Climate Change
Topic Paper

Greater Cambridge Local Plan

Topic Paper published as part of the Draft Local Plan - Regulation 18 consultation (December 2025 - January 2026)

GREATER CAMBRIDGE
SHARED PLANNING

Contents

1. Introduction and purpose 2
2. Climate Change chapter 3
3. Policy CC/SD: Sustainable Development and the Climate Emergency 6
4. Policy CC/DC: Designing for a Changing Climate 15
5. Policy CC/NZ: Net zero carbon new buildings 24
6. Policy CC/WE: Water efficiency in new developments 51
7. Policy CC/IW: Integrated Water Management, Sustainable Drainage and Water Quality 65
8. Policy CC/FM: Flood Risk Management 75
9. Policy CC/RE: Renewable and Energy Projects and Infrastructure 86
10. Policy CC/CE: Supporting a Circular Economy and Sustainable Resource Use 95
11. Policy CC/CS: Supporting land-based carbon sequestration and carbon sinks 104

1. Introduction and purpose

1.1 This is one of nine topic papers produced to inform the Draft Plan consultation on the Greater Cambridge Local Plan. The topic papers are:

- Strategy
- Sites
- Climate Change
- Green Infrastructure
- Wellbeing and Social
- Great Places
- Jobs
- Homes
- Infrastructure

1.2 All the papers can be found on the Greater Cambridge Shared Planning website. The topic papers set out how each policy under the relevant Local Plan 'Theme' has been developed. As such, the topic papers support and complement the Draft Plan consultation document as they provide a detailed explanation of the basis for each draft policy.

1.3 The Topic Papers build on those published as part of the First Proposals Consultation. They provide background on the early development of the policies. These are still available to view in our document library.

1.4 The policies are presented in a consistent format in each paper with sufficient information to provide a comprehensive appreciation of the background to and development of the Policy.

1.5 The content and structure for each policy option is:

- The issue the plan is seeking to respond to
- How was the issue covered in the First Proposals consultation?
- Policy Context update
- Summary of issues arising from First Proposals representations
- New or updated evidence

- Additional alternative approaches considered
- Response to Main Issues Raised in Representations
- Further work and next steps

1.6 The local plan is supported by a wide range of evidence which can be found in our document library. Key supporting documents to the plan include:

- Statement of Consultation
- Sustainability Appraisal
- Habitats Regulations Assessment
- Equalities Impact Assessment (EQIA)

2. Climate Change chapter

Introduction

2.1 As part of the First Conversation consultation in 2019 we set out our approach to ensuring that the mitigation of and adaptation to climate change would be at the heart of the new local plan.

2.2 The First Proposals consultation in 2021 identified how climate change had influenced the emerging strategy, and proposed a series of development management policies which would ensure development delivers on the need to mitigate and adapt to climate change, and transition to net zero carbon by 2050. A number of comments were received on the general approach to the theme. Further detail, including where to view the full representations and who made each representation, is provided in the Consultation Statement.

Summary of the main issues raised in general comments on the Climate Change theme

2.3 There was strong support for the general direction of the climate change policies in representations submitted from individuals, parish councils and developers. Some representations asked the councils to ensure that new housing will use up-

to-date heating technology and the representations emphasised the need to constantly review the policy in the context of new technologies and government targets. Some respondents felt that the First Proposals omitted important things, such as a retrofitting policy and the provision of gardens or allotments which could store carbon. Several representations also objected to policies on the grounds that the level of development in the Local Plan would exacerbate pre-existing water issues, thereby negating the climate change policies. Other representations, including one by the Cambridge Doughnut Economic Action Group also objected, arguing that growth and sustainability are incompatible. Some developers and landowners supported the policies and often explained how their site could fulfil these policies. Other developers, such as Southern and Regional Developments Ltd, objected to the policies because they thought that the proposed standards were too high which would make the policies undeliverable.

Response to the main issues raised in representations

2.4 Respondents raised a number of important matters through previous consultations on the emerging Local Plan. These matters have been considered during the preparation of the plan and its policies.

2.5 The Councils' response to these matters include:

- The Councils will operate proactively on the matters of water supply and water efficiency in new developments. Policies are proposed which will seek high levels of water efficiency.
- Acknowledging that best practice standards can change over the lifetime of the Local Plan policies will be drafted to ensure that innovative solutions are not unduly disregarded.
- An integrated approach to renewable and low-carbon energy infrastructure will be needed if it is to operate effectively in our homes and places of work
- The role of green infrastructure and new habitats in new developments can make important contributions to carbon sequestration, and this is addressed by proposed policies.

- In a number of cases the policies proposed in the plan do go above typical standards, but they respond to our evidence of what is needed to respond to climate change in Greater Cambridge. They have been tested through evidence and are considered to be viable.

Climate Change policies

2.6 The following proposed policies areas are addressed in this topic paper:

- CC/SD: Sustainable development and the climate emergency
- CC/DC: Designing for a changing climate
- CC/NZ: Net zero carbon new buildings
- CC/WE: Water efficiency in new developments
- CC/IW: Integrated water management, sustainable drainage and water quality
- CC/FM: Flood risk management
- CC/RE: Renewable energy projects and infrastructure
- CC/CE: Supporting a circular economy and sustainable resource use
- CC/CS: Supporting land-based carbon sequestration and carbon sinks

3 Policy CC/SD: Sustainable Development and the Climate Emergency

Issue the Plan is seeking to respond to

3.1 The principles of climate change adaptation and mitigation are embedded throughout the emerging Greater Cambridge Local Plan. However, comments received during the First Proposals consultation highlighted that the Local Plan was not explicitly clear how applicants should demonstrate compliance with various requirements for environmental sustainability. To ensure a more holistic approach to sustainable development within the Local Plan, Policy CC/SD has been drafted to guide the way in which applicants should present how their proposal will deliver places that are adapted to and mitigate the effects of climate change.

How was the issue covered in the First Proposals Consultation?

3.1 Policy CC/SD is a new policy created following comments received during the First Proposals consultation in relation to the Climate Change Chapter of the emerging Greater Cambridge Local Plan. Representations highlighted that the Local Plan should recognise that solutions to climate-change-related issues can often be interconnected and should, therefore, ensure the planning system considers these matters holistically. Comments received during the First Proposals consultation highlighted that the Local Plan was not explicitly clear how applicants should demonstrate compliance with various requirements for environmental sustainability.

3.2 Policy CC/SD seeks to provide a mechanism through which applicants can demonstrate how their proposals mitigate the effects of or contribute to adaptations to climate change. This approach to Sustainability Statements is intended as a broad continuation of Policy 28 of the Cambridge Local Plan (2018) and Policy CC/1 of the adopted South Cambridgeshire Local Plan (2018).

Policy context update

3.3 National Planning Policy Framework (NPPF, December 2024) Addressing climate change is one of the core land-use planning principles contained within the NPPF. Section 14 of the NPPF (December 2024) considers the role of the planning system in supporting the transition to a low-carbon future and facilitating resilience to the impacts of climate change. Paragraph 162 of the NPPF highlights that planning policies should 'take a proactive approach to mitigating and adapting to climate change'. Paragraph 163 states, 'the need to mitigate and adapt to climate change should also be considered in preparing and assessing planning applications, taking into account the full range of potential climate change impacts'. Establishing the sustainability evidence submission requirements for planning applications is in accordance with this.

3.4 International Panel on Climate Change – Climate Change 2022: Impacts, Adaptation and Vulnerability In 2022, the International Panel on Climate Change (IPCC) published a report assessing the magnitude of climate impacts, global adaptation potential and vulnerabilities to climate risks. The IPCC's report to policymakers highlights that global climate change has already impacted both human and natural systems and, due to changes in both the extremity of the climate and weather events, some human and natural systems will have great difficulty in adapting:

3.5 'B.1 Human-induced climate change, including more frequent and intense extreme events, has caused widespread adverse impacts and related losses and damages to nature and people, beyond natural climate variability. Some development and adaptation efforts have reduced vulnerability. Across sectors and regions, the most vulnerable people and systems are observed to be disproportionately affected. The rise in weather and climate extremes has led to some irreversible impacts as natural and human systems are pushed beyond their ability to adapt (high confidence).'

3.6 The IPCC is clear that climate change will have significant (and in some cases, irreversible) impacts on both settlements and key infrastructure if measures to mitigate and adapt to climate change are not taken:

> ‘B.1.5. In urban settings, observed climate change has caused impacts on human health, livelihoods and key infrastructure (high confidence). Multiple climate and non-climate hazards impact cities, settlements and infrastructure and sometimes coincide, magnifying damage (high confidence). Hot extremes including heatwaves have intensified in cities (high confidence), where they have also aggravated air pollution events (medium confidence) and limited functioning of key infrastructure (high confidence). […] Infrastructure, including transportation, water, sanitation and energy systems have been compromised by extreme and slow-onset events, with resulting economic losses, disruptions of services and impacts to well-being (high confidence).’

3.7 The IPCC’s report highlights that the spatial planning will play a critical role in ensuring that settlements and key infrastructure networks can adapt to the impacts of global climate change. Moreover, the report suggests that ecosystem-based adaptations can offer a range of interconnected benefits for our settlements and the people living within them:

> ‘C.2.6. Considering climate change impacts and risks in the design and planning of urban and rural settlements and infrastructure is critical for resilience and enhancing human well-being (high confidence). The urgent provision of basic services, infrastructure, livelihood diversification and employment, strengthening of local and regional food systems and community-based adaptation enhance lives and livelihoods, particularly of low-income and marginalised groups (high confidence). Inclusive, integrated and long-term planning at local, municipal, sub-national and national scales, together with effective regulation and monitoring systems and financial and technological resources and capabilities foster urban and rural system transition (high confidence).

C.2.7. […] Ecosystem-based adaptation (e.g., urban agriculture and forestry, river restoration) has increasingly been applied in urban areas (high confidence). Combined ecosystem-based and structural adaptation responses are being developed, and there is growing evidence of their potential to reduce adaptation costs and contribute to flood control, sanitation, water resources management, landslide prevention and coastal protection (medium confidence).'

3.8 For policymakers, the report recommends that cross-cutting action and renewable energy transitions are explicitly supported to improve public uptake of more sustainable practices. However, in progressing towards the delivery of climate-resilient development, the IPCC also warn policymakers to avoid short-term policy gains that could have negative effects on populations or the natural environment in the long-term. To achieve this, policymakers are recommended to ensure that social justice and social inclusion are made central to any response to climate change.

3.9 Cambridgeshire and Peterborough Combined Authority (2022). Climate Action Plan 2022 – 2025 The Cambridgeshire and Peterborough Combined Authority (CPCA) have adopted a Climate Action Plan, outlining a series of aims and actions that will help contribute to the delivery of greener, inclusive sustainable initiatives across the combined authority area. The CPCA's Climate Action Plan does not seek to duplicate or conflict with the priorities of other government bodies, such as setting climate change policies for the built environment or the management of the water environments.

3.10 Instead, the Climate Action Plan focuses on identifying and supporting strategic priorities and collaborative action in the Cambridgeshire and Peterborough areas. This includes joined-up approaches to energy infrastructure to ensure that electricity generated by renewable sources can serve residents across the combined authority area, providing financial support for nature-based solutions to climate action and recreational pressures, and explicit support for innovative approaches in business, housebuilding and transportation that will help to facilitate sustainable day-to-day living practices. Therefore, the CPCA's Climate Action Plan provides a series of regional policy ambitions that contextualise the national aims for climate action; the Local Plan should seek to deliver new development in ways that align with these national and regional strategic objectives.

Summary of issues arising from First Proposals representations

3.11 During the First Proposals consultation, general comments in relation to the Climate Change Chapter requested the Local Plan's climate change vision to advocate a more holistic approach to carbon offsetting (Marshall Group Properties) and sustainable development through considerations of the natural environment (Natural England). Comments also suggested that policies in the Climate Change Chapter needed to clarify what details applicants would be expected to submit for Local Plan policies to be effective. There were requests for clarity on how information will be secured in terms of design-led solutions and the limits set within the policy were received in relation to Policy CC/DC. Also, for policy to clarify how applicants should demonstrate water efficiency were

received in relation to Policy CC/WE. Requests for the Local Plan to incorporate a more holistic approach to securing multi-functional benefits for climate change, flood management, water resources and water quality through the protection and enhancement of the natural environment were received in relation to Policy CC/FM. Further detail, including where to view the full representations and who made each representation, is provided in the Consultation Statement.

New or updated evidence

3.12 N/A

Additional alternative approaches considered

3.13 No policy and rely on national policy and guidance and the other policies in the plan. This was not considered a reasonable approach as national planning policy highlights that development plans should be proactive in their approach to climate change adaptations and mitigation. In addition, consultation responses at First Proposals requested clarification on how evidence of sustainable development should be presented as part of planning applications in Greater Cambridge.

Draft Policy and reasons

3.14 The draft policy can be viewed in the draft Local Plan.

3.15 Climate change is recognised as one of the greater challenges of our generation and has been linked to irreversible damage or changes to the planet. The Intergovernmental Panel on Climate Change (IPCC) has warned that additional warming effects are likely, even under the various decarbonisation pathways presented as part of their 2020 report on the Global Warming of 1.5°C. The UK Climate Change Risk Assessment 2022 highlighted that swift action must be taken if the effects of climate change, including exacerbated flood events and more extreme weather events, are to be controlled at manageable levels; spatial planning has been recognised as a critical tool in the challenge of addressing climate change.

3.16 Section 19 of the Planning and Compulsory Purchase Act 2004 requires development plans to include policies related to both climate change mitigation and adaptation. Meanwhile, Chapter 14 of the National Planning Policy Framework (NPPF, 2024) states that local planning authorities should adopt proactive policy measures to mitigate and adapt to climate change.

3.17 The principles of climate change adaptation and mitigation are embedded within this Local Plan. However, comments received during the First Proposals consultation highlighted that the Local Plan's climate change vision must explicitly recognise the various linkages between the built and natural environments that can drive sustainable development. Comments received in relation to the policy directions presented during the First Proposals also requested clarity as to how information on resource efficiency and sustainability should be presented to the Councils as part of planning applications. Policy CC/SD provides an important foundation for other policies and a mechanism through which planning applications can demonstrate compliance with various policies within the Local Plan of relevance to climate mitigation and adaptation.

3.18 Responses received during the First Proposals consultation requested clarification regarding how evidence of sustainable design and construction should be presented as part of planning applications. Responses also requested that a holistic approach to sustainable design was integrated into the Local Plan's climate change vision. The draft policy approach to Policy CC/SD outlines the Sustainability Statement requirements for planning applications in Greater Cambridge. The draft policy provides a series of parameters for different scales and types of development, and the associated Sustainability Statement requirements.

3.19 Both the Cambridge Local Pan (2018) and the South Cambridgeshire Local Plan (2018) included planning policies that set Sustainability Statement requirements for development (Policy 28 in Cambridge City Local Plan and Policy CC/1 in the South Cambridgeshire Local Plan) – these policies, and their Sustainability Statement requirements, provided an important foundation for a holistic consideration of sustainability for both applicants and decision makers.

Therefore, the preferred policy approach seeks to provide a mechanism through which development proposals should demonstrate how their proposal accords with various local planning policies related to climate change mitigation and adaptation.

Response to the main issues raised in representations

3.20 The councils acknowledge that sustainable development is multifaceted and involves various aspects of the built and natural environment. To integrate a more holistic approach to sustainable development within the Local Plan, Policy CC/SD has been drafted to guide the way in which applicants should present how their proposal will deliver places that are adapted to and mitigate the effects of climate change. This approach to Sustainability Statements is a progression of Policy 28 of the Cambridge Local Plan (2018) and Policy CC/1 of the adopted South Cambridgeshire Local Plan (2018).

3.21 The councils also acknowledge that some solutions can entail a variety of environmental benefits and that these interconnected solutions need to be explored thoroughly when designing places. Therefore, Local Plan policies have been drafted in such a way that solutions with the capacity to deliver interrelated benefits are explicitly supported (e.g. SuDS and their potential to facilitate a combination of flood risk improvements, water quality improvements, biodiversity enhancements and amenity uplifts). Determining an appropriate design-led solution to climate change mitigation and adaptation will need to be conducted on a case-by-case basis, accounting for the various development opportunities and constraints. Policy CC/SD has been drafted to ensure that applicants will provide details of the sustainability benefits their proposals will bring and justification for the approaches to design and construction being proposed.

3.22 With the support of the regional Cambridgeshire and Peterborough Climate Action Plan (2022–2025), this reaffirms the UK's climate leadership role through the UNFCCC climate agenda and associated commitments made at the 2024 UN General Assembly. This includes contributing to global climate finance goals

and addressing climate-driven international risks, such as conflict and displacement. These commitments reinforce the importance of domestic policy alignment with global climate action.

Further work and next steps

3.23 Review the comments received on the draft Local Plan prior to preparing the proposed submission version, alongside any further evidence or changes to national or local policy.

4 Policy CC/DC: Designing for a Changing Climate

Issue the Plan is seeking to respond to

4.1 Section 182 of The Planning Act (2008) Act requires local planning authorities to adopt policies on climate change mitigation and adaptation. Therefore, we have a legal duty to ensure that the Local Plan promotes development that is resilient to the effects of a changing climate. Placemaking is a potentially powerful tool in the response to the climate emergency; the resilience of our homes and workplaces to overheating, flooding and droughts can be impacted by the integration of nature in our built environment, building design and layout, and the suitability of our infrastructure.

4.2 The Met Office's UK Climate Projections highlight that even under lower emission scenarios, the UK will still see higher average yearly temperatures and an increase in extreme weather events due to historic greenhouse gas emissions. Therefore, the councils need to ensure that new development can adapt to the impacts of a changing climate, giving consideration to issues including overheating and increasing flood risk.

How was the issue covered in the First Proposals Consultation?

4.3 A policy approach was proposed in the First Proposals consultation. The Proposed approach and full representations received can be viewed here: Policy CC/DC: Designing for a Changing Climate.

4.4 The First Proposals was supported by topic papers, which explored the context, evidence and potential alternatives and the preferred approach in greater detail. This can be viewed Climate Change: Topic Paper.

Policy context update

National Planning Policy Framework (NPPF, December 2024)

4.5 Addressing climate change is one of the core land-use planning principles contained within the NPPF. Section 14 of the NPPF (December 2024) considers the role of the planning system in supporting the transition to a low-carbon future and facilitating resilience to the impacts of climate change. Paragraph 162 of the NPPF states that, '[policies] should support appropriate measures to ensure the future health and resilience of communities and infrastructure to climate change impacts'.

4.6 Meanwhile, Paragraph 164 notes that new development should be planned for in ways that 'avoid increased vulnerability to the range of impacts arising from climate change' (e.g. overheating, increased flood risk, and more extreme weather events) and 'help to reduce greenhouse gas emissions'.

4.7 The Climate Change Planning Practice Guidance provides additional guidance on how the challenges of climate change can be addressed through the plan-making process, which should still be read alongside the December 2024 version of the NPPF. This includes promoting adaptation approaches as part of design policies (e.g. maximising summer cooling through natural ventilation and multi-functional green infrastructure) and ensuring a site-wide understanding of the future risks of climate change when allocating sites (e.g. understanding how sustainable drainage and flood resilience strategies can help to manage flood risks over the lifetime of a development). The PPG also advises that plan-makers should avoid the risk of maladaptation (i.e. making decisions or adopting policies that hinder, as opposed to help, the response to global climate change).

