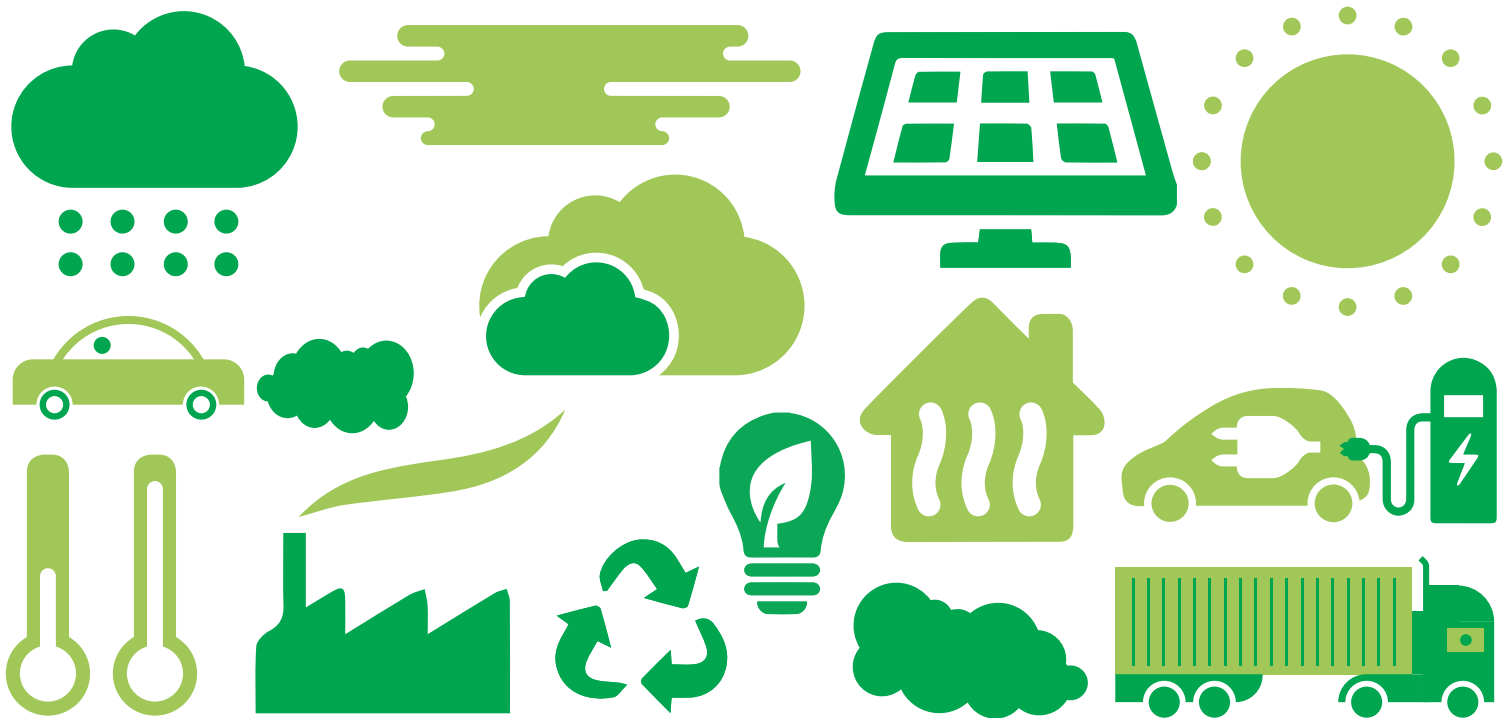


Climate Change Topic Paper



Greater Cambridge Local Plan

Topic paper published alongside the First Proposals
(Regulation 18: The Preferred Options) Consultation 2021

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1. Introduction and Purpose

This is one of eight topic papers produced to inform the consultation on the Greater Cambridge Local Plan: First Proposals. The topic papers are:

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

All of the papers can be found on the [Greater Cambridge Shared Planning website](#).

The topic papers set out how the preferred option for each policy under the relevant Local Plan 'Theme' has been developed. As such, the topic papers support and complement the First Proposals consultation document as they provide a detailed explanation of the basis for each preferred policy approach. 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 preferred option. The content and structure for each policy option is:

- the issue the plan is seeking to respond to;
- the national, regional and local policy context that informs how the plan should address the issue;
- how consultation and engagement have informed the policy's development;
- the evidence that has informed the preferred policy option;
- the proposed policy approach and reasons why this is preferred, including alternative options considered;
- an explanation of how Sustainability Appraisal (see below) has informed development of the preferred policy option; and
- further work and next steps.

A Local Plan must be informed by consultation and engagement as well as statutory processes, such as Sustainability Appraisal and Habitats Regulations Assessment, and the requirements of national planning policy. These important elements of plan-making have, therefore, informed development of the First Proposals for the Local Plan and are the subject of separate reports, and are also available on the [Greater Cambridge Shared Planning website](#). These form part of the overall consultation and are summarised below.

Greater Cambridge Local Plan Statement of Consultation

The Statement of Consultation sets out how the Councils have undertaken consultation, and propose to undertake consultation, in preparing the Greater Cambridge Local Plan.

The Statement will be updated at each stage of the plan making process; the current version supports the First Proposals stage.

The approach to Local Plan consultation is founded on the Councils' [Statement of Community Involvement](#). This sets out how and when we will involve the community and key stakeholders in preparing, altering and reviewing our plans and guidance for future development. It also explains how we will involve the community in planning applications.

The current version of the [Statement of Consultation](#) provides details of the consultation and engagement we have undertaken to date. This includes events before and after the first formal consultation on the plan, as well as details of the formal consultation itself, known as The First Conversation. The Statement summarises what have you told us so far and how we have taken this into account in developing the Local Plan.

Greater Cambridge Local Plan Sustainability Appraisal

A sustainability appraisal is a systematic process required by law that must be carried out during the preparation of a local plan. Its role is to promote sustainable development by assessing the extent to which the emerging plan, when judged against reasonable alternatives, will help to achieve relevant environmental, economic and social objectives. Sustainability appraisal should be applied as an ongoing process informing the development of the plan throughout its preparation.

Reasonable alternatives are the different realistic options considered in developing the policies in the plan. They need to be sufficiently distinct to highlight the different sustainability implications of each so that meaningful comparisons can be made. The sustainability appraisal should only focus on what is needed to assess the likely significant effects of the plan.

A Sustainability Appraisal Scoping Report was subject to consultation alongside the First Consultation in January 2020. A sustainability appraisal was also completed on the First Conversation. In November 2020 an appraisal was carried out to inform the testing of development strategy options. These reports can be found on the Greater Cambridge Shared Planning website in the [document library](#) section.

The Greater Cambridge Local Plan First Proposals Sustainability Appraisal report has now been published, which considers the proposals and option identified in the

First Proposals report. It includes a non-technical summary of the information, providing a clear and accessible overview of the process and findings.

The sustainability appraisal report sets out the reasonable alternatives considered as the plan has evolved, including the preferred approach in each case, and assesses these against the baseline environmental, economic and social characteristics of the area.

Greater Cambridge Local Plan Habitats Regulations Assessment

A Habitats Regulations Assessment (HRA) refers to a process which must be undertaken by law to determine if a plan or project may affect the protected features of a habitats site. European Sites and European Offshore Marine Sites are referred to as 'habitats sites' in national planning policy.

All plans which are not directly connected with the conservation management of a habitat site require consideration of whether the plan or project is likely to have significant effects on that site. This consideration should take into account the potential effects both of the plan/project itself and in combination with other plans or projects.

If a proposed plan or project is considered likely to have a significant effect on a protected habitats site then an appropriate assessment of the implications for the site, in view of the site's conservation objectives, must be undertaken. An appropriate assessment for a local plan should consider the impacts on sites and confirm the suitability or likely success of mitigation measures.

The HRA process began in 2020 with the publication of the HRA Scoping Report alongside the First Conversation in January 2020, which identified European sites with potential to be affected by the Local Plan. In November 2020 an assessment of the strategic spatial options was published. These reports can be found on the Greater Cambridge Shared Planning website in the [document library](#) section.

An HRA has now been carried out of the proposals in the First Proposals Report, and published to accompany the consultation.

Greater Cambridge Local Plan Duty to Cooperate: Statement of Common Ground

The purpose of the Greater Cambridge Local Plan Duty to Cooperate Statement of Common Ground is to set out the main areas of common and uncommon ground with relevant partners on strategic cross-boundary matters. It also forms part of the evidence required to demonstrate that the Councils have complied with the duty to cooperate in preparing the local plan.

The Statement of Common Ground responds to the requirement in national planning policy and guidance that strategic policy-making authorities are expected to document the activities undertaken when in the process of addressing strategic cross-boundary matters whilst cooperating. These will include the following matters that should be tailored to address local circumstances:

- working together at the outset of plan-making to identify cross-boundary matters which will need addressing;
- producing or commissioning joint research and evidence to address cross-boundary matters;
- assessing impacts of emerging policies; and
- preparing joint, or agreeing, strategic policies affecting more than one authority area to ensure development is coordinated.

The Statement of Common Ground is intended to provide the outcome at a point in time of the ongoing cooperation with relevant bodies regarding strategic cross-boundary matters. It is intended to be a concise sign-posting document. It is closely related to the First Proposals Duty to Cooperate Statement of Compliance and to the First Proposals Statement of Consultation.

Greater Cambridge Local Plan Equalities Impact Assessment (EQIA)

The Public Sector Equality Duty, introduced under the Equality Act 2010, requires all public bodies, including Councils, to have due regard to the need to eliminate unlawful discrimination, harassment, and victimisation; advance equality of opportunity between those who share a protected characteristic and those who do not; and foster good relations between those who share a relevant protected characteristic and those who do not.

An EQIA provides a methodical approach to the assessment of impacts across the protected characteristics set out in legislation. An assessment should be completed during the development and review of all Council policies, strategies, procedures, projects or functions.

EQIA was carried out at the First Conversation stage at January 2020, and in relation to the testing of strategic options in November 2020. These reports can be found on the Greater Cambridge Shared Planning website in the [document library](#) section.

The Greater Cambridge Local Plan First Proposals Report Equalities Impact Assessment has now been proposed to provide an assessment of the policies and proposals in the consultation.

2. Overall Context for Climate Change

2.1 Background

In October 2018, the Intergovernmental Panel on Climate Change (IPCC) released a [report](#) highlighting the significance of limiting global warming to just 1.5°C in line with the Paris Agreement and the potential climatic implications of exceeding this. In order to prevent further global warming beyond this level, the IPCC concluded that global net human-caused emissions of carbon dioxide (CO₂) need to fall by about 45% from 2010 levels by 2030, reaching 'net zero' around 2050. Even by limiting emissions, we will still see some global warming, with the UK Climate Projections 2018 study noting that even under a lower emissions scenario, the UK will still see higher average yearly temperatures and an increase in extreme weather events. However, under a scenario with the highest emissions, summer temperatures could be up to around 5°C hotter by 2070 with an increase in the frequency and magnitude of extreme weather events.

In May 2019, the UK Government declared a climate emergency, amending the 2008 Climate Change Act to set a target for emissions in the UK to become net zero by 2050. Both Cambridge City Council and South Cambridgeshire District Council have pledged to support net zero through the development of planning policy, as well as other areas over which the Councils have influence.

Planning is not just concerned with buildings themselves but place making and as such has the potential to be a powerful tool in the response to the climate emergency. Achieving net zero status cuts across all elements of place making; not just through how homes and buildings are designed and constructed, but also by ensuring new development is in places where it is or can be well served by low carbon transport links like public transport, cycling and walking as well as renewable and low carbon energy. Green infrastructure also has a role to play, supporting fauna and flora to enhance biodiversity and offering opportunities to capture any remaining emissions as well as helping our communities adapt to our changing climate through flood storage and helping to cool our cities, towns and villages. Planning can also help ensure we make the best use of the many natural assets the area has to offer, as well as considering issues such as efficient use of resources including water.

As part of the First Conversation report we set out our approach to ensuring that responding to climate change and managing water resources would be at the heart of the new local plan.

2.2 Proposed Approach

The following proposed policies areas are addressed in this topic paper. For each of these, further detail is provided on the national, regional and local policy context, the consultation and engagement undertaken, the evidence informing it, the proposed approach and reasons for its selection, and details of further work on the issue that will be undertaken for future stages of the plan making process.

- CC/NZ: Net zero carbon new buildings
- CC/WE: Water efficiency in new developments
- CC/DC: Designing for a changing climate
- CC/FM: Flooding and integrated water management
- CC/RE: Renewable energy projects and infrastructure
- CC/CE: Reducing waste and supporting the circular economy
- CC/CS: Supporting land based carbon sequestration

3. Further Work and Next Steps

The next step in the plan making will be to prepare a draft Local Plan for consultation. This will be informed by the comments we received through this consultation, and further development of the evidence base which supports the plan.

