencies are intrinsically linked and solar presents an opportunity to address both. Delays in deploying solar at any scale could prevent Scotland from meeting key targets, including those for nature conservation and net-zero.

Biodiversity Net Gain (BNG)

Many developers have prioritised biodiversity enhancement from the very outset, well before the implementation of NPF4 or any mandatory (BNG in England) requirements. Any revisions to improve the effectiveness of NPF4 could include an explicit statement which recognises that with appropriate design and management solar farms can become hotspots for nature.

Well-designed and well-maintained solar farms present a positive opportunity to support biodiversity and nature recovery. Solar farms are temporary structures with long operational lifespans (typically 25-40 years) and minimal ground disturbance. The overall infrastructure footprint of a solar farm is typically less than 2% of the total land area. This means the rest of the land is available for developers to take measures to actively improve the local environment and provide a range of ecological benefits. These can include (but are not limited to):

- Establishing wildflower meadows and grasslands. The areas between panels and around the edges of the site can be used to create new habitats for pollinators, butterflies, and ground nesting birds.
- Supporting hedgerow growth. Hedgerow loss is a major concern for countryside management across the UK. New solar projects aim wherever possible to preserve or restore existing hedgerows or deliver new hedgerow growth. These are often required for screening purposes by planning authorities but are in and of themselves a great benefit to wildlife.
- Promoting wetland habitats and enhancing watercourses. Effective drainage and water management systems are essential for solar farms. As part of this, they can be designed to incorporate wetland habitats and enhance water courses. These offer a natural drainage solution for the site, which reduces local flood risk and supports terrestrial and aquatic life.

There is clear commitment from industry to support ecology on solar farms; with many having undertaken ecological monitoring on solar for years. Ecological

monitoring of solar farms plays an important role in assessing change, identifying the effect and suitability of management practices, and ensuring planning obligations are met. Ecological monitoring also provides a valuable tool to explore the relationship between solar farms and biodiversity.

For the past three years, Solar Energy UK has published a UK wide report providing detailed analyses of ecological trends on solar farms throughout the country. [1]In May 2023, the first Solar Habitat report was released which highlighted ecological trends across 37 sites in the UK (monitored in 2022 using the standardised methodology). In 2023 this increased to 87 sites and in 2024 over 120 sites will be included in the research. Analysis so far indicates that when solar farms are managed for biodiversity, they can have a positive impact on plant and animal abundance and species richness. It also shows that the presence of diverse plant and invertebrate species has a positive impact on the abundance of bird species.

Land use & food security

Solar farms do not present a threat to food security, the biggest threat to food security is climate change. Across Scotland, farming businesses are facing increasing uncertainties (climate pressures, unpredictable weather patterns, stock issues and rising costs) which has led to many businesses struggling to survive or break even. Small enterprise farms, which make up a core part of the Scottish agricultural landscape, struggle to achieve net profits without the addition of government subsidies.

To keep farming businesses in operation, many are now looking at ways to diversify their assets from sources other than conventional farming. Solar farms are offer the potential for long term revenue, allowing farmers to lease part of their land for renewable energy production without compromising their ability to farm. This income can help support other areas of the farming business and help keep Scottish farmers

[1] https://solarenergyuk.org/resource/solar-habitat-2024-ecological-trends-on-solar-farms-in-the-uk/

farming, contributing to domestic food production. In addition, solar can support farmers to decarbonise assets; reducing carbon emissions, whilst also saving farmers money on their bills.

Solar Energy UK's latest report on farming sustainability showcases examples from across the UK, demonstrating how solar energy has helped farmers to diversify their assets; this reliable income source enables farmers to sustain traditional agricultural practices (e.g growing crops) supporting both food production and security. In addition, 37% of farmers who were surveyed for the report stated that additional revenue from solar would help secure their farm for future generations.

Land use

The amount of land needed for solar farm deployment, in line with the Scotland's net zero ambitions is minimal. To meet Scotland's net zero targets, a minimum of 4-6GW of solar will need to be built by 2030. We predict that approximately 3.5 GW will come from ground mounted solar farms; which would need just 0.08% of total Scottish land area.

