Huntingdonshire Climate Change Report

Document A – The role of the Local Plan Update in responding to climate change

Huntingdonshire District Council

Final Report
Prepared by LUC
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Glossary

Table 1: Glossary

Term	Definition
Activity	An action that leads to emissions of greenhouse gases. Examples include combustion of fossil fuels for heat, generation of electricity and transport, treatment of waste and wastewater, industrial processes. Activity data represent how much of this activity is taking place and has a variety of different units e.g. kWh, passenger kilometres, tonnes of waste etc.
Biodiversity Net Gain	An approach to development, and/or land management, that aims to leave the natural environment in a measurably better state than it was beforehand
Capacity Factor	An energy generator's 'capacity factor' can be defined as the actual energy yield produced over a period of time expressed as a proportion of the energy yield that would have been produced if the generator had operated at its full generation capacity continuously over the same period.
Carbon budget	A carbon budget is a cap on the amount of greenhouse gases emitted in the UK over a five-year period. Budgets must be set at least 12 years in advance to allow policymakers, businesses and individuals enough time to prepare. Once a carbon budget has been set, the Climate Change Act places an obligation on the Government to prepare policies to ensure the budget is met.
Carbon Dioxide Equivalent (CO_2e)	Carbon dioxide equivalent is a measure used to compare the emissions from various greenhouse gases based upon their global warming potential. For example, the global warming potential for methane over 100 years is 28. Therefore 1 tonne of methane released is equivalent to 28 tonnes of CO_2 (measured on a 100-year time horizon). Therefore, CO_2e works as a single 'currency' for greenhouse gases.
Carbon Emissions	Often used as a shorthand to refer to greenhouse gas (GHG) emissions that are included in the Kyoto Treaty. Carbon dioxide is the most common GHG and other gases can be measured in relation to it (see CO_2e).

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Term	Definition
Carbon neutral	The balancing of carbon emissions against carbon removals and/or carbon offsetting with the net result being zero (see also net zero carbon).
Carbon Offsetting	Broadly refers to a reduction in GHG emissions or an increase in carbon storage that is used to compensate for emissions that occur elsewhere
Carbon reduction	An activity that reduces carbon emissions compared to a baseline scenario.
Carbon sequestration	The practice of removing carbon dioxide (CO2) from the atmosphere and storing it.
Climate change	The large-scale, long-term shift in the planet's weather patterns or average temperatures.
Climate change mitigation	Action taken to reduce the release of greenhouse gas emissions or increase the removal of emissions by enhancing sinks (e.g. increasing the area of forests).
Decarbonisation	Usually refers to the electricity sector and refers to reducing the carbon intensity of electricity generated (emissions per kWh) by increasing efficiency of supply or changing the generation fuel mix from fossil fuel to renewables and low carbon sources.
Deployable potential	The 'deployable potential' is the amount of renewable energy that could be realistically delivered within the Council taking into account factors such as planning, economic viability and grid connection.
Emission factor	The average emissions of a given GHG for a particular activity. Emission factors are also expressed as the average combination of GHGs for a particular activity, in units of kgCO2e.
Emissions factor	A factor to convert fuel consumption into the equivalent carbon emissions
Global warming	Refers to the recent and ongoing rise in global average temperature near Earth's surface. It is caused mostly by increasing concentrations of greenhouse gases in the atmosphere. Global warming is causing climate patterns to change. However, global warming itself represents only one aspect of climate change.
Green Finance	Green finance refers to the financing of new and existing public and private investments with sustainability objectives. Sustainability objectives include renewable energy and zero carbon energy generation and distribution, energy conservation measures, climate adaptation works, migration of activities away from fossil fuel sources, conservation and sustainable agriculture.

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Term	Definition
Greenhouse Gas (GHG)	A gas in our atmosphere that absorbs and emits radiation within the thermal infrared range. There are naturally occurring greenhouse gases in our atmosphere which maintain surface temperatures in a range conducive to life. However, since the industrial revolution, anthropogenic sources of GHGs have increased hugely, leading to 40% increase in atmospheric concentration of carbon dioxide. This is causing increases in surface temperatures and is the main cause of climate change. There are seven GHGs covered by the Kyoto Treaty, but the main ones are carbon dioxide (CO2), methane (CH4) and nitrous oxide (N2O), and action needs to be taken to reduce emissions of these.
Greenhouse Gas Protocol	A joint initiative of the World Resource Institute (WRI) and the World Business Council for Sustainable Development (WBCSD), the GHG Protocol provides global standard frameworks for the measurement and management of greenhouse gas emissions.
Natural capital	UK natural capital is comprised of all the ecosystem services that UK natural assets provide; natural assets include soil, air, water and all living things.
Nature based solutions	Solutions that are inspired and supported by nature, which are cost-effective, simultaneously provide environmental, social and economic benefits and help build resilience
Net Zero	Net Zero refers to the point at which the amount of greenhouse gases being put into the atmosphere by human activity equals the amount of greenhouse gases being taken out of the atmosphere.
Net zero carbon	The balancing of carbon emissions against carbon removals and/or carbon offsetting with the net result being zero (see also carbon neutral).
Project lifetime	Anticipated lifetime of an energy efficiency technology or low carbon behaviour, used to calculate lifetime savings.
Removals	CO2 removals refer to a set of techniques that aim to remove CO2 directly from the atmosphere by either increasing natural sinks for carbon or using chemical engineering to remove the CO2, with the intent of reducing the atmospheric CO2 concentration.
Scope	A way of categorising emission sources in relation to the reporting organisation, used as a way of providing transparency in emissions accounting, making it clear the type of emission source and the level of control of the reporting organisation over the source. Three levels of scope have been defined and used on a global basis.

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Term	Definition
Sequestration	A natural or artificial process by which carbon dioxide is removed from the atmosphere and held in solid or liquid form. The uptake of atmospheric carbon by plants and the growth of wood or increase of peat volume are examples of biological sequestration. Also see removals.
Technical potential	The ‘technical potential’ is the total amount of renewable energy that could be delivered in Huntingdonshire based on a number of assumptions regarding the amount of resource and space.

List of Acronyms

Table 2 : List of Acronyms

Acronym	Definition
CCC	Climate Change Committee
CO2	Carbon Dioxide
NMDC	National Model Design Code
NPPF	National Planning Policy Framework
LA	Local Authority
LPA	Local Planning Authority
HDC	Huntingdonshire District Council
SPD	Supplementary Planning Document
GHG	Greenhouse Gases
RTPI	Royal Town Planning Institute

Executive Summary

This document provides an overview of the role of the local plan update Huntingdonshire in responding to climate change, including the applicable policy framework and the appropriate or possible scope of the local plan. In doing so, Document A sets out the context for the wider climate change evidence base (set out in Documents B to F of this study) produced for Huntingdonshire District Council. The evidence base is to be used to inform Huntingdonshire District Council's (HDC) local plan update and wider strategic policymaking.

This document does not offer conclusions or recommendations on climate change mitigation or adaptation policy but rather explores how local planning can contribute to achieving net zero, situating it within the wider policy context.

In Chapter 1, the document outlines how carbon emissions and net zero can be understood, along with the need to adapt to emissions-related climate change and the implications both have for local authorities. A broad overview of the emissions profile of Huntingdonshire is set out. It sets out the importance for local authorities seeking to address net zero in understanding their emissions profile in order to best allocate resources and policies towards those sectors dominating local emissions plan for net zero.

In Chapter 2, the policy context which requires local authorities to work towards net zero and climate adaptation is explored. It shows that national government, HDC and its regional partners share a common goal to deliver net zero and achieve related sustainability goals. The urgency to address climate change is reflected in both wider national legislation and planning-specific policy and guidance. The Climate Change Act 2008, and the Planning and Energy Act 2008, in particular, work together to compel local authorities towards reducing greenhouse gas emissions and supporting national efforts to achieve binding targets. Huntingdonshire have already recognised a Climate and Ecological Emergency and adopted a Climate Strategy that defines its priorities to achieve

the commitment of a net zero carbon council by 2040 (and supporting residents and business towards net zero by 2040).

In Chapter 3, the document set outs the role of local authorities in achieving net zero via the local plan process and the limitations for local authorities in addressing climate change through development plans. Local authorities are the delivery body for hundreds of essential services where emissions may be influenced but the local plan is also shown here to have a significant influence over local emissions, particularly its trajectory in future years. The local plan dictates spatial, strategic and management policies for (of significance to climate change mitigation and adaptation) buildings, energy generation (including) renewables, nature management, travel and transport, waste, recycling, resource management and community. However, whilst the importance of the role local plan in achieving net zero should not be understated, Document A discusses the limitations and obstacles they may face including the lack of accurate and up to date data on local emissions profiles housed by local authorities, a lack of resourcing and skills to achieve net zero and a lack of guidance or, in some cases, backing from national government to deliver ambitious climate change responses through the plan process.

Finally, Chapter 4 provides an **overview of the findings** of each of the remaining Documents in this evidence base - Documents B-F - displayed below:

- Document B – Position Statement and analysis of baseline and forecast future emissions
- Document C – The contribution of sustainable design to achieving Net Zero
- Document D – Assessment of spatial strategy options
- Document E – Renewable energy assessment
- Document F – Offsetting and sequestering emissions

Introduction

Document A and the Climate Change Evidence Base for Huntingdonshire

This document provides an overview of the role of the local plan update in responding to climate change, including the applicable policy context and guidance on the appropriate scope of the local plan in addressing net zero and climate adaptation needs. In doing so, it also sets the scene for the wider climate change evidence base that has been produced for Huntingdonshire District Council to inform its local plan update and its wider strategic policymaking.

In Chapter 1, the document will outline how carbon emissions and net zero can be understood, along with the need to adapt to emissions-related climate change and the implications both have for local authorities. A broad overview of the emissions profile of Huntingdonshire will be set out.

In Chapter 2, the policy context which requires local authorities to work towards net zero and climate adaptation will be explored.

In Chapter 3, the document set outs the role of local authorities in achieving net zero via the local plan process and the limitations for local authorities in addressing climate change through development plans.

Finally, Chapter 4 provides an overview of the other five Documents in this Evidence Base, including an understanding of what each Document provides to Huntingdonshire's knowledge base and the upcoming local plan update and its key findings.