In particular on this theme, further work will be required in relation to the development of a formal process to enable the carbon offsetting mechanism included within policy CC/NZ to be enabled.

4. CC/NZ: Net zero carbon new buildings

4.1 Issue the Plan is Seeking to Respond to

The UK has a legally binding requirement to achieve net zero carbon by 2050, with the recently adopted sixth carbon budget, which was translated into law in June 2021, requires 63% reduction in emissions from 2019 to 2035 (78% relative to 1990). Achieving net zero carbon requires action across all sectors, including the built environment. 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 building stock, we cannot add to that burden.

In its latest [progress report on reducing emissions](#), 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 around 20% of the required reduction in emissions needed to meet the Sixth Carbon Budget. With regards to planning, they noted that there had been a failure to recast national planning policy to meet our legal and international climate commitments and that MHCLG are not fully supporting local government to play its part in the transition to net zero carbon. The success of reducing emissions in the electricity sector has not been matched in other sectors including transport or buildings. They recommend that no fossil fuels be burnt in new buildings.

4.2 Policy Context

National Context

Addressing climate change is one of the core land use planning principles within the National Planning Policy Framework (NPPF). Section 14 of the NPPF considers the role of planning in dealing with climate change and flood risk, noting the role of planning in supporting the transition to a low carbon future in a changing climate. Planning should help to shape places in ways that contribute to radical reductions in greenhouse gas emissions, with footnote 53 of paragraph 153 noting that planning policies should be in line with the objectives and provisions of the Climate Change Act 2008. The Climate Change Act 2008 was amended in August 2019 to set a legally binding target for the UK to become net zero by 2050.

Section 182 of the Planning Act (2008) places a legal duty on local planning authorities to ensure that their development plan documents include policy to secure the contribution of development and the use of land in the mitigation of climate

change. Provisions in the Planning and Energy Act also enable local planning authorities to set requirements for carbon reduction and renewable energy provision. While the Housing Standards Review sought to repeal some of these provisions, amendments to the Planning and Energy Act have not taken place. 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.

When considering the national policy context, it is important to note the view of the Committee on Climate Change, who in their latest [progress report to parliament](#) note that the current Planning Bill misses the powerful opportunity to ensure that developments and infrastructure are compliant with net zero and appropriately resilient to climate change. The Committee have recommended that MHCLG address this via proposed amendments to the Planning Bill.

Regional / Local Context

Oxford-Cambridge Arc

A set of [environmental principles](#) has been developed to ensure that the environment is at the heart of decision making on development within the Oxford-Cambridge Arc. The following principles are of relevance to net zero carbon:

- Work towards a target of net zero carbon at an Arc level by 2040. This will include:
 - Working with Government to enhance building regulations and planning policy to actively reduce the carbon footprint of, and energy consumption in, new buildings.
- Be an exemplar for environmentally sustainable development, in line with the ambitions set out in the government’s 25 year plan. This will incorporate a systems-based approach and integrated assessment and implementation approach and will fully recognise the associated health and wellbeing benefits. We will aim to go beyond the minimum legislated requirements for development. This will include:
 - All new settlements, urban extensions and infrastructure contributing to the achievement of delivering net biodiversity gain, net environmental gain and net zero carbon both in site and route selection and in the design of settlements and transport corridors.
 - Working with Government to enhance building regulations and planning policy so that they align with sustainability principles, and actively reduce the carbon footprint water and energy consumption in,

new and existing buildings. We will encourage Arc partners to exceed the minimum standards required by Building Regulations.

- Promoting the switch to renewable and other sustainable energy supplies.

Cambridgeshire and Peterborough Commission on Climate

The Cambridgeshire and Peterborough Combined Authority (CPCA) have established the Cambridgeshire and Peterborough Commission on Climate to conduct a thorough review of the ways that climate change is impacting on the regions local economy and community and to determine what action should be taken. The Commissions [initial recommendations report](#), published in March 2021, notes that the regions emissions are approximately 25% higher per person than the UK average, and that if the area continues on this trajectory, we will only have around 6 years remaining before we have exhausted all of our 'allowed' share on emissions to 2050. Urgent action is therefore required, with the report noting that local government powers in transport and planning, amongst others, will be critical in driving transformation. The report makes a number of recommendations of relevance to the built environment, including:

- Calling on central government to provide increased powers for local authorities to require higher standards in planning, building and transport.
- Adopting a net zero carbon standard for new homes by 2023, with adoption of a similar standard for non-domestic buildings.
- Development of new build guidance to address embodied emissions with targets strengthening over time.
- Performance should be actively monitored and standards full enforced, with performance measurements reflecting real-world energy use.

Cambridge City Council and South Cambridgeshire District Council

Both Cambridge City Council and South Cambridgeshire District Council have declared climate emergencies, pledging to support net zero through the development of planning policy, as well as other areas over which the Councils have influence.

In terms of corporate objectives:

Cambridge City Council: Caring for the planet

1. A city that takes robust action to tackle the local and global threat of climate change, both internally and in partnership with local organisations and residents, and to minimise its environmental impact by cutting carbon, waste and pollution.

[Cambridge City Council Climate Change Strategy 2021-2026](#)

Includes a vision for Cambridge to be net zero carbon by 2030, subject to Government, industry and regulators implementing the necessary changes to enable the city and the rest of the UK to achieve this. The objectives of the strategy include:

1. Reducing energy consumption and carbon emissions from homes and buildings in Cambridge.

South Cambridgeshire District Council:

1. Being green to our core – by the Council developing a plan for a carbon-neutral future for South Cambridgeshire, exploring opportunities for green energy generation and improving air quality.

[South Cambridgeshire District Council Zero carbon strategy and action plan](#)

Includes an aspiration to deliver a 50% reduction in carbon emissions from the South Cambridgeshire area by 2030 relative to a 2018 baseline, reducing to net zero carbon by 2050 at the latest. The strategy recognises the role that the development of planning policy has to play in reducing the emissions associated with new housing and other development in the district.

Adopted Local Plans

South Cambridgeshire Local Plan 2018

- CC/1: Mitigation and Adaptation to Climate Change
- CC/3: Renewable and Low Carbon Energy in New Developments
- CC/5 Sustainable Show Homes

Cambridge Local Plan 2018

- Policy 28: Carbon reduction, community energy networks, sustainable design and construction, and water use
- Policy 30: Energy-efficiency improvements in existing dwellings.

4.3 Consultation and Engagement

In the First Conversation in 2020 you told us that delivering net zero carbon was an important issue for you. There was a call for developments to achieve standards such as Passivhaus and BREEAM and for the use of technologies such as heat pumps and solar panels, as well as the need to consider the carbon associated with building materials. There was also a call from some for policies to be flexible to respond to innovations during the plan period, for example the emergence of new heating technologies such as hydrogen. You also asked for the development of an approach to carbon offsetting. While there was a lot of support for strong standards, some respondents were of the view that energy performance policies should not set requirements above the equivalent of the energy requirement of Level 4 of the Code for Sustainable Homes.

4.4 Evidence Base

Our Net Zero Carbon study advises that new buildings need to be built to net zero carbon as soon as possible for Greater Cambridge to play its part in meeting the UK's Climate budgets. This will require rapid decarbonisation across all sectors of the UK economy, including the built environment. To achieve true net zero carbon, the policy needs to target all energy use in buildings as well as the carbon associated with constructing those buildings.

In order to support the preferred approach to our net zero carbon buildings policy, our evidence base includes an assessment of the technical feasibility of achieving net zero carbon across a range of development typologies, as well as the costs of achieving these targets. As part of assessing the technical feasibility of achieving net zero carbon, a series of common building archetypes common in developments across Greater Cambridge were assessed, using guidance issued by the Committee on Climate Change, the London Energy Transformation Initiative, RIBA 2030 Climate Challenge and the Passive House Institute. This assessment focussed on using energy efficiently, the role of low carbon heating and renewable energy generation.

The results from this analysis show that building to net zero carbon standard is feasible in Greater Cambridge. In order to provide a degree of flexibility in how the requirements are met, the preferred policy approach sets a series of metrics built around space heating demand, energy use intensity, low carbon heat and renewable energy generation. It is important to note that the building archetypes that were modelled, were not designed to be low energy buildings. There are many benefits to be derived from designing for net zero carbon from inception. Optimised buildings would have improved shape, orientation and window proportions, as well as an asymmetric roof to help maximise the number of pv panels. Adopting this approach would mean that more buildings could comfortably meet net zero onsite with high specification materials, the excellent fabric performance (15kWh/m²/yr) and low carbon heating system. Many buildings could easily be net energy positive, with the ability to export renewable energy or provide charging for electric vehicles. Implementing the fundamentals of energy efficient design can lead to greater flexibility in other areas as well as less onerous requirements to meet specific levels of performance. Optimising the design in this way is also likely to lead to cost savings or minimise cost uplift.

In terms of capital cost uplift to net zero carbon, our financial viability assessment carried out by Currie and Brown, indicates a 5 – 13% uplift in costs compared to building to Part L 2013. Note that amendments to Part L of Building Regulation scheduled to take place in 2021 will further reduce this uplift. These costs have been factored into wider viability work undertaken for the Greater Cambridge Local Plan.

4.5 Proposed Policy Approach and Reasons

The Proposed Policy Direction

The proposed approach, as set out in the First Proposals report is as follows:

That the policy set specific requirements regarding the energy needs of new buildings and how renewable energy should be used to generate that energy requirement. For those developments unable to meet those requirements fully on-site, the use of a carbon offset mechanism, which would be used to invest in additional renewable energy generation, is proposed. Consideration is also given to the carbon associated with the construction process and the materials used to construct new buildings, known as embodied carbon, as well as reducing the difference between designed performance and as built performance, known as the performance gap, using Assured Performance processes.

The technical requirements proposed below have been informed by our Net Zero Carbon Study (2021).

Net Zero Carbon Buildings – operational emissions

1. Part A: All housing and non-domestic buildings should achieve a specific space heating demand as follows:
 - a. All new dwellings should have a space heating demand of 15-20 kWh per meter squared per year
 - b. All non-domestic buildings should achieve a space heating demand of 15-20 kWh per meter squared per year
2. All heating should be provided through low carbon fuels (not fossil fuels).
3. No new developments should be connected to the gas grid.
4. Part B: Total Energy Use Intensity (EUI) targets are achieved as per building type (set out in kWh per m² per year), as follows:
 - a. All dwellings should achieve an EUI of no more than 35 kWh per m² per year.
 - b. Non domestic buildings should achieve the following EUI of no more than the following, where technically feasible, by building type:
 - Offices: 55 kWh per m² per year
 - Schools: 65 kWh per m² per year
 - Multi-residential (e.g. student accommodation): 35 kWh per m² per year
 - Retail: 55 kWh per m² per year
 - Leisure: 100 kWh per m² per year
 - Research facility: 150 kWh per m² per year
 - Higher education teaching facilities: 55 kWh per m² per year
 - Light industrial uses: 110 kWh per m² per year
 - GP surgery: 55 kWh per m² per year
 - Hotel: 55 kWh per m² per year

5. Part C: Proposals should generate at least the same amount of renewable energy (preferably on-plot) as they demand over the course of a year. This should include all energy use (regulated and unregulated), calculated using a methodology proven to accurately predict a building's actual energy performance.
6. Where a development of multiple buildings is concerned, the renewable energy generation requirement should be calculated and demonstrated across the whole development so that buildings that are able to exceed the requirements do so in order to compensate for any buildings onsite that cannot meet the requirements.
7. Part D: Offsetting to only be used in certain circumstances (e.g. insufficient roof space to generate renewable energy) – money would only be used to invest in additional renewable energy generation to ensure net zero carbon buildings are delivered. Where a proposal cannot meet the requirements in full, in addition to offsetting, the development must be futureproofed to enable future occupiers to easily retrofit or upgrade buildings and/or infrastructure in the future to enable achievement of net zero carbon development.
8. All developments must demonstrate use of an assured performance method in order to ensure that the buildings' operational energy performance reflects design intentions and addresses the performance gap.

Net Zero Carbon Buildings – construction

9. Residential developments of 150 homes or more and non-residential development of 1,000 m² or more should calculate whole life carbon emissions through a nationally recognised Whole Life Carbon Assessment and demonstrate actions to reduce life-cycle carbon emissions. This should include reducing emissions associated with construction plant.

Reasons for the proposed policy direction

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 a carbon 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 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 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.

