

Solar FarmsSupplementary Planning Guidance April 2025



1. Introduction

- 1.1 This Supplementary Planning Guidance (SPG) provides advice and guidance to inform the determination of applications for planning permission for solar farms. It is intended for use by developers, the public and by planning officers in the assessment of all applications for solar farms. Applicants for solar farms will be expected to demonstrate how they have taken into account this guidance in their applications.
- 1.2 SPG represents non-statutory planning guidance which supports, clarifies and/or illustrates by example policies included within the Fermanagh and Omagh District Council Local Development Plan Plan Strategy. The information set out in this SPG should therefore be read in conjunction with the LDP, copies of which are available online or from the Planning Department. The SPG is a material consideration in the determination of planning applications.
- 1.3 This SPG in conjunction with the SuDs and Energy Efficiency SPGs forms part of the Council's efforts to support the achievement of net zero, build climate resilience and grow a sustainable economy to achieve a truly sustainable District.
- 1.4 The guidance in this document refers to those solar photovoltaic installations which fall outside the definition of householder 'permitted development'. Householder permitted development rights for renewable energy installations can be found at Part 2 of The Planning (General Permitted Development) Order (Northern Ireland) 2015.
- 1.5 The Pre-application Discussion (PAD) stage is the appropriate time for developers/applicants to discuss queries relating to solar farms. This SPG should be read in conjunction with the Council's other advice guides and protocols, including the Validation Checklist Applicant/Agent Protocol A Good Practice Guide and the Pre-Application Discussion advice and guidance.

2. Planning Policy Context

Regional Development Strategy (RDS) 2035

- 2.1 The RDS is the main strategic planning framework for NI to guide the private and public sectors. The RDS states that climate change is one of the most serious problems to be addressed. It recognised that we need to reduce our dependency on fossil fuels and our energy consumption from unsustainable fuels.
- 2.2 New renewable energy targets have been set since the RDS was published in 2010. The document is still relevant as it recognises that one way of achieving these ambitious targets is to increase our use of renewable energy through the local production of electricity from renewable sources of energy which produce low or no carbon. This would require a number of renewable energy sources in

- addition to the grid infrastructure to support them in order to achieve the ambitious targets.
- 2.3 Renewable energy sources would not only reduce our carbon footprint but would ensure NI would have a secure supply of energy for the future. It would also provide local employment and help to tackle fuel poverty.

The Northern Ireland Energy Strategy – the Path to Net Zero Energy

2.4 The Northern Ireland Energy Strategy – the Path to Net Zero Energy (Dec 2021) was produced because energy targets and how energy is produced has changed significantly since the Strategic Energy Framework (SEF) was published in 2010. The UK became one of the first countries, in June 2019, to pledge that by 2050 there would be a 100% reduction in greenhouse gas emissions. This 'net zero' target is aimed at tackling the climate crisis and will also aim to de-carbonise the energy sector in Northern Ireland by 2050. The aim of the Energy Strategy is to ensure that energy in NI is affordable, secure and able to provide us with energy now and for future generations. The Energy Strategy for NI – The Path to Net Zero Energy will publish a number of Action Plans. The first Action Plan in 2022, aims to deliver part of the overall energy strategy and the second action plan was released in March 2023 and set out the tasks and the priority areas for action.

The Climate Change Act (Northern Ireland) 2022

- 2.5 The Climate Change Act (NI) 2022 was introduced to set out a government requirement for a reduction in greenhouse gas emissions. The target for the Act is at least a 100% reduction in greenhouse gas emissions by 2050.
- 2.6 The Act also sets other sectoral targets including 2030 targets at least 80% of electricity consumption from renewable sources (DfE) and 70% of waste is recycled (DAERA) as well as a target for a minimum spend of 10% of overall transport budgets on active travel (DfI).

Strategic Planning Policy Statement (SPPS) for Northern Ireland

- 2.7 The SPPS recognises that renewable energy can reduce greenhouse gas emissions and provide local jobs and investment. Solar energy is recognised as one of the main methods of renewable energy that can help meet renewable energy targets to reduce emissions and our reliance on fossil fuels. It recognises the importance of locating renewable energy development in those areas capable of absorbing the development without compromising our environmental assets of acknowledged importance. It is important to understand our landscapes and how the potential impact of solar farm proposals are affected by the local topography, landform and visibility.
- 2.8 The SPPS advises that some landscapes may be able to accommodate wind farms or solar farms more easily than others, on account of their topography, landform and ability to limit visibility. A cautious approach for renewable energy development proposals will apply within designated landscapes which are of

significant value, such as Areas of Outstanding Natural Beauty. In such sensitive landscapes, it may be difficult to accommodate renewable energy proposals, including wind turbines, without detriment to the region's cultural and natural heritage assets. In relation to developments such as wind farms and solar farms, applicants will be required to provide details on future decommissioning, including proposals for site restoration. In such cases planning conditions (or a legal agreement where appropriate) should be used.

