Planning for renewable energy

Topic resource

Planning for the Climate Crisis: A guide for local authorities

Publication Date: December 2025

RTPI Royal Town Planning Institute

tcpa

Introduction

The transition of energy supply from fossil fuel to renewable sources is fundamental to the UK's strategy to decarbonise in line with the Climate Act target of net zero emissions by 2050.

The UK decarbonisation strategy relies on the electrification of sectors currently powered by fossil fuels, including heat, transportation and industry, along with substituting electricity generation from fossil fuels with renewable energy sources. This is likely to result in a doubling of electricity demand from 2023 to 2050. [1]

To support this transition, local planning has a key role to play, both in identifying the most appropriate areas for renewable energy developments within a plan area, and to encouraging new development to make the best use of renewables for its energy supply.

This guide is for those working in local planning authorities to understand how they can use local planning to manage and support renewable energy deployment in their authority area. It is part of a suite of topic and policy resources on how the planning system can address action on climate change, which are available here.

Policy Context

The Climate Change Committee's balanced pathway in the sixth carbon budget 'very largely' decarbonises electricity generation by 2030, with complete decarbonisation achieved by 2035.[2] Many of these proposed reforms are underway, meaning the policy context for renewable energy deployment is rapidly changing.

The government's plan for achieving this target is set out in Clean Power 2030, which includes a series of legislative and policy changes to speed up the consenting of renewable energy and electricity infrastructure.[3] The Clean Power Plan sets out pathways to a clean power system and, to achieve this objective, models a requirement to double onshore wind and quadruple of solar capacity by 2030.

Publication Date: December 2025

RTPI Royal Town Planning Institute
tcpa

The **National Energy System Operator** (NESO) was established in late 2024 as a publicly owned body with responsibility for planning the electricity and gas network in the UK. It has committed to developing a Strategic Spatial Energy Plan in 2026. The intention is to provide clarity on the long-term planning of the energy system, and it will include information on quantities and types of energy sources as well as potential optimal locations for energy infrastructure.[4] NESO will also be responsible for producing **Regional Energy Strategic Plans**, aiming to have coverage for the whole of the UK by 2027. These are likely to be important plans for directing energy infrastructure development at a regional level, and coordinating distribution grid upgrades, so are likely to inform future Spatial Development Strategies (SDS) and local plans.[5]

In England, the **National Planning Policy Framework** (NPPF) update of December 2024 represented a significant change in direction for planning policy on renewable energy, particularly for onshore wind. It removed a footnote that had been characterised as a 'de facto ban' on onshore wind, and now provides much clearer expectations that local plans should 'provide a positive strategy' for low carbon energy and heat, 'consider identifying suitable areas' for renewable energy and identify opportunities for renewables to supply new development.[6] The NPPF is also clear that there should be no expectation for planning applicants to demonstrate the need for renewable energy development, and that 'significant weight' should be given to the benefits of low carbon energy and the proposal's contribution to a net zero future.[7]

The **National Policy Statement for Energy**[8] confirms that there is a critical national priority (CNP) for the provision of nationally significant low carbon infrastructure, including renewable electricity generation. Whilst primarily drafted for the consideration of nationally significant infrastructure projects, the NPS may be a material consideration in decision making on applications that fall under the Town and Country Planning Act 1990 and may change the weight given to the environmental benefits of renewable energy projects.

The government has also changed the thresholds for renewable energy development to be considered through the **Nationally Significant Infrastructure Projects** (NSIP) regime. From December 2025 onwards, onshore wind developments of 100MW or more will be considered as NSIPs, and anything smaller will be handled through the local planning regime. Thresholds for solar energy are consistent with this, and the threshold for NSIPs will also rise from 50MW to 100MW.

RTPI Royal Town Planning Institute
tcpa

The **Local Power Plan** sets out the national strategy for supporting local communities to own, benefit from and develop small and medium-scale renewable energy projects of up to 8 GW. Whilst not planning policy, the local power plan could increase the number of community energy projects coming through planning.