It is noted that the Planning and Energy Act, in allowing local planning authorities to set standards that exceed Building Regulations, requires 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. With net zero carbon, 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 the London Energy Transformation Initiative (LETI) in their climate emergency design guide, and those endorsed by the RIBA in their 2030 Climate Challenge.

The proposed policy deals with all of the carbon associated with new buildings, so 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. 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 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.

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 and RIBA Embodied and Whole Life Carbon Assessment for Architects, 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 will only be useful once measurement is consistent. The UK Green Building Council are currently working on a Whole Life Carbon Net Zero Carbon Roadmap, which will generate the evidence that will assist in future more detailed building level target setting. As such, and in line with the recommendations from LETI in their work on embodied carbon target alignment, at this stage, the recommended policy approach is that embodied carbon should be calculated and reported, with reference to best practice targets where appropriate. The thresholds identified in the policy are similar those used by the Greater London Authority, and recognise that for smaller scale developments, there may not be access to the expertise required to undertake Whole Life Carbon Assessment. These thresholds will be kept under review as further national work on embodied carbon progresses.

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 buildings 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 of schemes available including NABERS UK, the National Energy Foundation’s Assured Performance Process, The Building Energy Performance Improvement Toolkit managed 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.

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.

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. National policy does 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 meeting 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.

Alternative approaches, and reasons why they were rejected

No policy, leaving the delivery of net zero carbon to Building Regulations and the Future Homes/Buildings Standard - Not considered a reasonable alternative as it does not fulfil our statutory duty set out in the Climate Change Act and Planning Act and will not enable Greater Cambridge to achieve its carbon budget.

The alternative policy approach would be to leave the delivery of net zero carbon to Building Regulations and the Future Homes/Buildings Standard. This option has been rejected as it does not fulfil our statutory duty as set out in the Climate Change Act and Planning Act and will not enable Greater Cambridge to achieve its carbon budget. Building Regulations only considers regulated energy, whereas in order to achieve net zero carbon, all energy consumption from new buildings must be met by renewable energy. The Future Homes Standard, as currently drafted, only requires homes to be 'zero carbon ready', leaving further carbon reduction to achieve net zero carbon to home owners or landlords, adding to the retrofit burden and the 28 million homes in the UK already needing retrofit to achieve net zero carbon by 2050. The Committee on Climate Change, [writing in 2019](#) noted that the UK's legally binding climate change targets will not be met without the near-complete elimination of greenhouse gas emissions from UK buildings. In addition, 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. As buildings become more energy efficient, embodied carbon becomes more significant and can represent 40-70% of Whole Life Carbon in a new building.

4.6 Further Work and Next Steps

Taking account of feedback received, the next step would be the inclusion of a fully worked up policy in the draft Local Plan for consultation at the next stage of plan making. In particular on this theme, further work will be required in relation to the development of a formal process to enable the carbon offsetting mechanism included within policy CC/NZ to be enabled.

5. CC/WE: Water efficiency in new developments

5.1 Issue the Plan is Seeking to Respond to

Greater Cambridge is one of the driest areas in the UK and evidence has shown that existing abstraction is causing environmental problems. As a result, future development cannot be supplied with water by increased abstraction from the chalk aquifer and must be met in other ways. One of these ways is through reduced usage (demand management) and therefore the Plan must ensure that any future development achieves high levels of water efficiency. The efficient use of an important resource such as water is key to sustainable development and adapting to climate change which will affect rainfall and evaporation. The efficient use of water also links to integrated and sustainable water management, which is discussed in more detail under policy area CC/FM.

5.2 Policy Context

National Context

Paragraph 20 of the NPPF (2021) requires that strategic policies should set out an overall strategy for the pattern, scale and quality of development and make sufficient provision for infrastructure, including water supply. Paragraph 153 is concerned with ensuring that plans take a proactive approach to mitigating and adapting to climate change, including taking into account the long-term implications for water supply.

[Planning Practice Guidance \(PPG\) Water supply, wastewater and water quality \(2019\)](#) provides guidance on all aspects of the water environment including water supply. It emphasises the need for early discussion with water and sewage companies in order that growth can be reflected in their long-term water resources management plans so that adequate infrastructure will be in place when and where needed.

The PPG [Housing: optional technical standards \(2015\)](#) explains how planning authorities can gather evidence to set optional technical standards for new housing, and includes an option for tighter water efficiency standards for new homes to help manage demand. All new homes already have to meet the mandatory national standard set out in Building Regulations of 125 litres/person/day. The guidance states that where there is a clear local need, authorities can include a Local Plan policy requiring new dwellings to meet the tighter Building Regulations optional requirement of 110 litres/person/day. It also sets out how a local planning authority can establish that there is a clear need and the evidence that could be used to support this.

The Environment Agency recently published the report [Water stressed areas – final classification \(2021\)](#), which identifies the area covered by Cambridge Water as

seriously water stressed for the first time. This means that the water company can make water metering compulsory for all customers and local authorities can use the water stress determination to require the tighter standard of 110 litres per head per day in new developments.

A [National Framework for Water Resources](#) was published in 2020 by the Environment Agency. This was in response to two pledges set out in the Government's Environment Plan:

- to leave the environment in a better state than we found it; and
- to improve the nation's resilience to drought and minimise interruptions to water supplies.

The framework supports the case for water resource investment to increase drought resilience, so that the nation's water supplies are fit for the future. It also makes a shift to strategic regional planning and established five regional groups, based upon water companies and other water users and stakeholders. Greater Cambridge falls within the Water Resources East region (see below). The framework sets out what the regional plans must deliver in order to drive a step-change in water resources planning. This includes:

- Increasing resilience to drought
- Delivering greater environmental improvement
- Long-term reductions in water usage
- Leakage reduction
- Reducing the use of drought permits and orders
- Increasing supplies
- Moving water to where it's needed

Regional / Local Context

Water Resources East

Water Resources East (WRE) is co-creating a [Regional Plan for water resources in the East of England](#) in collaboration with key national, regional and local stakeholders. The current timetable for the Regional Plan is for a draft plan to be published in August 2022, with a final plan in September 2023. The Regional Plan and Greater Cambridge Local Plan are being developed in parallel and we are working collaboratively with WRE.

Water Company Plans

In Greater Cambridge water is supplied by Cambridge Water (which is part of South Staffordshire Water). All water companies are required to have a Water Resources Management Plan (WRMP), which sets out how they will manage the supply and demand for water over a 25 year period, and these are reviewed

every 5 years. Cambridge Water's most recent [WRMP](#) was published in 2019 and covers the period 2020 to 2045. It takes into account the growth in the adopted Cambridge and South Cambridgeshire Local Plans (2018). The next WRMP is due in 2024 and will need to reflect the Regional Plan for water.

Cambridge Water together with Anglian Water have submitted initial proposals, known as a gate one submission, for [strategic water resources options](#) to the Regulatory Alliance for Progressing Infrastructure Development (RAPID). This strategic option is a proposed new reservoir in the Fens either to the east or west of the Ouse Washes, known as the Fens Reservoir.

Cambridgeshire and Peterborough Independent Commission on Climate

The Independent Commission on Climate was established by the Cambridgeshire and Peterborough Combined Authority to conduct a thorough review of the ways that climate change is impacting the local economy and communities, and to determine what could and should be done so that the region can adapt to or mitigate these effects. The [initial recommendations](#) were published in March 2021. There are some recommendations in relation to water although this will be looked at in more detail in further work. These include:

- For Central Government and Ofwat to provide for the investment to allow intercompany trading and water infrastructure improvements by 2025 to enhance water supply, including eliminating Cambridge's dependence on the groundwater aquifer.
- Review new building regulation standards to allow local authorities to set more ambitious standards for water consumption, especially in current and future water-stressed areas.
- Home retrofit should include water efficiency measures (e.g. low-flow showers, low-flow taps)

Oxford-Cambridge Arc

A set of [environmental principles](#) has been developed to ensure that the environment is at the heart of decision making on development within the Oxford-Cambridge Arc. The following principles are of relevance to the water environment:

- Working with Government to enhance the building regulations to actively reduce water consumption. Arc local partners are encouraged to exceed the minimum standards required by building regulations.
- Work to address existing water resource, water quality and flood management issues and through an integrated approach ensure future

issues and risks are managed, including in the context of climate change, with a focus on nature-based interventions.

Adopted Local Plans

[South Cambridgeshire Local Plan](#) (2018)

- Policy CC/4 Water Efficiency requires that all new residential developments achieve as a minimum water efficiency equivalent to 110 litres/person/day, and non-residential must be accompanied by a water conservation strategy which demonstrates a minimum water efficiency standard equivalent to BREEAM standard for 2 credits for water use levels unless demonstrated not practicable. BREEAM is the Building Research Establishment Environmental Assessment Method, which is an established method of assessing, rating and certifying the sustainability of buildings.

[Cambridge Local Plan](#) (2018)

- Policy 28 Carbon reduction, community energy networks, sustainable design and construction, and water use, requires that all new development meets minimum standards for water efficiency in order not to exacerbate Cambridge's severe water stress. The levels are 110 litres/person/day for new homes and full credits for category Wat 01 of BREEAM

5.3 Consultation and Engagement

In the first conversation in 2020 there was a lot of support for sustainable sourcing and use of water in new developments and how this could be retrofitted in existing development. Several comments referred to the unsustainable abstraction taking place which is impacting the groundwater and causing harm to chalk streams and concern that future growth could worsen this problem of low flows. Also, that the Infrastructure Delivery Plan should consider the provision of water infrastructure in the area and outline the need for new and improved water infrastructure to support growth.

There was support for strong water management policies in order to protect groundwater and reduce the amount of water consumption through water efficiency. There were many comments about the benefits of sustainable urban drainage systems (SuDS), as a way in which to ensure water is recharged to the ground and aquifer, but also as a source of non-potable water. Water efficiency / re-use measures such as water saving fittings, rainwater harvesting, grey water use were put forward in many comments. There were also suggestions that 80 litres per person per day would be a suitable level of water use and that this should be included in policy.

Considerable engagement has taken place with stakeholders on developing the evidence base for water, which is set out in more detail in the section below.

5.4 Evidence Base

An Integrated Water Management Study has been produced by consultants Stantec, as an evidence base comprising:

- Level 1 Strategic Flood Risk Assessment
- Outline Water Cycle Study
- Detailed Water Cycle Study

The studies have been carried out in collaboration with a stakeholder group (comprising the Environment Agency, Natural England, Water Resources East, Lead Local Flood Authority (Cambridgeshire County Council), Cambridge Water, Anglian Water, Internal Drainage Boards) who have provided information and guidance throughout.

The Outline Water Cycle Strategy (OWCS) sets out the existing baseline situation with regards to water. It looks in detail at the hydrological context based on the area's climate, topography, geology, soils and land use. Greater Cambridge is one of the driest areas in the UK, with an average rainfall of 568mm per year compared to the UK average of 1154 mm per year. Winter rainfall replenishes the subsurface and groundwater stores, as summer rainfall tends to be associated with thunderstorms and the high rainfall rate is more likely to lead to surface run off which can cause flash flooding.

The most significant demand on water resources in Greater Cambridge is for public water supply. Cambridge Water (part of South Staffordshire Water) supplies all of the drinking water in Greater Cambridge and all of this is sourced from groundwater (97% from the chalk aquifer and 3% from greensand aquifers) via boreholes. Some groundwater abstraction is also required for industrial, commercial and public services, and there is some surface water abstraction for agriculture.

The OWCS looks in detail at water supply and shows that the chalk aquifer is already under pressure from abstraction and that this is having a detrimental impact on chalk stream baseflows and causing environmental damage, particularly during dry years. It is likely that this will be further exacerbated in the future by the impacts of climate change. Stakeholders agree that the level of abstraction should be reduced. As a result there is no environmental capacity for additional development in the new Local Plan to be supplied with water by increased abstraction from the chalk aquifer.

Future water demand and supply will need to be balanced in other ways and the OWCS suggests possible ways, including reduced usage (by using water more efficiently), reduced leakage, water company licence trading and the development of

new supply options at the regional scale. Water Resources East is coordinating regional efforts to increase water supply through their regional plan. New water supply reservoirs are being planned for the Anglian Water Region in South Lincolnshire and the Fens. The Fens reservoir (as referred to above) could provide additional water supply for Greater Cambridge, but this will not be operational until the mid to late 2030s.

The OWCS provides a lot of evidence about demand side measures to reduce the amount of water consumed, including changing public perception of water. To achieve 110 l/p/d is relatively easy and can be done by using water efficient fixtures and fittings including dishwashes, washing machines, toilets, showerheads and taps. The cost of this is negligible, estimated at £9 per home. The risk with measures such as these is that they could be replaced by the homeowner in the future with fixtures and fittings that aren't water efficient. Also, newer dual flush toilets quite often have undetected leaks due to faulty valves.