Climate Change Committee: 2024 Progress Report to Climate Change

4.8 As its Nationally Determined Contribution to the Paris Agreement (2015), the UK has committed to reduce emissions by 68% by 2030 compared to 1990 levels. However, in their 2024 Progress Report to Parliament, the Committee on Climate Change highlighted that, despite significant reductions in emissions, 'the country is not on track to hit this target despite a significant reduction in emissions'. The report highlights that spatial planning plays a pivotal role in helping to achieve

these targets and must therefore be structured in such a way that makes addressing the climate challenge a priority.

Addressing overheating risk in existing UK homes

4.9 Supporting research commissioned by the Climate Change Committee (Addressing Overheating Risk in Existing UK Homes) has highlighted that a high proportion of the UK's existing housing stock failed to meet current overheating standards for new homes and that substantial levels of investment will be needed to retrofit these homes. With more than 300,000 homes due to be built across the UK each year, there is a major risk of lock-in if these homes are not designed and built to address overheating alongside energy efficiency and low-carbon heating. Inaction now will create unnecessary retrofit costs later and could even leave many homes uninhabitable as temperatures rise.

Summary of issues arising from First Proposals representations

4.10 Support for the policy was expressed within representations from a variety of respondents; several proposed additional elements to include in the policy such as site-wide adaptive measures, green walls and sustainable drainage systems. Other respondents, such as Bassingbourn-cum-Kneesworth PC, questioned the applicability of some of the policy's technical stipulations which could require rephrasing elements of the policy's wording. Respondents also disagreed about the scope of the policy. Some, such as the Cambridge Doughnut Economics Action Group, thought it should go further and provide targets for developers to meet. Contrastingly, some respondents, including the Home Builders Federation, felt that the councils had not adequately considered how the policy would affect the viability of housebuilding. Several respondents, such as Countryside Properties, also asserted that this was not a matter for planning but should be left to Building Regulations. Further detail, including where to view the full representations and who made each representation, is provided in the Consultation Statement.

New or updated evidence

UK Climate Change Risk Assessment 2022 (CCRA3)

4.11 The Climate Change Act 2008 requires the Government to undertake an assessment of the risks of climate change on the UK every five years. The Technical Report for the third Climate Change Risk Assessment (CCRA3) identified sixty-one climate risks across a range of sectors such as food and water, weather and climate events, public health, and impacts to services and key infrastructure. The CCRA3 report highlights that the number of climate risks that fall into the “high” and “very high” damage categories has risen since the assessment made under CCRA1. For eight of the sixty-one climate risks assessed under CCRA3, the UK-wide economic damages by 2050 under a 2°C warming scenario are estimated to exceed £1billion per annum; CCRA1 identified only three climate risks with an impact of this magnitude.

4.12 Overheating, particularly in the UK’s built-up areas, is a recognised climate risk to human health, wellbeing and productivity due to increases in ambient temperatures and forecast occurrences in heatwaves that are attributable to global climate change (Priority Risk Area 7). In response to the issue, CCRA3 notes that overheating in homes and places of work needs to be planned for proactively, using passive cooling measures to ensure that new buildings are not locked into a long-term future of uninhabitability:

4.13 ‘Building designs and technology are available that can greatly reduce occupant exposure to heat while ensuring high levels of thermal efficiency. Beneficial adaptation actions include the updating of building regulations and other policy measures to address overheating through passive cooling measures like better shading, reflective surfaces and green cover. The [Advice Report for CCRA3] warns that with 300,000 homes due to be built each year across the UK there is a major risk of lock-in if they are not planned and built to address overheating alongside energy efficiency and low-carbon heating.’

4.14 Climate Change Committee (April 2025) – Progress in Adapting to Climate Change: 2025 Report to Parliament

4.15 This report assesses the extent to which the UK's Third National Adaptation Programme (NAP3) and its implementation are preparing the UK for climate change. It is the Climate Change Committee's first statutory progress report on NAP3.

4.16 The Report highlights that UK towns and cities will become increasingly hot, with a large proportion of existing buildings at risk of reaching potentially dangerous temperatures during heatwaves. Rising heat in our urban spaces is also increasing the incidents and likelihoods of droughts and even urban wildfires, with recent research suggesting that climate change could have made wildfire conditions six time more likely in the UK. Rising temperatures and risks of overheating are having significant impacts on services across multiple sectors, including IT capabilities where failures in computational systems has been attributed to rising heat during summer months, and the operability of healthcare services. The Report is critical of current efforts to actively address overheating measures, but recognises the planning system as a mechanism through which further efforts in overheating adaptation and mitigation should be realised in the near future:

4.17 'Planning policy has the potential to be a key lever for adaptation in the built environment. However, this outcome remains scored as 'insufficient' because, despite recent updates, current national policy lacks ambition on climate change adaptation, and is missing a clear approach to enforcement and monitoring.

4.18 Updates to the National Planning Policy Framework (NPPF) in December 2024 included some positive progress for adaptation but policy remains vague, with no stated resilience outcomes to add weight to other existing but non-statutory climate-relevant spatial plans, such as SMPs or the Thames Estuary 2100 Plan. Further detail is required in the forthcoming updates to Planning Practice Guidance (PPG), which provide the mechanisms to deliver change through planning.'

4.19 Observations are also made regarding the adaptation of existing housing and commercial space to the climate-related overheating risks:

4.20 ‘There has been progress in in planning and assessment of overheating for key public buildings, including prisons and schools […]. Guidance for retrofitting for improved energy efficiency in existing homes (PAS 2035:2023) now considers climate resilience and adaptation. It applies to all domestic retrofit projects and is mandatory for those receiving public funding. Guidance could be strengthened further as the evidence base on overheating and energy efficiency develops’.

4.21 Local planning policy can play a critical role in filling this gap, outlining requirements for overheating adaptation as part of placemaking, as well as requirements for maintenance and monitoring of adaptation measures.

Additional alternative approaches considered

4.22 No additional alternative approaches identified.

Draft policy and reasons

4.23 The draft policy can be viewed in the Local Plan.

4.24 Following changes made by Section 182 of the Planning Act (2008), Section 19 of the Planning and Compulsory Purchase Act 2004 requires development plans to include policies related to both climate change mitigation and adaptation. The draft approach to Policy CC/DC outlines how placemaking should be used to help ensure new development is resilient to effects of a changing climate. The draft approach provides requirements for overheating to be considered and addressed as part of design-led approaches to development. This includes the use of a colling hierarchy, which applicants should follow as part of the design process.

4.25 According to the Climate Change Committee’s The preferred policy approach seeks to ensure that all new homes and non-domestic buildings achieve a low

overheating risk, with a focus on a design-led approach whereby adaptation measures are integrated into architectural design. With regards to overheating, it was considered that proposals should follow the cooling hierarchy, with a focus on the use of passive design measures, with the use of active cooling only used as a last resort. This approach is intended to ensure that efforts to adapt to climate change do not undermine efforts to mitigate changes to the climate (i.e. reliance on mechanical air conditioning units due to increased overheating issues, which would function as an additional emissions source). The policy also seeks to ensure that all new dwellings benefit from cross ventilation, recognizing that single aspect dwellings are at much higher risk of overheating and that provision of adequate ventilation to help cool properties is challenging in single aspect units.

4.26 It was also considered that the policy should recognise that site-wide approaches to placemaking can have an impact on a development's resilience to climate change. Therefore, the draft approach advocates for the use of cool materials and urban greening through tree planting to help ambient temperatures in the built environment.

Response to the main issues raised in representations

4.27 At the time of writing, Paragraph 1A of Section 19 of the Planning and Compulsory Purchase Act 2004 states, '[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'. The introduction of this paragraph was made by Section 182 of the Planning Act (2008). Moreover, Paragraph 164 of the NPPF (December 2024) states that new development should be planned for in ways that 'avoid increased vulnerability to the range of impacts arising from climate change' and 'help to reduce greenhouse gas emissions'. Therefore, opting to remove this policy on climate change adaption and relying solely on Building Regulations would conflict with both national policy requirements and the Local Planning Authority's legal duty.

4.28 The councils acknowledge comments in relation to the various design solutions that could be integrated or encouraged as part of development to ensure it is resilient to the impacts of climate change. Policy CC/DC now requires applicants to consider a series of placemaking measures that can help to make a development resilient to climate change, as well as highlighting the linkages with other policies in the Local Plan. Policy CC/SD has also been drafted, requiring applicants to demonstrate the sustainable design solutions integrated as part of the proposal.

4.29 The councils acknowledge comments regarding the need for policies on sustainable development to be applicable to all types of development, where reasonable and necessary. The policy direction to Policy CC/DC has been clarified to ensure that climate resilience is also an explicit consideration for commercial, infrastructural and mixed-use developments, as well as residential proposals. The preferred policy approach has also sought to simplify the design and overheating priority order, with the policy's supporting text providing clarification on how the cooling hierarchy should be followed. Absolute targets and standards for the adaptability of new buildings was considered by the councils during the drafting of the policy, but it was considered that this would be better navigated using the UK Net Zero Carbon Buildings Standard, which includes standards for climate adaptability.

4.30 It is acknowledged that planning policies on sustainable development should also consider the sustainability benefits that can be delivered as part of change of use proposals or refurbishment projects that require planning permission. In ensuring that existing buildings can be considered, Policy CC/SD has also included projects involving existing buildings within the scope for Sustainability Statement requirements.

Further work and next steps

4.31 Review the comments received on the draft Local Plan prior to preparing the proposed submission version, alongside any further evidence or changes to national or local policy.

5 Policy CC/NZ: Net zero carbon new buildings

Issue the Plan is seeking to respond to

5.1 The UK has a legally binding target to achieve net zero carbon by 2050, with the sixth carbon budget, which was translated into law in June 2021, requiring a 63% reduction in emissions from 2019 to 2035 (78% relative to 1990). Furthermore, in November 2024, the UK committed to an even slightly greater 2035 target of 81% reduction on 1990 levels, setting this as the UK's Nationally Determined Contribution to the goals of the Paris Agreement. If Parliament next adopts the recommended seventh carbon budget (published February 2025), this would require the reduction to reach 87% by 2040-42 (from 1990 levels). Achieving net zero carbon, and these carbon budgets, requires action across all sectors, including the built environment. Analysis supporting the 6th and 7th Carbon Budgets shows that the buildings sector will need to reach close to zero carbon in the 2040s without offsetting. By failing to deliver net zero carbon for all new development now, we add to the retrofit burden, and would fail to take advantage of the efficiencies of integrating achievement of net zero carbon into the design of new developments from the outset. Given the lack of national progress in upgrading the existing building stock, we cannot add to that burden.

5.2 In its latest progress report on reducing emissions (July 2024), the Committee on Climate Change demanded a step change in Government action, noting gaps and ambiguities in the current approach. Credible policies for delivery currently cover only one-quarter of the required reduction in emissions needed to meet the Sixth Carbon Budget. With regards to planning, reports as far back as 2021 noted a failure to recast national planning policy to meet our legal and international climate commitments and that DLUHC/MHCLG was not fully supporting local government to play its part in the transition to net zero carbon. The 2024 report continues to emphasise that "decisions taken today will continue to have an impact into the Seventh Carbon Budget period and beyond. … these decisions must properly consider the importance of both reducing emissions … For example, planning frameworks and standards must ensure new

homes that are built today do not need to be retrofitted in future to meet emissions and adaptation goals." The success of reducing emissions in the electricity sector (69% reduction in the past decade) has not been matched in other sectors including transport or buildings, whose reductions in that period have only been 9% and 13% respectively. The 2024 report indicates that most of the emissions reductions from buildings in that decade was due to warmer weather and high gas prices resulting in behaviour change, rather than sufficient advancement in energy efficiency or low-carbon heat rollout.

How was the issue covered in the First Proposals Consultation?

5.3 A policy approach was proposed in the First Proposals consultation. The Proposed approach and full representations received can be viewed Policy CC/NZ: Net Zero Carbon New Buildings.

5.4 The First Proposals was supported by topic papers, which explored the context, evidence and potential alternatives and the preferred approach in greater detail. This can be viewed Climate Change: Topic Paper.

Policy context update

5.5 Since the first proposals consultation, a number of local planning authorities have adopted energy based metric type policies similar to that included in policy CC/NZ. This includes Cornwall Council's Climate Emergency DPD, Bath and North East Somerset's Local Plan, Central Lincolnshire's Local Plan and Greater Manchester's Joint Development Plan Document. In the Inspector's report for the Cornwall Climate Emergency DPD, consideration was given to the status of the 2015 Written Ministerial Statement (WMS), raised in a number of objections to policy CC/NZ. The Inspector noted at paragraph 167 that "The WMS of 25 March 2015 has clearly been overtaken by events. Nothing in it reflects Part L of the Building Regulations, the Future Homes Standard, or the Government's legally binding commitment to bring all greenhouse gas emissions to net zero by 2050. In assessing the Council's approach to sustainable energy and

construction, the WMS of 25 March 2015 is of limited relevance. The Framework makes clear in paragraph 161 that the planning system should support the transition to net zero by 2050". All of this closely echoed very similar wording in the December 2022 Inspector's report for BANES local plan, whose paragraph 85 also noted that "the relevance of the WMS 2015 to assessing the soundness of the Policy has been reduced significantly, along with the relevant parts of the PPG … given national policy on climate change. Whilst [the] NPPF… sets out that any local requirements for the sustainability of buildings should reflect the Government's policy for national technical standards … whilst I give the WMS 2015 some weight, any inconsistency with it … does not lead me to conclude that [the energy metric based policy] is unsound, nor inconsistent with relevant national policies".

5.6 The Cornwall and BANES Inspectors' reports were then echoed by legal advice procured by Essex County Council (April 2023) finding that "The 2015 WMS has been overtaken by events [i.e. by new Building Regulations and the national net zero target] and regard does not need to be paid to it, nor to the portion of the PPG on climate change which cites it" and that local planning authorities remain empowered by the Planning and Energy Act 2008 to set higher standards for energy efficiency and renewable energy, subject to those standards being 'reasonable' as per the wording of that Act. Relatedly, an inspector's decision to reject energy-based 'net zero carbon buildings' policies in the emerging Salt Cross Area Action Plan on the basis of that 2015 WMS was overturned at the High Court (hearings in late 2023; written verdict released in early 2024). That verdict was that although the powers granted by the Planning and Energy Act included an inherent condition that these powers should not be used in a way that is inconsistent with national policy, the 2015 WMS was no longer a relevant national policy because it was designed to cap energy efficiency standards at a level that had since been overtaken by Building Regulations.

5.7 However, in December 2023, a further Written Ministerial Statement "Planning – Local Energy Efficiency Standards Update" was published, which sought to restrict local plan energy efficiency policies to requiring a percentage uplift of a dwelling's Target Emission Rate (TER), calculated using a specified version of

the Standard Assessment Procedure (SAP). It should be noted that this is despite the Future Homes Standards consultation recommending an end to the use of SAP, with work currently underway to develop a new Home Energy Metric to replace SAP. In its report to Parliament in July 2024, the Climate Change Committee highlighted concerns over the 2023 WMS, noting that it would be "likely to cause further confusion and delays around adopting local Net Zero policies, which is a setback". In response, further open legal advice published by Essex Climate Action Commission and Essex County Council and Etude considers the legal approach to such policies in light of the 2023 WMS. They key headlines from this advice are that:

- The 2023 WMS does not prevent local plan policies based on energy-based metrics from being brought forward by local planning authorities or being found sound at examination.
- The 2023 WMS is policy guidance to which regard must be had, but from which deviation can be justified so long as there is clear evidence which provides the reason for doing so, and which demonstrates the viability of policies.

5.8 A new High Court case against the 2023 WMS was heard in June 2024. Its grounds were that the 2023 WMS was unlawful in the following ways:

- in that it sought to inhibit the function of legislation (i.e. the local plan's powers within the Energy & Planning Act, and duty to mitigate climate change set by the Planning & Compulsory Purchase Act 2004). This ground was unsuccessful because the judge interpreted that the Energy & Planning Act contained a provision that the powers were subject to not being inconsistent with national policy.
- In that it had been made without an Environmental Principles Assessment required by the Environment Act 2021. This ground was unsuccessful because the judge found that the Environmental Principles Assessment could be (and was) conducted retrospectively.

5.9 However, the written judicial decision's conclusion does not mention any view on whether the 2023 WMS inhibited the local plan's ability to meet its climate

mitigation duty thus inhibiting the function of the Planning and Compulsory Purchase Act. It also does not discuss whether the judge understood that the 2023 WMS' purported preferred metric – the Target Emission Rate – is not in fact an energy efficiency standard (which is what the Planning and Energy Act empowers), but rather a carbon standard. In November 2024 the complainants were then granted the right to take their case to appeal and the Court of Appeal handed down its judgement on 25 July 2025. The Court confirmed that local planning authorities can set energy efficiency standards above national regulations, where justified by local circumstances and backed by evidence. It also noted that the 2023 WMS is not a legal block and does not, in itself, prohibit higher local standards, especially where there is a clear rationale and viability evidence. They stressed that national policy such as the 2023 WMS is guidance, not a legal requirement, and as such councils can depart from it if they have strong local justification, such as that set out in this topic paper below.

5.10 Since the publication of the 2023 WMS, further local plans have taken an energy metric-based policies to examination similar to Greater Cambridge's draft policy. Of those, at least have had differing reactions from their respective Inspector despite having similar evidence of technical feasibility and cost:

- **Tendring Colchester Borders Garden Community Development Plan Document:** This was successfully defended at examination, with only minor modifications to the policy proposed in the Inspector's final report (1st April 2025). This policy includes the same energy metrics as those contained in policy CC/NZ, namely space heating demand, energy use intensity and a requirement of onsite renewable energy generation to match or exceed the total energy consumption.

- **Isle of Wight Local Plan**: The two Inspectors' final report is not yet available, but their Post Hearings Letter (22nd April 2025) expresses concerns about whether the costs evidence was sufficiently up to date and fully accounted for in the viability assessment, and instructs to rework the policies to be consistent with the WMS 2023. However, we note emphasis throughout the letter about the unique geographical situation on the Isle of Wight whereby

the island is at a disadvantage in terms of housing delivery because the mainland is more attractive to developers – a situation not the case in Greater Cambridge. We also note that one of the two Inspectors in the Isle of Wight was the same who had previously rejected the West Oxfordshire Salt Cross similar policies, a decision that was later overturned in the High Court as previously noted.

5.11 On the same day as the release of the 2023 WMS (December 2023), the then-Government released a new consultation on the form and outcomes of the anticipated Future Homes Standard (FHS) (Building Regulations Part L, planned to be introduced in 2025). The previous FHS consultation (2019-20) had proposed a single specification that consisted primarily of quite significant improvements to building fabric (albeit not sufficient to deliver the performance necessary in new builds for the UK's legislated carbon targets) and a heat pump instead of a gas boiler. By contrast, the FHS consultation in 2023-2024 weighed up two options which are both different to the previous consultation:

Future Homes Standard Assessment of Building Element

Building Element – Fabric

Current (Part L 2021) [baseline]

FHS consultation spec 2019/20 Significant improvement to insulation. No change to airtightness.

FHS consultation 2023/24 Option 1 No change to insulation.

Small improvement to airtightness.

FHS consultation 2023/24 Option 2 No improvement to fabric at all.