Chapter 1

Net zero and local authorities

Understanding net zero

1.1 The UK Government, via the Climate Change Act 2008 **[See reference 1]** and the Paris Agreement **[See reference 2]**, has committed to reduce emissions by at least 100% of 1990 levels by 2050. As a result, the amount of greenhouse gas (GHG) emissions produced by the UK would be equal to or less than the emissions taken out of the atmosphere by the UK, thus achieving net zero GHG emissions to the atmosphere.

1.2 Net zero can therefore be defined as the point at which the amount of greenhouse gases being put into the atmosphere by human activity equals the amount of greenhouse gases being taken out of the atmosphere **[See reference 3]**. The definition of this term can vary depending on:

- If only carbon dioxide is considered or also other GHGs (including methane, nitrous oxide, and fluorinated gases)
- Inclusive of direct emissions only (e.g. from the operation of a scheme) or also of indirect emissions (e.g. broader supply chain to include material extraction, manufacturing, transportation and construction).
- The acceptability of different types of carbon savings and carbon removals for offsetting emissions.

1.3 However, ultimately the net zero target aims to avoid catastrophic climate change effects by ensuring that emissions remain as close to zero as possible, with any residual emissions being absorbed through natural carbon sinks such as forests, or via new technologies such as carbon capture **[See reference 4]**.

Emissions profile of Huntingdonshire

1.4 The Huntingdonshire District Council (HDC) Local Plan update provides an opportunity to ensure that future developments in the district contribute to meeting carbon reduction targets – climate mitigation. It also allows for other land use planning decisions that can help address or contribute to emissions from the District.

1.5 As outlined by the UK Climate Change Committee (CCC), local authorities need to understand the emissions in their area in order to target where reduction measures will have the most impact. Huntingdonshire's current emissions profile is discussed in greater detail in Document B (in the context of forecasting future emissions). However, a summary is included here.

1.6 First,we highlight here the Council's own position on local climate emissions within its Climate Strategy:

1.7 The Council's Climate Strategy sets out the following climate change priorities for the District:

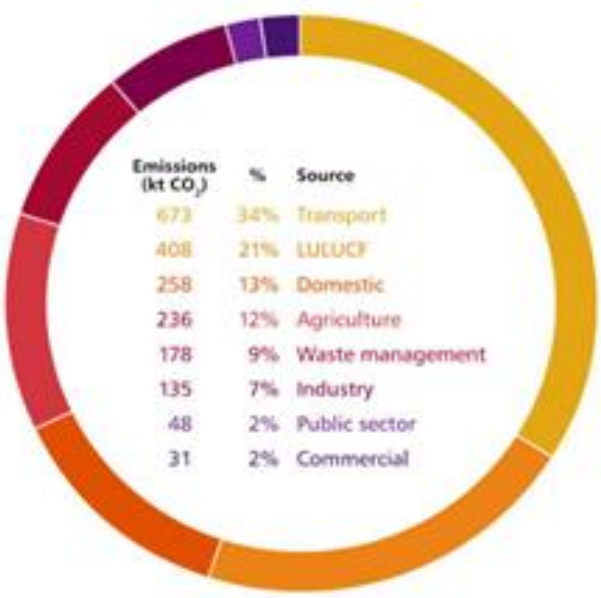
1. Sustainable travel with low emissions

2. Reduce energy use, shift to renewables

3. Increase biodiversity and natural capital

1.8 The Climate Strategy has produced a sectoral breakdown of emissions from the district.

Figure 1.1: Sources of Huntingdonshire GHGs [See reference **5**]



1.9 Harmful carbon emissions are produced across different sectors within Huntingdonshire as illustrated in **Figure 1.1**, with a significant proportion produced from local transport.

1.10 Document B, Chapter 3 establishes the baseline GHG emissions for Huntingdonshire. This document sets out that the most significant emissions source within Huntingdonshire is the transport sector, comprising 36% of total emissions. This demonstrates the significance of the A1 and A14 within Huntingdonshire. The land use and agriculture sectors are also of notable significance within Huntingdonshire, comprising 16 % and 13 % of emissions, respectively. This is reflective of the largely rural nature of Huntingdonshire and the substantial areas of high-quality agricultural land within the district.

Understanding the need to adapt to climate change

1.11 A changing climate increases the risk of numerous, significant impacts on our land, built environment, economy and society at large. Its effects are already evident. The planet is warming, precipitation patterns are changing, and sea levels are rising. Weather events are becoming less and less predictable, reflecting climate instability and adding increased uncertainty to future planning. Climatic events, such as heatwaves, floods, droughts, and wildfires are having wider effects on human health, ecosystems, and the global economy.

1.12 Anticipating and planning for the unavoidable effects of climate change – and climate uncertainty – is as important as reducing carbon emissions. A significant amount of climate change is already locked into the system – the product of emissions over the past 200 years; therefore, climate adaptation is essential even with the most ambitious carbon reduction actions.

1.13 This evidence base was tasked with conducting a bespoke assessment of the risks faced by Huntingdonshire as a result of climate change. This is located in **Document B** of this evidence base.

1.14 Preparing for continued climate change is about managing risks and increasing our resilience to them. New buildings and places need to be designed to withstand the impacts of climate change that are happening now and in the future, to ensure that they are fit for purpose over their lifetimes. Early action will not only manage current and future risks but save money and create jobs.

1.15 As the CCC has recently stated UK adaptation policy has not, to-date, produced the necessary resilience to fully address the risks that a changing climate poses to the UK and the gap between future levels of risk and planned adaptation has widened in the last 5 years. **[See reference** 6**]**. This reflection is held against both national and local government.

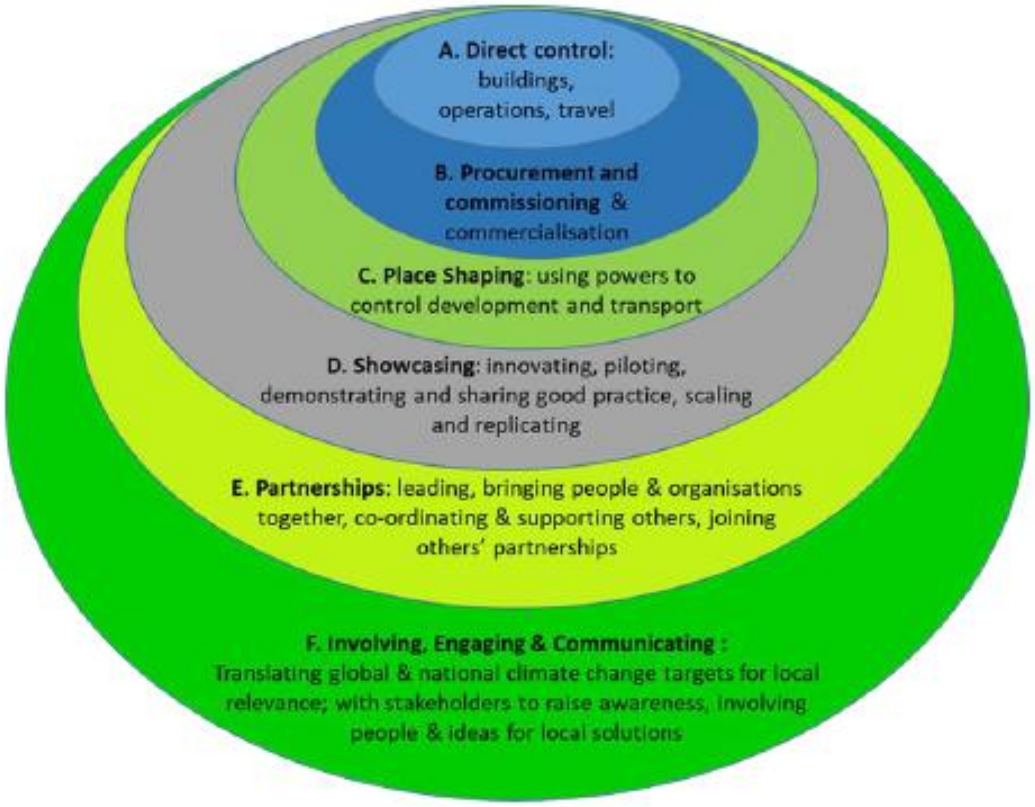
Summary

Implications for Huntingdonshire District Council

1.16 Local authorities have a key role to play in enabling the UK to achieve net zero. Taking a place-based approach to net zero is important in ensuring local progress can be made, making use of local knowledge, targeted funding, local assets and relationships with stakeholders that have local influence **[See reference 7]**. Local authorities are well positioned to understand and implement climate action that is appropriate for their area to achieve net zero.

1.17 The Climate Change Committee (CCC) estimate that local authorities are directly responsible for between 2-5% of their local areas' emissions **[See reference 8]**. However, as shown in **Figure 1.2**, local authorities also have a wide influence on a range of drivers throughout their administrative area which can affect the scale of emissions.

Figure 1.2: How local authorities control and influence emissions [See reference **9**]



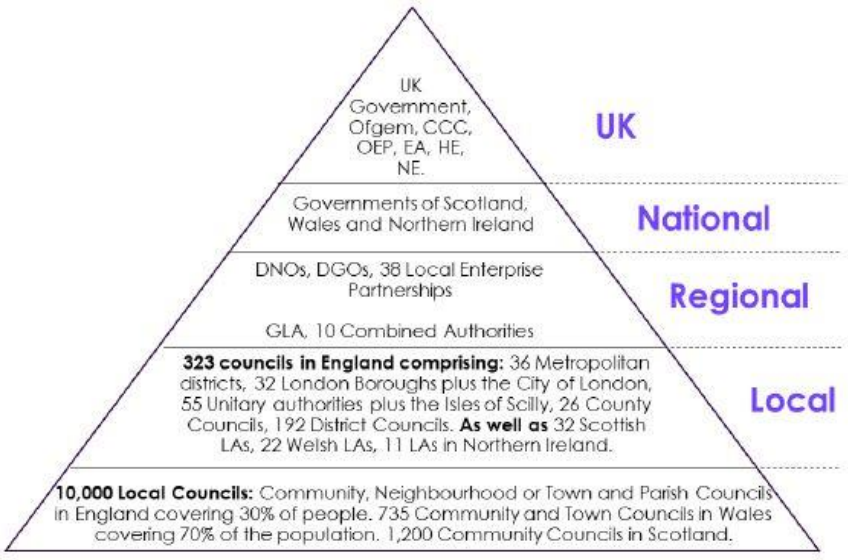
1.18 Local scale emissions reduction, coordinated by local authorities, is therefore key to the UK achieving net zero. To date, progress in emissions reduction across the UK has been largely achieved through centrally driven policy that is focused on phasing out coal for electricity production and increasing renewable energy generation **[See reference** 10**]**. However, many of the urgent changes needed to achieve net zero require action at a local level. Decarbonising buildings, transport, waste and industry, identifying suitable locations for renewable energy, cutting emissions from agriculture and storing more carbon through land use and forestry are dependent on planning and delivery coordination at a local scale. Over half of the UK's emissions cuts are dependent on purchasing decisions, behaviours and habits of individuals, businesses and organisations which can be influenced at the local level **[See reference** 11**]**.