2.9 Areas of active peatland are identified as being of particular importance to Northern Ireland's biodiversity, water and carbon storage qualities and as such are to be protected from any renewable energy development unless there are imperative reasons of overriding public interest', which are 'defined under The Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 as amended.

Fermanagh and Omagh District Council - Climate Change and Sustainable Development Strategy 2020-2030

- 2.10 The Strategy, published in July 2020, sets out practical steps to minimise climate change impacts on our day to day lives and to counter the severity of the Climate Emergency. It also outlines steps towards achievement of the United Nations' 17 Global Sustainable Development Goals by moving closer to building an inclusive, sustainable and resilient future for the population, environment and economy.
- 2.11 The Strategy recognises that local contributions are part of a complex challenge nationally and internationally and a central challenge in furthering sustainable development is mitigating and adapting to climate change. The Strategy's strategic context acknowledges that the Council aims to do this through the policies, objectives and supporting text within the Local Development Plan Strategy and sets out ways the planning system could help tackle climate change. It recognises that the planning system should help to mitigate and adapt to climate change in 7 distinct bullet points, which includes 'Promoting the use of energy efficient, micro-generating and decentralised renewable energy systems.' In October 2021 the Council also agreed its Climate Change and Sustainable Development Action Plan 2021-2024, Restore Revive Thrive: Our Environment, which provides the detail of the actions behind the Strategy and how the Council plan to reduce emissions.

Fermanagh and Omagh District Council - Local Development Plan 2030 Policy Context

2.12 Solar farm applications are considered under Plan Strategy Policy RE01 - Renewable and Low Carbon Energy Generation. RE01 states that proposals for renewable energy will be permitted along with any associated infrastructure and buildings where it can be demonstrated there would be no unacceptable adverse impact on a number of criteria including human health, landscape character and visual amenity, biodiversity including active peatland, aviation interests, recreational use and tourism assets and that it would not result in an unacceptable cumulative impact.

- 2.13 Proposals for ground mounted solar PV installations will not be permitted within certain areas designated for their unique and special landscapes e.g. the Sperrin AONB, Special Countryside Areas (SCAs) and Areas of High Scenic Value (AoHSV). Proposals outside these areas will be supported where they meet the criterion set out in the policy RE01.
- 2.14 Policy RE01 also states that these proposals will be supported where they do not result in unacceptable adverse impacts on nearby residential properties and/or any sensitive receptors and the proposed entrance is adequate for both the construction and operational phase of the development along with the local access road network to facilitate construction of the proposal and transportation of machinery and parts to the site. For the purpose of this policy, sensitive receptors are defined as habitable residential accommodation (although not necessarily occupied), hospitals, schools and churches. Temporarily unoccupied refers to a dwelling capable of immediate occupation.
- 2.15 The visual impacts of solar farms will vary depending on the site characteristics and the capacity of the landscape to absorb the proposed development. The assessment of this will include the impact of any ancillary buildings, proposed or associated with the proposal, to ensure they do not result in an unacceptable visual impact, either cumulatively or individually. It is important to take a proactive approach in seeking to minimise visual impact through appropriate design, scale, siting and landscaping schemes as well as any other mitigation measures. To assist with consideration all proposals should be submitted with a Landscape and Visual Impact Assessment (LVIA).

3. Planning Considerations

3.1 The considerations discussed below are matters which may arise when processing applications for solar farms. Please note that this list is not exhaustive and other considerations may arise depending on the size, scale or location of the proposal. This will be a matter of planning judgement, depending on the specifics of the particular application.

Landscape Considerations

- 3.2 Landscape and visual impacts of Solar Photovoltaics, amongst other impacts, are likely to be the most significant potential impacts of this type of renewables development. A Landscape Character Review for Fermanagh and Omagh (September 2018) has been published identifying key issues in relation to landscape sensitivities and forces for change which are considered below.
- 3.3 Policy RE01 states that solar farms will not be permitted within the Sperrin AONB, Special Countryside Areas (SCAs) and Areas of High Scenic Value (AoHSV). Outside these areas applicants should ensure that when choosing a site for a solar farm that it takes cognisance of the landscape sensitivities across the district.