Building element – Heating

Current (Part L 2021) - Gas boiler

FHS consultation spec 2019/20 - Heat pump

FHS consultation 2023/24 Option 1 - Heat pump

FHS consultation 2023/24 Option 2 - Heat pump

Building element – Solar PV

Current (Part L 2021) - 40% of ground floor area

FHS consultation spec 2019/20 - None
FHS consultation 2023/24 Option 1 - Same as in Part L 2021.
FHS consultation 2023/24 Option 2 – None

Building element – Ventilation
Current (Part L 2021) - Natural + intermittent extract fans
FHS consultation spec 2019/20 - Same as in Part L 2021.
FHS consultation 2023/24 Option 1 - Same as in Part L 2021.
FHS consultation 2023/24 Option 2 - Decentralised mechanical extract (DMEV)

Building element – Heat & hot water bill
Current (Part L 2021) - £640
FHS consultation spec 2019/20 - [not given in equivalent prices]
FHS consultation 2023/24 Option 1 - £520
FHS consultation 2023/24 Option 2 – £1,220

Building element – Space heat demand kwh/m^2/year (SAP:*) (PHPP)
Current (Part L 2021) - 13–47 (SAP) or 49-83 (PHPP)
FHS consultation spec 2019/20 - 7 – 46 (SAP) or 43-73 (PHPP)
FHS consultation 2023/24 Option 1 - No calcs available but will be slightly less than Part L 2021
FHS consultation 2023/24 Option 2 - Same or similar to Part L 2021.

* Space heat demand figures calculated using SAP dramatically underestimate what the actual space heat demand will be. Actual space heat demand is estimated to be 210-560% higher than the SAP figure.

5.12 The dramatic increase in bills in FHS Option 2 is due to switching to electric heat while removing the solar panels that are already part of today's building regulations Part L 2021 and failing to improve fabric (therefore failing to reduce space heat demand). At present, electricity is more expensive per kWh than gas. It is not yet known which of these options the new Government is expecting to proceed with, or possibly some hybrid of the two. Recent announcements have indicated an intent for all new homes to benefit from photovoltaic panels. But it is

not yet clear whether the final version of the FHS will maximise energy efficiency and neither option does all that is reasonably possible to protect occupants from unacceptable rises in fuel poverty especially in the recent context of dramatic spikes in energy prices that have been seen in the past two years. This provides a further rationale to design a local plan carbon reduction policy that would protect against that risk by delivering 'net zero' with a major element of energy efficiency, as the Greater Cambridge proposed absolute targets for energy use intensity and space heat demand would do.

5.13 Given the high standards proposed, the sustainable show homes policy which is currently part of the South Cambridgeshire Local Plan will no longer be required. The policy would also replace the current policy in Cambridge requiring achievement of BREEAM excellent for all new non-residential development. The standards contained within the draft policy and other policies in the Greater Cambridge Local Plan are such that they will exceed current BREEAM requirements, although developers may still choose to utilise BREEAM certification to meet the assured performance aspects of the policy. It is also not proposed to continue with the consequential improvements policy given the difficulties of implementing this policy via the planning system.

Summary of issues arising from First Proposals representations

5.14 The general thrust of the policy received a significant level of support from parish councils, organisations such as Carbon Neutral Cambridge, CPPF and the Wildlife Trusts, members of the public and some of the area's developers and landowners including the University of Cambridge and the Marshalls Group. There were calls for specific targets to be set around embodied carbon associated with demolition and remediation of sites.

5.15 A number of organisations, including the University of Cambridge, while supportive of the policy, felt there is a need for some flexibility in the application of specific targets, to take account of different building types where a more nuanced approach may be needed, for example R&D buildings.

5.16 Those objecting to the policy, primarily developers and the Home Builders Federation, were concerned that the delivery of net zero carbon policy is not a matter for planning but should be left to Building Regulations and the emerging Future Homes Standard. They raised concerns around the technical feasibility of the policy, impact on viability and implementation of the policy. The issue of policy implementation was also raised by some Parish Councils. It was also argued by developers that policy should only consider regulated energy and not unregulated energy (energy used by plugged-in appliances) as these are outside of the control of developers. Many considered that the delivery of net zero carbon was best left for national standards and that the role of the decarbonisation of the grid also needed to be recognised. Concerns were also raised that the policy referenced no new gas connections.

5.17 Some raised concerns that the policy does not contain targets for existing buildings and did not recognise the importance of reusing rather than demolishing existing buildings. There were requests for the policy to more explicitly include refurbishments/reuse of existing floorspace within its scope and to factor material circularity.

5.18 Further detail, including where to view the full representation and who made each representation, is provided in the Consultation Statement.

New or updated evidence base

- Greater Cambridge Net Zero Carbon Study update 2025:
  - Currie and Brown Costings work
  - National policy context update
  - Uk Net Zero Carbon Buildings Standard Summary
  - Carbon Budget Assessment
- Committee on Climate Change. 2024 Progress Report to Parliament, 18 July 2024.
- Committee on Climate Change (2025), The Seventh Carbon Budget.
- TCPA and Centre for Sustainable Energy report for the Committee on Climate Change (2023)
- Essex Open Legal Advice – Energy policy and Building Regulations, Estelle Dehon KC, Cornerstone Barristers, 25 February 2024

- Etude Open Legal Advice – Legal basis for planning policies delivering Net Zero Carbon developments, Estelle Dehon KC, Cornerstone Barristers, 20 September 2024
- Tendring Colchester Borders Garden Community Development Plan Document – tracked Change Version with Inspectors Modifications August 2024
- Aldersgate Group Briefing, February 2025. Electrifying Industry and Distribution Networks: Considerations for Policy Makers.

Additional alternative approaches considered

5.19 No additional alternative approaches identified.

Draft Policy and reasons

5.20 The draft policy can be viewed in the Draft Local Plan: Link to the draft plan policy.

5.21 The proposed policy approach sets specific requirements regarding the energy needs of new development. It looks to set requirements around how much heating a building will need as well as setting targets for overall energy use in buildings, with renewable energy used to meet that energy requirement. For those developments unable to meet those requirements fully on-site, consideration is given to the use of an energy offset mechanism, which would be used to invest in additional renewable energy generation. Consideration is also given to the carbon associated with the construction process and the materials used to construct new buildings, known as embodied carbon. These requirements seek to go beyond current proposals for changes to Building Regulations as part of the Future Homes Standard, in that they consider all energy used in Buildings in order to deliver home that are true net zero carbon from an operational emissions perspective, as well as considering the carbon associated with the materials used to construct those buildings, which is an aspect not included within Building Regulations. The issue of embodied carbon is not, at present, considered by any other regulatory framework, and there do not appear to be any plans for it to be considered through Building Regulations. This leaves a significant policy gap in the delivery of net zero carbon by 2050.The development of policies to drive more resource-efficient construction,

including the setting of a plan for phasing in mandatory whole-life reporting and minimum whole-life standards for all buildings, roads and infrastructure is identified as a priority policy area (ref R2022-376) in the latest progress report from the Committee on Climate Change.

5.22 The choice of metrics used is an important aspect of achieving net zero carbon. New buildings must use energy efficiently if they are to achieve net zero carbon. This can be measured by two key metrics:

- Space heating demand, which is a measure of the thermal efficiency of the building. For a net zero carbon building (that is compatible with the UK's legislated carbon budgets) it should be around 15-20 kWh/m2/yr.
- Metered energy use, which is a measure of the total energy consumption of the building including the heating system, hot water, ventilation, appliances and lighting. For most buildings it should be around 35-65 kWh/m2/yr, though this varies by type.

5.23 These energy metrics have two key advantages:

1. It does not rely on Part L of the Building Regulations as a baseline, so won't have to be changed each time Part L changes.
2. Energy metrics are more technically robust and designed to lead to better building outcomes. The SAP methodology used to demonstrate compliance with Part L is not designed to accurately determine energy use and associated carbon emissions and indeed is due to be replaced when the Future Homes Standard comes into force. The policy instead encourages the use of more sophisticated modelling tools such as CIBSE TM54 and the Passivhaus planning Package which are able to more accurately predict a buildings actual energy use.

5.24 It is noted that the powers granted by the Planning and Energy Act, in allowing local planning authorities to set standards that exceed Building Regulations, specifically relate to the use of standards that are set out or endorsed in national policies or guidance issued by the appropriate national authority. However, this needs to be viewed in the context of changing national legislation related to climate change targets. In 2008, when the Planning and Energy Act came into force, the Climate Change Act did not require achievement of net zero carbon and the first five-year carbon budget was legislated only in 2009 (followed by the

third, fourth, fifth and sixth in 2011, 2016, and 2021. With net zero carbon and increasingly stringent carbon budgets, comes the need to change the metrics used to define the performance of buildings. It is clear from the performance gap, that buildings constructed using current metrics are not performing as they should, and that a new approach is needed if we are to achieve net zero carbon. The space heating requirement included in the policy is in line with the recommendations of the Committee on Climate Change, who recommended in their Housing Fit for the Future report that a space heating demand of 15-20 kWh/m2/yr is required for new housing if the UK is to meet its net zero carbon commitment. The metrics also align with those recommended for use by all relevant standard-setting bodies in the UK built environment industry:

- The Low Energy Transformation Initiative (LETI) in their climate emergency design guide,
- Royal Institute of British Architects (RIBA) in their 2030 Climate Challenge.
- The entire range of entities involved in the creation of the UK Net Zero Carbon Buildings Standard, which includes Royal Institution of Chartered Surveyors (RICS), Chartered Institution of Building Services Engineers (CIBSE), Buildings Research Establishment (BRE), Institution of Structural Engineers (IStructE), UK Green Building Council (UKGBC), Carbon Trust, and Better Buildings Partnership (BBP) as well as LETI and RIBA already mentioned.

5.25 While Energy Usage Intensity targets and Space Heating Demand targets metrics do deviate from those contained in the 2023 WMS, the Councils are of the view that, supported by the legal advice commissioned by Essex Climate Action Commission and Essex County Council and the evidence in the updated Greater Cambridge Carbon Budget Assessment (Bioregional 2025), this deviation is justified. To determine whether local circumstances to deviate from the WMS are demonstrated, this assessment sets out a local carbon budget for the specific scope of operational carbon of new build housing in Greater Cambridge, derived from legislated national carbon budgets (see figure 1 below). This study then models operational emissions in 2025 – 2045 associated with new homes in two policy scenarios: draft policy CC/NZ, and the Future Homes

Standard Option 1, which represents a 2023 WMS compliant policy approach and is anticipated to pass into Building Regulations in 2025/26. Where the carbon budget for new build housing's operational emissions is exceeded by a policy scenario, this demonstrates that the policy scenario is not aligned with the net zero policy targets (in this case, the assessment has modelled both the national 2050 target and the local aspirational 2030 target for net zero carbon). For both the 2030 and 2050 targets, the 2023 WMS compliant approach exceeds the local carbon budget for new build housing, as shown in Figure 2 below.

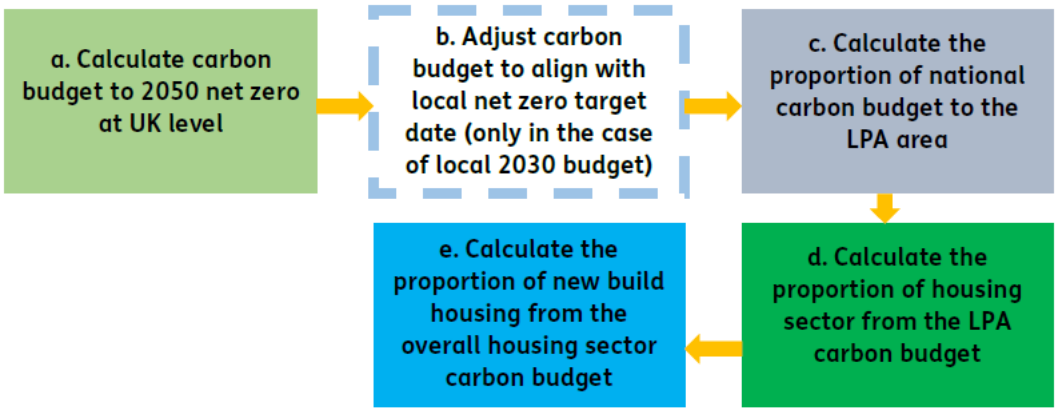

Figure 1: Steps in determining a local carbon budget for new build housing in Greater Cambridge (Source: Greater Cambridge Local Plan Net zero carbon policy support: Carbon budget assessment, Bioregional, 26 August 2025)

5.26 It is key to understand that all sectors and associated subsectors in Greater Cambridge (as in all parts of the UK) will need to stay within their reasonable share of the overall carbon area-wide budget, to meet that climate mitigation mandate while avoiding a situation where certain sectors must overcompensate for sectors that produce excessive emissions. While the Climate Change Act does not legislate limits on individual sectors, the national carbon budgets rely on all sectors to significantly reduce carbon emissions. It is thus effective to pursue indicative sectoral carbon budgets to avoid imbalances and keep the national mitigation targets feasible. This is therefore an appropriate and logical test to apply when determining what policies are appropriate for the climate mitigation mandate laid on the local plan. While the 2030 net zero carbon aspiration is not legally binding, it is crucial that local plans fulfil their mandate to contribute to the

national legislated Climate Change Act target of 2050 (and legislated carbon budgets). As per the NPPF (paragraph 162), it is the responsibility of local authorities to ensure their plan proactively plays its fair role in this. In local areas that have the physical ability and the viability margin to carry the cost uplift of higher build standards, this would logically mean maximising policy ambitions to balance out for less progressive policies in other areas of the UK that may not be able to meet optimal standards due to local constraints. Testing policies against the nationally legislated carbon budgets and local net zero goals will determine whether the policy is sufficient to proactively mitigate climate change. This assessment concludes that there are demonstrable local circumstances to justify divergence from the 2023 WMS, as the approach set out in policy CC/NZ is necessary for the Greater Cambridge Local Plan to align to local and national net zero carbon target dates, including the national carbon budgets legislated via the Climate Change Act (thus part of the "objectives and provisions" that the NPPF instructs the local plan to pursue).

Carbon budget period	Available carbon budget	FHS1 (WMS 2023 compliant policy)	Policy CC/NZ (Emerging GCLP 'true net zero' policy)
Total operational carbon emissions from new housing (2025-2030) ($ktCO_2e$)	**0.12**	**0.148**	**0**
Total operational carbon emissions from new housing (2025-2050) ($ktCO_2e$)	**4.13**	**4.75**	**0**

Figure 2: Outcomes of local carbon budget assessment for new build housing (Source: Greater Cambridge Carbon Budget Assessment, 2025).

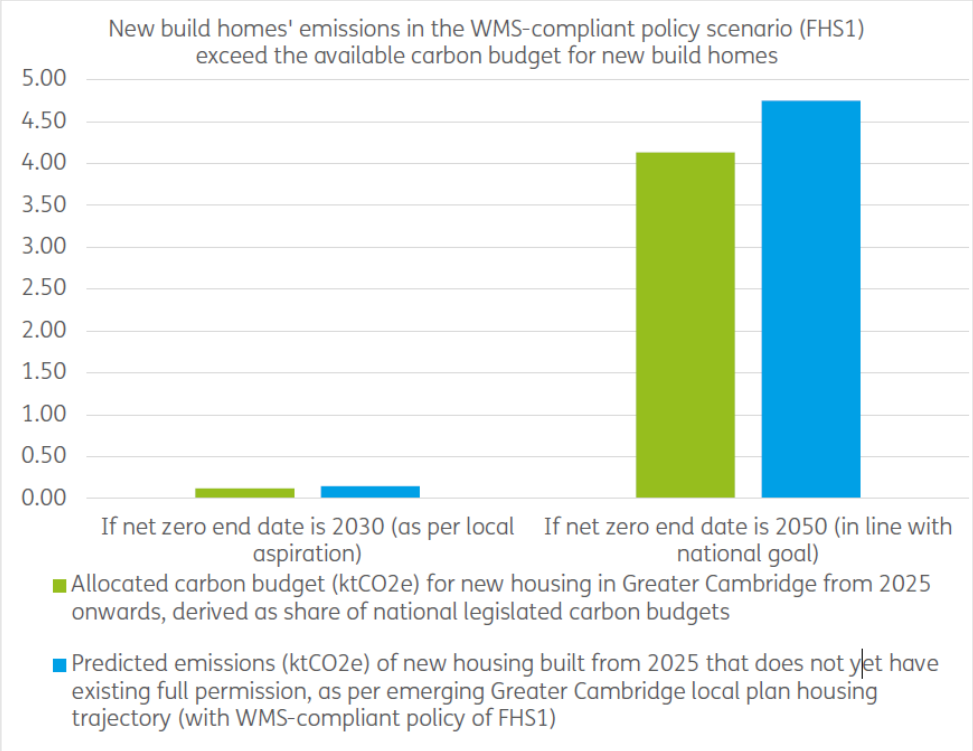

Figure 3: New Build homes' emissions in the WMS-compliant policy scenario (FHs1) (Source: Greater Cambridge Carbon Budget Assessment, 2025).

5.27 If the plan were to pursue a 2023 compliant policy approach (the FHS), the Greater Cambridge carbon budget available for housing, assuming accelerated retrofit of the existing housing stock in Greater Cambridge, would be exceeded as the FHS will not deliver net-zero carbon buildings as it does not consider all energy use in buildings, instead relying on the energy grid being fully decarbonised via future development of extensive standalone renewable energy. In contrast, emerging policy CC/NZ represents a true net zero operational carbon standard as it requires on-site renewable energy generation to equal total energy consumption and as such is much better aligned to meeting carbon budget requirements. This is demonstrated in the figure 2 above which is taken from the Carbon Budget Assessment work.

5.28 It is important to reiterate that these housing sector carbon budgets are derived from the legislated national carbon budgets, as set out in the Carbon Budget Assessment study. The carbon budget assumed available to new homes in this study depends on significant reductions in the emissions of existing homes,

beyond what will be delivered by electricity grid decarbonisation. If these reductions do not take place, Greater Cambridge's existing housing emissions would likely exceed the available carbon budget for the entire Greater Cambridge housing sector. It is therefore essential that new homes do not further add to the burden of remaining within these carbon budgets, which as can be seen from the above, would be the case if a 2023 WMS compliant policy approach were taken, amounting to a 15-22% exceedance of the available carbon budget for new housing with either a 2030* or 2050 target date. Local Plan policy must therefore require robust targets and metrics that truly result in zero carbon development in order to contribute towards meeting the legislated national carbon budgets, as is the case with policy CC/NZ, hence the need to deviate from the metrics proposed by the 2023 WMS.

* Cambridge City Council's current Climate Change Strategy includes a shared vision for Cambridge to be net zero carbon by 2030

5.29 As already covered, the proposed policy deals with all of the carbon associated with new buildings, therefore that associated with the energy needed for powering our homes and commercial buildings, as well as the carbon associated with the processes and materials used to construct those buildings, known as embodied carbon. Policy CC7 also gives consideration to what happens to materials at the end of a buildings life. All together this is known as whole life carbon. Currently, Building Regulations does not consider the carbon associated with construction, and this does not form part of the Future Homes Standard. However, this embodied carbon can make up 50% of a new buildings whole-life carbon footprint. Achieving full net zero carbon status requires us to reduce carbon emissions not just associated with energy use in buildings but also the carbon used to construct those buildings. Different building materials have varying amounts of energy required to make them. By encouraging the design and delivery of buildings with lower embodied carbon, we contribute to reducing carbon emissions at a global scale.

5.30 Reducing the upfront embodied carbon of a building does not necessarily mean higher capital costs. In promoting the reduction of upfront embodied carbon through good design and material efficiency, with reference to lean and circular

economy design, this approach can reduce capital costs through reducing wastage.