In order to achieve a lower level of 80l/p/d, other measures would also be necessary such as rainwater harvesting or grey water recycling. Rainwater harvesting involves the collection and storage of rainwater for non-potable uses such as watering gardens, flushing toilets and washing clothes. The cost of rainwater harvesting is much greater (in the region of £900 for an apartment and £2,200 – £2,700 for a house). It is more cost-effective at a site-wide scale and this has been successful at Eddington in West Cambridge. The OWCS also talks about the pros and cons of grey water recycling (where wastewater from hand basins, baths and showers can be used for toilet flushing, garden use and clothes washing machines). Grey water recycling systems are more expensive than rainwater systems due to the additional treatment needed and are only cost effective for larger schemes. Black water recycling is another option discussed in the OWCS (where water from toilets, kitchen sinks, dishwashers and washing machines is recycled and re-used for non-potable uses such as watering gardens (excluding edible crops) and flushing toilets).

How water is supplied is not within the remit of the Local Plan, however the OWCS highlights the opportunity for new development to achieve significantly reduced demand for water consumption making full use of water re-use measures on site including rainwater harvesting and grey water recycling. The study indicates that there is uncertainty as to whether the Local Plan would be able to go lower than the Building Regulations optional requirement of 110 l/p/d, but that all stakeholders support ambitious water efficiency targets below this optional requirement level.

5.5 Proposed Policy Approach and Reasons

The Proposed Policy Direction

The proposed approach as set out in the First Proposals report is as follows:

Developments will be required to meet high standards of high water efficiency:

- Residential developments should be designed to achieve a standard of 80 litres/person/day unless demonstrated impracticable.
- Non-residential development will be required to achieve full credits for category Wat 01 of BREEAM unless demonstrated impracticable.

Reasons for the Proposed Policy Direction

There is overwhelming evidence in the IWMS that Greater Cambridge is an area of severe water stress. This has also been recently confirmed by the classification of Cambridge Water's area as 'seriously water stressed' by the Environment Agency. As a result, the most water efficient standards for new development should be taken forward into Local Plan policy. 80 l/p/d is the level that was in the Code for Sustainable Homes Level 5/6 (now withdrawn) and was the design standard for Eddington in North West Cambridge. The IWMS has shown that 80 litres/person/day is achievable by making full use of water re-use measures on site including surface water and rainwater harvesting, and grey water recycling. It also shows that the cost effectiveness improves with the scale of the project, and that a site-wide system is preferable to smaller installations.

A standard of 80 l/p/d goes beyond what Local Authorities are currently able to do (as set out in the Deregulation Act 2015), but the case for greater water efficiency is so strong that there is a case for seeking this approach. This level of water efficiency is supported by Cambridge Water and Water Resources East and in principle by the Environment Agency although they have concerns about the deliverability of these levels being secured through the planning system.

This level was included in the previous submission draft Cambridge Local Plan but was removed by the Inspector as it went beyond Building Regulations. However, as referred to above the environmental principles for the Oxford Cambridge Arc suggest that they will be working with Government to enhance the Building Regulations to actively reduce water consumption. Within this document Arc local partners are encouraged to exceed the minimum standards required by Building Regulations.

The current Cambridge Local Plan requires full credits for category Wat 01 of BREEAM for non-residential developments, and it is proposed to take forward this high level of water efficiency for the whole of Greater Cambridge. The aim of the policy should be to achieve as high a level of water efficiency as possible and therefore full credits is the preferred option to take forward into policy.

Alternative approaches and reasons why they were rejected

For residential:

No policy – rely on standard Building Regulations (125 litres per person per day) - Not considered a reasonable alternative as it would not respond to the level of water stress in the area.

Implement the Building Regulations alternative standard (the current policy of 110 litres/person/day) - This is not the preferred approach as whilst this does seek to reduce water use, the level of reduction is not sufficient to respond to the pressure on water resources in the area.

For non-residential:

No policy – there is currently no standard in Building Regulations for water efficiency in non-residential developments - Not considered a reasonable alternative as it would not respond to the level of water stress in the area.

Require a minimum water efficiency standard of 2 credits for category Wat 01 of BREEAM unless demonstrated not practicable (current policy in the adopted South Cambridgeshire Local Plan, 2018) - This is not the preferred approach as whilst this does seek to reduce water use, the level of reduction is not sufficient to respond to the pressure on water resources in the area.

5.6 Further Work and Next Steps

Taking account of feedback received, the next step would be the inclusion of a fully worked up policy in the draft Local Plan for consultation at the next stage of plan making. During this period the regional plan for water will be developed further by WRE and proposals for the Ox-Cam Arc will be progressed. These will provide additional evidence on water resources and water efficiency which will need to be fed into the development of policy.

6. CC/DC: Designing for a changing climate

6.1 Issue the Plan is Seeking to Respond to

Even by limiting emissions, we will still see some global warming, with the UK Climate Projections 2018 study noting that even under a lower emissions scenario, the UK will still see higher average yearly temperatures and an increase in extreme weather events. As a result we need to ensure that new development can adapt to this changing climate, giving consideration to issues including extreme heat and flood risk.

6.2 Policy Context

National Context

The Planning Act requires local plans to have policies related to both climate change mitigation and adaptation. At the same time as reducing carbon emissions, we must not lose sight of the fact that our climate is already changing as a result of past emissions.

Addressing climate change is one of the core land use planning principles within the NPPF. Section 14 of the NPPF considers the role of planning in dealing with climate change and flood risk, noting the role of the planning system in supporting the transition to a low carbon future in a changing climate and taking a proactive approach to adapting to climate change, including the risk of overheating from rising temperatures. Paragraph 154 notes that new development should be planned for in ways that avoid increased vulnerability to the range of impacts arising from climate change, with care taken to ensure that risks can be managed through suitable adaptation measures, including through the planning of green infrastructure.

The PPG provides some additional guidance on climate change adaptation. This includes promoting adaptation approaches as part of design, including maximising summer cooling through natural ventilation in buildings and avoiding solar gain and the provision of multi-functional green infrastructure which can reduce the urban heat island effect, manage flooding and help species adapt to climate change. Care must also be taken to avoid the risk of maladaptation, for example designing buildings to maximise solar gain in the winter to reduce heating costs without thinking through the implications for overheating in the summer.

In their recently [published progress report on adapting to climate change](#), the Committee on Climate Change noted that the UK has fallen behind on adapting to the changing climate. It notes that the UK does not yet have a vision for successful adaptation to climate change, more measurable targets to assess progress. Turning to planning, the report notes that the climate challenge must be integrated throughout policy and planning decisions, and must be a key consideration in the

Government's proposed planning reforms. The Committees most recent [independent assessment of UK climate risk](#) notes that policies to address overheating risks in buildings are still missing, despite it being one of the top risks in the UK Climate Change Risk Assessment (2017). Little preventative action is being taken to address health risks from overheating in buildings, and in homes in particular. With more than 300,000 homes due to be built across the UK each year, they identify 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 existing and new homes uninhabitable as temperatures rise.

Regional / Local Context

Oxford-Cambridge Arc

A set of [environmental principles](#) has been developed to ensure that the environment is at the heart of decision making on development within the Oxford-Cambridge Arc. This includes ensuring that development addresses some of the biggest challenges of our time, including climate resilience.

Cambridgeshire and Peterborough Commission on Climate

The Cambridgeshire and Peterborough Combined Authority (CPCA) have established the Cambridgeshire and Peterborough Commission on Climate to conduct a thorough review of the ways that climate change is impacting on the regions local economy and community and to determine what action should be taken. The Commissions [initial recommendations report](#), published in March 2021, includes the following recommendations of relevance to climate change adaptation:

- All new buildings should be designed for a changing climate:
 - All planning applications to require overheating calculations and mitigation measures, and testing against climate projections to 2050.
 - All new build to incorporate sustainable urban drainage systems.
 - Where appropriate, new build to incorporate property level flood resilience measures.

Cambridge City Council and South Cambridgeshire District Council

Both Cambridge City Council and South Cambridgeshire District Council have declared climate emergencies, pledging to support net zero through the development of planning policy, as well as other areas over which the Councils have influence.

In terms of corporate objectives:

South Cambridgeshire District Council:

1. Being green to our core – by the Council developing a plan for a carbon-neutral future for South Cambridgeshire, exploring opportunities for green energy generation and improving air quality.

Cambridge City Council's Climate Change Strategy sets out six key objectives for how the Council will address the causes and consequences of climate change, including:

2. Supporting Council services, residents and businesses to adapt to the impacts of climate change.

Adopted Local Plans

South Cambridgeshire Local Plan 2018

- CC/1: Mitigation and Adaptation to Climate Change

Cambridge Local Plan 2018

- Policy 28: Carbon reduction, community energy networks, sustainable design and construction, and water use

6.3 Consultation and Engagement

As part of the consultation on the First Conversation document, there was strong support for policy relating to climate change adaptation. In particular, support was shown for policy related to overheating in new development with reference to the use of comfort modelling in line with the TM59 methodology for assessing overheating risk, as well as setting specific requirements related to the emissions scenarios that should be used for such analysis. There was also strong support for measures related to both overheating and also addressing flood risk to be incorporated into the design of new developments. There were also calls for a flexible approach to be taken, suggesting perhaps the submission of climate change adaptation studies rather than setting specific policy requirements. There were also calls for the development of guidance to support existing settlements, with support for guidance on retrofitting adaptation measures to existing buildings.

6.4 Evidence Base

The main source of evidence for climate risks comes from the UK Climate Change Risk Assessment (CCRA) and associated evidence base gathered by the Committee on Climate Change. The current risk assessment ([CCRA2 2017](#)), highlights the following priority risks for action across the UK of relevance to the local plan:

- Flooding and coastal change risks to communities, businesses and infrastructure;
- Risks to health, well-being and productivity from high temperatures;

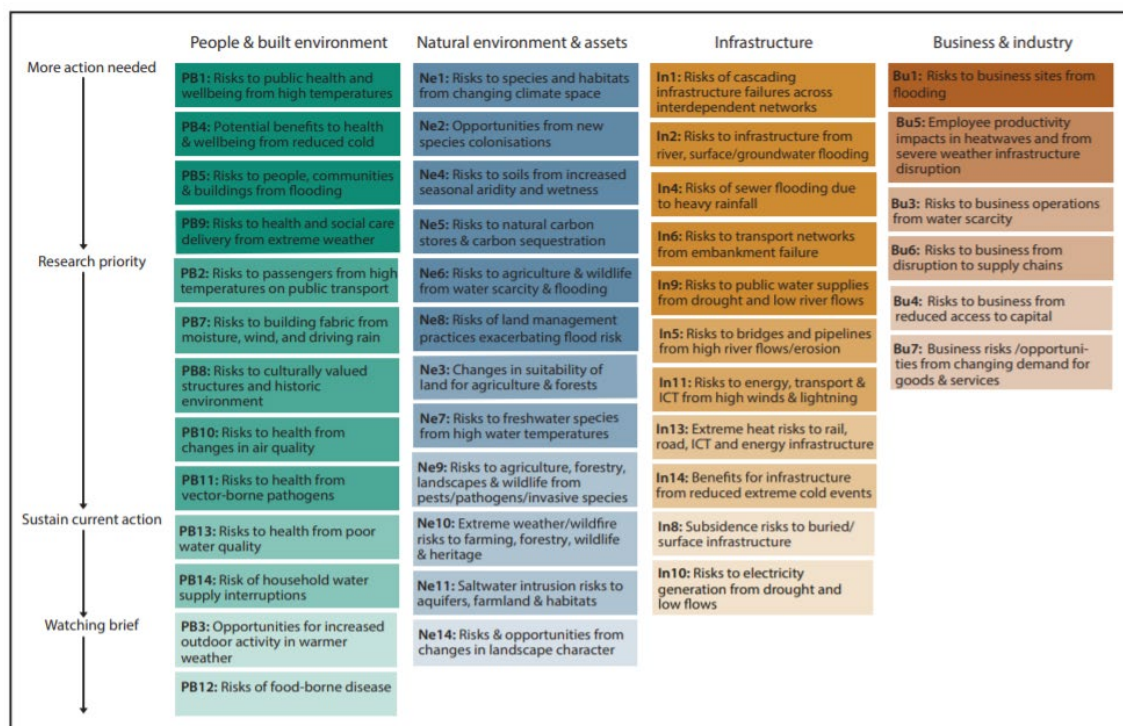
- Risks of shortages in the public water supply, and for agriculture, energy generation and business.