- 3.4 The landscapes within Fermanagh and Omagh vary in their landscape character, scenic value and capacity to absorb different types of development. In order to inform the development of proposals for solar farms it is important to understand their potential impact on the landscape through consideration of the potential landscape sensitivities. Proposals for solar farms should be accompanied by a Landscape and Visual Impact Assessment (LVIA) to evaluate the effect of the proposal on the landscape.
- 3.5 Landscape value and sensitivity differs across the district. Assessing the impact on the landscape requires a broad range of considerations to be taken into account. These may include but are not necessarily limited to:
 - Promotion of the area for leisure and tourism, with potential impact on related tourism development;
 - There may be pressure for access improvements to facilitate developments;
 - Undulating and/or sloping nature of the landscape;
 - Variations in natural vegetation, topography and cultural features such as old farms, fields and ancient monuments;
 - Decline of characteristic landscape features such as traditional buildings, earth hedge banks or stone walls;
 - Changes to rural and landscape characteristics through the loss of traditional farming patterns and the adoption of more visually intrusive forms of development resulting in the loss of cohesive character to the landscape;
 - Impact on local skylines and ridges which are often prominent and relatively sensitive, particularly if there is a striking landscape feature;
 - Potential impacts on sensitive and/or designated habitats.

Landscape Planning Guidance

- 3.6 A number of factors have the potential to impact on the landscape setting and visual effects from solar farms. When siting a solar farm, the following should be carefully considered in order to mitigate both the visual and landscape setting impact:
 - Established existing boundaries including trees, hedges, earth hedge banks and stone walls should be retained where possible to aid integration. This will also assist with site restoration after any decommissioning of the solar farm. Restoration and enhancement of boundaries should be considered where possible and this will help retain the existing landscape character;
 - The use of native broadleaved planting to supplement existing vegetation along site boundaries to aid integration into the landscape and to maintain established character of the area;
 - Retention of open areas of moorland/bog, rocky knolls and prominent higher ground in order to conserve the character of the area;

- Development should be in proportion to the scale of the local farming landscape;
- Engineered features such as embankments, cuttings etc. require careful design and integration into the landscape to maintain landscape character;
- Development of solar farms on sloping sites should be avoided unless it can be demonstrated that it is possible to use the natural variations in topography to reduce landscape and visual impacts;
- Siting and design of solar farms should consider smaller blocks of panels;
- Siting and design should take into consideration the potential for undesirable cumulative effects from existing and proposed development;
- Related ancillary buildings and parking should be sensitively sited and integrated to avoid prominence in the landscape;
- Minimise urbanising features such as the use of security fencing and lighting. Where required, the use of passive infrared (PIR) technology is preferred:
- New access tracks should be sited to not appear prominent or obtrusive;
- Advance consideration must be given to siting and scale of any resulting electricity transmission lines and sub-stations in relation to their prominence and impact on the landscape. This should be reflected in the submitted LVIA:
- Proposals should avoid impacting on local skylines;
- Views of the site from public interest points such as scenic viewpoints, the
 public road and other key sites should be carefully considered to reduce
 visual impact. This can be carefully considered and assessed through the
 use of photomontages which should be submitted with the proposal.

Historic Environment

- 3.7 Solar farms have the potential to harm the historic environment, affecting historic features located both above and below ground¹. Those features which are above ground include scheduled monuments, Areas of Significant Archaeological Interest (ASAI) and the setting of listed buildings. The Council may consult with Department for Communities Historic Environment Division (DfC HED), in accordance with legislative requirements, and will take its advice into account when determining the application. It is recommended that those bringing forward proposals for solar farms should front-load their submission by engaging with DfC HED at an early stage of formulating proposals, where this is likely to be a key consideration.
- 3.8 Information sources include the DfC HED 'Historic Environment Map Viewer², which contains operational layers which provide location and details on various heritage assets including listed buildings and monuments. DfC HED have also produced a number of guidance documents which should be considered before an application is submitted. It is recommended that applicants verify such sites with the DfC HED prior to submission.

6

¹ Bre Planning guidance for the development of large scale ground mounted solar PV systems

² https://www.communities-ni.gov.uk/services/historic-environment-map-viewer

3.9 Solar farms can also damage archaeological remains located underground, usually through the construction phase of the development by digging trenches and laying foundations by erecting fencing and through transport routes for equipment and materials to the site. As such proposals require early engagement with DfC HED to ensure there are no potential issues which could arise on site.