Another area where change is anticipated is around planning for district heat networks. The approach to designating heat networks is being centralised under the umbrella of the Warm Homes Plan, and DESNZ are set to designate heat network zones in England in 2025, which will identify areas where heat networks are expected to provide the lowest cost option for decarbonised heat.[9] A resource mapping existing and potential heat network zones is already available.[10] The proposals include a role for local authorities to act as 'Zone Coordinators', which will have powers to provide rights to develop heat networks within the allocated zones. Once established, certain developments may be required to connect to heat networks, including new buildings. At the time of writing, there are no details about how the zone coordination role will interact with planning, but it is likely to be essential to its successful delivery. There is still a level of uncertainty surrounding the timescales for implementation, so in the meantime local planning authorities can support heat network deployments through proactive planning approaches.

Policy for planning for renewable energy in the devolved nations is complicated, as whilst energy policy and strategy is led at a UK level by the Department for Energy Security and Net Zero (DESNZ), planning remains a devolved matter, so the interaction between planning and energy policy is different in each nation. The RTPI and Regen have produced guidance explaining policy for delivering energy infrastructure which covers each of the UK nations.[11]

Figure 1: The uptake of air source heat pumps is critical to the UK's energy transition. Source: Nancy Pauwels / Shutterstock.com

RTPI Royal Town Planning Institute
tcpa

Key principles

Planning is an essential tool for delivering the UK's clean energy ambitions and is an important gateway for weighing the needs of energy infrastructure development against other land use demands.

The principles below outline how planning can support clean energy and navigate this important policy area:

- Planning authorities should draw on regional and local evidence to set out a positive strategy to maximise the potential for renewable and low-carbon energy, reflecting the importance given to renewable energy deployment in national policy.
- Plan strategically for renewable energy deployment to set clear expectations for developers and communities.
- Provide support for community led energy development, for example through setting enabling criteria for community energy projects.
- Be clear about the criteria against which renewable development will be assessed, and the circumstances in which it will be supported. The NPPF is clear that significant weight should be given to the benefits associated with renewable and low carbon energy generation.
- Given the need to build public consent for renewable energy projects, local planning authorities and developers should engage proactively with local communities and support community led energy planning at the neighbourhood scale.

Evidence for renewable energy

Clearly identifying and mapping an area's potential renewable energy resources helps promote a strategic approach to deployment, enables effective community-led spatial planning, and can help to facilitate community energy projects.

Publication Date: December 2025

RTPI Royal Town Planning Institute

tcpa

Evidence can also send clear signals to developers about where renewable energy is considered to be appropriate and technically viable, for example where grid capacity and connections are in place, which can accelerate deployment and avoid conflict.

A range of methodologies are available to quantify and map the potential for renewable energy resources in a particular area. The objective should be to identify sustainable energy resources by considering both technical feasibility and environmental constraints. For example, for onshore wind this would mean considering where suitable wind speeds are attained and where there are environmental criteria such as constraints imposed by designated sites and species.

Case Study: Bath and North East Somerset Renewable Energy Resource Assessment Study

Bath and North East Somerset Council commissioned a study to assess the technical potential for renewable, low and zero carbon energy in different locations of the authority.

Alongside this, the Council also commissioned a Landscape Sensitivity Assessment for wind and solar energy. This means the Council was able to draw on a suite of evidence covering both the technical feasibility and the landscape potential for accommodating renewables to inform planning policies and development proposals.

Author: Bath and North East Somerset Council
Link: https://www.bathnes.gov.uk/policy-and-documents-library/renewable-energy-resource-assessment-study-reras
Year: 2022