1.19 To achieve net zero, local authorities will need to focus on development options that minimise carbon reductions, achieve multiple benefits and help to transform whole places towards net zero **[See reference** 12**]**.

1.20 At the same time, HDC must consider as a council how to achieve a 'just transition' where efforts to tackle emissions and our future energy needs benefits all residents and communities, rather than placing burdens on those least able to shoulder them. **[See reference** 13**]**. The Intergovernmental Panel on Climate Change has stated that a just transition requires "ensuring no people, workers, places, sectors, countries or regions are left behind" in decarbonisation" **[See reference** 14**]**. For instance, 'fuel poverty', has been a growing problem across the UK, particularly in the wake of the war in Ukraine. Efforts to address our energy profile can also address this problem and avoid solutions that exacerbate the phenomenon (e.g. energy efficiency schemes for poorer households) **[See reference** 15**]**.

1.21 The Government's 'Net Zero Strategy: Build Back Greener (2021) **[See reference** 16**]** and 'Powering Up Britain: Net Zero Growth Plan', **[See reference** 17**]** along with the UK's legislated emissions reduction targets (see Chapter 2, below) are the overarching policy frameworks that direct our national approaches to net zero. However, within England, there is no overall plan for how local authorities fit into delivering net zero, nor is there a single, clear source for local authorities to inform their activities on climate change. The CCC state that "The onus is on local authorities to work out their own course based on piecemeal policy and communications from Government" **[See reference** 18**]**. The sub national coordination framework in **Figure 1.3** demonstrates the different scales at which net zero ambitions need to be achieved.

Figure 1.3: Sub national coordination framework [See reference 19]



Notes: OEP: Office for Environmental Protection; EA: Environment Agency; HE: Highways England; NE: Natural England. These organisations all play a key role in the ability of local areas to deliver on Net Zero.

1.22 As a result of the lack of coordination between local and national level, it is down to local authorities to determine how best to achieve net zero within their area when developing local plans and making policy. The policy context that confirms local authorities' mandate and expectation to act on net zero is detailed in Chapter 2.

1.23 The CCC sets out several key actions for local authorities in achieving net zero **[See reference 20]**. This includes:

- Develop Net Zero or Climate Action Plans with delivery projects that prepare the area to make the transition to net zero choices from 2030, and align with climate adaptation, biodiversity net gain and other key local strategies. Include immediate actions that kick-start delivery now and that support low-carbon and green skills and jobs.
- Monitor and report on progress in reducing emissions to local communities and government.
- Conduct policy and service reviews to align policy, spending and functions with Net Zero.

- Implement training and capacity building to deliver Net Zero within the local authority and with key suppliers and contractors.
- Develop capacity to innovate and scale up. Climate change action plans help identify future delivery projects for when funding becomes available. Local authorities should prioritise applying for funding and managing funds if successful.
- Collaborate with neighbouring and cross-tier local authorities and other key delivery bodies on strategies and plans which ensure systems-wide transformation is coherent and supportive of net zero.
- Develop Green Finance know-how. Private sector investment and Green Finance will be required to deliver the scale of the change needed.
- Communicate and engage with local communities, businesses and partners on Net Zero so that a mandate for action is maintained

1.24 As outlined by the CCC, local authorities need to understand the emissions in their area in order to target where reduction measures will have the most impact. One approach for many UK local authorities has been to carry out assessments of their GHG emissions as part of a net zero or climate emergency strategy. There has been little standardisation across authorities in terms of the scope of these assessments, but they have mostly relied on the local authority GHG data that is published annually by BEIS **[See reference 21]**. This approach allows for like-with-like comparisons to be made between different jurisdictions, in a way that is consistent with the UK National GHG Inventory. This evidence base produces a detailed assessment of Huntingdonshire's baseline emissions and forecasted emissions in **Document B**.

1.25 Local authorities may also need to work alongside neighbouring authorities and other key delivery bodies to gain an understanding of emissions that can only be reduced through collaboration (e.g. related to transport across LA boundaries). Collaboration will enable local authorities to share skills, expertise and deliver net zero more effectively. Specifically, collaboration between local authorities is important when monitoring emissions and reporting on progress to

provide clear evidence to inform policy and provide benchmark data **[See reference** 22**]**.

1.26 Local plan making provides a key opportunity for influence over emissions to target net zero. Local authorities can influence new development, spatial planning and land use changes. Local authorities can give support to development which would help to achieve net zero, for example by supporting renewable energy developments or identifying land suitable for this purpose.

1.27 Local authorities are required to consider adaptation needs in the same way that they are tasked with addressing emissions. The Climate Change Act 2008, which enshrined the UK's commitments on emissions reductions also compels local authorities to act on climate adaptation. The National Planning Policy Framework was strengthened through the July 2021 update, adding reference to climate change adaptation to the wording of the presumption in favour of sustainable development; and included emphasis on the importance of considering the impacts of all sources of flooding. Overall, it compels local planning authorities to contribute to protecting and enhancing our natural, built and historic environment including …mitigating and adapting to climate change" **[See reference** 23**]**.

1.28 Given local authorities' unique position (including that of Huntingdonshire's) in understanding local needs and as the delivery body for hundreds of essential services to protect public health, manage roads, prepare for floods, and provide open space, they are well placed to fund, lead and steer the necessary measures to tackle the risks of climate impacts. As with emissions, the local plan making process provides a key opportunity for adaptation actions and again, as with emissions, local authorities may also need to work alongside neighbouring authorities and other key delivery bodies. Such coordination efforts would help develop understandings of local adaptation needs that can only be reduced through collaboration. This could relate to strategic water bodies or major landforms, such as forests, that span local authorities' jurisdictions and can only be addressed through large-scale efforts.

Chapter 2

Policy and evidence context

2.1 In this chapter, we will explore the national and local policy context within which carbon emission reductions sit. Carbon emissions need to be reduced nationally, locally and across sectors drastically to meet policy targets on emissions.

UK national emission reduction targets

2.2 The risks in failing to limit a global average temperature increase to 1.5°C have now been clearly set out in the IPCC Special Report 'Global Warming of 1.5°C' and have recently been reiterated in COP26 **[See reference** 24**]**. These risks depend on the magnitude and rate of warming, geographic location, levels of development and vulnerability, and on the choices and implementation of adaptation and mitigation options. The UK achieving net zero will help to reduce the global average temperature increase.

2.3 The UK's net zero target is a legally binding target for central government to achieve full net carbon neutrality - which is 100% reduction of net greenhouse gas emissions in the UK by 2050 **[See reference** 25**]**. The UK is also a signatory of the Paris Agreement which came into force in 2016. The Paris Agreement signatories pledge to prevent global temperature rising by more than 1.5°C above pre-industrial levels **[See reference** 26**]**.

2.4 The UK's Committee on Climate Change (CCC) via its Sixth Carbon Budget (2020) recommended a new emissions target for the UK: reduction in emissions by 78% by 2035 relative to 1990 levels and net zero greenhouse gases by 2050 **[See reference** 27**]** (the Seventh Carbon Budget is due for publication in early 2025). The report advised that that the UK is currently only on track to meet half of the required reduction in emissions by 2035. As such, substantial additional action is need to achieve net zero.

National legislative and policy context for climate change within planning

2.5 This section describes the legislative and policy context for addressing climate change through the planning system.

National Planning Policy Framework (NPPF)

2.6 The NPPF (last updated in December 2023) sets out the environmental, social and economic planning policies for England **[See reference** 28**]**. Central to the NPPF policies is a presumption in favour of sustainable development, that development should be planned for positively and individual proposals should be approved wherever possible. One of the overarching objectives that underpins the NPPF is set out in paragraph 8 (c): "an environmental objective – to contribute to protecting and enhancing our natural, built and historic environment including …mitigating and adapting to climate change, including moving to a low carbon economy."

2.7 Chapter 14 of the NPPF (Meeting the challenge of climate change, flooding and coastal change), sets out:

> The planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change. It 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.

2.8 Paragraph 158 sets out that plans should take a proactive approach to mitigating and adapting to climate change, taking into account the long-term implications for flood risk, coastal change, water supply, biodiversity and landscapes, and the risk of overheating from rising temperatures. Paragraph 159 states new development should be planned for in ways that can help to reduce greenhouse gas emissions, such as through its location, orientation and design.

2.9 Paragraph 161 sets out that local planning authorities should support community-led initiatives for renewable and low carbon energy, including developments outside areas identified in local plans or other strategic policies that are being taken forward through neighbourhood planning.