5.31 While there are a number of emerging 'best practice' approaches to embodied carbon, including the RICS Whole Life Carbon Assessment, the LETI Embodied Carbon Primer, RIBA Embodied and Whole Life Carbon Assessment for Architects and the pilot UK Net Zero Carbon Buildings Standard, there are no nationally defined 'targets' for reducing the embodied carbon associated with constructing new developments. A further challenge faced by industry is a lack of consistent measurement, leading to mis-aligned benchmarks, project targets and claims, although this will reduce over time as industry becomes familiar with set by industry bodies. Targets will only be useful once measurement is consistent. As such, at this stage, the recommended policy approach is that embodied carbon should be calculated and reported, with reference to best practice targets in the form of the UK Net Zero Carbon Buildings Standard. The thresholds for reporting identified in the policy have been amended in response to the recommendations from the Environment Audit Committee and Committee on Climate Change that whole life carbon assessments should be mandated for all buildings above a gross internal area of 1,000 m^2, or which create more than 10 dwellings, with local authorities encouraged and supported to include this requirement within their local plans ahead of the introduction of national planning requirements. This approach will be kept under review as the Greater Cambridge Local Plan progresses towards submission.

5.32 Assured performance is another important aspect of actually delivering on our net zero carbon targets, an aspect that is not currently considered by Building Regulations, leaving a considerable policy gap. It is well documented that there is a 'performance gap' in how our new building are designed to perform and how they actually perform. Work carried out by the Zero Carbon Hub between 2011 and 2014, revealed widespread evidence of a performance gap across all stages of the process of providing new homes. Without action, new development cannot be relied upon to play its part in achieving national carbon budgets. In response to this, the preferred option includes a requirement for new developments to utilise an Assured Performance process. This approach is

considered vital if growth in Greater Cambridge is to contribute towards net zero carbon. The preferred approach does not go as far as requiring the use of a specific Assured Performance scheme, leaving the choice of process to the developer. There are a number schemes available including NABERS UK, the National Energy Foundation's Assured Performance Process, The Building Energy Performance Improvement Toolkit developed by Bioregional and Passivhaus certification. A number of local planning authorities have already adopted or are looking to adopt similar policies to address the performance gap in their local plans, including Milton Keynes and Solihull.

5.33 In terms of the ability for local planning authorities to set policy requirements related to carbon associated with new buildings, legally, this is something that a Local Plan can do, a matter confirmed in January 2021, when government issued a response to its consultation on the Future Homes Standard. As part of the consultation, government had asked whether it should 'ban' local plans from going beyond Building Regulations. But having considered the responses received, it has decided not to and reconfirmed its position that Local Plans can set energy standards for new homes that go beyond Building Regulations. Further confirmation on this issue was sought by Bath and North East Somerset in the development of its Local Plan partial update, with a letter from DLUHC confirming that 'plan-makers may continue to set energy efficiency standards at the local level which go beyond national Building Regulations standards if they wish'. In the Inspector's report for the Cornwall Climate Emergency DPD, the Inspector noted at paragraph 167 that "The WMS of 25 March 2015 has clearly been overtaken by events. Nothing in it reflects Part L of the Building Regulations, the Future Homes Standard, or the Government's legally binding commitment to bring all greenhouse gas emissions to net zero by 2050. In assessing the Council's approach to sustainable energy and construction, the WMS of 25 March 2015 is of limited relevance. The Framework makes clear in paragraph 152 that the planning system should support the transition to a low carbon future in a changing climate".

5.34 In December 2023, a further Written Ministerial Statement "Planning – Local Energy Efficiency Standards Update" was published, which sought to restrict

local policies to requiring a percentage uplift of a dwelling's Target Emission Rate (TER), calculated using a specified version of the Standard Assessment Procedure (SAP). It should be noted that this is despite the Future Homes Standards consultation recommending an end to the use of SAP, with work currently underway to develop a new Home Energy Metric. In its report to Parliament in July 2024, the Climate Change Committee highlighted concerns over the 2023 WMS, noting that it would be "likely to cause further confusion and delays around adopting local Net Zero policies, which is a setback". Two pieces of open legal advice published by Essex Climate Action Commission and Essex County Council and Etude considers the legal approach to such policies in light of the 2023 WMS. They key headlines from this advice are that:

- The 2023 WMS does not prevent local plan policies based on energy-based metrics from being brought forward by local planning authorities or being found sound at examination.
- The 2023 WMS is policy guidance to which regard must be had, but from which deviation can be justified so long as there is clear evidence which provides the reason for doing so, and which demonstrates the viability of policies.

5.35 Additionally, as previously noted, since the WMS2023 two local plans have since examination with energy metric net zero policies like Greater Cambridge's draft. One of these, the Isle of Wight local plan, did not receive a favourable response from the Inspector but this appears to have been related partly to concerns over whether the estimated costs of the policy were sufficiently up to date and sufficiently accounted for in the viability assessment or the Isle of Wight's housing delivery challenges related to its unique geographical situation. However, the other – Tendring and Colchester Garden Community – received a positive response from the Inspector, whose final report (1st April 2025) included that (paragraphs 75 - 82):

- Acknowledgement that the policy goes beyond Building Regulations, both in the overall standard to be achieved and in the metrics used to demonstrate its achievement, and yet the policy was accepted

- "Whilst the WMS is a material consideration of significant weight, the Councils must prepare development plan documents that, in accordance with Section 19(1A) of the 2004 Act, include policies which contribute to the mitigation of, … climate change. Additionally, Section 1 of the Planning and Energy Act 2008 states that local … plans [may] impos[e] reasonable requirements for … energy efficiency standards that exceed … building regulations. Consequently … I am satisfied that [this] Policy … is appropriate and justified [having] been tested and demonstrated to be viable and is supported by a lead developer".

5.36 The energy based metrics set out in policy CC/NZ are underpinned by detailed technical evidence that has modelled the requirements on a range of development types, including three common types of residential development based on approved housing developments from across Greater Cambridge. The energy modelling for the different house types was undertaken using the Passivhaus Planning Package (PHPP). PHPP was developed to accurately model the energy performance of very low energy buildings and has been shown by post occupancy studies in the UK and Europe to be generally accurate at predicting future energy use. This is in contrast to SAP and SBEM which were not developed to predict future energy use and hence do not deliver accurate results in this respect, having been developed primarily as tools to show compliance with building regulations. The house types modelled included a semi-detached house, terraced house and block of flats. Costing analysis was also undertaken by Currie and Brown, looking at the extra over costs of the policy compared to Building Regulations requirements, with these costings integrated into the wider viability work for the Greater Cambridge Local Plan. This costing analysis has now being updated to reflect the new baseline of today's Building Regulations (Part L 2021, in force since mid-2022) and today's costs. This shows that the percentage uplift from the base build costs for achieving Part L 2021 vary from between 3% for a school to 7% for terraced housing. These updated costs have been fed into the latest iteration of the local plan viability assessment.

5.37 Achievement of net zero carbon operational emissions requires consideration of all energy used in new developments, with performance assured across three

separate aspects, namely energy efficiency, low carbon heating and renewable energy. Use of the Part L framework and the target emission rate approach promoted in the 2023 WMS, and indeed the Future Homes Standard, only consider regulated emissions, and do not address emissions from equipment and appliances (unregulated emissions). In this respect, they overlook up to approximately 50% of energy consumption. They also rely on modelling that does not predict actual energy use, with no feedback on whether buildings have been successful in achieving the required level of carbon reduction. This limited scope is in addition to their general inaccuracy as previously noted. They therefore have limitations in their effectiveness and measurability in achieving true net zero carbon developments. The energy-based metrics and predictive energy modelling approach enshrined in policy CC/NZ is designed to be more transparent, effective and easier to monitor as it is based on measurable outcomes rather than theoretical discussions. The policy's proposed metrics are also the same metrics used in the UK Net Zero Carbon Buildings Standard, developed by a consortium of built environment organisations including the Better Buildings Partnership, BRE, Carbon Trust, CIBSE, The Institute of Structural Engineers LETI, RIBA, RICS and the UK Green Building Council and launched in September 2024.

5.38 Energy-based metrics have already been adopted by a number of Local Planning Authorities in their development plan documents, including Cornwall Councill's Climate Emergency DPD, Bath and North East Somerset's Local Plan, Central Lincolnshire's Local Plan and Greater Manchester's Joint Development Plan Document. Since the publication of the 2023 WMS, an energy metric-based policy in the Tendring Colchester Borders Garden Community Development Plan Document has been successfully defended at examination, with only minor modifications to the policy. This policy includes the same energy metrics as those contained in policy CC/NZ, namely space heating demand, energy use intensity and a requirement of onsite renewable energy generation to match or exceed the total energy consumption.

5.39 The main changes to the policy since the publication of the first proposals document relates the integration of the 2030 UK Net Zero Carbon Buildings

Standard (UKNZCBS) Energy Use Intensity targets for some building types (see below), a reduction in size threshold of developments needing to carry out Whole Life Carbon Assessment and clarification on the methodology to be used to demonstrate policy compliance.

5.40 It has been considered whether there would be a rationale for the policy to specifically require conformance to the new UKNZCBS – a new voluntary standard developed by a coalition of relevant standard-setting built environment bodies including RICS, CIBSE, BRE, IStructE, UKGBC, Carbon Trust, BBP, LETI and RIBA. Regarding this, a consultant team was appointed to explore the question of whether this would bring benefits compared to the standard set by the draft CC/NZ policy. This was the same consultant team that produced the previous evidence base for Greater Cambridge. In summary, the UKNZCBS represents a valuable new consensus on what energy efficiency and renewable energy requirements for net zero, in various types of building, however there are some considerations that may limit the suitability for full adoption into a local plan policy. These include:

- The UKNZCBS targets change over time (tightening each year) which could lead to confusion about which year's targets should be used for each respective development.
- The UKNZCBS only verifies conformance from a full year of in-use data, which is beyond the point when local plan policy implementation has influence (planning permission is granted well before construction commences, and developers typically need conditions to be discharged before sale or lease of the completed buildings)
- Despite the name, the UKNZCBS does not necessarily make all buildings net zero carbon, in the sense the onsite renewable generation may not equal the energy use of the building. Instead it refers to being compatible with the UK's trajectory to net zero carbon at national level (rather than on an individual building basis). In taller or more energy-hungry buildings, the renewable energy generation targets set by the UKNZCBS would not be enough to match their energy use, meaning they would not be net zero.

5.41 In the Greater Cambridge draft policy, energy offsetting is mandatory and makes up any onsite renewable shortfall, such that an energy balance is achieved and would have to be met via delivery of additional offsite renewable energy either directly or via contribution to the Council's offsetting fund. In the UKNZCBS offsets may be used to complement, but not replace, the mandatory elements of the Standard, and may be used to achieve net zero carbon at the asset level. This voluntary approach is defined by the term 'Net Zero Carbon Aligned Building (plus offsets)' within the UKNZCBS. In the NZCBS carbon offsets are used rather than energy offsets. The offsets relate to a much wider scope including upfront embodied carbon, operational energy and refrigerant leakage. Offsetting in the NZCBS must be achieved via ICROA endorsed voluntary carbon market standards, ICVCM Core Carbon Principle-labelled credits or through specific types of renewable procurement.

5.42 Given the limitations, it was recommended that Greater Cambridge are selective over which policy criteria align with the UKNZCBS. This can be summarised as follows:

- Align all non-residential building types (with exception of schools) with the 2030 EUI targets in the UKNZCBS. This encompasses the building types that were not specifically assessed by the Greater Cambridge feasibility and cost uplift modelling.
- Residential and school building types will not align with UKNZCBS as EUI targets are already towards the more ambitious end of those proposed by the UKNZCBS and have been costed as part of the Greater Cambridge feasibility and cost uplift modelling.
- Refrigerant requirements from UKNZCBS will not be adopted, as this forms part of a building's embodied carbon emission. Currently the Greater Cambridge Spatial Plan only considers operational energy emissions.
- Heat network criteria from the UKNZCBS will not be adopted as this would only be impactful as qualifying criteria for a policy requiring a connection to a heat network, which GCSP draft plan does not include.

5.43 We have not gone as far as setting requirements for all new homes to achieve Passivhaus status and are also moving away from setting a specific BREEAM requirement for new non-residential development. We have not found any test cases about whether national policy would or would not allow us to set construction targets such as Passivhaus for new homes. For non-residential development, the targets set in this policy are such that they exceed current BREEAM requirements, although developers may still choose to use BREEAM, or standards like Passivhaus, to meet the assured performance aspects of the policy. Wider policies in the Local Plan will cover many of the other topics considered in BREEAM assessments, such as sustainable drainage, water efficiency, biodiversity net gain and environmental health requirements. We have also been mindful of the costs of meetings some of these construction standards, money which we consider could be better spent on the measures needed to deliver net zero carbon buildings. The metrics proposed within the policy also are much simpler than those utilised by the BREEAM assessment and will help to drive down energy use.

Response to main issues raised in representations

5.44 With regards to the calls to set specific targets for embodied carbon, while there are a number of 'best practice' approaches to embodied carbon, including the RICS Whole Life Carbon Assessment, the pilot UK Net Zero Carbon Buildings Standard, and the LETI and RIBA 2030 targets for embodied carbon, there are no nationally defined 'targets' for reducing the embodied carbon associated with constructing new developments. A further challenge faced by industry is a lack of consistent measurement, leading to mis-aligned benchmarks, project targets and claims. Targets set via planning policy will only be useful once measurement is consistent. However, there is a consensus best practice accepted approach to assessing whole life carbon including embodied carbon: the RICS Whole Life Carbon Assessment (WLCA). RICS WLCA expresses how to implement the relevant British Standard (EN15978). RICS WLCA splits up the whole life carbon into 'modules' from A0 to C4. The 'A' modules are upfront embodied carbon (up to completion of the building), 'B' modules are in-use, and 'C' modules are end of life. Recommended best practice targets to be achieved

in the ‘A’-modules have been proposed within the newly released UK Net Zero Carbon Buildings Standard (developed by a coalition of effectively all the relevant standard-setting bodies in the UK built environment industry, released in pilot form in Autumn 2024). These UKNZCBS targets are available for new build and retrofit, for a wide range of building types. The UKNZCBS pilot states intent to also provide equivalent targets for life-cycle embodied carbon (which would include all modules from A to C except the parts of the B-modules that relate to operational energy and water use).

5.45 In relation to objections that the setting of targets related to net zero carbon should be left to Building Regulations, the Planning and Energy Act enables LPA’s to set targets in advance of Building Regulations. The 2023 WMS does not rule out local planning authorities being able to set local energy efficiency targets that go beyond current or future Building Regulations but notes that to be found sound these must have a well-reasoned and robustly costed rationale, as detailed above. And while the WMS does suggest that metrics should be expressed as a percentage uplift on Target Emission Rate (TER), legal advice procured by Essex County Council and Etude notes that while the WMS is policy guidance to which regard must be had, deviation from its guidance can be justified as long as there is clear evidence which provides the reason for doing so, and which demonstrates the viability of policies. The Council’s net zero carbon evidence base provides evidence to demonstrate that achievement of the policy requirements is both technically feasible and viable. Furthermore, similar energy metric based policies have been considered at examination and found sound, most recently in the Tendring Colchester Borders Garden Community Development Plan document.

5.46 With regards to the need to consider the decarbonisation of the grid, this has been considered in the development of the policy. It was deemed necessary for new developments to contribute to total energy use due to the significant expansion of renewable energy that will be required nationally to support grid decarbonisation. Reliance on the Future Homes Standard would only require new homes to be ‘zero carbon ready’, leaving further carbon reduction to achieve net zero carbon to home owners and the decarbonisation of the grid, further

adding to the retrofit burden and the 28 million homes in the UK already needing retrofit to achieve net zero carbon by 2050. Such an approach would also exceed the housing sector carbon budget for Greater Cambridge, required to ensure that the area plays its fair share in achieving the legislated national carbon budgets. Work is currently underway to develop a Local Area Energy Plan for Cambridgeshire, which will consider the infrastructure required to achieve net zero carbon by 2050 and the costs of this infrastructure. This will help to set out the scale of the challenge in meeting net zero carbon and the importance of ensuring that all of the energy requirements of new development are kept at an absolute minimum. A report carried out by the Aldersgate Group has already highlighted that that without significant investment, the UK's electricity grid will become significantly constrained from 2030 as the economy electrifies. While the Aldersgate report is focussed on industrial electrification, it highlights the need to ensure that new development utilises new energy metrics to deliver low energy buildings, helping to reduce peak demands on the grid.

5.47 While the Objections related to the need for targets to be set for existing buildings are noted, policy in the local plan is focused on new development, with many of the areas required to retrofit or refurbish existing homes being covered by permitted development rights. Planning can also only be concerned with the proposals for which planning permission are sought, so for example, if planning permission for an extension is sought, it is not possible to use planning conditions to require improvements to be made to the rest of the property in order for a net zero carbon target to be achieved. The UK Net Zero Carbon Buildings Standard does include energy use intensity targets for retrofits, becoming more challenging over time, the use of which could be encouraged via local plan policy. But the standard does not yet include space heating demand targets for retrofit, which are to be added over time as the standard develops beyond the initial pilot phase. As such the setting of specific targets for retrofit would be a complex task requiring significant modelling of different housing architypes to determine what could be considered technically feasible and viable targets to reflect the variety of typologies of existing buildings. A better solution would be for Building Regulations to be updated to require Consequential Improvements for the existing building stock given that most retrofit measures

are covered by Building Regulations requirements. The issue of the need to promote the adaptive reuse instead of the demolition of existing buildings has been incorporated into policy CC/CE (Supporting a Circular Economy and Sustainable Resource Use).

5.48

5.49 With regards to representations suggesting that the space heating demand should be amended to 15 kWh per m2 instead of 15-20, the levels set in the policy is in line with the recommendations of the Committee on Climate Change. In addition, it allows for some flexibility for those house types where achievement of a strict space heating demand of 15 kWh per m2 could be more challenging, for example bungalows and detached dwellings.

5.50 Some representations called for flexibility in the application of targets for specific building types, notably research and development buildings. It was decided that all non-residential building types (except schools) should align with the UKNZCBS 2030 EUI targets. Current Greater Cambridge policy already includes a “where feasible” clause for non-residential targets (excluding schools). It has also been suggested that a “where viable” clause should be added in as a further caveat, to account for the fact that there is limited evidence to demonstrate whether there will be a cost uplift to meet these targets that could impact viability. Reference to viability has now been added to the policy wording, alongside the existing reference to technical viability.

Further work and next steps

5.51 Review the comments received on the draft Local Plan prior to preparing the proposed submission version, alongside any further evidence or changes to national or local policy.

6. Policy CC/WE: Water efficiency in new developments

Issue the plan is seeking to respond to

6.1 Greater Cambridge is one of the driest areas in the UK and evidence has shown that existing abstraction is causing environmental problems, particularly for the area's rare chalk streams. As a result, the Environment Agency are reducing abstraction by making changes to licences that will prevent further deterioration and lead to environmental improvements. These abstraction reductions have been taken into account in Cambridge Water's Water Resources Management Plan (WRMP24) (2025), which sets out ways to reduce the demand for water and increase supply through new sources of water. New water resources are planned, including the Fens Reservoir, and a range of other water saving measures are also being explored by the Cambridge water Scarcity Group. It remains vital that our new buildings are as water efficient as possible, therefore the local plan needs to set appropriate standards.

How was the issue covered in the First Proposals Consultation?

6.2 A policy approach was proposed in the First Proposals consultation. The Proposed approach and full representations received can be viewed Policy CC/WE: Water Efficiency in New Developments.

