NATIONAL LEGISLATION AND POLICY

"Global surface temperature will continue to increase until at least the mid-century under all emissions scenarios considered. Global warming of 1.5°C and 2°C will be exceeded during the 21st century unless deep reductions in CO_2 and other greenhouse gas emissions occur in the coming decades."

IPCC AR6, 9 August 2021

Planning and Compulsory Purchase Act 2004

20. Not only is it national policy that the planning system addresses the issues of climate change adaptation and mitigation[1], it is also set out in the Planning and Compulsory Purchase Act[2], placing a legal duty on local planning authorities to include in their 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". Clearly this legal duty requires that local development plans take account of the need for climate change mitigation and adaptation in development proposals and the policies that direct them. It is important to note that here mitigation and adaptation are given the same weight and should therefore be equally considered in the drafting of policy and its implementation.

[1] National Planning Policy Framework July 2021
[2] Planning and Compulsory Purchase Act 2004, S19 (1A)

Climate Change Act 2008 and Amendment

21. In the context of the Paris Agreement, legally binding greenhouse gas targets were introduced in the UK by the Climate Change Act[3] setting the initial target as a reduction to 80% of 1990 GHG emission levels to be achieved by 2050. In support of this target the act also introduced carbon budgets (based on a set of GHGs) limiting emissions over a series of four-year periods. The 2018-2022 carbon budget sets the annual equivalent of emissions 24% below 1990 levels[4]. However, the current GHG emissions levels have been reduced by up to 44% on 1990 levels[5]. Although this may suggest that the next budget period may be considered to be 'in credit', in a drive to limit global temperature rise to as close to 1.5°C as possible, section 1(1) of the 2008 Act has been amended[6] to establish a revised and more ambitious emissions target of net zero to be achieved by 2050 with further announcement of an interim target of 78% reduction by 2035.

Planning and Energy Act 2008

22. The Planning and Energy Act 2008 makes provision for the inclusion in development plans, policies imposing reasonable requirements for 'a proportion of energy used in development in their area to be energy from renewable sources in the locality of the development', and for development in their area to comply with energy efficiency standards that exceed the energy requirements of building regulations.'[7] However, the Act goes on to require that such policies included in development plans must

[3] The Climate Change Act 2008
[4] The Climate Change Act 2008 (Credit Limit) Order 2016, Carbon budget for 2018 – 22 period is 55,000,000 carbon units.
[5] 2020 UK Greenhouse Gas Emissions, Final Figures 2 February 2021, BEIS/ONS
[6] The Climate Change Act 2008 (2050 Target Amendment) Order 2019
[7] Planning and Energy Act 2008, S1 (1c)

not be inconsistent with relevant national policies. While not yet national policy, the Future Homes and Buildings Standard introduced to complement the Building Regulations, will ensure that new homes built from 2025 will produce 75-80% less carbon emissions than homes delivered under the current regulations and that they will be 'Net Zero ready and will need no retro-fitting. Given that the Climate Change Act 2008 sets a legal target of net zero by 2050 and in light of the findings and warnings of the IPCC AR6, a requirement for all new homes to achieve an 80% GHG reduction from 2025 and to be net zero well in advance of the 2050 target date would not appear unreasonable or irrational.

Town and Country Planning (General Permitted Development) (England) Order 2015

23. In most cases the installation of small-scale renewable energy equipment, including micro wind turbines, heat pumps, solar thermal and solar PV is permitted development within certain thresholds including not extending beyond 0.2m from the roof face or being higher than the roof line. In relation to listed buildings, scheduled monuments, conservation areas and world heritage sites, the installation of such equipment is not permitted development, however, the benefits of the installation of small-scale renewables should be weighed carefully against the harm to a conservation area or the significance of heritage assets.

National Planning Policy Framework (July 2021)

24. It is clear from the NPPF that the planning system has the potential to make a significant contribution to both climate change mitigation and adaptation in the UK.

25. The NPPF states that: "The purpose of the planning system is to contribute to the achievement of sustainable development… Achieving sustainable development means that the planning system has three overarching objectives, which are interdependent

and need to be pursued in mutually supportive ways (so that opportunities can be taken to secure net gains across each of the different objectives): a) an economic objective; b) a social objective; and c) an environmental objective – to protect and enhancing our natural, built and historic environment; including… mitigating and adapting to climate change, including moving to a low carbon economy."[8]

26. Planning should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure.[9]

27. The planning system should support the transition to a low carbon future in a changing climate. Plans should take a proactive approach to mitigating and adapting to climate change. Policies should support appropriate measures to ensure the future resilience of communities and infrastructure to climate change impacts.[10]