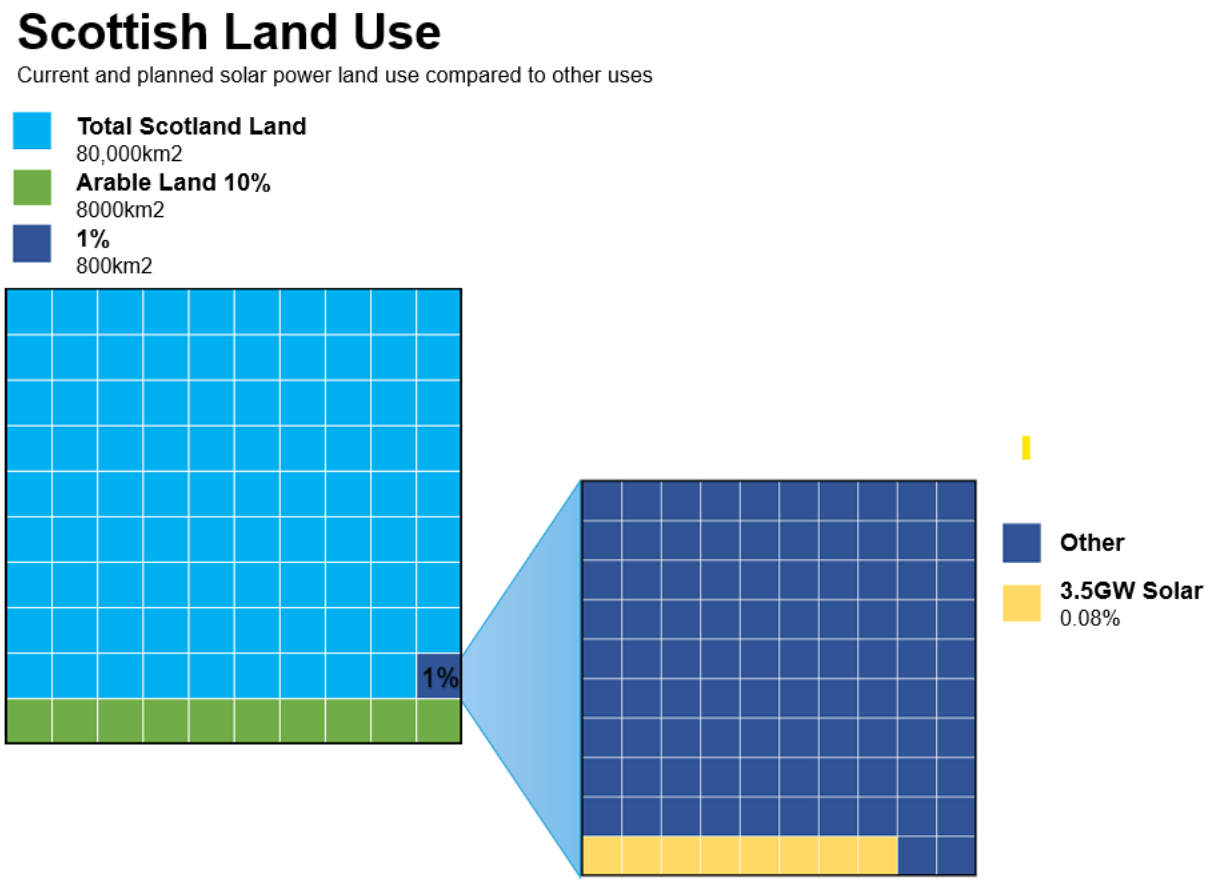

Figure 1: Scottish land use – land use needed for current and planned solar farms

Solar farms are temporary forms of land use and do not permanently remove agricultural land from use. Planning permission for solar farms is time-limited, and all installations can be fully decommissioned and the land restored at the end of their operational lifespan.