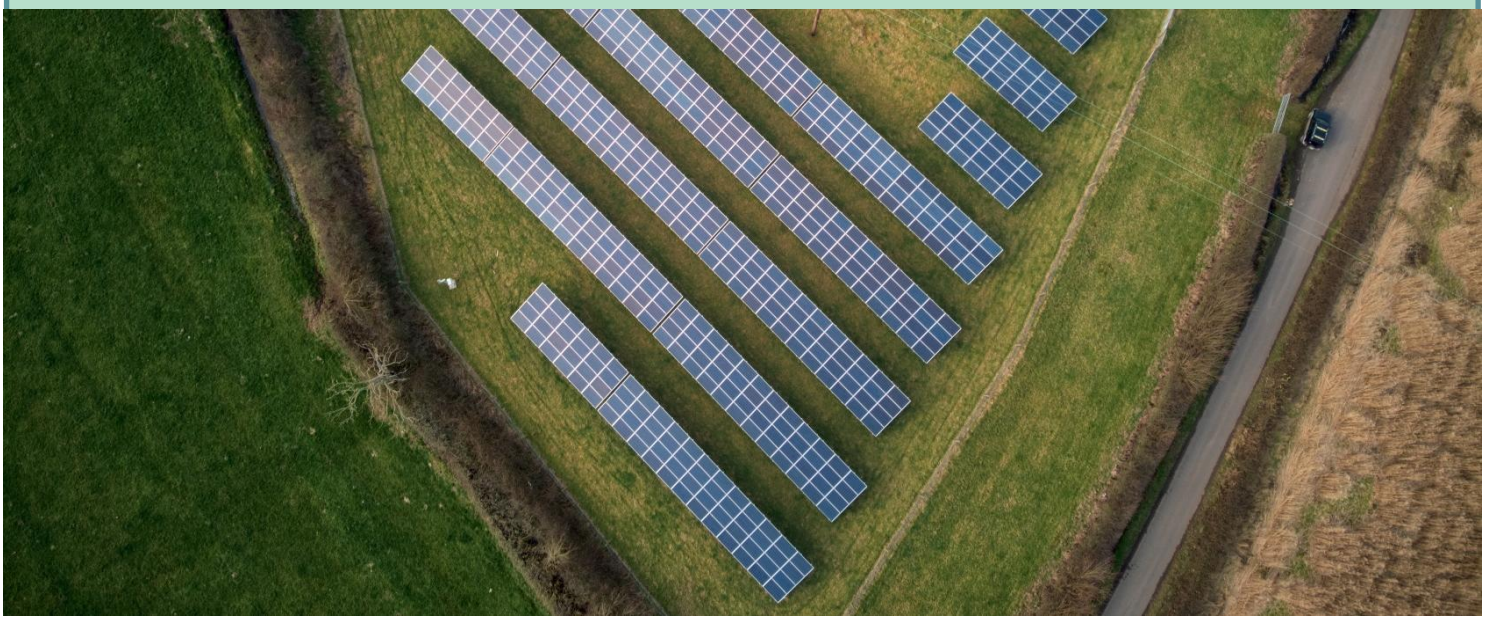

Figure 2: Aerial photo of a solar farm. Source: Andy Ballard / Shutterstock.com

Good practice for plan making

The development plan can support the delivery of renewables through identifying areas likely to be most compatible with development types, and by setting clear policies that enable their development whilst minimising impacts for communities.

When creating a spatial development strategy, or local plan, the LPA should:

- Include a strategy for the spatial distribution of energy infrastructure in the development plan. This should identify the most, and least, environmentally sensitive areas for the deployment of different renewable energy developments, and be informed by meaningful engagement with communities, infrastructure providers and businesses.
- Be clear about how policies for renewable energy align with government policy and national and regional plans for achieving clean power.
- The plan should include local criteria-based policies (including local approaches for protecting landscape and townscape) to inform allocations and assess planning applications for renewable energy and associated infrastructure. These should:
  - provide appropriate safeguards, so that any adverse impacts are addressed satisfactorily,
  - require the scale and impact of developments affecting recognised landscape, biodiversity and heritage designations are compatible with the purpose of the designation and appropriately mitigated, and
  - be informed by the national approach and policies for nationally significant energy infrastructure.
- Consider how communities can have a meaningful role in developing a strategy for renewable energy deployment and encourage local communities to develop projects and supportive policies. Giving people a real say helps avoid resistance and ensures the transition delivers local benefits.
- Compliment renewable energy policies with those that seek to reduce energy demand, particularly for new development, to capture wider benefits such as bill reduction and operational carbon emission reductions (see our topic resources on net zero buildings for further detail).