National Planning Practice Guidance

2.10 The online National Planning Practice Guidance (PPG) resource, published by the Department for Levelling Up, Housing and Communities (DLUHC) and Ministry of Housing, Communities and Local Government (MHCLG) **[See reference** 29**]** provides further interpretation of national planning policy for the benefit of local planning authorities and planning practitioners. Although the section on climate change has not been updated following the changes to the Climate Change Act and the UK Climate Emergency Declaration, it strongly asserts the importance of climate change within the planning system and the need for adequate policies if Local Plans are to be found sound :

> "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 will need to reflect this principle and enable the delivery of sustainable development in accordance with the policies in the National Planning Policy Framework. These include the requirements for local authorities to adopt proactive strategies to mitigate and adapt to climate change in line with the provisions

and objectives of the Climate Change Act 2008, and co-operate to deliver strategic priorities which include climate change." [Paragraph 001, Reference ID: 6-001-20140306, Revision date: 06.03.2014]

2.11 Regarding how the uncertainty of climate risks when promoting adaption can be managed, the PPG states:

"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." [Paragraph 005, Reference ID: 6-005-20140306 Revision date: 06.03.2014]

2.12 In respect of the approach to identifying climate mitigation measures for new development, the PPG also states:

"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." [Paragraph 007, Reference ID: 6-007-20140306 Revision date: 06.03.2014]

2.13 In regard to the Government's national standards for a building's sustainability and zero carbon buildings, the PPG states;

> "The National Planning Policy Framework 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 following engagement with appropriate partners and will need to be based on robust and credible evidence and pay careful attention to viability." [Paragraph 009, Reference ID: 6-009-20150327, Revision date: 27.03.2015]

Climate Change Act 2008

2.14 At a national level, the **Climate Change Act 2008** sets a legal requirement for the UK Government to assess climate change risks, define objectives for adapting to climate change, and set out policies and proposals that would help meet those objectives. This included a reduction of at least 80% by 2050 against a 1990 baseline. However, on 1st May 2019, Parliament declared a formal climate and environment emergency, and on 12th June 2019 the Government amended the Climate Change Act to target net zero emissions. This will be achieved with interim targets, set through five-yearly carbon budgets. The latest is the Climate Change Committee's Sixth Carbon Budget, introduced into law in 2021, which sets a target to reduce UK greenhouse gas emissions by 78% by 2035.

2.15 The Climate Change Act and carbon budgets provide an important reference point for setting priorities for action at a local level.

2.16 As required by the Climate Change Act 2008, the Government's assessment of current and future risks is presented within the Climate Change Risk Assessment (CCRA), which must be updated every five years; the most

recent version was published in early 2022. This is based on the Independent Assessment of UK Climate Risk, the statutory advice provided by the Climate Change Committee (CCC), commissioned by the UK government and devolved administrations.

2.17 The National Adaptation Programme (NAP3) sets the actions that government and others will take to adapt to the impacts of climate change in the UK. This report forms part of the 5-yearly cycle of requirements laid down in the Climate Change Act 2008. In the report, the Government describes how it plans to adapt to climate change over the next five years in relation to topics such as:

- *"protecting the natural environment"*
- *"supporting business in adapting to climate change"*
- *"adapting infrastructure (for example, our electricity networks and railways)"*
- *"protecting buildings and their surroundings (for example, from hotter temperatures)"*
- *"protecting public health and communities"*
- *"mitigating international impacts on the UK (for example, on food supplies imported from abroad)"*

2.18 Although the NAP3 primarily focuses on actions that the UK Government will take, it also highlights the role that local authorities can play as public infrastructure managers, placemakers, suppliers of community support and social care, and risk management authorities. One of their key responsibilities is in relation to flooding, with county councils and unitary authorities taking a lead role in managing flood risks, with district and borough councils acting as partners.

Planning and Compulsory Purchase Act

2.19 The Planning and Compulsory Purchase Act (2004) sets out the structure of the local planning framework for England, including the duty on plan-makers to mitigate and adapt to climate change. In other words, local planning authorities must make positive and proactive policies and decisions which contribute to the mitigation of, and adaptation to, climate change – the effects of polices and decisions that make measurable, ongoing reductions in carbon emissions should be reported in a Council's annual monitoring reports. This legislation is supported by national planning policy and guidance set out below.

2.20 Section 19(1A) of the Planning and Compulsory Purchase Act 2004 (PCPA) requires that **climate change is addressed through development plan documents** and that obligations regarding annual monitoring of any targets or indicators are fulfilled:

> "Development plan documents must (taken as a whole) include 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" [Section 19(1A)]
>
> "Every local planning authority must prepare reports containing such information as is prescribed as to…the extent to which the policies set out in the local development documents are being achieved." [Section 35(2)]

2.21 This means that local plans must consider how policies can deliver on these requirements, including having regard to the objectives and trajectories for reducing emissions set out within the Climate Change Act (2008).

Flood and Water Management Act 2010

2.22 This Act requires risk management authorities including District and Borough councils, the Environment Agency, highways authorities and others to act in a manner that is consistent with the National Flood and Coastal Erosion Risk Management Strategy for England and the local flood risk management strategies developed by Lead Local Flood Authorities.

Planning and Energy Act 2008

2.23 The Planning and Energy Act 2008 requires new developments to meet energy efficiency standards and to incorporate low-carbon and renewable energy technologies.

2.24 Importantly, this Act enables local planning authorities to set requirements for energy use and energy efficiency in local plans. Requirements are related to the proportion of energy used in development of their area to be energy from renewable sources in the locality of the development; proportion of energy used in development in their area to be low carbon energy from sources in the locality of the development and development in their area to comply with energy efficiency standards that exceed the energy requirements of building regulations.

Building Regulations

2.25 The Building Regulations set out minimum standards for new buildings and those undergoing major refurbishment, some of which link to climate change resilience or adaptive capacity.

2.26 Building performance standards play a major role in developments' emissions profile. Part L of the UK Building Regulations **[See reference** 30**]** is the key statutory guidance document on the conservation of fuel and power in

new and existing buildings. All new buildings, and those undergoing major refurbishment works or extensions, are required to demonstrate compliance with Part L, which sets requirements for energy efficiency of the building fabric (e.g. insulation and double or triple glazing), energy use; and CO2 emissions. Part O sets out requirements to avoid overheating, and Part G requires the use of water efficient fittings to limit potable water use.

2.27 Such standards only cover one area of emissions that emanate from built developments – that of 'regulated emissions'. These are emissions that fall within the remit of Building Regulations and come from energy consumed by a building and its controlled, fixed services and systems such as heating, cooling, hot water and lighting.

2.28 In contrast, 'unregulated emissions' emerge from the energy consumed by a building from fixtures or appliances. These are 'unregulated' in the sense that they fall outside the remit of current Building Regulations. For example, this can include energy consumption from appliances integral to the building's operation/habitation e.g. lifts, escalators, refrigeration, external lighting, I.T. equipment, general electrical items such as, TVs, kettles, microwaves, ovens, hobs etc. They contribute towards a building's carbon footprint but cannot be controlled directly through design – either by the design of the building or limitations of what can be used within it.

2.29 In 2021, the government announced changes to the Building Regulations. This is an attempt to ensure that new developments contribute to the UK's 2050 Net Zero target. As part of this, new homes are to produce 31% less regulated CO2 emissions than current standards along with a 27% reduction for new non-domestic buildings, including offices and shops. These changes came into effect in 2022.

2.30 Planned future updates to the Building Regulations are discussed below in 'Future Homes Standard and Future Buildings Standard'.

Relevant changes to national policy and guidance on planning for climate change

2.31 In this section we explore upcoming, known and potential changes to national policy and guidance their implications for HDC.

National Model Design Code and local Design Codes

2.32 The UK Government published the National Model Design Code (NMDC) in July 2021 to support local councils and communities to set standards around design in their local area and aid them in their creation of more beautiful and sustainable places and buildings **[See reference** 31**]**.

2.33 The National Planning Policy Framework (NPPF) now states that local planning authorities should prepare design guides or codes consistent with the principles set out in the National Design Guide and the NMDC.

2.34 For instance, the NMDC provides guidance on how design codes should respond to the challenge of 'Resources' (sustainability concerns and climate change), stating policy approaches they should adopt on the energy hierarchy, energy efficiency, local energy networks and sustainable construction principles including embodied carbon and sustainable construction methods.

2.35 In other parts of the NMDC, design features are encouraged, across built environment themes, that support climate mitigation and adaptation. For instance, it reiterates that the Government want to see street trees on all new streets, with other landscape features in addition for streetscapes providing habitat, shading, cooling, air quality improvements and carbon sequestration, as

well as being a vital component of attractive places. It is the Government's intention that all new streets include trees.

2.36 The Huntingdonshire Design Guide SPD 2017 sets out how design may directly impact emissions reductions, for example through design of new buildings to maximise insulation. Indirect emissions reductions can also be achieved through planning and design, for example, by minimising land and energy consumption and the need for travel by private car. A compatibility statement (2021) **[See reference** 32**]** for the Huntingdonshire Design Guide (2021) has been produced which sets out the compatibility of the SPD against the requirements set out in the NMDC. As such, the SPD is considered an up to date document to be used in the determination of planning applications. HDC may still consider it advantageous to produce a Design Code given that it would have significant material weight in planning decision-making, unlike traditional guidance documents.

2.37 A report by RTPI and RSPB identified that design codes can be a tool for local authorities in influencing net zero development **[See reference** 33**]**. However, this is dependent on the emphasis and choice of polices already enshrined within the local plan policy on climate and nature, and the extent to which low carbon development is supported in local plan policy. As such, the local plan update provides an opportunity to encourage development that is of low carbon standards, and it may be further supported by a design code to achieve these standards by introducing further design expectations. The RTPI and RSPB report states that design codes will be most effective when those involved with the local plan update process have considered the potential of a future complementary design code. This would therefore involve the inclusion of plan policies around climate change and sustainability topics drafted with the knowledge that further supporting detail on implementation, providing material weight, is to come through an expected design code.

FHS (Future Homes Standard) and FBS (Future Buildings Standard)

2.38 The Government has signalled its intention to update the Building Regulations, significantly scaling up expectations over energy efficiency and carbon emissions, amongst other characteristics. These have been improved over time with successive Building Regulations updates but next step in this process is the forthcoming FHS and FBS.

2.39 The implications of the FHS and FBS, along with recent government steers to local authorities to not set policies beyond its own targets is discussed in detail in Document C of this evidence base. However, it should be pointed out in this Document that its conclusions are that local authority planning has a legitimate role to play in seeking to close the still existent gap between government building regulations and the net zero requirement, particularly given the risk of delays to improvements to Building Regulations and/or to the decarbonisation of the national grid, which the FHS depends on to deliver net zero homes as opposed to 'net zero ready' homes. Other shortcomings of the FHS and FBS that planning policies could help to address include the failure to consider unregulated emissions; lack of ambition on fabric performance standards which do not improve beyond Part L 2021 meaning missed opportunities to reduce energy bills and higher energy demands on the national grid; limited requirements for onsite renewable energy and no mention of embodied carbon.

National Development Management Policies

2.40 National Development Management Policies (NDMPs) were introduced in the Levelling up and Regeneration Bill (2023) (the Bill) and are part of the government's ambition to make it easier to produce plans and foster a genuinely plan-led system, leading to clearer and more certain decision making **[See reference** 34**]**

2.41 The NDMPs aim to increase uniformity in the plan making process; and make local plans faster to produce and easier to navigate because nationally important issues will be protected by NDMP.