Natural Environment

- 3.10 The installation of a solar farm can have an unacceptable adverse impact on the natural environment as it can alter designations, habitats and can displace species. The impacts of installations may be site specific, and some features may be more sensitive to changes than others. It will be essential to consider what impacts could occur during the construction phase, the operation of the solar farm and finally the decommissioning/restoration processes of any proposals.
- 3.11 The Council will consult with DAERA Natural Environment Division (NED), in accordance with legislative requirements, and will take its advice into account when determining the application. It is recommended that those bringing forward proposals for solar farms should front-load their submission by engaging with NED at an early stage of formulating proposals. Applicants are, in the first instance, advised to familiarise themselves with DAERA, NED's advice in respect of solar farms³. Applications should be accompanied by appropriate information such as a Biodiversity Checklist and any other specialist reports such as bat or bird surveys etc. as the need arises and in accordance with the Council's Validation Checklist.
- 3.12 It is important that solar farm proposals consider their potential impact on the natural environment, including protected species, priority habitats and European Protected designated sites and where needed an assessment of the site should be carried out by a qualified Ecologist. Information sources include DAERA's 'Natural Environment Map Viewer'⁴, which contains operational layers providing location and detail of priority species, priority habitats and protected areas/designated sites. It is recommended that applicants verify details with DAERA NED.
- 3.13 It is important to note that solar farms can also result in biodiversity or habitat gain as they can create habitats which remain in situ for many years, such as undisturbed grasslands, hedgerows and wildflower meadows. The Council would encourage applicants and developers to incorporate a biodiversity enhancement scheme into the proposal and a biodiversity or Habitat Management Plan may be required. The Council will look favourably on such proposals when determining applications.

ni.gov.uk/sites/default/files/publications/daera/DAERA%20Standing%20Advice%20-%20NED%20-%20Solar%20Farms%20-%20November%202017.pdf

³ https://www.daera-

⁴ https://www.daera-ni.gov.uk/services/natural-environment-map-viewer

Noise

3.14 Noise from solar farms could potentially arise from the inverters (converts electrical direct current (DC) into an alternating current (AC) either for use or export to the grid) and transformers (used mainly to increase the voltage output by the inverter) which may be located within ancillary buildings on the site. It is suggested the buildings should be located as far as possible from any receptors or that buildings are sound proofed to protect residential amenity if necessary. A Noise Impact Assessment may be required to be submitted for consideration along with the application to ensure that there is no unacceptable adverse impact on residential amenity. The Council's Environmental Health Department may need to be consulted during the determination of an application to fully assess the impact on any receptors.

Residential Amenity

- 3.15 Solar farms have the potential to impact on residential amenity in a number of ways. Any solar farm should not have a dominant visual effect on any residential property. The potential impact could be mitigated or reduced through the use of landscaping; however, this cannot be used exclusively as new landscaping takes time to establish. Glint and glare have the potential to impact upon residential amenity which could be exacerbated seasonally where tracking panels are used. Noise also has the potential to impact on residential amenity as outlined above.
- 3.16 Any assessment of residential amenity should also consider increased traffic at the site and construction traffic, although this would be for a limited timeframe, and any potential impact resulting from security lighting and glint and glare. The proximity of residential dwellings, alongside other sensitive receptors, to the proposed solar farm and any potential impacts on residential amenity should be considered as part of any supporting submission with the application.

Tracking and orientation

3.17 There are different types of solar panels, e.g. those in a fixed position are known as 'static' panels but others may track the orientation of the sun to maximise solar gain and are known as 'tracker'. Some static panels can also be moved each season to make the most of the sun's rays throughout the year. ⁵The panels, and whether or not they track the sun, will potentially result in differing visual impacts in the landscape. The type of panels to be installed should be included in the 'landscape and visual impact assessment' so that any potential impact can be properly assessed.

Airport Safety

3.18 The Fermanagh and Omagh District has its own airport, St Angelo, located outside Enniskillen in addition to a number of other private airstrips across the District. Potential issues for concern relate to air traffic control or pilot

⁵ Bre Planning Guidance for the development of large scale ground mounted solar PV systems

distraction due to glint and glare, during either take-off or landing.⁶ In this regard, consideration should be given to the potential impact of tracking panels or movement of panels through different seasons of the year and this should be reflected in any report regarding glint and glare. Airport Safety Zones will also need to be considered so that rescue vehicles have clear access and egress.