6.3 The First Proposals was supported by topic papers, which explored the context, evidence and potential alternatives and the preferred approach in greater detail. This can be viewed Climate Change: Topic Paper.

Policy Context update

National Planning Policy Framework (NPPF, December 2024)

6.4 The updated NPPF (2024) includes an amendment to Paragraph 161, which now states, '[the] planning system should support the transition to net zero by 2050 and take full account of all climate impacts including overheating, water

scarcity, storm and flood risk and coastal change'. The change highlights that, in planning for climate change, water scarcity is an issue that needs to be considered.

Water Scarcity Group

6.5 In 2022, the Environment Agency raised concerns about the impact that water abstraction was having on the quality of Cambridgeshire's chalk streams, and whether there would be a sufficient supply of potable water to support the delivery of new development in the Greater Cambridge area. In response to the issue, the Government established the Water Scarcity Group in 2023 – a working group that includes, amongst others, central government departments, the Environment Agency, Cambridge Water, and the Greater Cambridge Shared Planning Service.

6.6 Central Government published two written ministerial statements regarding water scarcity in Greater Cambridge in March 2024:

- The Joint Statement on Addressing Water Scarcity in Greater Cambridge (published by the Department for Levelling Up, Housing and Communities (DLUHC), the Department for Environment Food and Rural Affairs (DEFRA), the Environment Agency and the Greater Cambridge Shared Planning Service).
- Addressing Water Scarcity in Greater Cambridge: Update on Government Measures (published by DLUHC and DEFRA).

6.7 The written ministerial statements demonstrated a joint commitment to continue to develop a workable, effective way of unblocking planning applications and delivering sustainable water resources. The Joint Statement highlighted that the Government would be working with Cambridge Water to produce a Water Resource Management Plan (WRMP) to support the growth aspirations for Cambridge, whilst also managing the environmental impact of the water demand from new development. The Water Scarcity Group continues to meet on a regular basis showing an ongoing commitment to tackling the issue.

Written Ministerial Statement (19 December 2023)

6.8 A Written Ministerial Statement in 2023 specifically referred to Cambridge and the issue of water scarcity. It reads:

- 'I am also announcing that we will review building regulations in Spring next year to allow local planning authorities to introduce tighter water efficiency standards in new homes. In the meantime, in areas of serious water stress, where water scarcity is inhibiting the adoption of Local Plans or the granting of planning permission for homes, I encourage local planning authorities to work with the Environment Agency and delivery partners to agree standards tighter than the 110 litres per day that is set out in current guidance.'

Regional Water Resources Plan for Eastern England (December 2023)

6.9 Water Resources East (WRE) co-created the first Regional Water Resources Plan for Eastern England with a wide range of stakeholders. The plan recognises that the region faces significant water resource challenges as a result of climate change affecting weather patterns, population growth and significant environmental pressures in the form of abstraction licence reductions and ambitious Environmental Destination outcomes to ensure the environment is protected for future generations.

6.10 The plan is multi-sector and looks not only at public water supply, but also other major water users such as the agriculture and energy sectors. It focuses on ways to reduce water demand through leakage reduction, the introduction of smart metering, and water efficiency policies, and also the development of new sustainable water sources including two new reservoirs (the Lincolnshire and Fens reservoirs) and the possible use of desalination. A second round of regional planning has been confirmed.

Cambridge Water - Water Resources Management Plan 2024 (March 2025)

6.11 Cambridge Water – the water company that covers the Greater Cambridge area – published their Water Resources Management Plan (WRMP) in March

2025. A WRMP outlines how the company will ensure a reliable and sustainable water supply for the next 25 years and is updated every 5 years. The plan is aligned with the regional plan and refers to working with Water Resources East and the Water Scarcity Group in the development of the plan.

6.12 The plan looks at how to balance the demand and supply of water. Recognising the Government's focus on developing Cambridge's capacity as a leader in research and development and delivering a substantial number of homes to support this economic growth, the WRMP has tested a number of future development scenarios to identify suitable demand management and supply options. The preferred supply-side options outlined by the WRMP include transfer from Anglian Water's grid via a new pipeline, transfer of potable water from the forthcoming Fens Reservoir, and the Milton Wastewater Treatment Works effluent reuse.

6.13 Throughout the WRMP, 'engagement with developers to incentivise them to build more water efficient homes and estates' is recognised as a pathway to improving the efficiency of water resource use and improving the built environment's resilience to drought events.

The Environment Agency's Planning and Water Toolkit

6.14 The Environment Agency have prepared a Planning and Water Toolkit to assist local planning authorities within the Oxford to Cambridge Arc as the area is one of the most water-stressed areas in the country. The toolkit provides guidance on the creation of planning policy around various aspects of water in placemaking, including water efficiency in new development.

The National Framework for Water Resources, June 2025

6.15 This sets out the current and future pressures on England's water resources and highlights the challenges faced around continued, reliable access to water and the need to protect and improve the water environment.

Summary of issues arising from First Proposals representations

6.16 There was strong support for the policy direction from a range of public bodies and individuals. Many representations expressed concern about the level of water stress in the area and damage to chalk streams and stated that there should be a limit on growth if there is insufficient water or until further water supply is available. The Environment Agency and Natural England identified that the Water Cycle Study will need to demonstrate how water to meet growth needs will be supplied sustainably. Other comments related to the need for collaborative working, and that there will be more detail about this future supply in the Water Resources Management Plans being produced by the water companies.

6.17 There was support for the proposal to require high water efficiency standards, noting the potential of rainwater harvesting and greywater recycling to achieve these. However, there were also representations from developers saying that 80 litres per person per day is unrealistic and would have an impact on the viability of developments, and that the Building Regulations level of 110 litres should be used. Some representations from developers and landowners highlighted some of the potential problems with rainwater harvesting and greywater recycling such as maintenance issues, where there is limited roof collection (such as flats) and that rainwater is limited in this part of the country. There were some suggestions on the policy wording. For example, whether the standard would apply to all sizes of developments, if BREEAM is the right tool to use for non-housing developments and is the term “unless demonstrated impracticable” too weak, giving developers a let-out. The Environment Agency stated that to ensure the policy is effective, further guidance would be needed regarding the evidence applicants would be expected to submit to demonstrate that this standard has been achieved and how this would be monitored.

6.18 Further detail, including where to view the full representations and who made each representation, is provided in the Consultation Statement.

Government Consultation: Water Efficiency Standards: a review of Building Regulations 2010 Part G2, September 2025

6.19 Government consultation proposes to strengthen Water Efficiency Standards in the Building Regulations 2010, Part G, to require tighter standards in new homes. It includes an option to revise the: Water Efficiency Standard in new homes from 125 litres per person per day to 105 litres per person per day; and Optional Technical Standard from 110 litres per person per day to 100 litres per person per day. It also seeks to gather more information on enabling water reuse systems in new developments to enable even greater water efficiency in homes.

New or updated evidence

Cambridge Area Water Supply Evidence Report 2025

6.20 Working with the Water Scarcity Group, the Councils commissioned a report to explore the water demand and supply impacts of the emerging Local Plan. The report confirms that with the new planned supply interventions there will be supply available for the plan period up to 2040. There is a likely water deficit in 2040 when further abstraction reductions are planned, but though adaptive water planning and further infrastructure there is scope to plan ahead to address those water needs though the water industry planning process. However, the report highlights the significant impact water saving planning policies could have on supply requirements over the plan period.

Future Homes Hub – Water Ready: A Report to inform HM Government's Roadmap for Water Efficient New Homes (April 2024)

6.21 The Future Homes Hub was asked by the Department for Environment, Food and Rural Affairs (Defra), to support them with the creation of a roadmap towards greater water efficiency in new developments. This also included directly inputting into the Government's Environmental Improvement Plan (2023) – a 10-point action plan that forms part of the Government's Plan for Water. The Future Homes Hub were asked to prepare a report to outline detailed recommendations for the delivery of the Government's action plan,

including recommendations for the setting of long-term directions for water efficiency.

6.22 The Future Homes Hub reviewed various aspects of water in planning and development, including the current interplay between local planning policy and the current Building Regulations 2010. The water efficiency calculator included in Part G of The Building Regulations 2010 is reviewed within the Report and The Future Homes Hub asserted that the current calculation method does not remotely reflect real-life water use practices and property performance. Consequently, the Report provided the following recommendation to Government:

- ‘That the current Part G water efficiency calculator compliance regime is retained as a Building Regulation conformance tool but is in future only used to support and encourage the modelling of performance levels that achieve savings beyond the water fittings baseline. The calculation method must, however, be revised to improve accuracy and water targets adjusted accordingly.’

6.23 On review of the interplay between local planning policy and water efficiency requirements within the Building Regulations 2010, the Future Homes Hub recommended that, amongst other reforms to national requirements:

- ‘[to] reflect the needs of those areas where water scarcity is inhibiting the adoption of Local Plans or the granting of planning permission for homes the Building Regulations need to specify that developers should achieve agreed better levels of water efficiency in those areas.’

6.24 To ensure that water efficiency improvements can be reasonably accommodated as part of national growth, the Report sets out a roadmap for incremental improvements on the litres per person per day (LPPPD) requirements for new development. From 2025, the Report sets out 100

LPPPD in water stressed areas and 90 LPPPD in seriously water stressed areas, and these are further reduced in 2030 and 2035.

6.25 Table 3 of the report sets out contender specifications to achieve different levels of LPPPD. The table sets out the various fixtures and fittings to achieve the levels and identifies whether these products are available now, whether any water reuse would be needed and the extra cost.

6.26 The report recommends that a single national framework of standards should be set through Building Regulations which is related to the local degree of water stress and that there should be no option for local authorities to specify higher standards than the Building Regulations. The report refers to the future relationship between Building Regulations and the Mandatory Water Efficiency Labelling Scheme (MWELS) which will provide consumers with a ready way of understanding the water efficiency performance of fittings and appliances.

Water Reuse in New Housing – Understanding the Business Case (2024)

6.27 The Chartered Institute of Water and Environmental Management's (CIWEM) study reviews the costs of installing individual property or community-scale water reuse installations in new housing development. This was achieved by sourcing capital cost information from appropriate parts of the supply chain (water companies, treatment suppliers, plumbers) on the main components of water reuse installations: external pipework, storage and treatment equipment and internal pipework. The Report recognises that water reuse represents a beneficial approach to enhancing resilience to climate change, particularly where councils are challenged by water stress and the need to unlock low levels of water consumption in new developments. Whilst there is scope to extend the study's scope and database, the Report provides helpful indicative cost information for the various aspects of water reuse installations.

6.28 The types of water reuse considered were rainwater harvesting (rainfall from roofs), stormwater harvesting (rainfall from roofs and other hard surfaces such as pavements) and greywater recycling (water from sinks, showers,

baths, washing machines) and treating it for uses other than for human consumption (known as non-potable) such as toilet flushing and watering gardens. The study found that community-scale stormwater reuse is more cost-effective than on-plot installations, even for smaller scale developments (40 and 50 homes), costing on average £1,500 - £3,400 capital cost per plot over and above conventional potable supply. In developments of over 100 units, community-scale stormwater reuse is costed in the region of £2,000 per unit.

6.29 Greywater reuse is more costly at all scales, but more data is needed to reduce uncertainties and to establish whether on-plot or community-scale installations are more cost effective. The study gives an indicative cost of around £4,000 per unit.

6.30 For both reuse approaches at community-scale, there was a significant fall in costs with development size up to around the 100-unit mark, which then plateaued at this lower level. Therefore, it is reasonable to infer that the water-saving benefits of employing community water reuse are most evident for sites of 100 units or larger. In addition, higher density sites yielded the lowest costs overall linked to the reduced length of external pipework.

Shared Standards in Water Efficiency for Local Plans (June 2025)

6.31 The Shared Standards set out an agreed position by the Environment Agency, Natural England, WRE and several water companies (including Cambridge Water) for water efficiency levels that could be set in Local Plan policies for new development in the East of England. These are below the optional Building Regulations (Part G) standard of 110 litres per person per day (l/p/d). The standards are up to 85 l/p/d for residential developments and for non-household buildings full credits in the BREEAM water calculator. The standards provide guidance and local evidence to help Local Planning Authorities to make a case for more stringent water efficiency policies that are justified and viable. The importance of Water Cycle Studies to add to this evidence is stressed.

6.32 The Shared Standards recognise the importance of water reuse through rainwater harvesting and grey water recycling but discuss the current challenges for residential developments. The Water Supply (Water Quality) Regulations 2016 requires water supplied by companies to be 'wholesome' if supplied for 'domestic purposes', which is usually interpreted as meaning that water recycling cannot be supplied by water companies for domestic purposes. Private suppliers can use recycled water for toilet flushing, provided human health is not jeopardised and notification is provided and approved. As a result, the Shared Standards at this stage does not rely on reuse for household development purposes and the 85 l/p/d is based on the design standards of fixtures and fittings. A table illustrating water efficient fixtures and fittings widely available on the market is provided in Appendix C2 indicating how 85l/p/d could be achieved. Reference is also made to a policy adopted in the Crawley Borough Local Plan for 85 l/p/d which amongst other measures such as water credits will be used to achieve water neutrality in an area of Sussex North. Crawley's research suggested that to achieve this level by a fittings-based approach would cost between £349 and £431 per dwelling.

Additional alternative approaches considered

6.33 No additional alternative approaches identified.

Draft Policy and reasons

6.34 The draft policy can be viewed in the Draft Local Plan: Link to the draft plan policy.

6.35 It is recognised by the Government that Greater Cambridge is an area of serious water stress and to address this issue the Cambridge Water Scarcity Group was created. The Regional Water Plan has looked at strategic solutions to deliver a sustainable water supply based upon demand management and new strategic supply in the form of a water transfer and new reservoir to serve Cambridge Water. This has been taken forward in

Cambridge Water's WRMP. The Local Plan Strategy Topic Paper looks further at how the growth proposed in the Local Plan can be supported by a sustainable water supply.

6.36 Policy CC/WE is seeking to achieve the delivery of development that is highly water efficient. The 2023 Written Ministerial Statement allows Local Plans to go below the water efficiency requirements set out in Part G of the Building Regulations 2010 and this is re-enforced by the Shared Standards in Water Efficiency for Local Plans (2025), which advises lower levels in Local Plans in the East of England.

6.37 It is recognised that there are currently difficulties with the use of water recycling for housing developments due to the 'wholesome water' requirement. However, it is anticipated that this will be addressed by central Government in the near future and, therefore, the Local Plan's water efficiency requirements should be future proofed by recognising the potential for the use of rainwater/stormwater harvesting and greywater recycling in both non-housing and housing developments. In Greater Cambridge, there are already examples of housing schemes that use rainwater harvesting at Eddington, Knights Park and Virido and have a design target of 80 l/p/d.

6.38 Research in the CIWEM's 'Water Reuse in New Housing' report suggests that rainwater harvesting is most cost effective at a community scale and grey water recycling is more expensive. The study indicates that there is a significant fall in costs for water reuse approaches in developments of at least 100 units. Based on this evidence, the policy requires a very efficient level of 80 l/p/d for housing developments comprising 100 units or more. In Greater Cambridge, there are schemes that were designed to the 80 l/p/d water efficiency level as this was the previous highest water efficiency level outlined in the Code for Sustainable Homes. The policy does not prevent developers going below this level and encourages this to encourage further water saving and innovative schemes.

6.39 For housing developments of less than 100 homes, a range of between 90 and 100 l/p/d has been developed from an analysis of levels of water efficiency being achieved on recently approved planning applications across Greater Cambridge, as well as the advisory report prepared by the Future Homes Hub to inform the Government's roadmap for water efficient new homes. The contender specifications included in Table 3 of the Future Homes Hub Report include specifications to achieve both 100 l/p/d and 90 l/p/d based on water efficient fittings, with the extra cost of these measures ranging from £350 for achievement of 100 l/p/d to £750 for 90 l/p/d (without water reuse). The Councils are aware of the 85 l/p/d water efficiency level being recommended by the Shared Standards Report, but this is based on limited information related to suitable specifications; it is considered that further work is needed to test whether the fittings suggested in the Shared Standard Report are feasible in terms of their applicability to all housing types. Again, developers are encouraged to go below the water efficiency levels specified in the policy where possible.

6.40 The current Cambridge Local Plan requires full credits for category Wat 01 of BREEAM for non-residential developments. It is proposed to take forward this high level of water efficiency for the whole of Greater Cambridge due to the significant water stress experienced by the region. The aim of the water efficiency policies should be to achieve as high a level of water efficiency as possible, thus full credits is the preferred option to take forward as part of the new Local Plan.

6.41 This area of policy is fast moving, and a review of Building Regulations is already underway. The introduction of Mandatory Water Efficiency Labelling is expected, and a resolution of the 'wholesome water' issue that will allow water reuse in housing developments. The Future Homes Hub report recommended that the level of water efficiency should be set by Building Regulations and that Local Planning Authorities should not have the ability to set lower levels after a new national framework that more accurately reflects real-life water practices and water efficiency needs is set. Therefore, if the Government changes national policy or regulatory standards to reflect the

Future Home Hubs recommendations, the policy may have to be amended before the Local Plan is submitted.

6.42 At present, the Councils do not consider the proposed revision to the optional Building Regulations standard goes far enough to reflect the scale of issues facing the Greater Cambridge area or the opportunities to save water though development. The government consultation seeks views on more stringent standards which are more in line with our policy proposals. Until national standards respond with more stringent water efficiency standards, there remains justification for a local policy.

Response to main issues raised in representations

6.43 Support for the policy direction was noted. There were concerns about growth and the impact it is having on the environment. Housing and employment growth targets are based on the standard method, as set out as a requirement by Chapter 5 of the NPPF (December 2024). The councils acknowledge that significant growth in the area raises serious considerations with regards to sustainable water supply and water infrastructure. The councils agree that partnership working with Government bodies, local water authorities and landowners will be integral in ensuring sustainable water supply for both existing and future communities. This issue and how it is being addressed in the overall Local Plan strategy is addressed in the Strategy Topic Paper.

6.44 The standards proposed are achievable and viable. The approach reflects evidence that the cost effectiveness of such measures can improve with the scale of the project. This cost effectiveness of community scale measures, particularly for rainwater harvesting, was also shown in the CIWEM's 'Water Reuse in New Housing' report. As a result the policy includes a more stringent water efficiency level for larger developments where community scale measures for water recycling could be implemented in addition to water efficient fixtures and fittings.

6.45 Cost of implementing the propose standard has been accounted for the in Local Plan Viability Assessment.

6.46 BREEAM is an industry standard certification scheme to assess the environmental performance of buildings. This standard is in the current adopted Local Plan policies and has been practical to use and it is also used in the Shared Standards. As such it seems an appropriate tool. The wording 'unless demonstrated impracticable' allows for some flexibility depending upon the exact circumstances, but the onus is on the developer to demonstrate within the Sustainability Statement the reasons why the full BREEAM credits required in the policy would not be achievable.

6.47 It is agreed that the Local Plan should be clear as to how the Councils wish to see water efficiency details presented as part of a planning application. The policy is clear that details about how the water efficiency levels have been achieved should be submitted as part of a Sustainability Statement.

Further work and next steps

6.48 Review the comments received on the draft Local Plan prior to preparing the proposed submission version, alongside any further evidence or changes to national or local policy.

7. Policy CC/IW: Integrated Water Management, Sustainable Drainage and Water Quality

Issue the Plan is seeking to respond to

7.1 Water is a critical resource for both the built and natural environment, but rising average global temperatures are placing an additional strain on water resources and present environmental challenges for the built environment. The Advice Report to the UK Climate Change Risk Assessment (CCRA3) identifies water scarcity issues and declining water quality as climate risks with the ability to impact food security and human health.