2.42 We await clarity on their scope and implications for policies in local plans. For example, it is not yet clear if the NDMPs will set minimum national standards, which can be exceeded locally where evidence justifies this; or if they will more directly constrain the scope to define local plan policies.

Existing local policy and guidance

2.43 Emissions reductions are needed at the local level in HDC and can be delivered via the local plan update. Key aspects of current local policy are outlined below.

Huntingdonshire's Local Plan to 2036

2.44 Huntingdonshire's Local Plan **[See reference** 35**]** was adopted in May 2019. The spatial vision sets out that 'By 2036 Huntingdonshire's physical environment will support the health and wellbeing of all its residents, by: working with our climate, landscape and heritage'.

2.45 The following objectives from the Local Plan are considered most relevant to targeting net zero and climate adaptation:

- Objective 2 is: To promote high quality, well designed, locally distinctive, sustainable development that is adaptable to climate change and resilient to extreme weather.
- Objective 23 is: To take advantage of opportunities for minimising energy and water use and for securing carbon emissions reductions in all new development and transport choices.

- Objective 24 is: To encourage waste management and pollution control practices which minimise and reduce contributions to climate change and avoid adverse impacts on the local environment or human health.

2.46 There is no specific Climate Change policy in the Local Plan, however the following policies are considered relevant:

- Policy LP2 Strategy for Development: advises that the strategy for Huntingdonshire includes providing complementary green infrastructure enhancement and provision to balance recreational and biodiversity needs and to support climate change adaptation.
- LP3 Green Infrastructure: sets out the role that provision and enhancement of strategic green infrastructure has in achieving the strategy and the Council's approach to its protection and enhancement for the benefit of biodiversity and residents.
- LP5 Flood Risk: sets out the Council's approach to ensuring that the users and residents of development are not put at unnecessary risk in relation to flooding.
- LP12 Design Implementation: sets out the Council's approach to achieving high standards of design. This includes sustainable design and construction methods.
- LP16 Sustainable Travel: ensures that developers fully consider how the opportunities and impacts of the range of travel and transport modes are addressed in their proposals.
- LP30 Biodiversity and Geodiversity: sets out the appropriate assessments needed for proposals that have a direct or indirect effect on biodiversity of geodiversity. States that propose should ensure no net loss in biodiversity and provide a gain where possible.
- Policy LP35 Renewable and Low Carbon Energy: sets out that a proposal for a renewable or low carbon energy generating scheme, other than wind energy, will be supported where it is demonstrated that all potential adverse impacts including cumulative impacts are or can be made acceptable.

- LP36 Air Quality: sets out the requirements for submitting an air quality assessment and low emissions strategy. States that measures to reduce air pollution arising from traffic and congestion may also be required.

2.47 On 24 January 2023 Huntingdonshire District Council's Cabinet agreed to the preparation of a full update to the adopted Local Plan which will set out a plan for how the district will grow over future decades.

2.48 The Strategic Flood Risk Assessment for Huntingdonshire is used to inform the local plan, providing information on local risks, including allowances for future climate change. It is used to inform Local Plan site allocations as well as decisions on planning applications. In areas at risk of flooding, developers must undertake site-specific flood risk assessments. There is also a Regional Water Resources Plan, produced by Water Resources East, which is 'the independent, not-for-profit membership organisation tasked by government to create a regional water resources plan for Eastern England'. Although it is a non-statutory plan, it provides evidence that can inform local development plans, nature recovery strategies, flood risk management strategies, and climate adaptation and mitigation strategies

Huntingdonshire Climate Strategy and Action Plan

2.49 The Council's Climate Strategy **[See reference** 36**]** outlines the Council's vision for addressing the Climate and Ecological Emergency through both climate change mitigation and adaptation. One of the core objectives is to 'work to adapt our service delivery to a changing climate and build resilience in our community.' The Council intends to lead by example by introducing adaptation measures into its own building stock and implement an energy strategy that addresses resilience. It also highlights the opportunity to build more environmentally friendly developments, shaped by updated Local Plan policies. Overall, the main focus of the Climate Strategy is on mitigating GHG emissions; it does not provide any details on climate adaptation measures.

2.50 The Strategy includes an Action Plan primarily setting out the steps to be taken to achieve net zero carbon within the council's own operations by 2040. It is not, therefore, an action plan to address wider emissions across the area. However, the Strategy and Action Plan does include actions to influence communities and partners within the council to share, contribute and work towards a carbon zero Huntingdonshire by 2040.

2.51 The Council has set out 6 objectives to achieve net zero which include:

- Achieving net zero for the Council's own operations by 2040
- Designing council policies that enable reduction of emissions
- Demonstrating that they consider environment impact in policymaking
- Influencing the updated Local Plan to reflect priorities outlined in the Climate Strategy
- Maximising the opportunities to work with partners collaboratively to address environmental issues
- Work to adapt to council service delivery to a changing climate

2.52 The Climate Strategy includes a Climate Action Plan. This sets out a hierarchy of actions for HDC to address to meet the Strategy's objectives. These include prioritising reduction in emissions through changing activity and demand for energy and fossil fuels, then replacing fossil fuels. The Action Plan also seeks to influence communities and businesses.

2.53 The Action Plan contains many distinct, detailed activities amongst the Council's own assets, including energy efficiency works at three local leisure centres and rooftop solar and heat pumps at council buildings, EV replacements for small and medium-sized vehicles by 2030 and a switch away from gas in all buildings by 2033. It also includes many activities that will involve coordination with neighbouring local authorities and council partners, including delivery of the Great Fen, a biodiversity programme led by Natural England in partnership with the Wildlife Trust and Environment Agency. A Climate Co-Ordinator is set to be appointed within the District to lead its ambitious programme of activities, as outlined in the Climate Action Plan (2023).

2.54 The local plan will be an integral part of this effort, guiding development decisions that have a direct effect on local emissions and adaptation.

Huntingdonshire Futures Place Strategy

2.55 Huntingdonshire Futures is a collaborative strategy which sets out a shared vision for the future of Huntingdonshire in 2050 and a clear way forward to achieve it. The Place Strategy aims to set out plans for places, people, economy and the environment to improve the lives of residents, communities and businesses within Huntingdonshire.

2.56 The strategy sets out five journeys which areas of focus that describe what the council aim for Huntingdonshire to be like as a place and the common outcomes that they will work towards. These journeys are:

- Journey 1 Pride in place: focusing on pride over Huntingdonshire as a place to live and work.
- Journey 2 Inclusive economy: focused on upskilling and providing job opportunities for residents
- Journey 3 Health embedded: focusing on a Huntingdonshire will value happiness and health above all else.
- Journey 4 Environmental innovation: sets out that the district will be net zero by 2040.
- Journey 5 Travel transformed: the district will transition away from the car, focusing on sustainable transport modes.

2.57 As set out, journey four considers how the district is home to beautiful landscapes and sets out that in 2040 Huntingdonshire will be net zero. This journey sets out that a culture of experimentation is needed as well as investing in net zero projects. This could be achieved by improving energy efficiency for homeowners and businesses, delivering re wilding projects and support developments to function like the circular economy. This journey also sets out how natural assets could inspire new infrastructure, but repair and retrofitting is

needed to support nature based solutions in the public realm and private buildings.

2.58 The strategy also sets out the possibility for all energy to be produced within the district by fast tracking community energy, embedding renewable energy generation through new developments and the promotion of a multi-functional agricultural landscape where renewable energy could be delivered in tandem with agricultural practices. The strategy also promotes accelerating climate action and sets out the possibility of establishing a youth climate council, providing business support and training to delivery sustainable improvements and development advice, training and awareness programmes on sustainability.

2.59 Journey five sets out how the future of travel in Huntingdonshire will transition away from the car, promoting effective public transport, on demand travel options and a sustainability distribution and alternative cycling and walking network.

2.60 The strategy sets out a clear vision for the future of the district by 2050 and establishes that achieving net zero as integral to this. The document sets out that each pathway will have delivery requirements and associated action plans which are under development.

Summary

2.61 A growing body of legislation and policy initiatives led by central government requires and encourages local authorities to act on the threat of climate change, both to tackle climate emissions and to lead efforts to adapt to a changing climate. It is recognised that local authorities are, in many cases, particularly on matters of land use planning and climate change, best placed to lead local decision-making and policy. However, although planners and developers are required to consider climate change impacts, there are not many specific, measurable requirements for how this should translate into policy or design proposals. The main exceptions are strategic and site-specific flood risk

assessments, and the overheating and water efficiency requirements set in Building Regulations.

2.62 Huntingdonshire's own Climate Strategy and Climate Action Plan has embodied the commitment to act on climate change. The Council must now embed the strategy to ensure they lead by example and influence others to ensure they are a net zero council by 2040. The stated initiatives into all new iterations of the local plan must also be actioned. The local plan update must be aware of the many recent and ongoing changes to planning policy and guidance such as the National Model Design Code and the Written Ministerial Statement on energy efficiency – alongside ongoing tightening requirements in the Building Regulations – that influence the means and methods by which local authorities can act on climate change through planning. In addition, the local plan update provides an opportunity to address gaps in national and regional policy in addressing climate change.

Chapter 3

Scope of local plans in addressing climate change

3.1 It is important to understand where the Local Plan can have influence over emissions (and adaptation) in the district.

3.2 As set out in **Figure 1.2** in **Chapter 1** of this report, local authorities have significant leverage and influence for reducing emissions which extends across their services, planning and enforcement roles, housing, regeneration, economic development activities, education and skills services and investments. Their leadership role, in partnerships and with the public, places them at the heart of the climate conversation and in developing and replicating local solutions.

3.3 Huntingdonshire's climate strategy outlines key areas of activity that align well with the remit of a local plan in achieving net zero. These include:

- Buildings – ensuring what is built is sustainable.
- Energy and Renewables – reducing emissions caused by activities and ensuring energy is from a renewable source.
- Nature – valuing open spaces and the natural environment.
- Travel and transport – reduce emissions from council owned vehicles to zero by 2040 and promote active travel and alternative travel choices.
- Waste, recycling and resource management – reducing what is thrown away and how it is processed.
- Community – share progress against the council's climate targets, work with communities and partners to support climate action across the district.