28. The NPPF also indicates that plans should take account of climate change impacts over the longer term, including factors such as flood risk, coastal change, water supply and changes to biodiversity and landscape. New development should be planned to avoid increased vulnerability to the range of impacts from climate change and that, where new development is brought forward

[8] NPPF, Paragraphs 7 and 8. July 2021
[9] NPPF, paragraph 152
[10] NPPF, paragraph 153

in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through the planning of green infrastructure and can help to reduce greenhouse gas emissions, such as through location, orientation and design reflecting the government's policy for national technical standards and local requirements.[11]

Planning Practice Guidance, 2019

29. Planning Practice Guidance: Climate Change (last revised 2019) makes it clear that 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 issue 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 NPPF expects to underpin both plan-making and decision-making. To be found sound, local plans will need to reflect this principle and enable the delivery of sustainable development in accordance with the policies in the NPPF. There is a requirement to adopt pro-active strategies to mitigate and adapt to climate change in line with the provisions of the climate change Act 2008.[12]

30. There is therefore a clear requirement for the plan-making and decision-making processes to adopt the measures needed to meet the UK Government and legal targets of achieving net zero emissions by 2050 to mitigate the effects of climate change and keep

[11] NPPF, paragraph 154
[12] National Planning Practice Guidance: Climate Change. 15 March 2019

global temperature increases to as near to, or below 1.5°C. Similarly, development plan policies and the decision-making process should also take into account the need for climate change adaptation.

Planning White Paper (August 2020)

31. The planning white paper 'Planning for the Future' published in August 2020 set out the government's proposals for reform of the planning system and sought comments from interested parties. In doing so it identifies 3 pillars of the future planning system; Planning for the future; Planning for beautiful and sustainable places, and; Planning for infrastructure and connected places. The section concerning beautiful and sustainable places states that "From 2025, we expect new homes to produce 75-80 per cent lower CO_2 emissions compared to current levels[13]. These homes will be 'zero carbon ready', with the ability to become fully zero carbon homes over time as the electricity grid decarbonises, without the need for further costly retrofitting work."[14] It is clear therefore that if this aspiration is to be achieved, then this requirement must be implemented without delay through planning policy and development management decisions. Further aspirations focussed on decarbonising transport and maintaining the health of ecosystems and biodiversity are also included in the proposals contained in the white paper.

UK Government 10 Point Plan for a Green Industrial Revolution (November 2020)

32. The UK government published its 10 Point Plan for a Green Industrial Revolution in November 2020. The plan identifies aspirations for both policy and investment in proposals for the greening of the UK economy and infrastructure.

[13] Future Homes Standard, January 2021
[14] Planning for the Future. Ministry of Housing, Communities and Local Government, August 2020

33. The 10 point plan seeks to:

1. Quadruple UK offshore wind capacity by 2030
2. Implement 5GW of UK low carbon hydrogen production by 2030
3. Advance the deployment of both large, and small-scale nuclear power, including small and advanced modular reactors
4. Phase out internal combustion engine cars by 2030 and hybrids by 2035 requiring the switch to electric or hydrogen powered cars and light vans
5. Assist in the funding of zero emissions public transport including buses and cycling infrastructure provision
6. Tackle the emissions from air travel and shipping, positioning the UK at the forefront of aviation and maritime technology to push forward low carbon travel by government investment in research and development
7. Put buildings, homes, workplaces schools and hospitals at the heart of the green economy making buildings more efficient setting a clear path away from a reliance on fossil fuel boilers in the next 15 years
8. Capture 10 mega tonnes of carbon dioxide by 2030 with £1 billion of funding for carbon capture, use and storage (CCUS) hubs in industrial centres
9. Safeguard landscapes, restore habitats for wildlife, combat biodiversity loss while adapting to climate change and creating green employment

10. Unleash innovation and develop new sources of finance by raising research and development investment to 2.4% of GDP by 2027, nurturing product development, new business models and influencing consumer behaviour.

Draft Energy National Policy Statements 2021

34. In September 2021 the government launched a consultation on the revised National Policy Statements for energy infrastructure.[15] The Policy Statements consist principally of a suit of 7 documents covering the overarching energy policy in EN-1, natural gas generating infrastructure EN-2, renewable energy generating infrastructure EN-3, gas and oil supply infrastructure EN-4, the electricity network infrastructure EN-5, and finally the appraisal of sustainability and habitats regulations assessment for EN-1 to EN-5.

35. The policy documents set out the case for an urgent need for offshore wind, solar PV, wave, tidal range, tidal stream, energy from waste, natural gas, low carbon hydrogen, and nuclear reactors, including small modular, advanced modular and large-scale reactors, as well as fusion power plants. Natural gas and other combustion plants, including energy from waste and biomass will still be required to meet peak demand periods, but will operate with carbon capture, utilisation and storage to reduce their GHG emissions.