7.2 Integrated Water Management (IWM) is a holistic approach to water management that considers water supply, wastewater, flood risk and water quality in a coordinated way with the aim of ensuring the long-term sustainability of water resources and ecosystems. It is key that IWM is considered at an early stage in the design process of a new development. This includes the use of sustainable drainage systems (SuDS), which help to emulate the benefits of natural drainage systems and collect, store, slow and treat the quality of surface water to mitigate the impacts of development on run-off rates, volumes and water quality.

How was the issue covered in the First Proposals Consultation?

7.3 This policy originally formed part of the policy direction for Policy CC/FM in the First Proposals. The policy direction for Policy CC/FM has been divided into two policies to keep the length of the policies manageable: Policy CC/IW, which focuses on matters of Integrated Water Management, water quality and sustainable drainage; and Policy CC/FM, which focuses on flood risk management. The original policy approach can be viewed, alongside full representations made regarding the policy, using the following link: Policy CC/FM: Flooding and Integrated Water Management.

7.4 The First Proposals was supported by topic papers, which explored the context, evidence and potential alternatives and the preferred approach in greater detail. This can be viewed Climate Change: Topic Paper.

Policy Context update

National Planning Policy Framework (NPPF, December 2024)

7.5 The National Planning Policy Framework (NPPF) highlights that the planning system should take full account of all climate impacts, including issues of water scarcity and the management of flood risk. For planning policymaking, the strategic importance of water resource management is conveyed by Paragraph 20 (b) of the NPPF, which notes that strategic policies should provide an overall strategy for the infrastructure for 'water supply, wastewater, flood risk and coastal change management'.

7.6 However, planning policy must also recognise the complex relationships between the built and natural environment. Paragraph 187 (e) of the NPPF states that planning policies should contribute to the natural environment by:

- 'preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans.'

- Various bodies have advocated for the recognition of SuDS as critical to the success of integrated water management solutions (e.g. the Chartered Institute of Water and Environmental Management in their SuDS Policy Position Statement). Such a stance is supported by national planning policy. Paragraph 164 (a) of the NPPF highlights that green infrastructure and sustainable drainage systems should be used to ensure that new development avoids 'increased vulnerability to the range of impacts arising from climate change'.

Flood Risk and Coastal Change PPG (2022)

7.7 The Flood Risk and Coastal Change PPG was updated in 2022. It provides additional guidance on the role that SuDS can play in managing various types of flooding and the importance of adopting multifunctional, integrated approaches to water management.

Committee on Climate Change (2022). UK Climate Change Risk Assessment 2022 (CCRA3)

7.8 The Climate Change Act 2008 requires the Government to undertake an assessment of the risks of climate change on the UK every five years. The Technical Report for the third Climate Change Risk Assessment (CCRA3) identified sixty-one climate risks across a range of sectors such as food and water, weather and climate events, public health, and impacts to services and key infrastructure.

7.9 Water management is critical to a range of priority risk areas identified by CCRA3, such as risks to the viability of terrestrial and freshwater habitats, risks to soil health due to flooding and drought, risks to crops, livestock and commercial tree plantations. Reducing water pollution, restoring the water environment, and using nature-based solutions to manage flooding and drought events are identified as strategically linked responses to safeguarding water availability for food production, drinking water, and the health of carbon sinks.

7.10 The Flooding and Coastal Erosion climate risks were identified by the Technical Report for CCRA3 as areas where more action was needed. The Report highlights that surface-water flooding is the most widespread form of flooding in England. In response to the issue, CCRA3 notes that integrated water management solutions were needed to ensure that flood risks can be managed holistically:

7.11 ‘Using the power of nature is part of our solution to tackling flood and coastal erosion risks. The government is taking a holistic approach to flood risk

management including encouraging more natural flood management where appropriate, alongside engineered defences.'

Surface Water Planning Guidance (2025)

7.12 In May 2025, Cambridgeshire County Council, in its capacity as the lead local flood authority, published supplementary planning guidance on drainage systems and the design of SuDS. The SPD includes technical guidance on the drainage hierarchy and its application in a Cambridgeshire context, attenuation volumes and hydraulic calculations, Drainage Plan requirements, and management and maintenance arrangements. The SPD also provides a series of example surface-water drainage conditions that can be used or adapted by the Local Planning Authority for inclusion as part of a decision notice for the proposal.

Cambridgeshire's Water Scarcity Group

7.13 In 2022, the Environment Agency raised concerns about the impact that water abstraction was having on the quality of Cambridgeshire's chalk streams, and whether there would be a sufficient supply of potable water to support the delivery of new development in the Greater Cambridge area. Data provided by the Environment Agency highlights that only one of the water bodies in Greater Cambridge achieved "good" status in accordance with the Water Framework Directive in 2022 (when records were last published); the remaining water bodies were either in "moderate" or "poor" condition.

7.14 In response, the Government have set up the Water Scarcity Group and published two written statements regarding water scarcity in Greater Cambridge:

- The Joint Statement on Addressing Water Scarcity in Greater Cambridge (published by the Department for Levelling Up, Housing and Communities (DLUHC), the Department for Environment Food and Rural Affairs (DEFRA), the Environment Agency and the Greater Cambridge Shared Planning Service).

- Addressing Water Scarcity in Greater Cambridge: Update on Government Measures (published by DLUHC and DEFRA).

7.15 The need for water supply requirements to be balanced against the ecological impacts of abstraction and the need to maintain the integrity of Cambridgeshire's chalk streams are keenly recognised challenges within both written statements.

National Standards for Sustainable Drainage Systems (SuDS)

7.16 The Government published an update to the national standards for the design of SuDS in July 2025. This includes a series of drainage principles that should be applied to new development.

The Environment Agency's Planning and Water Toolkit

7.17 The Environment Agency have prepared a Planning and Water Toolkit to assist local planning authorities within the Oxford to Cambridge Arc to maximise the potential of planning for the water system in an integrated way. The toolkit explains the importance of IWM and that this is a 'collaborative approach to managing land and water which mitigates the risks to people and the environment from having too much and/or too little water, as well as risks related to water pollution'. It provides guidance on the creation of planning policy around various aspects of water in placemaking including flood risk, water resources, water quality and environment, and wastewater.

Summary of issues arising from First Proposals representations

7.18 A variety of organisations expressed support for the policy. Several respondents, including Cambridgeshire County Council and the Environment Agency, showed support for managing water on site at source. There was also support for incorporating brown/green roofs where practical, use of permeable surfaces and use of sustainable drainage systems (SuDS) as ways to reduce flooding in new development. Many comments highlighted the impacts of climate change and the effects on weather and flooding and that this would need to be considered. There were comments from Anglian

Water on the benefits of sustainable drainage systems for improving water quality and reducing the amount of water entering the wastewater system. Organisations including Historic England argued that the policy needed to ensure that the design of SuDS would not harm other aspects of the built or natural environment. Wates Development argued that sites of all scales and not just large sites can adopt ambitious water use targets and implement water recycling systems. Anglian Water requested that the policy recognise the capability for pollution control to be introduced as part of SuDS systems. Further detail, including where to view the full representations and who made each representation, is provided in the Consultation Statement.

New or updated evidence

Greater Cambridge Local Plan Detailed Water Cycle Study 2025

7.19 The study explores how the wastewater needs of proposed development will be met. Preparation of the report included engagement with Anglian Water, as the wastewater undertaker responsible for sewerage services in the area, and the Environment Agency. In a number of cases additional investment in wastewater treatment infrastructure will be required to meet the needs generated by new development. This will need to be planned through the wastewater planning process, and in particular the review of the Drainage and Wastewater Management Plan which Anglian Water have now commenced.

Additional alternative approaches considered

7.20 Progress policy direction as proposed as part of the First Proposals, excluding Policy CC/IW. This is not the preferred approach given the consultation responses highlighting the importance of integrated water management and flood risk management. The proposed approach provides two detailed policies, one setting out the requirements for integrated water management, sustainable drainage and water quality (CC/IW) and one setting out requirements for managing flood risk (CC/IW). This will provide greater detail on what will be required in new developments in relation to integrated water management and flood risk.

Draft Policy and reasons

7.21 The draft policy can be viewed in the Draft Local Plan: Link to the draft plan policy.

7.22 Integrated Water Management (IWM) is a holistic approach to water management that considers water supply, wastewater, flood risk and water quality in a coordinated way with the aim of ensuring the long-term sustainability of water resources and ecosystems and helping to provide multiple benefits. The concepts of 'water smart communities' and 'sponge cities' have similar aims. A sponge city is designed to mimic natural processes by absorbing, storing and gradually releasing rainwater, much like a sponge soaks up water. Green infrastructure such as green roofs, permeable pavements, rain gardens and other green spaces are used to manage rainwater runoff to prevent flooding and improve water quality through natural filtration. This is also the purpose of sustainable drainage systems (see below).

7.23 Weather pattern changes and the increasing occurrences and intensity of flooding and drought events, all of which are being influenced by global climate change, are making effective IWM increasingly important for both urban and rural environments. Therefore, it is crucial that IWM is considered at an early stage in the design process of any development. Appropriate water management measures for a particular development will depend upon the scale and nature of the development, but even at a small scale, measures such as permeable paving, green roofs and water butts can slow down the discharge of water, enable the reuse of water, and enhance biodiversity.

7.24 Sustainable drainage systems (SuDS) are a key component of IWM. SuDS re-create the benefits of natural drainage systems, allowing infiltration and storage of water and recharge aquifers. They reduce the volume and speed of water entering fluvial systems following storms and therefore reduce downstream flooding and provide other benefits such as water filtration, which can improve water quality. Infiltration SuDS reduce the flow peak and volumes

entering the Fens. This is increasingly important for Cambridgeshire. The Fens Baseline Review projects that sea level rise is expected to substantially diminish the gravity discharge of fluvial water from the Ely Ouse (downstream of the rivers in Greater Cambridge) to The Wash. This has potentially major energy requirements to support pumped discharge to sustain the Fens. The recharge of aquifers from SuDS is also particularly important in maintaining the baseflows of the chalk streams in Greater Cambridge.

7.25 SuDS also provide biodiversity and amenity enhancements, which can have positive implications for both human and environmental health. Ensuring that there is space for SuDS and the creation of blue and green infrastructure needs to be considered early in the design process for new developments.

7.26 The effective management, maintenance and adoption of SuDS is critical to ensure that they function effectively over the lifetime of the development and details of this will be required from developers. Alongside excessive heat and flooding, the Cambridgeshire and Peterborough Healthy Places Joint Strategic Health Assessment (JSNA) 2024 identifies vector-borne diseases, such as those carried by invasive species of mosquito, as one of the health effects of climate change that are likely to have the largest impacts. This is particularly important to avoid areas of stagnant water.

7.27 To further protect and enhance water quality, the policy also requires that development proposals demonstrate that there is adequate wastewater infrastructure to serve the development over its lifetime and that applicants will need to secure a connection with the service provider, Anglian Water. Appropriate water treatment and pollution control measures will need to form part of the surface drainage system / SuDS to prevent contamination of water on the site or downstream during the construction and operation of the development.

Response to main issues raised in representations

7.28 The Councils acknowledge that best-practice guidance and standards for all aspects of development can change over the duration of a plan period. Therefore, the Local Plan policies will be drafted to ensure that innovative solutions to contemporary problems, including sustainable drainage and water quality control, are not unduly disregarded by the planning system. The matters of flood risk management and Integrated Water Management systems have been separated into two policies: Policy CC/IWM and Policy CC/FM. This approach has been adopted to allow the councils to more clearly establish their support for measures designed to enhance water quality, mitigate against water pollution, and introduce natural forms of drainage. Requirements in relation to site-wide considerations of IWM systems and surface-water drainage strategies have been included. In addition, provisions have been included in relation to the long-term management and maintenance of surface-water drainage infrastructure.

7.29 Comments made by individuals highlighted that drainage requirements should account for the impermeable clay ground in Cambridgeshire and ensure that drainage requirements do not rely solely on ground infiltration. The policy recognises the various ways that surface-water flooding can be sustainably drained, adhering to national guidance and former approaches to surface-water drainage. Reference has also been made to supplementary planning guidance prepared by the LLFA, which provides applicants with additional technical guidance on alternative drainage solutions that can be used where infiltration to the ground may be unfeasible due to a site's geology or topography.

7.30 The policy has also been constructed to include references to allowances for climate change; references to the drainage priority order and the addition of grey water recycling systems; inclusion of provisions on pollution control; and inclusion of provisions regarding the long-term management of the drainage and pollution control infrastructure.

7.31 Below-ground heritage assets are protected by both the National Planning Policy Framework (NPPF Paragraphs 207 and 213) and the Ancient Monuments and Archaeological Areas Act 1979 and Policy GP/AR: Archaeology of the draft Local Plan. Therefore, it was not considered necessary to repeat this within this policy.

Further work and next steps

7.32 Review the comments received on the draft Local Plan prior to preparing the proposed submission version, alongside any further evidence or changes to national or local policy.

8. Policy CC/FM: Flood Risk Management

Issue the Plan is seeking to respond to

8.1 The Plan needs to ensure that new development is located in the areas with the least likelihood of flooding and that it does not cause flooding to occur elsewhere. Flooding can stem from many different sources including rivers, surface water, groundwater, sewers and reservoir breaches. Climate change is likely to increase the intensity and frequency of flooding events and must be taken into account in future planning.

How was the issue covered in the First Proposals Consultation?

8.2 This policy originally formed part of the policy direction for Policy CC/FM in the First Proposals. The policy direction for Policy CC/FM has been divided into two policies: Policy CC/IW, which focuses on matters of Integrated Water Management, water quality and sustainable drainage; and Policy CC/FM, which focuses on flood risk management. The original policy approach can be viewed, alongside full representations made regarding the policy, using the following link: Policy CC/FM: Flooding and Integrated Water Management.

8.3 The First Proposals was supported by topic papers, which explored the context, evidence and potential alternatives and the preferred approach in greater detail. This can be viewed Climate Change: Topic Paper.

Policy Context update

National Planning Policy Framework (NPPF, December 2024)

8.4 The December 2024 version of the NPPF remains clear that plans should take a proactive approach to adapting to climate change including the long-term implications for flood risk. Chapter 14 includes a section on planning and flood risk (paragraphs 170-182) and highlights that:

- Strategic policies should be informed by a strategic flood risk assessment (SFRA) and should manage flood risk from all sources.

- All plans should apply a sequential, risk-based approach to the location of development, taking into account all sources of flood risk and the current and future impacts of climate change and managing any residual risk. (the requirement for all sources of flooding to be taken into account in the sequential test was included in the revised NPPF in July 2021 and continues to be a feature of the December 2024 version).
- When determining planning applications, local planning authorities should ensure that flood risk is not increased elsewhere and, where appropriate, applications should be supported by a site-specific flood risk assessment (FRA).
- Where planning applications come forward on sites allocated in the development plan, applicants need not apply the sequential test again. Applications on sites that are at risk of flooding from any source now or in the future must follow a sequential test to determine if there are any other reasonably available sites with a lower risk of flooding. This is unless a FRA demonstrates that no built development within the site boundary, including access or escape routes, land raising or other potentially vulnerable elements, would be located on an area that would be at risk of flooding from any source, now and in the future (having regard to potential changes in flood risk).
- Applications which could affect drainage on or around the site should incorporate sustainable drainage systems to control flow rates and reduce volumes of runoff, which are proportionate to the nature and scale of the proposal.

Flood Risk and Coastal Change Planning Practice Guidance

8.5 The Flood Risk and Coastal Change PPG was significantly refreshed in 2022. The following notable changes were made to the previous 2021 version of the PPG:

- Refreshed guidance on when/how the sequential and exception tests should be applied.
- Consideration of surface water flood risk and how it should be considered and addressed.

- Additional guidance on how to consider the safety of development and its potential impact on flood risk elsewhere.
- Additional guidance on the use of multifunctional SuDS and a clearer requirement for SuDS information and integrated approach to flood risk management with planning applications.
- Additional guidance on natural flood management and safeguarding land for future flood risk management infrastructure.
- Additional information in relation to Construction Industry Research and Information Association (CIRIA) guidance in relation to flood risk and water resource management.

Committee on Climate Change (2022). UK Climate Change Risk Assessment 2022 (CCRA3)

8.6 The Climate Change Act 2008 requires the Government to undertake an assessment of the risks of climate change on the UK every five years. The Technical Report for the third Climate Change Risk Assessment (CCRA3) identified sixty-one climate risks across a range of sectors such as food and water, weather and climate events, public health, and impacts to services and key infrastructure.

8.7 The Flooding and Coastal Erosion climate risks were identified by the Technical Report for CCRA3 as areas where more action was needed. The Report highlights that surface-water flooding is the most widespread form of flooding in England. In response to the issue, CCRA3 highlights that updates were needed to the consideration of flooding as part of the planning process, including the need for flood risk assessments to consider climate change's impacts on flooding. Integrated water management solutions that incorporate nature-based solutions are identified as a preferential approach to flood risk management.

Climate Change Committee (April 2025) – Progress in Adapting to Climate Change: 2025 Report to Parliament

8.8 This Report assesses the extent to which the UK's Third National Adaptation Programme (NAP3) and its implementation are preparing the UK for climate change. It is the Climate Change Committee's first statutory progress report on NAP3.

8.9 The Report highlights that further action needs to be taken to mitigate the risks of flood risk, which is being worsened by climate change. Currently 6.3 million properties in England are in areas at risk of flooding from rivers, the sea, and surface water, which could rise to around 8 million (25% of all properties) by 2050.

Environment Agency (2022). Anglian River Basin District Flood Risk Management Plan (2021 -2027)

8.10 The Environment Agency's Flood Risk Management Plan (FRMP) provides regionally specific flood risk management initiatives for the Anglian River Basin. The FRMP is intended to contribute towards the realisation of the broader National Flood and Coastal Erosion Risk Management Strategy for England. This also includes a review of surface-water flood risks, which is a particular concern for urban areas within the Anglian River Basin. The following are of particular relevance to planning in the Greater Cambridge area:

The Cambridge Surface Water Flood Risk Area

8.11 The Cambridge Surface Water Flood Risk Area encompasses large swathes of Cambridge city, and Fulbourn and Great Shelford. Flood risk management in the Cambridge Surface Water Flood Risk Area is primarily overseen by Cambridgeshire County Council – the Lead Local Flood Authority (LLFA). However, Cambridge City Council is responsible for the operation and maintenance of several watercourses and drainage assets within the Flood Risk Area, including some publicly adopted sustainable drainage systems (SuDS).

8.12 Assessing possible impacts, the FRMP states that rainfall intensity is expected to increase in future due to global climate change, resulting in a

higher volume of surface water runoff and higher flows within watercourses during heavy periods of heavy rainfall.

The Cam and Ely Ouse Management Catchment

8.13 The Cam and Ely Ouse catchment covers an area of approximately 3,600km^2 extending from Swaffham in the north, to Royston and Saffron Walden in the south, and from Potton in the west, to Attleborough in the east. The severity and frequency of flooding events within the catchment are expected to increase as a result of global climate change.

8.14 Roughly 2.6% of the population, 1,600 non-residential properties, and approximately 20% of the agricultural land within the catchment are at risk of flooding from rivers. Cambridge city and many smaller communities are likely to be affected by an increase in the risk of surface water flooding caused by higher levels of rainfall. Risk of flooding may also increase during winter months as a result of changes in the climate.