A [report](#) from the University of Cambridge to support the work of the Cambridgeshire and Peterborough Commission on Climate has identified the climate risks facing Cambridgeshire and Peterborough between 2020 and 2099. Examining the interplay between two factors, future overheating and changes in seasonal rainfall patterns, the report notes that:

1. The region faces at least 42 local risks and opportunities of the 53 national risks referenced in the UK Climate Change Risk Assessment 2017 (see figure 1 below).
2. The most severe risks faced by the region before 2099 will relate to more extreme summer temperatures and changes in the character of seasons and annual precipitation.
3. Nearly 1 in 10 homes and nearly 1 in 4 agricultural and industrial production facilities in the region may face flooding from rivers by 2099 due to changing precipitation patterns without further adaptation. Flooding from runoff in urban and paved areas may also impact a significantly higher proportion of the built environment.
4. Summers may face significantly higher temperatures.
5. Due in part to greater future water needs, changes in the character of summer precipitation, and increased summer temperatures, the region may seasonally experience lower river and aquifer levels than in previous years.

In their latest [evidence report](#) to inform the UK's third Climate Change Risk Assessment (CCRA3), the Committee on Climate Change have highlighted that the UK is not prepared for the unprecedented extreme weather events that could now occur. There is already a 1% risk each year that monthly winter UK rainfall could be 20-30% higher than the maximum ever observed. The chance of daily maximum temperatures exceeding 40°C is also growing. They note that lack of adaptation over the past five years has also led to lock-in, irreversible changes and higher future costs for the Government. In terms of new homes they note that since CCRA2 was published, over 570,000 new homes have been built in England alone that are not resilient to future high temperatures. These will require costly retrofit to make them safe, habitable and water efficient in the future. In the next five years, at least another 1.5 million homes are due to be built across the UK; these will also lock in increased climate vulnerability unless planning and building policy is changed now.

Figure 1: 42 Climate Risks and Opportunities relevant to the Cambridgeshire and Peterborough Region (taken from Aines, Simpson, Munro-Faure and Shuckburgh. Preliminary report on climate risk in the Cambridgeshire and Peterborough Region, 2020-2099



6.5 Proposed Policy Approach and Reasons

The Proposed Policy Direction

The proposed approach, as set out in the First Proposals report is as follows:

All new dwellings must be designed to achieve a low overheating risk using the [Good Homes Alliance Overheating in New Homes Tool and Guidance](#), with more detailed modelling required for schemes identified as being ‘at risk’, using future climate scenarios such as those provided by 2050 Prometheus weather data for Cambridge.

All non-domestic buildings must be designed to achieve a low overheating risk using the cooling hierarchy, with more detailed modelling required for major developments using future climate scenarios such as those provided by 2050 Prometheus weather data for Cambridge.

All developments should take a design led approach to climate change adaptation with approaches integrated into architectural design. For overheating, proposals should follow the cooling hierarchy as follows:

- a. Passive design: minimise internal heat generation through energy efficient design and reduction of heat entering the building through consideration of orientation, overhangs and external shading, albedo, fenestration, insulation and green roofs.
- b. Passive/natural cooling: use of outside air, where possible pre-cooled by soft landscaping, a green roof or by passing it underground to ventilate and cool a building without the use of a powered system. Cross ventilation, passive stack and wind driven ventilation should be maximised and single aspect dwellings must be avoided for all schemes as effective passive ventilation can be difficult or impossible to achieve. Windows and/or ventilation panels must be designed to allow effective and secure ventilation.
- c. Mixed mode cooling: with local mechanical ventilation/cooling provided where needed to supplement the above measures using low energy mechanical cooling
- d. Full building mechanical ventilation/cooling system, ensuring the lowest carbon/energy options and only considered after all other elements of the hierarchy have been utilised.

All development proposals must utilise site wide approaches to reduce climate risks, including the integration of sustainable drainage systems as part of landscape design, the use of cool materials and urban greening, for example through increased tree canopy cover and an enhanced treescape and integrating green spaces into new developments.

Reasons for the proposed policy direction

Section 182 of the Planning Act requires local plans to have policies related to both climate change mitigation and adaptation. 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, 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. The policy also recognises that it is not just buildings that must be adapted to our changing climate but also sites as a whole, and as such promotes a site wide approach to reducing climate risks, using approaches such as sustainable drainage systems, the use of cool materials and urban greening through tree planting. More detailed policy related to flood risk is provided in First Proposals CC/FM.

As a starting point for the design of new homes, the policy requires all proposals for new homes to utilise the Good Homes Alliance Overheating Risk Method. This simple to use toolkit has been designed to be used as part of the early design of new homes in order to identify key factors contributing to overheating risk and possible mitigation measures. This is in recognition that not all scales of housing development will have the resources to undertake a detailed modelling using the CIBSE TM59 methodology, for example applications for a single home. The use of the Good Homes Alliance toolkit will ensure that all new housing developments are subject to a level of assessment of the degree of overheating risk presented by individual schemes, and that appropriate mitigation measures are identified and applied to the design of schemes. For schemes where a risk of overheating is identified, further detailed modelling will be required, using the CIBSE TM59 methodology. The preferred option also requires that where detailed modelling is carried out, that this uses future climate scenarios such as 2050 Prometheus weather data. This approach will help to ensure that schemes are futureproofed.

As evidenced above from the work of the Committee on Climate Change, the UK is falling behind on climate change adaptation action. Early adaptation action, before impacts actually occur, reduces vulnerability to current climatic variability and builds in resilience where decisions have long lifetimes or long planning processes, such as with major infrastructure projects. Early action is also needed to prevent, as far as possible, irreversible changes such as loss of species or ecosystems. Overheating risks can and should be mitigated through consideration of various factors at early design stages at low or no cost. Failing to do this leads to 'lock-in', where delayed decisions, or decisions that don't consider the long-term risks, result in irreversible changes, increased climate change damages, or higher costs when larger and faster action is required later. The current practice of building new homes without designing in adaptations to future conditions such as extreme heat is one example of 'lock-in'. Retrofitting windows and shutters is around four times more expensive than including them at design stage. The design of the built environment planning policy to support this, must therefore ensure that new developments are futureproofed for our changing climate, in line with our legal duties.

Alternative approaches, and reasons why they were rejected

Alternative approaches considered were:

No policy, rely on national guidance – Not considered a reasonable alternative, as local planning authorities have a legal duty to include policies related to both climate change mitigation and adaptation, as contained within the Planning Act.

6.6 Further Work and Next Steps

Taking account of feedback received, the next step would be the inclusion of a fully worked up policy in the draft local Plan for consultation at the next stage of plan making.

7. CC/FM: Flooding and integrated water management

7.1 Issue the Plan is Seeking to Respond to

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 be 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.

The plan should also be supportive of integrated water management in new developments. Water can be channelled and collected in sustainable drainage systems (SuDS), which mimic natural drainage, in order to prevent flooding. This water is valuable and can also be re-used through rainwater harvesting systems as an additional supply of non-potable water. SuDS and green roofs have multiple benefits; helping to slow down the flow of water and allow infiltration which prevents flooding, helping to filter water and improve water quality, and also provide benefits for biodiversity and amenity within new developments.

7.2 Policy Context

National Context

Flooding

The NPPF is 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 159-168) which has recently been revised (July 2021). It includes the following main points:

- Development should be directed away from areas at highest risk of flooding (whether existing or future). If development is necessary in such areas, it should be made safe for its lifetime without increasing flood risk elsewhere.
- 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).
- Opportunities provided by new development and improvements in green and other infrastructure should be used to reduce the causes and impacts of

flooding. Natural flood management techniques should be used as much as possible, as part of an integrated approach to flood risk management. (The July 2021 update to the NPPF included the reference to green and other infrastructure and the additional emphasis on using natural flood management techniques as part of an integrated approach to flood risk management)

- 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)
- Major developments should incorporate sustainable drainage systems unless there is clear evidence that this would be inappropriate.

There is planning practice guidance on [flood risk and coastal change](#) (2014). This provides more detailed guidance on how to apply the sequential test and the exception test in the preparation of a Local Plan and also for individual planning applications if they are not on allocated sites. It does not yet reflect the recent changes to the NPPF that require all sources of flooding to be considered as part of the sequential test. It includes guidance on how to prepare an SFRA and a site FRA. The Environment Agency has also produced guidance on [How to prepare a Strategic Flood Risk Assessment](#) (last updated 2020).

Integrated Water Management

The NPPF refers to water supply (this is discussed in more detail for Policy CC/WE) and water quality which are all of relevance to the principles of integrated water management. In Chapter 15, the NPPF states that development should wherever possible, help to improve local environmental conditions such as water quality, taking into account relevant information such as river basin management plans.

CIRIA (the construction industry research and information association) have produced guidance '[Delivering better water management through the planning system](#)' (2019) to support planning for water through the delivery of integrated water management. The guidance talks about the multiple benefits of integrating water management including:

- increased resilience
- delivering housing and a strong local economy
- enhancing environment and greenspace.

The guide sets out the critical success factors for achieving good integrated water management outcomes:

- Understanding Integrated Water Management (IWM) – a robust and accessible evidence base, showing which approaches are appropriate and identifying possibilities at an early stage.
- Enabling local policy – clear and understandable policies with supportive plans and strategies from the Lead Local Flood Authority (LLFA) and water company.
- Early engagement – with water company, developers, LLFA, local community, catchment partnership and other stakeholders.
- Partnerships – working in good partnership with stakeholders.
- Good management – good whole life project management, including a strong champion, long-term maintenance arrangements, co-ordination of budgets and funding and enforcement of planning conditions.

The guidance provides advice to planners on good practice when preparing plans and policies and provides case studies of good local plan policy and developments on the ground. Policy 31: Integrated water management and the water cycle of the Cambridge Local Plan (2018) is identified as an example of good local policy. Clay Farm and North West Cambridge are included as case-studies in the document.

Regional / Local Context

The Environment Agency have prepared the [Anglian River Basin District Flood Risk Management Plan](#) which identifies the risk of flooding and how risk management authorities will manage the risk to 2022. In order to implement the Water Framework Directive (2000) requirements, the Environment Agency have also produced River Basin Management Plans for all identified water bodies in the UK focusing on the quality of the water environment and what actions need to be taken. The [Anglian River Basin District River Basin Management Plan](#) covers Greater Cambridge.

Cambridgeshire County Council are the Lead Local Flood Authority, responsible for managing surface water flooding, ordinary watercourses such as streams and ditches (excluding main rivers which are managed by the Environment Agency) and groundwater flooding. The LLFA established the Cambridgeshire Flood Risk Management Partnership to bring together key stakeholders in flood risk management. They have produced [Cambridgeshire's Local Flood Risk Management Strategy](#) and [Cambridgeshire Surface Water Management Plan](#). The surface water management plan identifies wetspots and for some of these more detailed surface water plans have been produced, including Cambridge and Milton, Girton and Histon in Greater Cambridge.

The [Cambridgeshire Flood and Water Supplementary Planning Document](#) (SPD) (2016) was prepared by the LLFA in conjunction with the other Cambridgeshire local planning authorities and water management authorities. It was adopted by both Cambridge City Council and South Cambridgeshire District Council as a material

consideration when considering planning applications. The SPD provides guidance on the approach that should be taken to design new developments to manage and mitigate flood risk and includes detailed guidance on sustainable drainage systems (SuDS).

Adopted Local Plans

[South Cambridgeshire Local Plan](#) (2018)

- Policy CC/7: Water Quality, aims to protect and enhance water quality by requiring that all development proposals demonstrate there are adequate water supply, sewerage and land drainage systems to serve the whole development. Also that water quality is not harmed and improved where possible and that SuDS are used to protect water quality from polluted surface runoff. The policy requires that foul drainage should be to a public sewer where possible or that alternative facilities must not pose an unacceptable risk to water quality or quantity.
- Policy CC/8: Sustainable Drainage Systems requires that new developments incorporate SuDS appropriate to the nature of the site and provides details about what should be included to maximise their effectiveness, including their whole life management.
- Policy CC/9: Managing Flood Risk, sets out the requirements for new development to minimise flood risk to the development itself or provide suitable mitigation or flood protection measures, and to not increase or where possible reduce flood risk elsewhere. This includes limiting the amount of discharge of surface water to natural greenfield rates or lower and a priority order for the destination of discharge from the site. The policy also provides information about the requirements of site specific flood risk assessments.

[Cambridge Local Plan](#) (2018)

- Policy 31: Integrated water management and the water cycle sets out a number of measures to ensure that water is managed in a sustainable and integrated way in new developments. These include managing surface water on site and reducing discharge, re-use of water where practicable, ensuring that surface water management features are multi-functional and integrated into the design, requiring that where acceptable any flat roof is green or brown and hard surfaces are permeable.
- Policy 32: Flood Risk includes detailed measures that new development will need to demonstrate to gain planning permission in relation to both potential flood risk from the development and potential flood risk to the development.