[15] Planning for new energy infrastructure, Draft National Policy Statement for Energy Infrastructure. September 2021

UK Hydrogen Strategy 2021

36. Hydrogen is one of a handful of new, low carbon solutions that will be critical for the UK's transition to net zero. As part of a deeply decarbonised, renewable energy system, low carbon hydrogen could be a versatile replacement for high-carbon fuels used today – helping to bring down emissions in UK industrial sectors and providing flexible energy for power, heat and transport. The UK Hydrogen Strategy sets out how the country will drive progress in the 2020s, to deliver a 5GW production ambition by 2030 and position hydrogen to help meet the Sixth Carbon Budget and net zero commitments.

37. The UK Hydrogen Strategy includes the promotion of both Blue[16] and Green[17] hydrogen. Blue H_2, produced from natural gas, is seen as a bridge to a truly low carbon source of energy although it has the disadvantage of having the potential to create greater CO_2 emissions per KWh of energy than simply burning the natural gas unless it is linked to an effective carbon capture and storage system. Future green H_2, from the electrolysis of water using wind or solar power, will replace blue H_2 as the grid further decarbonises. The government is seeking to secure 5GW of low carbon[18] H_2 production capacity by 2030. The government have invited consultation responses on a 'UK Low Carbon Hydrogen Strategy' published 17 August 2021.

Future Homes and Buildings Standard

38. The government consultation on the proposed Future Homes Standard was launched in October 2019 seeking views on proposed changes to Part L and F of the Building regulations (England and Wales). The revised building regulations will require that from

[16] Blue hydrogen made by extracting hydrogen from natural gas, usually by reaction with steam.
[17] Green Hydrogen, made by electrolysing water using renewable electricity from wind or solar.
[18] Low carbon hydrogen can include processes requiring carbon sequestration in the production of hydrogen.

2025 all new homes will achieve 75 - 80% carbon emissions reductions compared with current Building Regulations standards and will be net zero ready, meaning that retrofitting of zero carbon technologies will not be required as the grid is decarbonised. The government has also stated that it will introduce an interim uplift in building standards from 2021 which require a 31% reduction in emissions compared with previous Building Regulations standards, and that from 2025 no new homes should be built with fossil fuel heating, such as a natural gas or oil-fired boiler.

Future Buildings Standard 2021

39. The aim of the Future Buildings Standard is to improve energy efficiency in new and renovated buildings while ensuring that the design and construction is sustainable. It applies to all types of non-domestic buildings including residential uses such as care homes and halls of residence. The standard intends to deliver highly efficient non-domestic buildings using low carbon heat and future proofed against potential over heating without the need for energy intensive air conditioning systems.

40. Like the Future Homes Standard, the Future Buildings Standard will come into force from 2025 but includes an interim uplift in buildings regulations applicable from 2021, increasing energy efficiency standards and introducing a 'fabric first' approach to energy efficiency. This is intended to encourage the phase out of fossil fuelled heating systems.

41. Rather than banning specified technologies, the Future Buildings Standard will set performance-based standards. It is however unlikely that the new standards will be met without the introduction of low carbon technologies.

Net Zero Strategy: Build Back Better. October 2021

42. The strategy identifies a series of policies and proposals to deliver a pathway to UK emissions reductions meeting the targets of the 6th carbon budget (to 2037) and ultimately toward the net zero target of 2050. The key policies for power generation are for the decarbonisation of electricity supply by 2035, to increase the supply of renewable energy and by 2030 to secure 40GW of additional offshore wind capacity, to secure an investment decision on a large-scale nuclear power plant by the end of the current parliament, launch a new Future Nuclear Enabling Fund to further the development of small modular nuclear reactors, and the deployment market of flexibility measures to assist in smoothing of energy price spikes.

43. In relation to fuel supply the main themes are industrial decarbonisation through the Industrial Decarbonisation and Hydrogen Revenue Support scheme (IDHRS) to fund new hydrogen generation and carbon capture business models. This will include £100 million towards the provision of 250MW of electrolytic hydrogen in 2023 with further funding in 2024. Future oil and gas exploration and licensing on the UK continental shelf will also be further regulated to reduce GHG releases.

The Environment Act 2021

44. The Environment Act seeks to improve protection of the natural environment including emissions to air, land and water, the protection and recovery of biodiversity and the regulation of waste and resource efficiency. The Act enables the establishment of the regulatory Office of Environmental Protection (OEP) with the functions of contributing to environmental protection, the improvement of the natural environment, and as a watchdog, overseeing the governments' plans, actions and targets in this area of responsibility. While the main aims of the Act are to protect and improve air and water quality and to improve and restore

biodiversity, these functions have a considerable overlap with climate change adaptation and mitigation in areas such as flood prevention and carbon sequestration or offsetting.