Publication Date: December 2025

RTPI Royal Town Planning Institute

tcpa

- Futureproof development for the clean energy transition. Ensure new housing, commercial sites, and infrastructure are ready to connect to clean energy networks as they grow.
- Require developers to submit energy strategies to demonstrate that opportunities to maximise renewable energy supply have been considered and maximised. For large scale development, energy masterplans can be required.

Local Area Energy Planning – why it matters for local places

Local Area Energy Planning (LAEP) is an established process used to translate national net zero targets into local energy system action through the creation of spatial plans. Pioneered by Energy Systems Catapult, the process brings together councils, energy network operators, businesses, and local communities to agree the most cost-effective, fair, and low-carbon way forward. Over 37 % of local authorities across the UK now either have a plan or are working towards one (as of Sept 2025).

A LAEP looks at all parts of the local energy picture – electricity, heat, gas, and how future fuels like hydrogen might play a role. It also considers buildings, transport, renewable generation, and storage, as well as the flexibility we'll need to keep energy affordable and reliable.

When done well, a LAEP gives local authorities the evidence and insight to guide investment, shape development plans, and make sure communities feel the benefits of the clean energy transition.

Figure 3: Solar panels on new build homes in Cornwall. Source: TCPA

RTPI Royal Town Planning Institute
tcpa

Decision making

In determining planning applications for the development of renewable or low-carbon energy and associated infrastructure, local planning authorities are recommended to:

- Support proposals for renewable and low-carbon energy and associated infrastructure that have taken appropriate steps to avoid and then mitigate any adverse impacts.
- Ensure applicants have given careful consideration to location, scale, design and taken measures to mitigate harm such as visual impact.
- Give significant weight to the wider environmental, social and economic benefits of renewable or low-carbon energy projects. Applicants are not required to demonstrate the overall need for renewable or low-carbon energy.
- Give community energy groups constructive and proactive pre-application support in developing projects.
- Recognise that small-scale and community-led projects provide a valuable contribution to the local area and contribute to security of supply and to cutting greenhouse gas emissions. Planning applications should not be rejected simply because the level of output, or the number of buildings involved, is small.
- Be mindful of the rapidly changing nature of low carbon energy solutions and be prepared to deal positively with the implications of new transport and energy technologies, such as battery storage at scale, infrastructure for electric vehicles, and the deployment of hydrogen technology.
- Check that energy strategies provided by developers provide detailed assessment of all aspects of energy consumption, generation, distribution, management, and ownership.[12]

RTPI Royal Town Planning Institute
tcpa

Case Study: Merton local plan policy for low carbon energy

The Merton Local Plan chapter on climate change includes a range of policies that together set a clear strategy for reducing the greenhouse gas emissions arising from development. Policy CC2.4 on Low Carbon Energy sets clear requirements for new development which respond to the local context.

The policy requires applicants to provide information to demonstrate that opportunities to maximise the potential for onsite renewables have been given clear consideration. These include reducing energy demand through measures to enhance energy efficiency, making best use of roof space for renewable energy generation, making use of technology such as mart meters to manage demand, ensuring high quality heat pump installations and the suitability for low carbon heat sources from district heat networks in identified areas.

Authors: London Borough of Merton
Link: Merton New Local Plan
Date: November 2024

Horizon scanning

The **Onshore Wind Strategy**[13] includes a series of actions and commitments to scale up the deployment of onshore wind which are likely to impact the approach to consenting regimes in future. This will include the introduction of Environmental Outcomes Reporting to replace existing Strategic Environmental Assessments. Onshore wind will also fall under the provisions to establish a Nature Restoration Fund in the Planning and Infrastructure Bill. The strategy also commits the government to scoping a data tool that would allow better, and more consistent access to site data.