3.4 The Local Plan has the potential to ensure that local development, transport infrastructure and wider land management is aligned with net zero commitments. This could be achieved by setting ambitious policies on a range of relevant areas such as sustainable design, zero carbon building standards, electric vehicle infrastructure, active travel and land for nature recovery. It will also be important to influence spatial patterns of development (addressed further in **Document D**) to reduce the need to travel (especially by car) and encourage use of public transport and active travel modes, particularly given that transport is such a significant source of emissions in Huntingdonshire (see **Chapter 1** – 'Emissions profile of Huntingdonshire'). The potential scope of local plans in addressing climate change is explored in more detail below.

3.5 Many of the policy areas are discussed in **Document C** of this evidence base, discussing sustainable design policy. Where not discussed in **Document C**, they are included within **Document D** (spatial strategies), **Document E** (renewable energy generation) or **Document F** (carbon offsetting and sequestration).

Key policy areas

Energy standards for buildings

3.6 Many local plans do not fully address the issue of energy and greenhouse gas performance standards of buildings, instead deferring to the Building Regulations and the forthcoming Future Homes Standard and Future Buildings Standard.

3.7 Local plan policies can set more ambitious requirements. For example, Cornwall adopted their new Climate Emergency DPD in February 2023, with a clear set of 'Energy Use Intensity' targets going above and beyond Building Regulations for all new residential developments.

3.8 However, the recent WMS seeks to constrain the flexibility for setting such policies. This is covered in more detail in Document C. The evidence discussed and subsequent analysis of the WMS alongside other existing policy and legislation shows, though, that local authorities are still empowered and entitled to pursue more ambitious energy efficiency standards.

Micro, small- and large-scale renewables

3.9 The Guide for Local Authorities on Planning for Climate Change **[See reference** 37**]** sets out that understanding the potential for the supply and demand for renewable energy in a local area is an essential start point in considering opportunities to move toward low carbon communities, and ultimately achieve net zero. There are different methodologies to quantify and map renewable energy resources in a local area, taking into account technical restraints and environmental restrictions.

3.10 Additionally, the Written Ministerial Statement published on the 15th May 2024 **[See reference** 38**]** sets out that solar power is a key part of the Governments strategy for securing net zero. This statement outlines that proposals that set out the technical details of the Future Homes Standard demonstrate the effectiveness of rooftop solar in reducing energy bills for consumers with solar panels.

3.11 Huntingdonshire is already the site of speculation by solar and wind power developers who have been successful in delivering such sites within the district but also faced local opposition and rejection by the Planning Inspectorate. Enabling developers to understand where renewable energy would be most appropriate within the district would help to promote renewables development and avoid conflict. The Written Ministerial Statement (2024) on solar power sets out that when developing solar projects there will be some instances when local environments are negatively affected, however the planning system is designed to balance these considerations against the need to develop solar for future energy systems. The local plan update provides an opportunity to ensure that

Huntingdonshire's priorities for solar development are reflected when planning decisions are made.

3.12 With this in mind, this evidence base conducts this assessment in **Document E**, advising on the most suitable locations in the district for different renewable energy generation types.

Heat networks

3.13 Heat networks (also known as district heating) are an effective and low carbon means of supplying heat where there is a high and consistent heat demand and a readily available source of zero carbon or surplus/waste heat **[See reference** 39**]**. Heat networks should be designed for cost effective future connection and use renewable and/or low carbon sources for their energy centre or provide an evidenced timeline and technology pathway towards system decarbonisation by 2050. Heat networks could meet up to 17% of heat demand in homes and up to 24% of heat demand in industrial and public sector buildings by 2050 **[See reference** 40**]**.

3.14 The higher the heat demand density, the more cost effective the network. Heat networks are therefore cost effective for higher density developments, such as those found in Huntingdon or St. Neots, rather than in low density (often rural) areas.

Emerging technologies

3.15 Although central government has the biggest role among the public sector in fuelling and steering emerging technologies for climate change, local authorities play an important role in working out how to deliver net zero at a local level.

3.16 Innovation projects, often on the public estate, are seen as a means to de-risk, develop new business models, test new technologies and monitor results **[See reference** 41**]**. Delivering net zero will require moving beyond pilots and towards mass rollout of low-carbon solutions such as electrified heating in buildings, and electric vehicles and renewable energy technologies which may include solar PV, heat pumps, solar thermal, battery storage, biomass or geothermal heat (although the latter does not, for the moment, appear feasible in Huntingdonshire) **[See reference** 42**]**.

3.17 Some technologies are becoming more affordable, such as solar and wind power projects which can come forward without subsidies **[See reference** 43**]**. Electric vehicles are expected to replace traditional combustion-lead vehicles based on price alone and new decentralised low-carbon technologies, including batteries will also make such energy offerings more suitable to consumers than traditional energy networks **[See reference** 44**]**. Central government is at the heart of much of this effort to drive down the price and market suitability of these technologies but local authorities, again, will be on the front line of the delivery of these technologies. It will require local authorities to support the installation of such technologies through supportive planning policy and it may often involve local authorities' own mapping efforts to support their allocation as well as their work to negotiate with private sector delivery bodies.

3.18 Options for and locations for supporting the deployment of renewable energy generation technologies in Huntingdonshire are discussed in detail in **Document E** of this evidence base.

Walking, cycling, wheeling and public transport

3.19 As transport is the largest contributor to the UK's and Huntingdonshire's emissions, significant emissions reductions can be made through local plans in this sector. The Department for Transport report that in 2022 the majority of domestic travel trips in England were completed using private modes of transport. Around 33% of the trips made were by active travel modes (walking and cycling), 8% of trips were made using public transport modes compared to

59% of trips which were made using private transport modes **[See reference 45]**.

3.20 Local plan policies should encourage a reduction in the need to travel by car whilst supporting more sustainable forms of transport, such as public transport, walking and wheeling. This will include policies that provide for development of infrastructure that will support low carbon transport modes as well as policies that reduce the need to travel through influencing the location and pattern of development. Where new transport infrastructure is needed, a sustainable transport hierarchy can be followed, to give priority to travel by walking, cycling and public transport.

3.21 The Climate Change Committee advises that local development plans or transport plans should deliver a 33%-35% shift from cars to walking/ cycling/public transport for shorter trips to meet net-zero targets, and cities can be even more ambitious than this **[See reference 46]**.

3.22 Sustainable transport systems are easier to deliver in denser development. That said, whilst this might dictate that HDC encourages their adoption primarily in the densest or largest developments of those coming forward within the plan process, it should also stimulate a push to promoting denser over sparse development by the council, informing spatial strategy selection.

New and remodelled '20 minute' neighbourhoods

3.23 Planning policies that support a move away from car dependence could include using the 20-minute neighbourhood concept to design complete, compact and connected places **[See reference 47]**. The Town and County Planning Association states a 20-minute neighbourhood is essentially a compact and connected place, with a range of services that meet most people's daily needs **[See reference 48]**. Shops and services, including preschool and primary education facilities, should be located within walking distance of

people's homes. Given the scope of any interventions seeking to achieve these elements, this approach is more suited to newly planned, large-scale developments than existing, particularly smaller-scale rural communities.

3.24 The density of homes and buildings is key to consider in the context of 20-minute neighbourhoods. The guidance by the TCPA (2020) states that it is easier and more cost effective to provide facilities and services in denser areas than low density developments. The advantage of a denser area is that a wide range of facilities and services can be located closer together, providing high quality connections between places, and people are more likely to walk or actively travel.

3.25 Notwithstanding, providing 20-minute neighbourhoods within villages or rural areas is possible but will have challenges different to that of an urban setting. It is unrealistic to expect rural areas to deliver all services to all people, but by focusing on certain principles of the concept, such as promoting sustainable transport modes, or local food growing through cooperatives, the concept can be applied in a rural setting. The 20-minute neighbourhood concept can be supported by policy which encourages mixed use developments with key local services being provided within reach by public transport or on foot. Alternatively in settings where mixed used developments aren't possible, policy can support quiet lanes and lower speed environments which promote active travel between rural areas to access services. This ensures residents can meet their daily needs without being overly dependent on using cars.

3.26 The coronavirus pandemic resulted in people changing their behaviour abruptly, with many people working from home instead of commuting **[See reference** 49**]**. This increases the relevance of the 20-minute neighbourhood with more people staying within their local community to work rather than commuting elsewhere. Policies need to consider the likely future patterns of people working from home and how the 20-minute neighbourhood could provide benefits in terms of ultrafast broadband connectivity in all new homes; support for live-work development and space standards that allow for new homes to incorporate suitable spaces for home working.

3.27 An assessment of the spatial strategies proposed for Huntingdonshire's future development and likely resulting carbon emissions is discussed in **Document D** of this evidence base.

Parking standards and EVs

3.28 Policies that encourage public transport can be supported by policies which restrict parking to disincentivise the use of cars. This is effective where alternatives are available that are considered easier than using a private car. In addition, the proportion of trips within local areas made by sustainable modes of travel can be increased by providing advantages such as requiring cycle parking to be located closer to a main entrance than car parking **[See reference** 50**]**.

3.29 Where parking is necessary, the rapid deployment of electric and plug in hybrid vehicles should be supported by EV charging points. The transition to zero emission vehicles will help the UK to meet our legally binding climate change targets. In 2023, the Prime Minister delayed the ban on the sale of new petrol and diesel cars from 2030 to 2035 **[See reference** 51**]**. However, the Labour party have outlined in their 2024 manifesto that they would restore the date of 2030 for the ban of new petrol and diesel cars, supporting buyers of second hand electric cars **[See reference** 52**]**. The EV Infrastructure Strategy sets out clear expectations for major stakeholders, including local authorities ahead of the ban phase out dates **[See reference** 53**]**.

Embodied Carbon

3.30 The embodied carbon of a building can include all the emissions from the construction materials, the building process, all the fixtures and fittings inside as well as from deconstructing and disposing of it at the end of its lifetime. This places it separately from the carbon consumed through the operation of a building (e.g. generated from energy use for heating, lighting, cooking, cooling;

can also extend to include emissions associated with travel to/from the development).