Construction, Traffic & Access Tracks and Road Safety

- 3.19 The construction of solar panels should aim to result in minimal damage to the land to aid restoration after decommissioning. Any access to the site should, where possible, be taken from an existing access and a buffer zone between existing hedges/trees should be in place to avoid damage to roots. Where there is a need to create a new access the potential impact on landscape setting and character of the area should be carefully considered. The impact on any watercourse adjoining the site should be carefully considered prior to construction and any mitigation measures /buffer zones required should be in place before construction commences to avoid contamination.
- 3.20 Road safety is an important issue and a Construction Traffic Management Plan (TAF) may be required to bring materials to the site safely especially if there are residential dwellings sharing the road. In addition, the impact of glint and glare on vehicle traffic should be considered as part of any submission. The Department for Infrastructure (DfI) Roads, as the relevant authority, will be able to provide advice on the supporting information necessary to accompany any application. The length of the construction stage and the number of working hours each day should also be considered.
- 3.21 A temporary construction compound may also be required to store equipment and materials, and details of this should be submitted with the proposal. Any compound should be located so as to reduce any impact on residential dwellings and to the site. Topsoil which is removed, should be stored in an appropriate location on site which avoids any unacceptable adverse impact on the landscape or residential amenity among other issues. The topsoil should then be reused as part of any mitigation, landscaping or site restoration works. The details of how this will be implemented should accompany the planning application and should be strictly complied with during construction.

Grid connection and network capacity

- 3.22 A determining factor for the location of a solar farm will be whether a suitable connection to the National Grid is feasible. It is recommended the developer discuss this with NIE in the development of proposals in order to front load any resulting application.
- 3.23 Normally connections to the grid, where new infrastructure is required, are dealt with as separate planning applications. In such cases applicants should ensure that cumulative effects are considered where relevant. Connections proposed should be in accordance with the policies within the Plan Strategy and should

9

⁶ Solar Trade Association – Impact of solar PV on aviation and airports

be appropriately sited and designed to avoid any unacceptable adverse impact on the landscape or biodiversity/nature conservation.

Drainage, Surface Run-off and Flooding

3.24 Consideration should be given to the impact of drainage, runoff and any potential flooding issues which may arise from a solar farm development and the use of SuDS to control and treat runoff should be considered where appropriate, please refer to SuDS SPG for further information. A Flood Risk Assessment or a Drainage Assessment may be required, in order to fully assess any potential impact. Depending on the size of the proposal there may be potential for runoff which could result in issues such as, gullying and soil erosion and these should be considered as part of any proposed submission. Measures to avoid or mitigate these impacts should also form part of any proposal.

Decommissioning/Site Restoration and Duration of planning permission

3.25 Conditions will be placed on any permission for a solar farm to limit the lifespan of the permission. This could be either at the end of a specified period or when electricity generation at the site ceases. Information regarding decommissioning and site restoration should accompany a planning application, detailing how this work will be carried out and how the site will be restored.

4. Information required for Planning Applications

- 4.1 Applicants are encouraged to engage with the Council at an early stage via the Pre Application Discussion (PAD) process. This process is designed to maximise your chances of obtaining planning approval in the quickest time possible by assisting you in identifying what information should be supplied when submitting your application and highlighting any landscape designations or hazards or constraints you should be made aware of.
- 4.2 The level of detail and surveys required to support any application will vary depending on the size, scale and location of the development. The list below provides a guide, of the information likely to be required however it is not considered exhaustive and information required will depend on the specific circumstances of each application.
 - Full details of the type of solar farm, to include any proposal to track or change location;
 - Details of any temporary construction compound;
 - Construction Traffic Management Plan (TAF);
 - Details of connection to the National grid and the Electricity Generating Capacity' details (Megawatts/MW);
 - A Landscape and Visual Impact assessment should also be submitted as per Policy RE01 Renewable and Low carbon energy generation;
 - Assessment of the impact on heritage assets;

- Glint and glare assessment;
- Biodiversity checklist and further surveys if necessary for all applications that would impact upon, or have the potential to impact on natural heritage, including designated sites, priority habitats or protected and priority species;
- Habitat Management Plan required for all applications on lands that have a nature conservation value, e.g. woodland, wetland or watercourse;
- Decommissioning Scheme and details of site reinstatement;
- Noise Impact Assessment; and
- Flood Risk Assessment or Drainage Assessment, the use of SuDs at the site to control and treat runoff should be considered where appropriate, please refer to the SuDS SPG for further information.

Further Guidance

4.3 Further best practice guidance and sources of information exists to assist developers and their professional advisors, and applicants are encouraged to reference these which are listed below, though this list is not exhaustive.

References

BRE Planning guidance for the development of large scale ground mounted solar PV systems. National Solar Centre.

Landscape Character Review for Fermanagh and Omagh. Ironside Farrar. September 2018

Solar Photovoltaic and Building Development – Glint and Glare Guidance – December 2020 Third Edition Pager Power Urban and Renewables

Guidelines for Landscape and Visual Impact Assessment 3rd Edition Landscape Institute and Institute of Environmental Management and Assessment 2013 Routledge