The **Solar Roadmap** details government and industry actions that will be delivered to radically increase the deployment of solar across the UK, with objectives to increase deployment from 18 to 47+ GW by 2030, aligning with NESO's clean power plan. Key features are the inclusion of rooftop solar panels as standard in new homes through the Future Homes Standards, reviewing national planning policy to give greater support to floating solar, a proposal to require the installation of solar canopies over new surface car parks, plus capacity investment for local planning authorities and training for planners.

Further Resources

The **Centre for Sustainable Energy** have developed a free downloadable community engagement process to nurture public support for the development of renewable energy projects. It can be used to initiate and refine emerging community energy projects, start local conversations about renewable energy in a non-threatening and engaging environment and inform Local and Neighbourhood Plan making. The **Future Energy Landscapes** resources are available from: www.cse.org.uk/my-community/future-energy-landscapes/

Information on **Local Area Energy Planning** can be found on the **Energy Systems Catapult** website, including guidance on the approach, which is available here: https://es.catapult.org.uk/guide/guidance-on-creating-a-local-area-energy-plan/

Regen have also created a resource setting out best practice for community engagement for the renewables sector: https://www.regen.co.uk/insights/best-practice-guide-for-community-engagement-aims-to-help-foster-trust-and-transparency

The **RTPI and Regen** have created a suite of resources on spatial approaches to local energy planning, which is available here: https://www.rtpi.org.uk/policy-and-research/spatial-approaches-to-local-energy-planning-resource-suite-salep/

Acknowledgments

With thanks to the following organisations for their input into this topic resource:

- **Centre for Sustainable Energy**: https://www.cse.org.uk/
- **Energy Systems Catapult:** https://es.catapult.org.uk

References

[1] *Future Energy Scenarios: Pathways to Net Zero. National Energy Systems Operator, July 2025.* *www.neso.energy/document/364541/download*

[2] *The Sixth Carbon Budget: The UK's path to Net Zero.* Climate Change Committee, December 2020. https://www.theccc.org.uk/publication/sixth-carbon-budget/

[3] *Clean Power 2030 Action Plan: A new era of clean electricity. UK Government, December 2024.* *https://www.gov.uk/government/publications/clean-power-2030-action-plan*

[4] *Strategic Spatial Energy Planning. NESO,* *https://www.neso.energy/what-we-do/strategic-planning/strategic-spatial-energy-planning-ssep*

[5] *Regional Energy Strategic Planning. NESO,* *https://www.neso.energy/what-we-do/strategic-planning/regional-energy-strategic-planning-resp*

[6] *National Planning Policy Framework. MHCLG, December 2024.* *https://www.gov.uk/government/publications/national-planning-policy-framework--2* *(Para 165)*

[7] *Ibid. (Para 168)*

[8] *Overarching National Policy Statement for Energy (EN-1). DESNZ, Nov 2023* *https://www.gov.uk/government/publications/overarching-national-policy-statement-for-energy-en-1*

[9] *Heat Network Zoning – AN Overview. DESNZ, January 2024.* *https://www.gov.uk/government/publications/heat-network-zoning-overview*

[10] See resources on gov.uk here: https://www.gov.uk/government/publications/heat-network-zoning-maps

[11] *Spatial Approaches to Local Energy Planning resource suite.* RTPI / Regen, May 2025. https://www.rtpi.org.uk/policy-and-research/spatial-approaches-to-local-energy-planning-resource-suite-salep/

[12] *Further information on net-zero energy strategies is available in the TCPA's Masterplanning for Net-Zero Energy guide.* *https://www.tcpa.org.uk/collection/garden-city-standards-21st-century/*

[13] *Onshore Wind Taskforce Strategy.* DESNZ, July 2025. https://www.gov.uk/government/publications/onshore-wind-strategy

Cover image: Conisholme Wind Farm in Lincolnshire. Source: John-Kelly / Shutterstock.com
Icons: Flaticon.com by iconixar

Planning for renewable energy
Topic Resource 10
Planning for the Climate Crisis: A Guide for Local Authorities

Fifth Edition

Publication Date: December 2025

RTPI Royal Town Planning Institute
tcpa