7.3 Consultation and Engagement

In response to the First Conversation document in 2020 comments were received which did not support development in or near flood risk areas and that developments should be prepared for increased flood risk due to climate change by designing them to be resilient to flooding and including flood mitigation. In addition that flood management policies should seek to ensure that the risk of flooding in the area is not increased as a result of new development. There was a lot of support for SuDS and of the multiple benefits they offer within developments. There was also general support for sustainable water management and water conservation (further details are provided in the section on water efficiency above).

7.4 Evidence Base

An Integrated Water Management Study for Greater Cambridge has been produced by consultants Stantec, as an evidence base comprising:

- Level 1 Strategic Flood Risk Assessment (SFRA)
- Outline Water Cycle Study
- Detailed Water Cycle Study

Level 1 SFRA

The Level 1 SFRA (2021) is the key evidence base relating to flood risk. The SFRA collates all available information to map the extent and severity of flood risk from all sources in Greater Cambridge. The maps also show the potential effects of climate change on future flood risk. This mapping has been used to support the selection of development sites through the application of the Sequential Test.

The SFRA was completed before the updates to the NPPF in July 2021. However it already considered all other sources of flooding which have been taken into account in the selection of sites. There is no guidance from Government yet on how to undertake a sequential test for the other types of flooding as there are no explicit zones for these other types of flooding presently. The flood zones for planning produced by the Environment Agency are based on fluvial flooding.

Following the production of the SFRA, the Environment Agency have published revised climate change allowances in July 2021 based upon management catchment rather than river basin districts. Greater Cambridge is mostly covered by the Cam and Ely Ouse catchment, with a small part to the east in the Upper and Bedford Ouse. In both cases the new climate change allowances show lower increases in flow due to climate change than those used in the SFRA (Anglian river basin district, July 2020). Therefore the SFRA is more conservative than the new climate change allowances.

The SFRA identifies flood risk opportunities and constraints which can be taken into account in future Local Plan policies and site allocations. It contains chapters on site specific flood risk assessment requirements and surface water drainage and SuDS design and cross-refers to the Cambridgeshire Flood and Water SPD which provides useful detailed guidance. The SFRA also provides recommendations on Local Plan policies including:

- Considering all sources of flood risk
- Working in partnership with other relevant risk management authorities to inform planning applications
- Requiring all development to be safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall
- Requiring all development to use appropriate SuDS for surface water drainage which provide multi-functional benefits
- Where appropriate site-specific policies relating to flood risk opportunities and constraints in that area.

Outline Water Cycle Study (OWCS)

The OWCS draws together information about all aspects of the water system including an overview of flood risk taken from the Level 1 SFRA. Chapter 8 of the OWCS is specifically about integrated water management. This describes the benefits of a more integrated approach to water management and the wider effects this can have to biodiversity, landscape, soils and agriculture, access to green infrastructure and associated health and well-being and mitigating the impacts of climate change.

The study provides examples of integrated water management in Greater Cambridge, including farm-scale land management projects such as that being piloted by WRE to support the proposed Environment Land Management Scheme. At a development scale, Eddington and Clay Farm are given as examples of good practice and reference is made to several community-led projects.

The OWCS reviews a number of potential initiatives for an integrated approach to water management and concludes that the following provide opportunities, particularly at the new settlement or urban extension scale:

- Combining surface water or rainwater harvesting with SuDS
- Re-use of treated effluent to maintain low flow in watercourses, recharge aquifers or irrigate agricultural land
- Capture, store and re-use fluvial flood waters
- Improve riparian corridors to provide natural flood management, improve water quality and recharge groundwater

- Planting of wet woodlands to offset increases in nutrient loads, improve water quality, slow rates of runoff and increase recharge to groundwater as well as potentially contributing towards carbon neutrality through carbon offsetting
- Planted SuDS features, such as bioretention systems, to treat surface runoff and manage flows at all scales and provide multiple benefits to 'green' streetscapes.

The OWCS does go on to say that although there are economies of scale for larger sites, the principles of integrated water management can be applied at smaller sites and infill locations. Different solutions may be required for different scales of site, but that the opportunities need to be considered at an early stage in site planning. In addition to be fully implemented and integrated, projects will need to be supported outside of the realm of the Local Plan, and require a wider re-think of water management at the regional scale. These measures will be considered in the regional plan being developed by WRE.

7.5 Proposed Policy Approach and Reasons

The Proposed Policy Direction

The proposed approach, as set out in the First Proposals report is as follows:

Development will be directed to the areas with the least likelihood of flooding from all sources and taking into account climate change (the policy will not need to repeat aspects covered by the NPPF).

Developments will be required to provide integrated water management, including sustainable drainage systems (SuDS), where surface water is managed close to its source and on the surface where reasonably practicable to do so. SuDS and green /brown roofs should provide multiple benefits (such as biodiversity and amenity). All hard surfaces must be permeable where reasonably practicable. Appropriate measures for future management will need to be demonstrated and secured.

Potential flood risk from developments will need to be fully addressed. The plan will set 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.

Reasons for the Proposed Policy Direction

The proposed policy direction is in line with Government policy and the evidence set out in the Integrated Water Management Study in that development will be directed to the areas least likely to flood and new development should not increase the likelihood of flooding elsewhere. The consultation responses received are also supportive of this approach.

SuDS and surface water storage are a key component of an integrated approach to water management within development sites. They control and slow down flows of water during times of high rainfall reducing the risk of flooding, help to improve water quality and provide benefits for amenity and biodiversity. The collection of water in order that it can be recycled on site, through rainwater harvesting, is also extremely important and supports the policy aspirations for a high level of water efficiency set out in Policy CC/WE. The process of designing successful SuDS in developments which mimic natural drainage, and their approval, adoption and maintenance is set out in detail in the Cambridgeshire Flood and Water SPD and the policy will refer to this document or its successor.

Alternative approaches and reasons why they were rejected

No policy, rely on national guidance – Not considered a reasonable alternative, due to the need to respond to local issues, and include a robust approach to drainage and water management.

7.6 Further Work and Next Steps

Taking account of feedback received, the next step would be the inclusion of a fully worked up policy in the draft local Plan for consultation at the next stage of plan making.

Where necessary we will also carry out level 2 Strategic Flood Risk Assessments of sites in the draft plan to ensure that designs and capacity fully reflect management of flood issues.

8. CC/RE: Renewable energy projects and infrastructure

8.1 Issue the Plan is Seeking to Respond to

In order to support the transition to net zero carbon, there will need to be an increase in renewable energy generation and associated infrastructure.

8.2 Policy Context

National Context

Paragraph 152 of the NPPF notes that the planning system should support renewable and low carbon energy and associated infrastructure. To help increase the use and supply of renewable and low carbon energy and heat, plans should:

1. Provide a positive strategy for energy from these sources that maximises the potential for suitable development, while ensuring that adverse impacts are addressed satisfactorily.
2. Consider identifying areas suitable for renewable and low carbon energy sources and supporting infrastructure.
3. Identify opportunities for development to draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers.

Support for community-led initiatives for renewable and low carbon energy should also be supported, giving consideration to the role of neighbourhood planning as well as local plans.

Footnote 54 of the NPPF notes that in the case of proposed wind energy development involving one or more turbines, these should not be considered acceptable unless they are located in an area identified as suitable for wind energy development in the development plan. In addition, such applications also need to demonstrate that following consultation, the planning impacts identified by the affected local community have been fully addressed and the proposal has their backing.

Further detailed guidance on developing policies on renewables and low carbon energy and the planning considerations involved in such schemes is provided in the Planning Practice Guidance (PPG).

Regional / Local Context

Oxford-Cambridge Arc

A set of [environmental principles](#) has been developed to ensure that the environment is at the heart of decision making on development within the Oxford-Cambridge Arc. The following principles are of relevance to increasing the supply of renewable energy and associated infrastructure:

- Work towards a target of net zero carbon at an Arc level by 2040. This will include:
 - Ensuring all decisions about development and new infrastructure support this goal.
- Be an exemplar for environmentally sustainable development, in line with the ambitions set out in the government's 25 year plan. This will incorporate a systems-based approach and integrated assessment and implementation approach and will fully recognise the associated health and wellbeing benefits. We will aim to go beyond the minimum legislated requirements for development. This will include:
 - Promoting the switch to renewable and other sustainable energy supplies.

Cambridge City Council and South Cambridgeshire District Council

Both Cambridge City Council and South Cambridgeshire District Council have declared climate emergencies, pledging to support net zero through the development of planning policy, as well as other areas over which the Councils have influence.

In terms of corporate objectives:

Cambridge City Council: Caring for the planet

1. A city that takes robust action to tackle the local and global threat of climate change, both internally and in partnership with local organisations and residents, and to minimise its environmental impact by cutting carbon, waste and pollution.

[Cambridge City Council Climate Change Strategy 2021-2026](#)

Includes a vision for Cambridge to be net zero carbon by 2030, subject to Government, industry and regulators implementing the necessary changes to enable the city and the rest of the UK to achieve this. The objectives of the strategy include:

1. Reducing energy consumption and carbon emissions from homes and buildings in Cambridge.

South Cambridgeshire District Council:

1. Being green to our core – by the Council developing a plan for a carbon-neutral future for South Cambridgeshire, exploring opportunities for green energy generation and improving air quality.

[South Cambridgeshire District Council Zero carbon strategy and action plan](#)

Includes an aspiration to deliver a 50% reduction in carbon emissions from the South Cambridgeshire area by 2030 relative to a 2018 baseline, reducing to net zero carbon by 2050 at the latest. The strategy recognises the role that the development of planning policy has to play in encouraging the use of renewable and low carbon energy.

Adopted Local Plans

South Cambridgeshire Local Plan 2018

- CC/2: Renewable and Low Carbon Energy Generation

Cambridge Local Plan 2018

- Policy 29: Renewable and low carbon energy generation

8.3 Consultation and Engagement

As part of the consultation on the First Conversation document there was support for renewable energy production, use and investment alongside support for community energy schemes and district heating.

8.4 Evidence Base

In order to support the transition to net zero carbon and ensure that Greater Cambridge contributes to carbon budgets, the Local Plan will need to facilitate both community and commercial scale renewable energy generation, with a blend of both wind and solar based energy. As part of the work on the Net Zero Carbon Study (2021), our consultants have 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.

The report recommends an approach that considers generation as a proportion of energy use, which would result in around 28% of Greater Cambridge's energy requirements being generated within the area. This would equate to 270 megawatts (MW) of solar photovoltaic (pv) arrays and 190 MW of wind energy, equivalent to 95 x 2MW wind turbines. Greater Cambridge already has 303 MW of installed solar pv, above the 270 MW estimate to be in line with national grid scenarios for 2050. However, installed onshore wind capacity is lower than the national average, and the report recommends that Greater Cambridge should seek to increase this capacity around 7-fold. It is recommended that sufficient areas should be identified to

accommodate additional renewable energy projects, albeit that an increase in offshore wind provision may well reduce the number of installations needed in Greater Cambridge.

With regards to land take, 95 x 2MW turbines would require between 250 – 380 acres of land (that is approximately 190 football pitches), with much of that land still being available for agriculture. If larger capacity wind turbines were used, this would reduce the number of turbines used, although they would be slightly taller and consequently could result in slightly wider harm to landscape views for example. That said, public attitudes to onshore wind are changing, with nationally 73% of people now supporting, in principle, on-shore wind, and only 7% of people against (Source: BEIS public attitude survey, 35, Sept 2020), which in turn is likely to lead to a softening of at least some views on potential harm on the landscape of such on-shore turbines, on a site specific basis.

Consideration of whether there are any areas that can be considered suitable for wind energy as well as identifying suitable locations for solar farms has taken place will be undertaken as part of a Landscape Sensitivity Analysis of the Greater Cambridge area, and if the policy is taken forward this will inform the draft plan stage.

8.5 Proposed Policy Approach and Reasons

The Proposed Policy Direction

The policy will:

1. Provide a positive policy framework for the development of stand-alone renewable energy projects including associated infrastructure such as battery storage and upgrades to grid capacity;
2. Identify broad areas of potential suitability for different types of renewable energy, informed by Cambridgeshire Renewables Infrastructure Framework and a Landscape Sensitivity Assessment;
3. Indicate support for community led projects.
4. Identify a set of criteria which will apply to all renewable energy projects including consideration of impacts on:
 - i. Residential amenity and quality of life (resulting from noise, vibrations, shadow flicker or visual dominance);
 - ii. Character and appearance of the landscape and surrounding area;
 - iii. Biodiversity, geodiversity and water quality;
 - iv. Historical, archaeological and cultural heritage;
 - v. Highway safety and infrastructure
 - vi. Aviation, telecommunications or other essential infrastructure (including the Mullard radio telescope)

- vii. The capacity of the landscape to accommodate renewable energy projects, the ability to mitigate visual intrusion and the cumulative impacts of individual sites.
- 5. In relation to wind energy, require that following community engagement, it can be demonstrated that the planning impacts identified by affected local community have been fully addressed and the proposal has their backing.
- 6. National planning policy states that in the Green Belt, elements of many renewable energy projects will comprise inappropriate development. In such cases developers will need to demonstrate very special circumstances if projects are to proceed. Such very special circumstances may include the wider environmental benefits associated with increased production of energy from renewable sources.