3.31 As building standards and regulations start to reduce the operational emissions from buildings, embodied carbon emissions can make up as much as 50% of total emissions over a building's lifetime **[See reference** 54**]**. There is no national policy that requires embodied carbon emissions to be measured, other than the provision for targets in the National Model Design Code. The majority of embodied carbon emissions occur near the start of a building project, so local plan policy has an important role to play in setting requirements in this area.

3.32 In recognition, however, of the role of embodied carbon across economic activities, the Government has recently announced a scheme to develop voluntary product standards for business to help promote their low carbon products along with an embodied emissions reporting framework **[See reference** 55**]**. There is scope for future planning policy to embed support for developers who engage with low carbon products, evidenced by these standards and reporting frameworks, should they be practicable.

3.33 The TCPA recommend that all local authorities set a requirement for all new homes to demonstrate actions taken to reduce embodied carbon and maximise opportunities for re-use through the provision of a circular economy statement **[See reference** 56**]**.

Carbon sequestration and Biodiversity Net Gain

3.34 Local plans are well placed to address carbon sequestration, both through protecting existing habitats and sites that could be targeted for significant sequestration efforts (e.g. woodland creation); and establishing policy for developments to physically locate alongside and support carbon sequestration efforts. Local authorities can also establish requirements for green infrastructure provision including new tree planting as part of new development, or offsite via

developer contributions, though the benefits for carbon sequestration are likely to be limited unless large scale woodland creation is proposed.

3.35 As mandatory biodiversity net gain has now been introduced as national policy, local planning policy can play a role in defining preferred locations within the local authority area for offsite BNG, dovetailing with the allocation of GI to support carbon sequestration. BNG policy is aimed primarily at supporting biodiversity and nature recovery but could also contribute towards wider benefits such as carbon sequestration and flood risk reduction depending on the types and locations of habitats created.

3.36 In addition, Local Nature Recovery Strategies can be used to identify and map the best locations to create, enhance and restore nature. This can help to achieve the governments wider commitments and targets including net zero **[See reference** 57**]**. This type of strategy can be used to propose actions such as the creation of wetlands, restoration of peatlands, planting of trees and suggestion more sustainable management of existing woodlands and other habitats. This can help to achieve both biodiversity net gain and identify opportunities for carbon sequestration.

3.37 Options for carbon sequestration in Huntingdonshire are discussed in detail in **Document F** of this evidence base.

Nature-based solutions for drainage and flooding

3.38 Traditionally, developments have sought to take water off site as quickly as possible through a series of pipes, often causing flash flooding as the volume of water reaches a watercourse in a very short period of time. Increasingly popular Sustainable Urban Drainage Systems (SuDS) try to mimic natural drainage systems and retain water on or near the site, reducing the rate of surface water run-off even at times of peak rainfall . SuDS also promote ground water recharge, improve water quality, provide amenity and can help to reduce the

frequency of floods that occur when the capacity of sewers is exceeded. A suitably designed SuDS scheme can also enhance biodiversity by broadening the range of habitats within a development. The variety of SuDS techniques (e.g. swales, balancing ponds, rain gardens) available means that virtually any development can make use of them.

3.39 Flood Risk Management Strategies and local plans can promote and require the use of such natural flood management measures. Design guides and supplementary planning documents (SPD) have been produced by many local authorities that provide guidance on good SuDS practice such as the Cambridge Flood and Water Supplementary Planning Document. This SPD sets out design principles for protecting water quality, designing a safe water environment, SUDs adoption and surface water drainage strategy design **[See reference** 58**]**.

Overheating

3.40 Local authorities can ensure through the plan process and development management that different approaches are taken to ensuring that buildings do not overheat in summer. This takes in to account increasing temperatures from climate change. The NPPF states that “plans should take a proactive approach to mitigating and adapting to climate change, taking into account the long-term implications for the risk of overheating from rising temperatures”.

3.41 This could include requirements to undertake an overheating assessment and/or requirements regarding maximising passive design measures such as orientation, solar shading and careful design of fenestration. The role of tree planting and green infrastructure for mitigating the urban heat island effect, cooling air temperatures and providing shade – as well as wider benefits for physical and mental wellbeing can mitigate overheating. All of the above are considered in **Document C**.

Limitations for local authorities addressing climate change through the local plan process

3.42 Land use and development planning policy can only influence some climate change mitigation and adaptation challenges (explored above). Direct policy around, for instance, consumption and production of high carbon goods and services as well as the ability to influence national and international suppliers of renewable energy and fossil fuels lies well outside of the local plan.

3.43 Similarly, the planning system has a significant focus on the built environment but has much less influence on agricultural practices, despite approximately 70% of the UK being agricultural land. Note the agricultural sector is responsible for 11% of total UK GHG emissions. **[See reference** 59**]** Local authorities are also unable to look much beyond their geographic boundaries, even where local authorities collaborate strategically.

3.44 In part, to address these limitations, local plan policy should be informed by coordination (and eventual coherence) between local authorities and Government departments on climate change approaches, and, where possible be supported by sufficient funding/resources and coordinated with wider actions in a climate change strategy/action plan.

3.45 A range of ongoing challenges for local authorities in addressing climate change through the plan process are discussed below.

Challenges

Reporting and data

3.46 One key barrier is the lack of reporting. Local authorities are not required to monitor or report reductions in their own area emissions as the requirement for reporting emissions through National Indicators was dropped and became voluntary under the coalition government **[See reference** 60**]**. Whilst removing the burden of reporting was intended to lighten the load in local authorities, it served to push emissions reduction down the political agenda in areas without strong commitments on climate change.

3.47 Despite gaps in policy, there are benefits to local authorities reporting on their own emissions, particularly when trying to reduce direct emissions. In addition, accurate reporting can lead to the development of realistic targets to achieve net zero in specific sectors locally.

3.48 For local authorities who do report on emissions, there is little consistency nationally. This makes it difficult to get an overall picture of what local authorities have achieved, or where collaboration may be useful **[See reference** 61**]**. A lack of reporting also reduces local authorities' ability to engage accurately with local residents and businesses on their progress in achieving net zero.

3.49 A review of national policy levels shows a general lack of methodologies with clarity and detail as to how local authorities should address and monitor climate mitigation and adaptation. The CSE/TCPA report in to spatial planning and climate change backed calls for a requirement for local plans to be supported by quantified carbon evidence and better national guidance on how to holistically assess local plan spatial strategy options against quantified emissions. It also found that guidance on adaptation and reporting expectations around that were even more lacking than on emissions **[See reference** 62**]**.

Lack of guidance or backing to deliver ambitious local climate policy

3.50 Despite explicit policy support and a mandate to respond to the need for climate change mitigation and adaptation, a lack of coherence across the policy landscape fails to give confidence and can actively prevent local authorities from pursuing ambitious climate policy within planning.

3.51 A Government report sets out that central government have not yet developed with local authorities any expectations in their role to achieving the national net zero target **[See reference** 63**]**. There are no net zero statutory targets for local authorities as government have said they do not think targets are needed as many local authorities are already committed to net zero **[See reference** 64**]**. Many local authorities have adopted commitments to reduce carbon emissions in line with the 2050 target **[See reference** 65**]**. However, without a clear sense of responsibilities and priorities there is a risk that local authority action on net zero is not as coordinated, targeted, or widespread as it might need to be for effective action.

3.52 The Climate Change Committee reports that spatial planning is one of the biggest opportunities that local authorities have to deliver net zero, but that the National Planning Policy Framework, the method of calculating housing targets and viability rules, undermine local authorities' ability to require developers to build high quality low-carbon developments in sustainable locations **[See reference** 66**]**. In addition, energy planning and spatial planning are not integrated, which reduces local authorities' powers to enable systems thinking and holistic delivery of energy systems, low emissions development and smart energy systems.

3.53 Many local authorities are eager to establish more ambitious requirements for new developments to be net zero carbon, in line with local climate emergency declarations. The 2015 Written Ministerial Statement (WMS) on Plan Making continues to create confusion as to whether, where, and how local authorities can exceed national standards and adopt binding zero carbon

policies for new development, caused by outdated content in the NPPF and PPG. This has led to contradictory statements from the Department for Levelling Up, Housing and Communities (DLUHC) and inconsistent interpretations from PINS **[See reference** 67**]**. This has been exacerbated by the pushback and uncertainty created by the 2023 WMS on energy efficiency (discussed above in Chapter 2).

3.54 The CCC reports that local authorities are subsequently wary of the threat of legal challenge due to their statutory duties and powers to influence the local area and economy **[See reference** 68**]**. Local authorities must therefore undertake legal checks to ensure compliance with standards and regulations for example, with building regulations. This can slow delivery, add expense and cause local authorities to make risk adverse decisions which limit their ability to implement policies that target net zero. This is exacerbated by rules and guidance around development viability. Around 65% of survey respondents to a report by CSE and TCPA quoted development viability as a barrier to achieving net zero through the planning system **[See reference** 69**]**.

Resources and skills for net zero

3.55 Austerity measures have impacted local authorities' ability to use their powers in many areas, particularly in smaller authorities as staff are cut back and specialist staff are lost. This means local authorities have varying levels of capacity for net zero. As such, the recent CCC backed report in to spatial planning's obstacles to addressing net zero called for a long-term strategy for developing skills and resources at the local authority level (though backed by clearer guidance about the role of local authorities in addressing climate change, discussed above) **[See reference** 70**]**.

3.56 Funding constraints may also prevent the delivery of low carbon improvements to existing buildings, for example installing energy efficiency measures and low carbon heating in social housing. At the very least, local authorities will need the spending power to decarbonise their own buildings and the social housing they own, and to build the skills to incorporate net zero into their existing functions such as transport planning **[See reference** 71**]**.

3.57 The length of local government contracts may also be a factor in the extent to which emissions reductions can be delivered in procurement **[See reference** 72**]**. Shorter contracts mean that it is not worth suppliers making investments to deliver carbon savings. On the other hand, in longer term contracts there is a risk of locking in emissions if climate change is not considered at the procurement scoping stage.

Summary

3.58 Whilst there is a strong national policy framework to achieve net zero by 2050, local authorities have a critical role to play in delivering this as a result of their powers and influence over spatial planning, transport, social housing and their close links with (and understanding of the needs of) local communities.