Cambridgeshire County Council (2022). Cambridgeshire Local Flood Risk Management Strategy (2021 – 2027)

8.15 As Lead Local Flood Authority (LLFA), Cambridgeshire County Council have prepared a Local Flood Risk Management Strategy (LFRMS) to address flood risk issues between 2021 – 2027. In addition to being a material planning consideration, the LFRMS provides a series of objectives for flood risk management in Cambridgeshire, including needs and plans for flood defence and drainage infrastructure.

8.16 Guidance is provided within the LFRMS regarding the preparation of Strategic Flood Risk Assessments (SFRAs) and Water Cycle Studies in Cambridgeshire. These documents have been prepared as evidence bases to further justify the approach to policy and site allocations taken within the Greater Cambridge Local Plan; the LLFA's LFRMS was considered when preparing these evidence bases.

8.17 The LFRMS also highlights the planning functions delegated to the LLFA through amendments made to the Town and Country Planning Act 1990. This includes the preparation of supplementary planning guidance and

supplementary planning documents over the course of the LFRMS, which, when prepared and adopted, will be read alongside adopted local planning policies. The Councils have sought to work proactively with the LLFA in the preparation of the Greater Cambridge Local Plan.

The Environment Agency's Planning and Water Toolkit

8.18 The Environment Agency have prepared a Planning and Water Toolkit to assist local planning authorities within the Oxford to Cambridge Arc. The toolkit provides guidance on the creation of planning policy around various aspects of water in placemaking, including flood risk assessments, flood risk management and agreements on flood defences.

Summary of issues arising from First Proposals representations

8.19 Consultees expressed support for policy requirements in relation to flood risk management. Various Parish Councils requested that the policy should include provisions for the delivery and long-term management of flood defences, and that these details should be agreed prior to the occupation of development. The Cam Valley Forum proposed including areas for storage of flood waters. Cambridgeshire County Council requested that Local Plan policies relating to flood risk and drainage accounted for the impact of climate change and requested that the Local Plan acknowledged the Cambridgeshire Flood and Water Supplementary Planning Document (SPD) (2016).

8.20 Individual respondents commented that efforts to manage flood risk and integrate drainage strategies should be wary not to cause any harm to the integrity of aquatic ecosystems or cause damage to water bodies up or downstream of a development. The Environment Agency thought that the scope of the policy needed to be widened to reduce flood risk in a more holistic manner including securing both mitigation and betterment through growth. The Environment Agency also highlighted that the Local Plan should be supported by robust evidence, including a Water Cycle Study, a more obviously demonstrated sequential test and a Level 2 SFRA.

8.21 Further detail, including where to view the full representations and who made each representation, is provided in the Consultation Statement.

New or updated evidence

New national flood and coastal erosion risk information

8.22 The Environment Agency has developed a new National Flood Risk Assessment (NaFRA2) using the best available data from a new national model and local detailed modelling where it is available. In March 2025 the new NaFRA2 data was made available on an updated Flood Map for Planning. This now has layers showing the possible effects of climate change on river flood risk and for the first time surface water flood risk information has been made available on the Flood Map for Planning. This new flood risk information has been taken into account in the Greater Cambridge Flood Risk Sequential Test, an updated Greater Cambridge Level 1 Strategic Flood Risk Assessment and the Greater Cambridge Level 2 Strategic Flood Risk Assessment.

Greater Cambridge Flood Risk Sequential Test (2025)

8.23 Paragraph 172 of the NPPF requires that all plans should apply a sequential, risk-based approach to the location of development – taking into account all sources of flood risk and the current and future impacts of climate change – so as to avoid, where possible, flood risk to people and property. The process that has been carried out is set out in detail in the Greater Cambridge Flood Risk Sequential Test (2025).

Level 1 and Level 2 Strategic Flood Risk Assessments

8.24 Plan-making needs to consider flood risk when determining where new jobs and homes will be located. Therefore, national guidance states that Strategic Flood Risk Assessments (SFRAs) should be prepared or updated to inform changes in a development plan. An updated Level 1 SFRA (2025) has been prepared in line with Government guidance on How to Prepare a Strategic Flood Risk Assessment to identify all flood risk areas within Greater

Cambridge. The Level 1 SFRA was prepared using the NaFRA2 flooding data and any Environment Agency model updates.

8.25 The Environment Agency confirmed that the Level 1 SFRA (2025) was methodically sound and aligned with national guidance. The Environment Agency's response also stated that a Level 2 SFRA should be prepared to confirm the suitability of sites put forward for allocation as part of the Local Plan.

8.26 The sites proposed to be allocated for development as part of the Local Plan were screened using available data on fluvial risk (including fluvial flood risk changes due to climate change), surface-water flood risk, groundwater flood risk, reservoir flood risk, and historical flooding in Greater Cambridge. Sites identified with notable flood risks in any of the above categories were "scoped in" for inclusion as part of a Level 2 SFRA. This exercise identified 22 sites to be taken forward for consideration as part of the Level 2 SFRA. The Environment Agency confirmed that they agreed with the approach to the sites that were "scoped in" for consideration as part of a Level 2 SFRA.

8.27 The Greater Cambridge Level 2 SFRA (2025) provides an in-depth analysis of flood risks from all sources, including the impacts of climate change at the identified sites. It sets out the site-specific flood risk assessment requirements, emergency planning recommendations, and flood risk mitigation measures that should be included as part of development proposals to make the site safe and suitable for its intended use. The Level 2 SFRA also provides an overview of whether the exception test would be required.

Additional alternative approaches considered

8.28 Progress policy direction as proposed as part of the First Proposals, excluding Policy CC/IW. This is not the preferred approach given the consultation responses highlighting the importance of integrated water management and flood risk management. The proposed approach provides two detailed policies, one setting out the requirements for integrated water management,

sustainable drainage and water quality (CC/IW) and one setting out requirements for managing flood risk (CC/IW). This will provide greater detail on what will be required in new developments in relation to integrated water management and flood risk.

Draft Policy and reasons

8.29 The draft policy can be viewed in the Draft Local Plan: Link to the draft plan policy.

8.30 Global climate change has presented a series of challenges for our built and natural environments. This includes increased occurrences of flooding from various sources (e.g. fluvial and surface-water flooding) and increased intensity in flood events. As highlighted by the Advice Report to the UK Climate Change Risk Assessment (CCRA3), in addition to risks to human life, flooding can have significant impacts on the long-term functionality of infrastructure, including roads, water and wastewater conveyancing systems, and electricity lines.

8.31 The management of flood risk from all sources is a strategic planning matter. The proposed policy follows the sequential, risk-based approach set out in the NPPF. It seeks to direct new development to the areas with the least likelihood of flooding from all sources taking into account climate change and to ensure that new development does not increase the likelihood of flooding elsewhere. The supporting text to the policy also refers to the fact that development represents an opportunity to plan for climate change adaptation and that there may be wider opportunities to make Greater Cambridge more resilient to flooding by making space for water, safeguarding land expected to flood in the future, considering the use of green infrastructure in managing flood water and by enlarging the active floodplain away from vulnerable land uses. This should be discussed in the early design stages of a development with the flood risk management authorities.

8.32 Development proposals will need to fully assess potential flood risk and demonstrate that development is resilient or adaptive to flooding. The policy sets out the approach to runoff rates, including that peak runoff rate should be no greater for the developed site than it was for the undeveloped site. The policy encourages proactive engagement with relevant parties to ensure the long-term management of flood resilience measures and flood defences are secured alongside new development. It sets out the requirements of a site-specific Flood Risk Assessment and the supporting text sets out the national and local guidance that developers should refer to.

Response to issues raised in representations

8.33 Policy CC/FM has been prepared to outline how flood risk and flood risk management will be considered when determining planning applications for new development, adding evidence-based local requirements to extant national planning policy requirements related to flooding. Policy CC/FM highlights that development proposals will be supported where development will not pose an undue risk to both the forthcoming development and communities elsewhere (both within Greater Cambridge and beyond), having regard to flood risk predictions that factor climate change. To assist applicants with the preparation of flood risk assessments and arrangements regarding flood defences and flood mitigation strategies, references to the Cambridgeshire Flood and Water Supplementary Planning Document (SPD) (2016) or successor documents adopted by the Lead Local Flood Authority have been included within the supporting text of the policy.

8.34 The Councils appreciate that flood mitigation measures and new development should not worsen issues up or downstream from a development site. Flood management requirements will be read alongside the Local Plan's requirements for integrated water management systems, which actively seek to ensure that solutions that introduce a range of integrated water management benefits (e.g. biodiversity improvements, water quality improvements using natural drainage systems, and efficient water reuse systems, alongside flood risk management) are taken, wherever possible.

8.35 The Councils have sought to ensure that the Local Plan is based upon a robust evidence base. A Level 1 and Level 2 Strategic Flood Risk Assessment (SFRA) have been prepared, which identifies areas in Greater Cambridge that are at risk of flooding from all sources and looks at the anticipated impact of climate change. In line with comments received from the Environment Agency, a separate stand-alone Sequential Test report has been produced to show the Council's process in the selection of sites for allocation for development by following a sequential approach and avoiding high risk areas using the information in the SFRAs.

Further work and next steps

8.36 Review the comments received on the draft Local Plan prior to preparing the proposed submission version, alongside any further evidence or changes to national or local policy.

9. Policy CC/RE: Renewable and Energy Projects and Infrastructure

Issue the Plan is seeking to respond to

9.1 In order to support the transition to net zero carbon there will need to be an increase in renewable energy generation and associated infrastructure, including onshore wind generation, of which there is currently very little in the Greater Cambridge area. Therefore, the policy seeks to support renewable and low-carbon energy development in Greater Cambridge where this does not result in unacceptable impacts. The policy also seeks to support the development of a district heating system in Cambridge city centre and community-led low-carbon heating infrastructure.

How was the issue covered in the First Proposals Consultation?

9.2 A policy approach was proposed in the First Proposals consultation. The Proposed approach and full representations received can be viewed Policy CC/RE: Renewable Energy Projects and Infrastructure.

9.3 The First Proposals was supported by topic papers, which explored the context, evidence and potential alternatives and the preferred approach in greater detail. This can be viewed Climate Change: Topic Paper.

Policy context update

National Planning Policy Framework (Updated December 2024)

9.4 Chapter 14 of the NPPF recognises that, to help increase the use and supply of renewable and low carbon energy, local planning authorities should support all communities to contribute to energy generation from these sources. Paragraph 165 (b) states that, to increase the supply of renewable energy, planning policies should 'consider identifying suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this would help secure their development'.

9.5 In addition, since the first proposals consultation, updates to the NPPF have removed the previous restrictions on onshore wind, bringing planning considerations for wind turbines in line with that for all other renewable energy generation technologies. Moreover, Paragraph 168 (a) of the NPPF states that, when determining planning applications, local planning authorities should not refuse applications that have not demonstrated a need for the renewable energy infrastructure.

National Climate and Infrastructure Policy

9.6 The Climate Change Committee (CCC) published a 2025 report to Parliament on the Progress in adapting to climate change, where the notable changes in the National Adaptation Programme (NAP) published in March 2024 and the 2023 Monitoring Framework, pledged for more climate resilient building and infrastructure outcomes;

1. Setting out a 10 year infrastructure strategy it intends to mainstream climate adaptation into the delivery of infrastructure across sectors (p.23). This will incorporate a set of approaches across the energy sector and built environment fully recognising vulnerability of assets, climate-resilience, overheating of buildings and interdependencies of identification.
2. Ensure key funding agreements provide incentives for adaptation deployment (p.23). To help reduce the dependence of non-renewable energy sources and reduces the space for climate policy vulnerability.

9.7 A key shift in national strategy is the move to mainstream climate resilience across infrastructure sectors. This ensures that new energy developments respond to the challenges of overheating, flood risk, and interdependencies between energy and other critical infrastructure, and the work of the National Infrastructure Commission and Cabinet Office on defining resilience standards and managing interdependencies within critical national infrastructure.

Energy Governance and Strategic Planning

9.8 A significant governance change occurred in October 2024 with the establishment of the National Energy System Operator (NESO), which now leads national energy planning. NESO's methodology for the Centralised

Strategic Network Plan explicitly requires consideration of extreme climate events and changing baseline conditions. At the regional level, Ofgems's policy framework for Regional Energy Strategic Plans highlights the importance of resilience, though the CCC suggests that it should go further by incorporating place-based climate impact projections. This approach aligns directly with planning policies seeking to future-proof local energy infrastructure.

Clean Power and Net Zero Commitments

9.9 The UK Government's Clean Power 2030 Action Plan reaffirms clean energy as central to net zero delivery. It sets out a clear target: by 2030, clean sources, defined as renewables, nuclear, and low carbon technologies, should produce at least 95% of Great Britain's electricity generation and reduce carbon intensity to below 50gCO2e/kWh. In this case, offshore wind remains the single largest contributor to clean generation, with further growth needed in solar and onshore wind to meet the required scale-up. For example, The Clean Power Action Plan emphasises a whole-system transition, with projections from NESO estimating that 77% to 82% of electricity will be sourced from variable renewables, primarily wind and solar, by 2030.

Summary of issues arising from First Proposals representations

9.10 A variety of organisations expressed support for the policy. There were several suggestions to improve the policy, including: more explicit support for the delivery of an accessible anaerobic digestion plant; clearer requirements for the incorporation of community power projects into new settlements; and support for the installation of solar panels onto the roof of houses.

9.11 Some respondents argued that the policy needed to emphasise a holistic, district-wide strategy to renewable energy production, whereas others focussed upon how individual buildings could contribute. One respondent questioned whether the electric cables in South Cambridgeshire's villages have capacity to support electric cars or heat pumps. A range of respondents

suggested that the policy should set out clearer criteria around the potential impact of developments on the character of the surrounding landscape, biodiversity, and the historic environment. Some suggested that the policy should explicitly restrict development that would interfere with military aviation activities. Several respondents, including the Campaign to Protect Rural England, objected to the policy on the grounds that it would not halt the removal of farmland. Further detail, including where to view the full representations and who made each representation, is provided in the Consultation Statement.

New or updated evidence base

Local Renewable Energy Generation

9.12 The Annual Monitoring Report (AMR) 2024 confirms the Councils' ongoing commitment to reducing fossil fuel use and increasing the proportion of renewable energy locally. Paragraph 3.56 highlights this strategic aim, while paragraph 3.57 notes small but positive increases in installed renewable capacity across Cambridge and South Cambridgeshire during 2023-2024. Both Local Plans emphasize sustainable design and climate change adaptation, requiring new developments to incorporate these principles to promote resilience and reduce carbon emissions (AMR para 3.59).

9.13 The importance of energy infrastructure delivery was identified by the UK Energy Research Centre (UKERC) and NESO 2024 November report. The reforms highlight plausible pathways for UK energy system by 2030: one focused on maximizing variables renewables, the other is balancing renewables with dispatchable low-carbon plants. The role of more supportive planning policies to help deliver increased renewable energy generation is identified as a key delivery mechanism to support the decarbonisation of the UK energy system.

Energy Market and Efficiency Reforms

9.14 Ofgem's recent consultations on energy retail market innovation and pricing may influence future energy consumption patterns, which needs to be

considered when drafting the policy. In this case the government has committed £6.6 billion through The Warm Homes: Local Grant scheme to upgrading five million homes with energy efficiency and low-carbon heating measures, and the reinstatement of minimum energy efficiency standards for rented properties by 2030. This is a further step toward decarbonising housing stock. This points towards an increased reliance on the electrification of the grid, with additional renewable electricity generation needed to support the roll out of technologies such as heat pumps, again highlighting the need for a supportive policy framework for renewable energy.

Wider policy context

9.15 This is further supported through the devolution of climate and energy policy context in the UK. By learning from other government contexts can provide useful insights that may inform and strengthen Greater Cambridge's local energy policies. For example, The Welsh Government's approach, guided by the Well-being of Future Generations (Wales) Act 2015 and the Environment (Wales) Act 2016, demonstrates a proactive, integrated framework for sustainable development and emissions reduction.

Local landscape sensitivity analysis

9.16 The policy has been informed by work carried out to assess the sensitivity of landscapes that make up Greater Cambridge to renewable energy schemes. This work assessed the impacts of a range of wind farm development scenarios on the different Landscape Character Types as defined by the 2021 Greater Cambridge Landscape Character Assessment. The conclusions of this assessment were that there are a number of Landscape Character Areas in the Greater Cambridge area that can accommodate small scale onshore wind and solar projects.

Draft Policy and reasons

9.17 The draft policy can be viewed in the Draft Local Plan.

Further information supporting Draft Policy approach

9.18 The draft policy sets out a criteria-based approach for determining applications for renewable and low carbon energy, including onshore wind. While the policy does not rule out proposals for onshore wind in any particular locations, it requires applicants to demonstrate that proposals do not result in unacceptable harm across a wide range of relevant criteria. With regard to impacts on landscape, tranquillity and sensitive views, decisions will have regard to the findings of Part 2 of the Greater Cambridge Landscape Sensitivity Assessment (2021), which found that the area's river valleys would be less suitable for wind turbine development. A new addition to the policy is the inclusion of the identification of a heat network zoning study boundary in recognition of work to establish a low carbon heat network in Cambridge city centre as well as ongoing work to consider wider heat network zones in the city linked to Heat Zoning Regulations.

9.19 Paragraph 165 of the NPPF highlights that, in order to help increase the use and supply of renewable and low-carbon energy, local planning authorities should recognise the responsibility on all communities to contribute to energy generation from renewable or low carbon sources and consider identifying suitable areas for renewable and low carbon energy sources where this would support their development. In order for the Greater Cambridge area to play a proactive role in responding to climate change and meet its legal duty in relation to climate change mitigation, it is important for the Greater Cambridge Local Plan to take a positive approach to the issue of renewable energy generation and associated infrastructure, whilst also ensuring that any impacts are minimised. The Net Zero Carbon Study (2021) considered how much renewable energy should be generated within the boundaries of Greater Cambridge by 2050 in order for the area to fairly contribute to the national generation mix. This work found that, in relation to solar energy, Greater Cambridge already had 303 MW of installed solar photovoltaics, above the 270 MW estimate to be in line with national grid scenarios for 2050. However, the work noted that installed onshore wind capacity for Greater Cambridge, recorded at 26 MW, is currently lower than the national average, needs to

increase sevenfold to be in line with national grid scenarios for 2050. The report recommended that sufficient areas should be identified to accommodate additional renewable energy projects. It is therefore considered that policy support is required specifically for onshore wind in light of paragraph 165 of the NPPF.

9.20 In recognition of work currently underway to establish a low-carbon heat network in the city centre, powered by heat pumps, the policies map identifies a strategic district heating zone covering Cambridge City Centre, which continues the approach currently contained within Policy 28 of the 2018 Cambridge Local Plan. New development proposals within this zone will be required to connect to the heat network. The policy also takes account of the current national proposals for the introduction of regulations around heat network zoning.

Additional alternative approaches considered

9.21 Consideration was given to not having a policy related to renewable energy provision, leaving it instead to national planning policy. This is not considered a reasonable approach, as this could lead to there be insufficient renewable energy delivered in the area to enable Greater Cambridge to contribute to meeting carbon budgets, which would not be compatible with net zero carbon given the need for an increase in renewable energy generation to support this. Our landscape sensitivity evidence suggests that there are areas of lower landscape sensitivity for certain scales of wind and solar projects, where projects that meet the criteria set out in policy CC/RE could be supported. One option considered was to prepare a map-based policy which would have seen such areas denoted as suitable in principle or unsuitable for renewable energy projects on the basis of this evidence. However, given the range of planning considerations relevant to assessing the suitability of renewable energy projects, it was judged that a more general framework approach for considering projects would be the most effective approach, whilst still aligning with paragraph 165 of the NPPF.