Reasons for the proposed policy direction

National planning policy recognises that 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. 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, while at the same time ensuring that any impacts are minimised.

The preferred approach to be taken in policy is a two-step approach. Firstly, broad areas where renewable energy projects, notably on shore wind and solar pv projects, may be suitable are identified on the policies map, informed by work currently being carried out on a Landscape Sensitivity Analysis. For wind development, this mapping is a strict requirement of national policy. For solar, this 'mapping' is optional, but may help encourage investment and direct it to suitable places.

Once such broad areas are identified and adopted in a Local Plan, for wind this means proposals can only take place in such areas, and only then if policy criteria are met. Proposals within an identified broad area would not mean a 'guarantee' of approval within such areas, just an 'in principle' indication that the proposal might be approved. If wider criteria are not met then a proposal would not be approved, despite being in the Broad Area of potential suitability. This is in keeping with the approach outlined in the NPPF and associated PPG.

For solar farms, it is slightly different. If zones of suitability are identified, then the same principles as for wind are also applied. However, there would still be the potential for proposals outside of such zones to come forward and be approved, but again, only if certain criteria are met. The policies of the Local Plan would likely

encourage (rather than require) proposals to come forward in Broad Areas of suitability for solar farms.

Work is currently underway to assess the sensitivity of the landscapes that make up Greater Cambridge. The area will be broken down into a set of landscape character areas, and a bespoke set of assessment criteria and indicators developed to assess the susceptibility of those landscapes to wind and solar pv developments. This work will help to identify whether there are any broad areas of suitability for wind turbines and solar farms, which would then be identified via the policies map, and this would form part of the draft Local Plan stage.

This policy is also linked to policy CC/NZ, in that for any schemes that require the use of the offset facility, it will be important to ensure that sites are identified and ready to proceed in order to ensure that offsetting is not delayed.

Alternative approaches, and reasons why they were rejected

Alternative approaches considered were:

Not identifying areas suitable for wind turbines, leaving it to other types of renewable energy to contribute towards Greater Cambridge's share of renewable energy - This is not the preferred approach, as there is a risk with this approach that this could place a risk on delivering sufficient renewable energy to meet carbon budgets, which would not be compatible with net zero carbon given the need for an increase in renewable energy generation to support this.

8.6 Further Work and Next Steps

Taking account of feedback received, the next step would be the inclusion of a fully worked up policy in the draft local Plan for consultation at the next stage of plan making.

9. CC/CE: Reducing waste and supporting the circular economy

9.1 Issue the Plan is Seeking to Respond to

The construction sector is the largest user of materials in the UK and produces the biggest waste streams in terms of tonnage. This policy seeks to ensure that construction waste is minimised, giving consideration to the role of Construction Environmental Management Plans and Circular Economy Principles.

9.2 Policy Context

National Context

The NPPF is clear that, in responding to the challenge of climate change, planning should encourage the reuse of existing resources, including the conversion of existing buildings for alternative uses. In July 2020, government issued a Circular Economy Package Policy statement, setting out a move towards a more circular economy, which will seek to ensure that resources are kept in use as long as possible, extracting maximum value from them, minimising waste and promoting resource efficiency. This builds upon the [Resources and Waste Strategy for England](#) published in 2018, which sets out how we will preserve material resources by minimising waste, promoting resource efficiency and move towards a circular economy. These plans and strategies include increasing resource efficiency and minimising waste in the construction sector and aim to eliminate avoidable wastes of all types by 2050 in England.

Regional / Local Context

Oxford-Cambridge Arc

A set of [environmental principles](#) has been developed to ensure that the environment is at the heart of decision making on development within the Oxford-Cambridge Arc. The following principles are of relevance to reducing waste and supporting the circular economy:

- Use natural resources wisely by:
 - Making more efficient use and management of waste and resources, working towards a circular economy with no net waste and promoting the use of sustainable building materials and construction guidelines.

Cambridgeshire County Council

Cambridgeshire County Council are the Minerals and Waste Planning Authority covering the Greater Cambridge Area. Their Minerals and Waste Plan sets the framework for all minerals and waste developments across the area, setting out

policies to ensure a steady supply of minerals to supply the growth for the area and enable us to have modern waste management facilities, to manage waste in a much better way than landfill. What this plan does not cover however is policy to improve resource efficiency and reduce construction waste within new developments.

Many developments across Greater Cambridge are already required to submit Site Waste Management Plans and Construction Environmental Management Plans in order to set out approaches to reducing the environmental impacts of construction projects and ensure that and construction waste is reduced, reused and recycled. The proposed preferred option seeks to build upon this approach.

Adopted Local Plans

Cambridge Local Plan 2018

- Policy 28: Carbon reduction, community energy networks, sustainable design and construction and water use

South Cambridgeshire Local Plan 2018

- Policy CC/6: Construction methods

9.3 Consultation and Engagement

In the first conversation in 2020 there was support for considering a circular economy and requiring new developments to provide a Circular Economy Statement. There were calls for the plan to support development that prioritised resource efficiency and for investment in innovative technologies for dealing with waste.

9.4 Evidence Base

Our net zero carbon study notes that in order to achieve net zero carbon by 2050, action is needed across all sectors including waste, with a large reduction in waste, and zero biodegradable waste sent to landfill. Their analysis notes that waste currently accounts for 4% of the greenhouse gas emissions in Cambridge. A policy is recommended to ensure that large development take a strategic approach to waste management, ensuring that domestic and non-domestic waste storage is in line with best practice and that sufficient sites are allocated for waste recycling facilities as recycling rates increase.

As much waste policy across Greater Cambridge falls under the remit of Cambridgeshire County Council's Minerals and Waste function, the preferred approach being put forward for the local plan focuses on measures to improve resource efficiency during the construction stage of development projects, an element that is not currently included within the Minerals Waste Local Plan. This

approach represents a continuation of the current adopted policy approach set out in the South Cambridgeshire Local Plan (policy CC/3), with the addition of Circular Economy principles. Preferred policy approach GP4 (achieving high quality development) gives consideration to integrating functional needs such as refuse and recycling storage into the design of new developments.

9.5 Proposed Policy Approach and Reasons

The Proposed Policy Direction

During construction, require Construction Environmental Management Plans (CEMP). The level of information provided in the CEMP should be proportionate to the scale and nature of the proposed development but should include an outline of the approach to site waste management and how construction waste will be addressed following the waste hierarchy and the 5 r's of waste management: Refuse, Reduce, Reuse, Repurpose, Recycle.

All proposals must provide adequate, flexible and easily accessible storage space and collection systems in line with the requirements of the RECAP Waste Management Design Guide (or successor documents). Proposals that exceed these requirements or propose innovative approaches to waste management will be supported.

All major developments should submit a Circular Economy Statement, either as a stand-alone document or as part of the CEMP, setting out:

- How materials arising from demolition and remediation works will be reused and/or recycled;
- How the proposals design and construction will reduce material demands and enable building materials, components and products to be disassembled and re-used at the end of their useful life, following design for disassembly principles;

Reasons for the proposed policy direction

Statistics from Defra show that in 2016, 63% (120 million tonnes) of the total waste stream in England (189 million tonnes) was attributed to construction, demolition and excavation waste, with 60 million tonnes of this (50%) from construction and demolition. Of this over 90% is recovered, with waste such as concrete, brick and asphalt being downcycled for future use as aggregates. This does beg the question is how much of this waste is avoidable and could such waste be reused for higher value uses, helping prevent the need for the manufacture of new materials, an important element in achieving net zero carbon. By promoting the principle of designing for disassembly, the preferred policy direction seeks to ensure that such materials can be reused for higher value uses.

Reducing construction waste and minimising the need for the manufacture of new building materials is a vital component of achieving net zero carbon by 2050. As energy production decarbonises with the introduction of more renewable energy technologies, the carbon associated with building materials becomes an increasingly significant proportion of a buildings carbon footprint, an issue touched upon in preferred policy CC/NZ. Measures to reuse materials from demolition works and to reduce material demands are therefore critical in delivering net zero carbon in the built environment.

Alternative approaches, and reasons why they were rejected

Alternative approaches considered were:

No policy, leave to the Minerals and Waste Plan - This is not the preferred approach as the Minerals and Waste Plan does not give consideration to construction waste and as such there would be a policy gap in relation to this important element of achieving net zero carbon.

9.6 Further Work and Next Steps

Taking account of feedback received, the next step would be the inclusion of a fully worked up policy in the draft Local Plan for consultation at the next stage of plan making.

10. CC/CS: Supporting land based carbon sequestration

10.1 Issue the Plan is Seeking to Respond to

Land plays a significant role in climate objectives, acting as both a source of greenhouse gas emissions and as a carbon sink. It can therefore be both a problem and a solution to climate change. The preferred approach in the plan seeks to ensure that land use becomes part of the solution.

10.2 Policy Context

National Context

Section 11 of the NPPF deals with making effective use of land and notes that planning policies should promote an effective use of land, while safeguarding and improving the environment and ensuring safe and healthy living conditions. Paragraph 120, bullet point b goes on to recognise that some undeveloped land can perform many functions, including carbon storage.

This is expanded upon in the [PPG](#), which notes that soil is an essential natural capital asset that provides important ecosystem services including as a store for carbon. It references the Defra publication [the Code of practice for the sustainable use of soils on construction sites](#), which provides advice on the use and protection of soil in construction projects, including the movement and management of soil resources. The PPG also recognises the wider role that green infrastructure has to play in contributing to carbon storage.

More widely, government's [Peat](#) and [Trees](#) Action Plans published in May 2021 set out England's ambition for peatland restoration (30,000 hectares by 2025) and new woodland (7,000 hectares per year by 2025). The Nature for Climate Fund will be the main source of public funding during this period, providing £50 million for peat and £500 million for trees, with options being developed to leverage private sector finance.

In their latest [progress report to parliament](#), the Committee on Climate Change have called for the implementation of comprehensive delivery mechanisms for landscape-scale land use change for afforestation and peatland restoration.

Regional / Local Context

Oxford-Cambridge Arc

A set of [environmental principles](#) has been developed to ensure that the environment is at the heart of decision making on development within the Oxford-Cambridge Arc. The following principles are of relevance to the issue of carbon sequestration:

- Protect, restore, enhance and create new nature areas and natural capital assets.

Cambridge City Council and South Cambridgeshire District Council

Both Cambridge City Council and South Cambridgeshire District Council have declared climate emergencies, pledging to support net zero through the development of planning policy, as well as other areas over which the Councils have influence.

In terms of corporate objectives:

Cambridge City Council: Caring for the planet

1. A city that takes robust action to tackle the local and global threat of climate change, both internally and in partnership with local organisations and residents, and to minimise its environmental impact by cutting carbon, waste and pollution.

[Cambridge City Council Climate Change Strategy 2021-2026](#)

Includes a vision for Cambridge to be net zero carbon by 2030, subject to Government, industry and regulators implementing the necessary changes to enable the city and the rest of the UK to achieve this. The objectives of the strategy include:

1. Supporting Council services, residents and businesses to adapt to the impacts of climate change, with an action to increase the number of trees in Cambridge.

Cambridge City Council's Tree Canopy project aims to increase tree canopy in the city, from its current level of 17% to 19%. By increasing tree canopy cover the project aims to help enhance the role of trees in helping mitigate the projected impacts brought by climate change.

South Cambridgeshire District Council:

1. Being green to our core – by the Council developing a plan for a carbon-neutral future for South Cambridgeshire, exploring opportunities for green energy generation and improving air quality.

[South Cambridgeshire District Council Zero carbon strategy and action plan](#)

The Council's Zero Carbon Strategy recognises the role of planning policies in protecting habitats, woodlands and peatland restoration, recognising the importance of green infrastructure in carbon sequestration.

Adopted Local Plans

New policy area so not covered in adopted Local Plans.

10.3 Consultation and Engagement

In the first conversation in 2020 a number of issues were raised in relation to climate change and land uses, some of which we have addressed under other policy themes.