3.59 However, there is a lack of clarity on the role of local authorities as well as a lack of funding to achieve net zero. As a result, local authorities may find it difficult to plan effectively for the long term, build skills and effectively utilise their scale of influence. There is now greater urgency to develop a coherent approach for local authorities so that a just transition to net zero (see Chapter 1) can be achieved alongside developing climate change resilience.

Chapter 4

Overview of other Evidence Base Documents

4.1 In this section we summarise the content and findings of other Documents produced for this Climate Change Evidence Base.

Document B – Position Statement and analysis of baseline and forecast future emissions

4.2 Document B considers both climate adaptation and mitigation needs in Huntingdonshire. On adaptation, it considers two possible scenarios for future climate change, one where global warming reaches 2°C above pre-industrial levels by 2100 and one, more extreme scenario, where it reaches 4°C above pre-industrial levels by 21007.

4.3 With the first scenario, the hottest summer day in Huntingdonshire could be almost 2°C warmer. In addition, there could be about 2 times as many summer days with temperatures above 25°C. The wettest winter day in Huntingdonshire could see 35% more rainfall, leading to more serious flooding. Summer rainfall could decrease by 10%, leading to droughts and water shortages, while also drying out the soil. With the 4°C scenario, the hottest summer day in Huntingdonshire could be almost 6°C warmer. There could be nearly 4 times as many summer days with temperatures above 25°C. The wettest winter day in Huntingdonshire could see 40% more rainfall, leading to more serious flooding. Summer rainfall could decrease by 30%, leading to droughts and water shortages, while also drying out the soil.

4.4 The assessment highlights the need for a broader climate adaptation strategy for Huntingdonshire. The baseline emissions for Huntingdonshire are projected forward and potential future pathways towards net zero emissions. The analysis shows that reaching net zero will be particularly challenging for Huntingdonshire, due to the breakdown of emissions within the District.

4.5 On mitigation, a particularly high proportion of emissions in Huntingdonshire are shown to be associated with agriculture, land use (due to emissions from drained peatland that is currently used for crops or grazing), waste, and heavy goods vehicles (HGVs). These emissions are considered 'hard to abate', either because they rely on large-scale changes in land use, agricultural practices, and dietary change; or because they rely on green hydrogen, carbon capture or other technologies which are not yet commercially available. Document B's analysis shows that, even if all available mitigation measures were implemented, Huntingdonshire can only reach net zero if carbon removal technologies or some of other form of offsetting becomes available.

4.6 Given that some of these sources of emissions are outside of HDC's control, it is recommended that the council should focus more on accelerating the GHG reductions that can be achieved within their local area, rather than solely focusing on net zero as an end goal. Clear steps that the Council can take within the Local Plan process to ensure that mitigation and adaptation needs can be acted upon locally are made at the end of the Document. These have been used to inform the policy recommendations made in Document C (on sustainable design policy options) and Document E (on renewable energy).

Document C – The contribution of sustainable design to achieving Net Zero

4.7 Document C sets out a series of recommendations to the Council to support its efforts to respond to climate change through the promotion of sustainable

design in new developments in Huntingdonshire. The document explores policy mechanisms and makes recommendations in relation to the following themes:

- Approaches to net zero carbon development
- The use of sustainable materials and the circular economy
- Retrofitting and retaining exiting building stock
- Nature-based solutions
- Sustainable travel
- Water efficiency
- Design for adaptation

4.8 As an overall approach to low carbon development, HDC should embed the use of accreditation schemes in policy, specifically both BREEAM for commercial and HQM for residential development. Minimum credit targets should be set for applicants for specific categories and overall scores to ensure minimal carbon profiles and overall sustainability.

4.9 It is further recommended that, as the operational carbon profile of new development falls as the national grid decarbonises, HDC should anticipate this and set policy requirements to achieve minimum scores against specific quantitative embodied carbon targets to ensure limits on embodied carbon in construction materials and construction processes in domestic and non-domestic developments. Embodied carbon will represent an increasingly large proportion of the built environment's own carbon footprint, requiring local attention. If HDC do not wish to adopt specific locally set embodied carbon targets, it could instead require that major new build developments undertake a whole life cycle carbon assessment using a nationally recognised assessment methodology, such as BREEAM and HQM and seek to minimise WLC emissions, shown in the assessment.

4.10 Document C goes on to make other recommendations in other areas of sustainability of most concern in the built environment. Further details of these recommendations and those highlighted above are provided in Document C.

Document D – Assessment of spatial strategy options

4.11 Document D assessed the greenhouse gas (GHG) implications of the different spatial strategy options proposed by HDC and provided a clear recommendation on the most appropriate option to minimise carbon emissions from growth. The five spatial strategy options are described in the table below.

Scenario	Description
1	Strategic expansions to existing towns
2	Public transport corridor focussed – This would include A428/A421 which has ambitions to provide a guided bus route and East West Rail and the proposal to reroute the A141 and provide a public transport corridor
3	Development concentrated around the Strategic road network
4	Two new settlements plus dispersed growth
5	Continuation of Local Plan strategy – This currently focusses on 75% growth in Spatial Planning Areas and 25% elsewhere e.g. Key Service Centres and Small Settlements.

4.12 Document D assessed the five spatial strategies in two ways. In short, an 'Overall Assessment' to reflect the fact that different spatial strategies may unlock different levels of growth and a 'Standardised Assessment' assuming that they all deliver the same amount of growth.

4.13 The GHG emissions modelling demonstrated that HDC's proposed policies are necessary to reduce building emissions under all five scenarios. The assessment looked at two scenarios where either HDC adopts policies related to sustainability and low zero carbon that are recommended across this study or where it doesn't adopt these policies. In both the 'Policy On' and 'Policy Off'

options, Scenario 1 performs best when considering GHG emissions in isolation, with Scenario 5 following.

4.14 When considering the Standardised Assessment, assuming like-for-like development quantum across all scenarios, Scenario 2 results in the lowest transport-related GHG emissions.

4.15 HDC are urged, when considering the final spatial strategy, to consider the wider sustainability characteristics of a spatial strategy, alongside GHG emissions.

Document E – Infrastructure and renewable energy

4.16 Document E identifies the different types of renewable and low carbon energy technologies that may be potentially suitable within the District. The study finds that, with HDC in the process of preparing its Local Plan update, there is a clear window of opportunity to ensure that the Local Plan update sets out a step change in the support given to the development of renewable and local carbon energy projects with significant potential for renewable deployment in the District.

4.17 The study assesses the technical potential for renewables within Huntingdonshire. The main findings are summarised below:

- For wind energy capacity, the study finds that there is a technical potential to deliver up to around 4,941MW of wind energy capacity in Huntingdonshire, with the greatest potential for very large turbines.
- For Solar PV the full technical potential is very large, utilisation of 1%, 3% and 5% of the resource is also quantified. Adopting the 3% development scale would result in a total potential technical capacity from ground-mounted solar PV across Huntingdonshire of 1,087MW – this approximately equates to an area of 13km2.

- For rooftop solar technical potential, the estimated capacity is 1,156MW with an electricity output of 1,106,703 MWh/year.
- For Air Source Heat Pumps, the study finds there is technical potential to delivery 1,756 MW of energy.

4.18 Other renewable energy technologies are also considered including energy from waste. As for all technologies there are barriers to achieving the technical potential of technologies. The study finds at present an estimated 41% of electricity demand within Huntingdonshire is met by renewable/low carbon generation. The findings show that there is significant technical potential for renewable and low carbon energy and that Huntingdonshire could deliver 80% of its electricity demand from renewable energy sources by 2050 if they follow an ambitious deployment scenario.

4.19 To support the deployment of renewable energy in the District, it is recommended that stronger polices should be put in place supporting:

- Onsite renewable and low carbon energy generation via supportive and positively worded criteria based policies;
- Stand-alone renewable and low carbon energy schemes, including specific policies on solar PV and wind energy identifying areas of suitability for these technologies and recognising that some landscape change will be required; and
- Community-led renewable and low carbon energy schemes

4.20 Careful monitoring of the success of policies should be established. In addition, the implementation of policy will be required to ensure delivery of renewable and low carbon projects. This should include appropriate training and checklists for development management officers and planning committees to ensure policies are implemented as intended.

Document F – Offsetting and sequestering emissions

4.21 Document F provides an assessment of the role of the Local Plan and policy recommendations to support Huntingdonshire in delivering sequestration of carbon emissions and their offsetting where necessary and appropriate. The document also outlines the importance of carbon sequestration in achieving net zero, along with the role of natural capital in supporting this. An overview of the role and purpose of offsetting and its potential scope in planning policy is provided as well as guidance on the range of offsetting options available.

4.22 It is recommended that HDC follow nationally recognised documents and guidance including the Green Book supplementary guidance: valuation of energy use and greenhouse gas emissions for appraisal publication and the UK Green Building Council's (UK GBC) guidance on Renewable Energy Procurement & Carbon Offsetting.

4.23 An overarching issue for HDC in relation to carbon offsetting is HDC's lack of internal technical expertise/resource to set up and run a carbon offsetting fund, including setting a carbon price, securing payments, selecting/designing suitable projects for funding, delivering projects and monitoring/reporting. Recommendations and considerations have therefore been made in the document to explore different spatial scales for any new offsetting fund and linking up with other authorities to implement such a fund.

4.24 A framework is provided for HDC to follow when deciding what type or projects to be funded. It is recommended that whilst the focus for HDC should be on projects that will deliver carbon reductions, consideration may also want to be given to co-benefits of projects such as reducing fuel poverty.

4.25 This document also provides an overview of the carbon balance (sequestration and storage) of the variety of habitats in the HDC administrative area along with an indication of what would need to be done to increase this. In

terms of carbon sequestration, the broadleaved, mixed and yew woodland habitat type sequesters the most amount of carbon in Huntingdonshire at 25,714.5 tCO2/yr, making up 71% of carbon sequestration of all positive carbon sequestering habitat types in Huntingdonshire. For the transition to net zero, such habitats must be protected and enhanced.

4.26 The document also provides a high-level indication of peatland extent and condition in Huntingdonshire. 18% (16,786 ha) of Huntingdonshire is covered by peatland. If we assume that all of the peatland on arable and horticultural land is degraded, this land would be emitting 411,048 tCO2/yr. The best option for improving the condition of Huntingdonshire's peat and therefore optimising carbon sequestration, is to increase the restoration and conservation of areas of peat, especially on habitat types with high CO_2 emissions such as arable and horticultural land.

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