Response to issues raised in representations

9.22 The councils recognise that an integrated approach to renewable and low-carbon energy infrastructure will be needed if it is to operate effectively in our homes and places of work. While policy CC/RE forms part of this integrated approach, work has recently started on a Cambridgeshire Local Area Energy Plan, which will consider the infrastructure needed to support the delivery of net zero carbon across the county. As part of this work, consideration will be given to the decarbonisation of heating systems and transport alongside an uplift in renewable energy generation. The work will also provide information in relation to the costs of such infrastructure and will enable the development of business plans to help deliver that infrastructure. Policy CC/RE will provide policy support for the introduction of low-carbon energy generation and energy infrastructure, which will function alongside other local planning policy requirements regarding the assessment of grid capacity and the introduction of ancillary systems, such as battery storage systems, that will facilitate an integrated approach to renewable energy delivery in Greater Cambridge (e.g. Policy I/EI).

9.23 In response to those respondents who objected to the loss of farmland as a result of renewable energy projects, in particular solar farms, the councils agree that the loss of the best and most versatile agricultural land should be avoided. This has therefore been reflected in the criteria-based approach in this policy, as well as a stipulation that proposals should also include plans for their end-of-life treatment, including the decommissioning of any infrastructure and measures to return the site to its former condition. Policy CC/RE will also be read alongside Policy J/AL: Protecting the best agricultural land, which generally guards against the irreversible loss of Grades 1, 2 or 3a agricultural land. It is important to note that many renewable energy projects can be designed and delivered to support the continued use of agricultural land in tandem with new infrastructure, for example land around solar panels can be used for livestock, and wind turbines are usually spaced to the extent that crops can continue to be farmed.

9.24 In response to feedback, the policy has also been designed to encompass criteria relating to a wider range of impacts arising from renewable energy projects, following the hierarchy of avoidance and then minimisation and/or mitigation of impacts. In response to the representations, specific criteria have been added to address concerns around biodiversity, impacts on heritage assets, including their setting, and the safe operation of aviation. In relation to landscape impacts, specific reference has also been made to part 2 of the Greater Cambridge Landscape Sensitivity Assessment (2021), which provides a clear framework to support applicants in understanding the suitability of their site for renewable energy development in landscape terms. Additionally, policy wording has also been introduced to ensure that, where cross-boundary impacts could arise from the proposed development, decisions will be considerate of neighbouring local authority requirements.

Further work and next steps

9.25 Review the comments received on the Draft Local Plan prior to preparing proposed submission version, alongside any further evidence or changes to national or local policy.

10. Policy CC/CE: Supporting a Circular Economy and Sustainable Resource Use

Issue the Plan is seeking to respond to

10.1 National policy requires strategic policymakers to facilitate consistent approaches to waste management and adopt policies that simultaneously facilitate the sustainable use of materials and mitigate the impacts of climate change. The Local Plan seeks to integrate circular economy principles into local planning policy in an effort to achieve these duties.

How was the issue covered in the First Proposals Consultation?

10.2 A policy approach was proposed in the First Proposals consultation. The Proposed approach and full representations received can be viewed Policy CC/CE: Supporting a Circular Economy and Sustainable Resource Use.

10.3 The First Proposals was supported by topic papers, which explored the context, evidence and potential alternatives and the preferred approach in greater detail. This can be viewed Climate Change: Topic Paper.

Policy Context update

National Planning Policy Framework (NPPF, December 2024)

10.4 The 2024 version of the NPPF states that the planning system should support the transition to net zero carbon by 2050 and maintains that encouraging the reuse of existing resources, including the reuse and conversion of existing buildings.

Simpler Recycling in England: Policy Update

10.5 As part of the wider strategy to improve the UK's environmental performance and work towards a net-zero carbon future, the Government are also seeking to improve the country's rate of recycling and residual waste disposal. This comes with an ambition to recycle at least 65% of municipal waste by 2035. As part of the Government's simpler recycling initiative, they are determined to

move towards a zero waste, circular economy - this will involve resources and materials in circulation rather than opting for unnecessary disposal and finding alternative uses for decommissioned products that will help to accelerate low-carbon economic activity.

UK Net Zero Carbon Buildings Standard

10.6 The UK Net Zero Carbon Buildings Standard – initially launched in September 2024 and updated in April 2025 – contains technical details on how a building should meet the Standard, including what limits and targets need to be met by the development, the technical evidence needed to demonstrate compliance with the Standard, and how evidence and compliance should be reported. The Standard was agreed by representatives from professional bodies across the UK's construction sector, including the Royal Institute of British Architects, the Royal Institute of Chartered Surveyors, and the Building Research Establishment (BRE). The Standard includes limits for upfront embodied carbon as well as reporting requirements for life cycle embodied carbon, both of which are considered in policy CC/CE.

Summary of issues arising from First Proposals representations

10.7 A variety of organisations expressed support for the policy. Respondents, such as Cambridgeshire County Council, included suggestions to make the policy more legible to members of the public. Some organisations, including Croydon PC, suggested ideas to improve the policy, such as ensuring that new settlements have community bins similar to ones implemented in Eddington. Respondents differed in their reactions to the scope of the policy; the Cambridge Doughnut Economics Action Group for example, argued that targets were needed to ensure developers deliver the policy. Contrastingly, some respondents, such as the Metro Property Unit Trust, sought to narrow the policy's scope, suggesting that the policy should only be applied to major developments. The Home Builders Federation asserted that these requirements should be dealt with via national regulation as opposed to local planning policy. Some developers, such as Martin Grant Homes, used their representations to explain how their proposed site accords with the policy's requirements. Further detail, including where to view the full representations

and who made each representation, is provided in the Consultation Statement.

New or updated evidence

10.8 N/A

Additional alternative approaches considered

10.9 No additional alternative approaches identified.

Draft Policy and reasons

10.10 The draft policy can be viewed in the Draft Local Plan: Link to the draft plan policy.

Further information supporting Draft Policy approach

10.11 The construction sector is the largest user of materials in the UK and produces the biggest waste stream in terms of tonnage. Avoiding waste and designing places in such a way that facilitates material and component reuse helps to prevent the need for the manufacture of new materials, which is an important element in achieving a net-zero carbon future.

10.12 Sustainable resource use and sustainable waste management are supported by the integration of a circular economy. A circular economy is one where 'materials are retained in use at their highest value for as long as possible and are then reused or recycled, leaving a minimum of residual waste'. A circular economy is an alternative economic model that challenges the typical, linear "make, take and dispose" models of economic activity. Circular economies have three core objectives:

- Eliminate waste and pollution (i.e. designing products, materials, and infrastructure for durability and recyclability to avoid creating unnecessary waste or pollution).
- Circulate products and materials (i.e. keeping materials in use through reuse, repair and recycling thereby preventing them from being wasted).

- Regenerate natural systems (i.e. focusing on sustainable resource management and using nature-based solutions to help with day-to-day functions, for example, water treatment).

10.13 Application of these objectives to the built environment leads to six circular economy principles, which should be a fundamental part of the building design process:

1. Building in layers – ensuring that different parts of the building are accessible and can be maintained and replaced where necessary.
2. Designing out waste – ensuring that waste reduction is planned from project inception to completion, including consideration of standardised components, modular build and reuse of secondary products and materials.
3. Designing for longevity.
4. Designing for adaptability and flexibility.
5. Designing for disassembly.
6. Using systems, elements or materials that can be reused and recycled.

10.14 Through the application of the above circular economy principles, there is significant potential to reduce greenhouse gas emissions and residual waste, particularly in the construction sector.

10.15 As part of the proposed approach to the circular economy, the policy seeks to prioritise the reuse of existing buildings over their demolition, albeit recognising that there will be instances where some existing buildings cannot be reused in full but that elements of the building may be able to be reused as part of new development (for example, the reuse of materials onsite). Circular economy principles can be applied to all scales and types of development including minor and major applications. For smaller scale development, circular economy principles could be applied through the use of sustainable materials and maximising recycled materials within the development, whereas, for larger scale proposals or sites with existing buildings, there may be greater opportunities to reuse the sub or super structure of existing buildings and introduce site-wide adaptations that reduce operational resource use.

10.16 By prioritising the avoidance or reduction of waste, the policy supports the application of the Government's Waste Hierarchy. The Waste Hierarchy is a framework that ranks waste management options from most to least environmentally desirable, with prevention (or waste reduction) at the top of the hierarchy, followed by reuse, recycling, recovery (such as energy from waste), and finally disposal (such as through landfill) as the last resort. The top priority in the waste hierarchy is prevention, and as such the policy also includes criteria that seeks to prioritise the reuse of existing buildings, components or elements over their demolition and replacement. This is in acknowledgement of the embodied carbon locked up in those buildings and the embodied carbon generated by the demolition and construction of replacement buildings, as well as the need to reduce waste. While it is recognised that not all existing buildings will be capable of reuse, the approach set out in the policy seeks to ensure that all possible options for the retention and adaptive reuse of buildings are considered before the option of demolition is pursued and sets out the evidence that will be required for demolition to be considered acceptable. over their demolition and replacement. This is in acknowledgement of the embodied carbon locked up in those buildings and the embodied carbon generated by the demolition and construction of replacement buildings, as well as the need to reduce waste. While it is recognised that not all existing buildings will be capable of reuse, the approach set out in the policy seeks to ensure that all possible options for the retention and adaptive reuse of buildings are considered before the option of demolition is pursued and sets out the evidence that will be required for demolition to be considered acceptable.

10.17 The policy includes requirements related to operational waste management because circular economy principles can also shape the day-to-day functionality of a development once use has commenced. The Greater Cambridge Shared Waste Service (GCSWS) between South Cambridgeshire District and Cambridge City Council are the waste collection authority. However, Cambridgeshire County Council is the minerals and waste planning authority, and they are required to plan for net self-sufficiency in waste

management, which means planning for the equivalent amount of waste that will arise due to new development and ensuring waste can be managed locally. This emphasises the need to reduce residual waste wherever possible. The County Council have adopted their RECAP Waste Management Design Guide, which provides guidance on how waste storage, collection and separation should be designed into development proposals.

10.18 The Councils recognise the need for circular economy principles to be applied proportionately to development across Greater Cambridge. Broadly, circular economy principles should be demonstrated within Sustainability Statements – further guidance for applicants will be set out within the Sustainability Checklist to be included as an appendix in the Local Plan. For certain scales of development, a more formal Circular Economy Statement will need to be submitted, and further guidance on the development of these Statements as well as wider integration of Circular Economy principles will be provided in an update to the Greater Cambridge Sustainable Design and Construction SPD.

10.19 The policy does not seek to replicate or supersede policy requirements set out in the adopted Cambridgeshire and Peterborough Minerals and Waste Plan (July 2021). The adopted Minerals and Waste Plan contains policies that are relevant to planning applications for minerals and waste development and this should be read alongside the Greater Cambridge Local Plan.

10.20 The proposed approach, which separates the Local Plan's requirements for Construction Environment Management Plans (CEMPs) from requirements on the circular economy, was considered to be more appropriate. This is because CEMPs cover aspects of construction management and pollution control beyond waste and resource management – it was considered that Policy CC/CE's purpose and requirements would not be entirely clear if based on the policy direction set out in the First Proposals.

Response to main issues raised in representations

10.21 There is a national commitment to achieving net zero carbon by 2050; reductions in waste generation and unnecessary demolition activity will play critical roles in achieving this target through the facilitation of reductions in embodied carbon. Paragraph 8 of the NPPF states clearly that “minimising waste” and supporting movements towards a “low carbon economy" are core components of the environmental objective of the planning system, whilst Paragraph 161 of the NPPF is clear that plans should “encourage the reuse of existing resources, including the conversion of existing buildings”. Notwithstanding the above, Paragraph 27 of the NPPF requires strategic policymakers to take consistent approaches with other strategic bodies, particularly on matters such as waste. Therefore, it was not considered appropriate for the Local Plan to omit requirements for sustainable resource use and waste management.

10.22 Feedback received during the First Proposals consultation was broadly positive, providing support for local planning policy on sustainable waste management and the integration of circular economy principles in the Local Plan. It is recognised that effective resource and waste management needs to be considered when a development is operational, as well as during the construction process. This will need to include the consideration of material reuse, recycling or other material recovery as part of development. Moreover, innovative waste management solutions have been implemented in new development across Greater Cambridge, such as the underground bin system introduced in Eddington; the councils agree that innovative solutions that facilitate sustainable waste management and operational resource use should be encouraged by local planning policy. Therefore, support for innovative waste management solutions has been built into the policy, in addition to requirements for waste sorting and storage facilities to align with or exceed guidance contained within Cambridgeshire County Council’s RECAP Guidance (or successor documents).

10.23 The councils agree that where possible existing buildings should be reused or repurposed, unless a clearly evidenced more sustainable outcome, can be delivered through their demolition and replacement. However, it is also acknowledged that details submitted as part of a planning application should be proportionate to the scale and nature of a proposed development in line with the NPPF. A standalone Circular Economy Statement will be required for large-scale development (i.e. development of 150 dwellings or more, 15,000 square metres or more, or where the site area is 2 hectares or more) or development that involves the demolition of existing buildings. Smaller scale developments will also be expected to integrate circular economy principles, but this can be sufficiently demonstrated as part of a Sustainability Statement for the proposed development. The supporting text has clarified the details expected as part of the Circular Economy Statement – as waste output and material requirements can vary considerably from project to project, targets for waste outputs and material circularity are not proposed to be included within policy and will instead need to be established on a case-by-case basis as appropriate to the development in question. In a similar vein, targets for whole life carbon are not proposed at this stage as this will vary depending on the type of development being proposed. It is noted that for the UK Net Zero Carbon Buildings Standard, metrics related to whole life or life cycle carbon are expected to evolve over time.

10.24 To maintain the policy's focus on circular economy principles and sustainable resource use, the policy title has been altered in line with the suggestion made by Cambridgeshire County Council. Requirements for Construction Environmental Management Plans (CEMPs), which cover aspects of construction management and pollution control beyond waste and resource management, were also moved to a separate, complementary policy within the Local Plan (Policy I/CM) to maintain Policy CC/CE's focus on the circular economy and sustainable resource use.

Further works and next steps

10.25 Review the comments received on the draft Local Plan prior to preparing the proposed submission version, alongside any further evidence or changes to national or local policy.

11. Policy CC/CS: Supporting land-based carbon sequestration and carbon sinks

Issue the Plan is seeking to respond to

11.1 The policy seeks to protect peatland from development due to its role as a carbon sink. It also seeks to ensure that the carbon sequestration potential of new green infrastructure provided as part of new developments is maximised.

How was the issue covered in the First Proposals Consultation?

11.2 A policy approach was proposed in the First Proposals consultation. The Proposed approach and full representations received can be viewed Policy CC/CS: Supporting Land-based Carbon Sequestration and Carbon Sinks.

11.3 The First Proposals was supported by topic papers, which explored the context, evidence and potential alternatives and the preferred approach in greater detail. This can be viewed Climate Change: Topic Paper.

Policy Context update

National Planning Policy Framework (NPPF, December 2024)

11.4 Paragraph 125 of the NPPF calls for planning policies and decisions to recognise that some undeveloped land can perform many functions, including carbon storage.

Peat Map for England (Natural England, May 2025)

11.5 In May 2025 Natural England launched a new nationwide map of peat and peaty soils, The England Peat Map. It contains the most detailed national coverage to date for peat depth, peatland vegetation, upland drainage channels and upland bare peat, all of which are important in determining peatland condition.

International Panel on Climate Change – Climate Change 2022: Impacts, Adaptation and Vulnerability

11.6 The IPCC's 2022 assessment of climate impacts, global adaptation potential and vulnerabilities to climate risks highlight that the preservation of existing carbon sinks and the introduction of new carbon sinks will play an important role in helping populations across the world to mitigate the worsening of climate change:

11.7 'C.2.3. Adaptation for natural forests includes conservation, protection and restoration measures. In managed forests, adaptation options include sustainable forest management, diversifying and adjusting tree species compositions to build resilience, and managing increased risks from pests and diseases and wildfires. Restoring natural forests and drained peatlands and improving sustainability of managed forests, generally enhances the resilience of carbon stocks and sinks.'

Summary of issues arising from First Proposals representations

11.8 As part of the First Proposals consultation, there was general support for a policy related to land-based carbon sequestration. Some suggested that for developments over a certain threshold, soil management plans should be required to demonstrate that carbon sequestration would be maintained into the future. A number of developers also supported the policy, noting the potential that the landscape strategies for new developments offered in relation to enhancing carbon sequestration through new habitat creation and requesting that this be acknowledged by the policy. Further detail, including where to view the full representations and who made each representation, is provided in the Consultation Statement.

New or updated evidence base

11.9 The England Peat Map provides up to date information on the extent, depth and condition of peat and peaty soils.

Additional alternative approaches considered

11.10 No additional alternative approaches identified.

Draft Policy and reasons

11.11 The draft policy can be viewed in the Draft Local Plan: Link to the draft plan policy.

11.12 Land plays a significant role in climate objectives, acting as both a source of greenhouse gas emissions and a carbon sink. Peatlands are a particularly important store of carbon, while other habitats, including woodlands and grasslands, also have a role to play, as indicated in latest research by Natural England. Peatland is primarily located in the north of Greater Cambridge, as identified on the Natural England peatland status maps.

11.13 Alongside many other negative impacts, loss and degradation of natural habitats result in the direct loss of carbon stored within them. Our evidence, alongside the work of the Committee on Climate Change, shows that, even after all ambitious carbon reduction actions are taken, there will still be a proportion of 'residual' or unavoidable carbon emissions from the economy as a whole. Therefore, land-based carbon sequestration, alongside technological means for removing carbon from the atmosphere, will have a role to play.

11.14 Planning policies already exist to protect nature sites, which will act as a carbon sink. Legislation and policies also exist to require new development to provide new open space and deliver biodiversity net gains. Promotion of nature-based solutions, where natural systems are protected, restored and managed can assist with the protection of carbon sinks, whilst also providing benefits for biodiversity and health and wellbeing. The policy wording has been updated to encourage green infrastructure proposals as part of new development to maximise carbon sequestration potential.

11.15 A further issue that the draft policy seeks to address relates to the impact that construction can have on soils. Soil is a vulnerable and essentially non-renewable resource. The draft policy seeks to promote construction practices that seek to preserve the functions and ecosystem services provided by soils.

11.16 Some of the most fundamental impacts on this resource occur as a result of construction activities, including:

1. Covering soil with impermeable materials, effectively sealing it and resulting in significant detrimental impacts on its physical, chemical and biological properties, including drainage characteristics.
2. Contaminating soil as a result of accidental spillage or the use of chemicals.
3. Over-compacting soil through the use of heavy machinery or the storage of construction materials.
4. Reducing soil quality, for example by mixing topsoil with subsoil.
5. Wasting soil by mixing it with construction waste or contaminated materials, which then have to be treated before reuse or even disposed of as landfill as a last resort.

11.17 By following best practice guidance for sustainable use of soils, these impacts can be minimised, ensuring that soils can continue to provide function and services which are central to social, economic and environmental sustainability.

Response to main issues raised in representations

11.18 The role that the provision of green infrastructure and new habitats as part of new developments can play in carbon sequestration has been added to the policy in response to representations calling for the policy to recognise and support this approach.

Further work and next steps

Review the comments received on the draft Local Plan prior to preparing the proposed submission version, alongside any further evidence or changes to national or local policy.