Guidance

Climate change

Advises how to identify suitable mitigation and adaptation measures in the planning process to address the impacts of climate change.

From: **Ministry of Housing, Communities and Local Government (/government/organisations/ministry-of-housing-communities-local-government)**, **Ministry of Housing, Communities & Local Government (2018 to 2021) (/government/organisations/ministry-of-housing-communities-and-local-government-2018-2021)** and **Department for Levelling Up, Housing and Communities (/government/organisations/department-for-levelling-up-housing-and-communities)**

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Why is it important for planning to consider climate change?

In addition to supporting the delivery of appropriately sited green energy (https://www.gov.uk/guidance/renewable-and-low-carbon-energy), effective spatial planning is an important part of a successful response to climate change as it can influence the emission of greenhouse gases. In doing so, local planning authorities should ensure that protecting the local environment is properly considered alongside the broader issues of protecting the global environment. Planning can also help increase resilience to climate change impact through the location, mix and design of development.

Addressing climate change is one of the core land use planning principles which the National Planning Policy Framework expects to underpin both plan-making and decision-taking. To be found sound, Local Plans (https://www.gov.uk/guidance/local-plans--2) will need to reflect this principle and enable the delivery of sustainable development in accordance with the policies in the National Planning Policy Framework (https://www.gov.uk/guidance/national-planning-policy-framework/14-meeting-the-challenge-of-climate-change-flooding-and-coastal-change). These include the requirements for local authorities to adopt proactive strategies to mitigate and

adapt to climate change (https://www.gov.uk/guidance/national-planning-policy-framework/14-meeting-the-challenge-of-climate-change-flooding-and-coastal-change#para149) in line with the provisions and objectives of the Climate Change Act 2008 (http://www.legislation.gov.uk/ukpga/2008/27/contents), and co-operate to deliver strategic priorities which include climate change.

In addition to the statutory requirement to take the Framework into account in the preparation of Local Plans (https://www.gov.uk/guidance/local-plans--2), there is a statutory duty on local planning authorities to include policies in their Local Plan designed to tackle climate change and its impacts. This complements the sustainable development duty on plan-makers and the expectation that neighbourhood plans will contribute to the achievement of sustainable development. The National Planning Policy Framework emphasises that responding to climate change is central to the economic, social and environmental dimensions of sustainable development.

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What climate change legislation should planners be aware of?

Section 19(1A) of the Planning and Compulsory Purchase Act 2004 (http://www.legislation.gov.uk/ukpga/2008/29/section/182) requires local planning authorities to include in their Local Plans "policies designed to secure that the development and use of land in the local planning authority's area contribute to the mitigation of, and adaptation to, climate change". This will be a consideration when a Local Plan is examined.

The Climate Change Act 2008 (http://www.legislation.gov.uk/ukpga/2008/27/contents) establishes a legally binding target to reduce the UK's greenhouse gas emissions by at least 80% in 2050 from 1990 levels. To drive progress and set the UK on a pathway towards this target, the Act introduced a system of carbon budgets including a target that the annual equivalent of the carbon budget for the period including 2020 is at least 34% lower than 1990.

The Climate Change Act 2008 also requires the government:

- to assess regularly the risks to the UK of the current and predicted impact of climate change;
- to set out its climate change adaptation objectives; and
- to set out its proposals and policies for meeting these objectives.

These requirements are fulfilled by the UK climate change risk assessment (https://www.gov.uk/government/publications/uk-climate-change-risk-assessment-government-report) and the National adaptation programme report (https://www.gov.uk/government/publications/adapting-to-climate-change-national-adaptation-programme) respectively, which may provide helpful information for plan-making.

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How can the challenges of climate change be addressed through the Local Plan?

There are many opportunities to integrate climate change mitigation and adaptation objectives into the Local Plan (https://www.gov.uk/guidance/local-plans--2). Sustainability appraisal (https://www.gov.uk/guidance/strategic-environmental-assessment-and-sustainability-appraisal) can be used to help shape appropriate strategies in line with the statutory duty on climate change and ambition in the Climate Change Act 2008 (http://www.legislation.gov.uk/ukpga/2008/27/contents).

Examples of mitigating climate change by reducing emissions:

- Reducing the need to travel and providing for sustainable transport (https://www.gov.uk/guidance/travel-plans-transport-assessments-and-statements)
- Providing opportunities for renewable and low carbon energy technologies (https://www.gov.uk/guidance/renewable-and-low-carbon-energy)
- Providing opportunities for decentralised energy and heating

- Promoting low carbon design approaches (https://www.gov.uk/guidance/design) to reduce energy consumption in buildings, such as passive solar design (https://www.gov.uk/guidance/design)

Examples of adapting to a changing climate:

- Considering future climate risks when allocating development sites to ensure risks are understood over the development's lifetime (https://www.gov.uk/guidance/housing-and-economic-development-needs-assessments)
- Considering the impact of and promoting design responses to flood risk and coastal change (https://www.gov.uk/guidance/flood-risk-and-coastal-change) for the lifetime of the development
- Considering availability of water and water infrastructure (https://www.gov.uk/guidance/water-supply-wastewater-and-water-quality) for the lifetime of the development and design responses to promote water efficiency and protect water quality (https://www.gov.uk/guidance/water-supply-wastewater-and-water-quality#water-quality)
- Promoting adaptation approaches in design (https://www.gov.uk/guidance/design) policies for developments and the public realm

Engaging with appropriate partners, including utility providers, communities, health authorities, regulators and emergency planners, statutory environmental bodies, Local Nature Partnerships, Local Resilience Forums, and climate change partnerships will help to identify relevant local approaches.

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How can adaptation and mitigation approaches be integrated?

When preparing Local Plans and taking planning decisions local planning authorities should pay particular attention to integrating adaptation and mitigation approaches and looking for 'win-win' solutions that will support sustainable development. This could be achieved in a variety of ways, for example:

- by maximising summer cooling through natural ventilation in buildings and avoiding solar gain;
- through district heating networks that include tri-generation (combined cooling, heat and power); or
- through the provision of multi-functional green infrastructure, which can reduce urban heat islands, manage flooding and help species adapt to climate change – as well as contributing to a pleasant environment which encourages people to walk and cycle.

Local planning authorities should be aware of and avoid the risk of maladaptation (adaptation that could become more harmful than helpful). For example, designing buildings to maximise solar gain in winter without thinking through the implications for overheating in summer.

Sustainability appraisal (https://www.gov.uk/guidance/strategic-environmental-assessment-and-sustainability-appraisal) and, where required, Environmental Impact Assessment (https://www.gov.uk/guidance/environmental-impact-assessment), can be useful for testing the integration of mitigation and adaptation measures and the long term implications of decisions.

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How can planning deal with the uncertainty of climate risks when promoting adaptation in particular developments?

The impact of climate change needs to be taken into account in a realistic way. In doing so, local planning authorities will want to consider:

- identifying no or low cost responses to climate risks that also deliver other benefits, such as green infrastructure that improves adaptation, biodiversity and amenity
- building in flexibility to allow future adaptation if it is needed, such as setting back new development from rivers so that it does not make it harder to improve flood defences in future

- the potential vulnerability of a development to climate change risk over its whole lifetime

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What evidence of risks arising from climate change is available to support local plan-making?

Climate change risk assessments can support the production of Local Plans (https://www.gov.uk/guidance/local-plans--2) by informing the Sustainability appraisal (https://www.gov.uk/guidance/strategic-environmental-assessment-and-sustainability-appraisal).

Local risk assessments can be used to identify those climate risks, including those arising from severe weather events, the planning system can address. Risk assessments could consider the implications for the built environment and development, infrastructure, services and biodiversity, and their subsequent implications for vulnerable groups and community cohesion. Identifying those impacts which pose most potential risk or disruption to the provision of local services will enable vulnerability to be assessed and areas suitable for development to be identified and adaptation responses to be put in place.

Other parts of a Local Plan's evidence base will also include information on climate change risks, such as the Strategic Flood Risk Assessment (https://www.gov.uk/guidance/flood-risk-and-coastal-change#Strategic-Flood-Risk-Assessment-section) and Water Resource Management Plan and water cycle studies (https://www.gov.uk/guidance/water-supply-wastewater-and-water-quality#water-cycle-studies). Infrastructure providers hold information on the extent of supply and network constraints and their existing plans to reinforce those networks and capacity. Other service providers may also have carried out risk assessments that have implications for planning, such as health and social service providers.

Local studies can also be undertaken to provide a more detailed assessment of local vulnerability to climate impacts and the effects of extreme weather events.

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How can local planning authorities identify appropriate mitigation measures in plan-making?

Every area will have different challenges and opportunities for reducing carbon emissions from new development such as homes, businesses, energy, transport and agricultural related development.

- Robust evaluation of future emissions will require consideration of different emission sources, likely trends taking into account requirements set in national legislation, and a range of development scenarios.
- Information on carbon emissions at local authority level (https://www.gov.uk/government/collections/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics) has been published by the government for 2005 onwards, and can be drawn on to inform emission reduction options. Information is also available on GOV.UK (https://www.gov.uk/government/policies/greenhouse-gas-emissions) on how emissions are reported against the national target to reduce the UK's greenhouse gas emissions by at least 80% (from the 1990 baseline) by 2050.
- The distribution and design of new development and the potential for servicing sites through sustainable transport solutions, are particularly important considerations that affect transport emissions. Sustainability appraisal (https://www.gov.uk/guidance/strategic-environmental-assessment-and-sustainability-appraisal) should be used to test different spatial options in plans on emissions.
- Different sectors may have different options for mitigation. For example, measures for reducing emissions in agricultural related development include anaerobic digestion, improved slurry and manure storage and improvements to buildings. In more energy intensive sectors, energy efficiency and generation of renewable energy can make a significant contribution to emissions reduction.