Energy security and food production don't have to be in competition; with solar farms, both can coexist. It is well established practice for solar developers to work with landowners to responsibly manage the land used for solar farms for continued agricultural use, biodiversity enhancements and allow the soil quality to improve; all in addition to the renewable energy generation.

Solar farms built on previous arable land can give land a break from intensive cultivation for extended periods – with minimal or no inputs of pesticides, herbicides, and fertilisers – and can reap big rewards by boosting pollinators, biodiversity, soil health and regeneration and carbon sequestration.

We are also beginning to see the emergence of what is known as agrivoltaics, which combines solar and agriculture.[8] These installations are designed to the maximise 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.[9]

Local Development Plans

Local Development Plans (LDPs) will play a role in the successful implementation of NPF4. All LDPs should be compliant with the NPF4 and align the objectives of the planning policy with local needs.

As NPF4 is still in its early stages in planning policy terms, we are not aware that there are many LDPs that have come the whole way through the system since it was adopted. However, our members are concerned that there has been a gradual extension of scope in supplementary planning guidance that is expected to make its way into the next round of LDPs which could lead to inconsistencies.

One example of this would be how the Highland Council is approaching biodiversity enhancement. Policy 3 of NPF4 sets out the requirements for developments to demonstrate biodiversity enhancement, with specific policies targeted at EIA/national/major development and separately at local development. Policy 3 does not fix a specific metric for 'how much' enhancement there must be, and ultimately it will be a matter of planning judgement in each case. In addition, NPF4 is to be read as a whole, and therefore Policy 3 has to be read alongside other policies when considering overall accordance with the development plan. This approach can be contrasted with that adopted in England (which was in existence before NPF4) which applies a legal requirement for a 10% uplift, calculated through a statutory metric. A similar approach to BNG in England was available to the Scottish Government, but they chose not to adopt it.

The Highland Council adopted 'Biodiversity Enhancement Planning Guidance' in May 2024, which is stated to "support the application of the National Planning Framework 4". However, it also states (para 4.24) that a minimum 10% biodiversity enhancement is required, which is to be calculated using a Scottish metric once available, or until then using England's Statutory Metric. The Highland Council is now consulting on a proposed new LDP (consultation available here), which makes reference to the guidance they have adopted and that this would form part of the new LDP.

Therefore, whilst the intention of the policies are aligned (i.e. to achieve biodiversity enhancement as part of development), their means for doing so and how it is taken into account in the planning balance are very different and could have a material impact on the determination of applications.

Community wealth building

Embracing solar at all scales delivers a host of benefits across local communities - delivering a source of green, clean energy, supporting local economies through job creation, education opportunities for local schools and community groups and delivering affordable homes.

Solar PV provides more job creation opportunities in comparison to other renewable technologies, and to be economic this labour generally needs to be sourced locally; providing local opportunities for local people. If the Government were to maintain its commitment to a 4GW solar ambition by 2030, as many as 10,033 jobs could be created, with a 6GW solar ambition leading to as many as 15,050.[2]

In addition, solar projects can be used to host educational visits from local schools and community groups to provide practical, hands-on learning opportunities, creating empowered and engaged community members for the future. The visits can be tailored to each group depending on which key stage they are in and topics they are studying at the time, for example understanding the chemistry of how solar panels work, conducting minibeast hunts or classifying organisms and human impact on ecosystems.

Conclusion

The opportunities presented by solar deployment are vast and can be fully realised with the right ambition and supportive policies. We remain positive that the NPF4 can be an instrumental policy document in delivering renewable energy deployment to support Scotland's environmental, social and climate targets. Maintaining a national solar deployment target of 4GW to 6GW by 2030 would provide a clear and ambitious vision, empowering key stakeholders to accelerate progress, overcome existing barriers, and unlock the full potential of the sector. This would create optimal market conditions, drive investment, and support the transition to a cleaner, more

[2] https://solarenergyuk.org/resource/solar-skills-scotland-briefing/

resilient Scotland.