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How can local planning authorities support energy efficiency improvements to existing buildings?

Where energy efficiency improvements require planning permission local planning authorities should ensure any advice to developers is co-ordinated to ensure consistency between energy, design and heritage matters.

Many improvements to homes and other buildings may not require planning permission. Further guidance can be found on the Planning Portal's interactive house (https://www.planningportal.co.uk/info/200125/do_you_need_permission/90/interactive_house) and in the When is permission required? (https://www.gov.uk/guidance/when-is-permission-required) guidance.

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What are government's national standards for a building's sustainability and for zero carbon buildings?

The National Planning Policy Framework (https://www.gov.uk/guidance/national-planning-policy-framework/14-meeting-the-challenge-of-climate-change-flooding-and-coastal-change#para150) expects local planning authorities when setting any local requirement for a building's sustainability to do so in a way consistent with the government's zero carbon buildings policy and adopt nationally described standards. Local requirements should form part of a Local Plan (https://www.gov.uk/guidance/local-plans--2) following engagement with appropriate partners, and will need to be based on robust and credible evidence and pay careful attention to viability (https://www.gov.uk/guidance/viability). In this respect, planning authorities will need to take account of government decisions on the Housing Standards Review (https://www.gov.uk/government/publications/2010-to-2015-government-policy-building-regulation/2010-to-2015-government-policy-building-regulation#appendix-5-technical-housing-standards-review) when considering a local requirement relating to new homes.

If considering policies on local requirements for the sustainability of other buildings, local planning authorities will wish to consider if there are nationally described standards and the impact on viability of development. Further guidance can be found under Viability (https://www.gov.uk/guidance/viability).

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What is passive solar design?

Guidance on passive solar design is available under Design – 'Planning should promote efficient use of natural resources' (https://www.gov.uk/guidance/design#efficient-use-of-natural-resources).

Paragraph: 010 Reference ID: 6-010-20140306

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Where can I find out more about climate change mitigation and adaptation?

Further information on climate change (https://www.gov.uk/guidance/climate-change-explained) and the actions being taken by the government, including the National adaptation programme (https://www.gov.uk/government/publications/adapting-to-climate-change-national-adaptation-programme) and the UK climate change risk assessment (https://www.gov.uk/government/publications/uk-climate-change-risk-assessment-government-report), which is updated every 5 years.

The Committee for Climate Change (https://www.theccc.org.uk/) (including the Adaptation Sub-Committee) is an independent, statutory body established under the Climate Change Act 2008 (http://www.legislation.gov.uk/ukpga/2008/27/contents) to advise the UK government on emissions targets and reports to Parliament on progress made in reducing greenhouse gas emissions and preparing for climate change.

Natural England's website (https://www.gov.uk/government/organisations/natural-england) provides information on using green infrastructure to help places and communities mitigate and adapt to climate change.

Local planning authorities may also find it useful to read Keeping the country running: natural hazards and infrastructure (https://www.gov.uk/government/publications/keeping-the-country-running-natural-hazards-and-infrastructure), which is a guide to improving the resilience of critical infrastructure and essential services, published by Cabinet Office.

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Can a local planning authority set higher energy performance standards than the building regulations in their local plan?

Different rules apply to residential and non-residential premises. In their development plan policies, local planning authorities:

- Can set energy performance standards for new housing or the adaptation of buildings to provide dwellings, that are higher than the building regulations, but only up to the equivalent of Level 4 of the Code for Sustainable Homes.
- Are not restricted or limited in setting energy performance standards above the building regulations for non-housing developments.

The Planning and Energy Act 2008 (https://www.legislation.gov.uk/ukpga/2008/21/contents) allows local planning authorities to set energy efficiency standards in their development plan policies that exceed the energy efficiency requirements of the building regulations. Such policies must not be inconsistent with relevant national policies for England. Section 43 of the Deregulation Act 2015 (http://www.legislation.gov.uk/ukpga/2015/20/section/43) would amend this provision, but is not yet in force.

The Written Ministerial Statement on Plan Making (https://www.gov.uk/government/speeches/planning-update-march-2015) dated 25 March 2015 clarified the use of plan policies and conditions on energy performance standards for

new housing developments. The statement sets out the government's expectation that such policies should not be used to set conditions on planning permissions with requirements above the equivalent of the energy requirement of Level 4 of the Code for Sustainable Homes (this is approximately 20% above current Building Regulations across the build mix).

Provisions in the Planning and Energy Act 2008 (https://www.legislation.gov.uk/ukpga/2008/21/contents) also allow development plan policies to impose reasonable requirements for a proportion of energy used in development in their area to be energy from renewable sources and/or to be low carbon energy from sources in the locality of the development.

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