- Protect agricultural land, consider food security and protect peat soils
- Protect woodlands and increase tree planting, including fruit trees, and hedge planting.
- Provide more guidance on biodiversity and planting.
- Support rewilding, wetlands and carbon sinks. Create new habitats.
- Set biodiversity targets and monitor these.
- Support the Cambridge Canopy Project.
- Protect and provide gardens and allotments.

10.4 Evidence Base

Agriculture, forestry and other land use can have a significant impact on emissions of methane and nitrous oxide, and sequestration (removal) of carbon dioxide. Methane and nitrous oxide are largely related to biological waste, ruminant digestion, and fertiliser application. Some carbon is also emitted during soil disturbance such as ploughing or tilling, especially of peaty soils. The [Committee on Climate Change](#) states that to achieve net zero, one-fifth of our agricultural land must be converted to woodland, biomass production or peatland restoration.

Forests and grassland are shown to remove carbon in the government's annual subnational [CO₂ figures](#). UK-wide, these capture 7% of emissions, but Greater Cambridge's ones only capture 2.3% of the area's emissions. Wetlands are currently a small net emitter at regional and national level, but can remove GHGs if they stay wet and are a major carbon store.

Our net zero carbon study includes a recommendation for the development of policy to support the role of land in carbon sequestration. It suggests a number of areas for consideration in the development of such a policy, including:

1. Requiring developments over a certain threshold to provide a site soil carbon analysis and demonstrate that developments will neither cause the land to release a significant amount of carbon, nor have significant potential as a carbon sink.
2. Developments of a certain size should achieve an urban greening factor of >0.5 or more.
3. Identify areas for the creation of new woodland.
4. Development on degraded peatlands should not be supported where those peatlands could be restored.

The preferred option sets out a high level approach to supporting land based carbon sequestration, and some of the detail included within our evidence base will help to inform detailed policy wording for the next stage of plan-making. There are also strong links between this preferred option and BG/GI: Green Infrastructure and BG/TC: Improving tree canopy cover and the tree population, which identifies the existing green infrastructure network and the strategic initiatives intended to enhance it, and addresses how development proposals should relate to green infrastructure and enhance tree cover. One area that we have decided not to pursue are the recommendations related to the use of an urban greening factor.

Our green infrastructure strategy also recognises the role that green infrastructure can play in helping mitigate the impacts of climate change through carbon sequestration as well as helping to improve climate resilience.

10.5 Proposed Policy Approach and Reasons

The Proposed Policy Direction

Support the creation of land and habitats that play a role as carbon sinks and protect existing carbon sinks from development in particular undisturbed or undrained peat.

Promote approaches that minimise soil disturbance, compaction and disposal during construction projects

Reasons for the proposed policy direction

Land plays a significant role in climate objectives, acting as both a source of greenhouse gas emissions and a carbon sink. Peatlands in particular are an important store of carbon, while other habitats such as woodlands and grasslands also have a role to play, as indicated in latest research by Natural England. In South Cambridgeshire, peatland is located to the north of the district, as identified on the Natural England peatland status maps. Alongside many other negative impacts, loss and degradation of natural habitats results 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. Land based carbon sequestration, alongside technological means for removing carbon from the atmosphere, will have a role to play.

While the role of planning in supporting the development of land for carbon sequestration is limited, planning policies already exist to protect nature sites, which almost without exception will act as a carbon sink, and further policies exist to require new development to provide new open space and deliver biodiversity net gain. Promotion of nature based solutions, where natural systems are protected,

restored and managed can assist with the protection of carbon sinks while at the same time providing benefits for biodiversity and health and wellbeing.

A further issue that the preferred option seeks to address relates to the impact that construction can have on soils. Soil is a vulnerable and essentially non-renewable resource. The preferred option seeks to promote construction practices that seek to preserve the functions and ecosystem services provided by soils. 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 soils' 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 at landfill as a last resort.

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.

Alternative approaches, and reasons why they were rejected

Alternative approaches considered were:

No policy, leave the protection and enhancement of carbon sinks to existing policy related to sites of nature conservation importance - This is not the preferred approach as not all sites of importance for their role as carbon sinks will be covered by designations to protect their nature conservation importance, so this approach could still lead to the loss of areas of land that act as carbon sinks.

10.6 Further Work and Next Steps

Taking account of feedback received, the next step would be the inclusion of a fully worked up policy in the draft Local Plan for consultation at the next stage of plan making.

Appendix 1: First Conversation Feedback

This section of the topic paper provides a summary of the feedback from the First Conversation related to this theme, and how comments have been taken into account. A report on the consultation, and full details of the comments received can be found on the [Greater Cambridge Planning website](#).

Q8. How should the Local Plan help us achieve net zero carbon by 2050?

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Green roofs	Provide green roofs on residential and office development.	Noted. Green roofs are addressed in the Flooding and Integrated Water Management and Designing for a changing climate proposed policy approaches.
Green roofs	Offer incentives for rooftop greening.	Noted. Green roofs are addressed in the Flooding and Integrated Water Management and Designing for a changing climate proposed policy approaches.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Flooding	Findings from the Integrated Water Management Study should recommend the implementation of integrated drainage including SUDs, in all development, where possible. It should also identify and promote delivery of benefits and opportunities associated with climate change, for example to create more extensive wetland habitats and to protect and enhance the degraded peat soils remaining in the Greater Cambridge area.	Noted. Such matters are addressed in the Integrated Water Management Strategy, which has informed the preferred options report. The Green Infrastructure theme is also relevant.
Flooding	Development should incorporate multi-functional sustainable drainage and flood risk management measures in accordance with the Flood and Water SPD.	Noted, policy approaches are proposed in relation to flood and drainage in the climate change theme , which include requiring the use of SUDs.
Flooding	Update the existing Flood and Water SPD to reflect current biodiversity net gain and net zero carbon targets.	Noted. These issues are addressed in the biodiversity and climate change themes. An update to the current flood and water SPD would most likely follow the adoption of the new local plan if it were required.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Water management	Address drying rivers and chalk beds, and restore the Cambridge Valley ecosystem.	Noted. The Integrated Water Strategy which accompanies the consultation has considered water supply issues and guided the development of the preferred options report.
Water management	Produce more ambitious water consumption targets, including non grey water use reduction.	Noted, the proposed policy approach in the preferred option consultation seeks to require higher standards of water efficiency in both residential and non-residential development.
Water management	Encourage water reuse, rainwater capture and install grey water systems in new development.	Noted, the proposed policy approach in the preferred option consultation seeks to require higher standards of water efficiency in both residential and non-residential development.
Water management	Create a sustainable water supply for existing and new development.	Noted. The Integrated Water Strategy which accompanies the consultation has considered water supply issues and guided the development of the preferred options report.
Renewable energy schemes / initiatives	Support local renewable energy networks with local companies, allocate renewable energy schemes and create a planning fund for investment in local renewables.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings, setting out potential standards that could be applied to new development, guided by the findings of the Net Zero Carbon Study.
Renewable energy schemes / initiatives	Facilitate large scale renewable energy production.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding renewable energy, building on the findings on the Net Zero Carbon Study.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Renewable energy schemes / initiatives	Support affordable and efficient renewable energy as the main energy source for new development and provide incentives for its use.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding renewable energy, building on the findings on the Net Zero Carbon Study.
Energy efficiency	Set reductions in energy use, encourage energy conservation and recycling, and minimise the energy used to construct new development and to power its running costs.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings, setting out potential standards that could be applied to new development, guided by the findings of the Net Zero Carbon Study.
Energy efficiency	Support an integrated and efficient energy system, including buildings and transport.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding energy masterplanning that could be applied to new developments.
Energy efficiency	Install energy efficient glazing in new development.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings, setting out potential standards that could be applied to new development, guided by the findings of the Net Zero Carbon Study.
Energy efficiency	Ensure energy efficiency measures should not lead to the overheating of homes.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding designing for a changing climate which addresses this point.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Proposed use of renewable energy sources	Produce geothermal energy from plants below parks, including Parker's Piece.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding energy masterplanning that could be applied to new developments.
Proposed use of renewable energy sources	Use low carbon energy.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding renewable energy, building on the findings on the Net Zero Carbon Study.
Proposed use of renewable energy sources	Use hydro power.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding energy masterplanning that could be applied to new developments.
Proposed use of renewable energy sources	Use local waste to generate power locally via a contained system that bypasses refuse lorries.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding energy masterplanning that could be applied to new developments.
Proposed use of renewable energy sources	Use biogas energy.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding energy masterplanning that could be applied to new developments.
Proposed use of renewable energy sources	Provide wind turbines.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding renewable energy, building on the findings on the Net Zero Carbon Study.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Proposed use of renewable energy sources	Provide solar panels on development, including public buildings such as bus shelter roofs.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings, setting out potential standards that could be applied to new development, guided by the findings of the Net Zero Carbon Study.
Proposed use of renewable energy sources	Energy performance policies should not set requirements above the equivalent of the energy requirement of Level 4 of the Code for Sustainable Homes.	Noted. However, our Net Zero Carbon Study (2021) advises that new buildings need to be built to net zero carbon as soon as possible for Greater Cambridge to play its part in meeting the UK's carbon budgets. The Climate change topic paper provides further reasoning for proposing ambitious policies regarding climate change.
Proposed use of renewable energy sources	Incorporate allowances for viability and feasibility in energy policies.	Noted. The net zero carbon study has considered issues regarding the feasibility regarding the standards it recommends. The Local Plan will also be subject to a viability assessment.
Proposed use of renewable energy sources	The new Local Plan needs a policy framework that prioritises climate change and zero carbon in a planning balance judgement.	Noted, climate change and carbon impacts have been an important consideration during the development of the strategy proposed by the preferred options report. The net zero carbon study provided a carbon calculator which allowed different strategies to be compared.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Heating and energy	Require new development over 500sqm to undertake full operational energy and comfort modelling in line with CIBSE TM54 for operational energy and TM 59 for overheating risk, using 2050 climate data.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding overheating risk and the use of the CIBSE methodology. These are based on the recommendations of the Net Zero Carbon study
Heating and energy	Provide guidance on heat pump installation.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings.
Heating and energy	Use hydrogen or heat pumps instead of gas boilers.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings, and includes the proposal to not connect to the gas grid.
Heating and energy	Do not install utility gas in new developments, unless convertible to a non-carbon fuel. For large developments either ground source, air source, or communal heating should be prioritised.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings, and include the proposal to not connect to the gas grid.
Heating and energy	Allocate development which supports heat sharing infrastructure that balances cooling-led and heating-led land uses.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding energy masterplanning that could be applied to new developments.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Heating and energy	Design new development to require minimal heating or cooling.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding designing for a changing climate which addresses this point.
Heating and energy	Encourage the use and knowledge of electric boilers.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings, and include the proposal to not connect to the gas grid.
Heating and energy	Encourage all-electric heating in new development.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings, and include the proposal to not connect to the gas grid.
Sustainable design and construction	All development should be sustainable and designed to adapt to climate change.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding designing for a changing climate which addresses this point.
Sustainable design and construction	Require new development to use sustainable materials.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding reducing waste, including from materials, and the policy proposals regarding net zero carbon buildings includes seeking consideration of whole life carbon emissions.
Sustainable design and construction	Acknowledge the carbon levels from development allocations.	Noted, climate change and carbon impacts have been an important consideration during the development of the strategy proposed by the preferred options report. The net zero carbon study provided a carbon calculator which allowed different strategies to be compared.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable design and construction	Minimise the embodied carbon of new development with preference for construction materials and processes that are lower in embodied carbon and resource use, such as requiring projects to use at least >20% GGBS in concrete.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding reducing waste, including from materials.
Sustainable design and construction	Development schemes should demonstrate that they pass future climate data requirements.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding designing for a changing climate.
Sustainable design and construction	Require new development to provide a Circular Economy Statement.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding reducing waste, including from materials, and the policy proposals regarding net zero carbon buildings includes seeking consideration of whole life carbon emissions.
Sustainable design and construction	Support BREEAM and Passivhaus standards.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings.
Sustainable design and construction	Do not encourage meeting BREEAM targets in the new Local Plan.	Noted. There are some specific references in the plan to BREEAMs role in helping to meet Assured Performance requirements, but a bespoke and comprehensive approach is proposed to sustainable buildings, guided by the Net Zero Carbon study.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable design and construction	Support prefabricated development.	Noted. Acknowledge they may have a role to play, and policies in the plan will not preclude their use.
Sustainable design and construction	The Local Plan should be supported by design guidance on achieving climate change adaptation and mitigation in heritage assets.	Noted. The Great Places theme of the preferred options report includes policy proposals regarding adapting heritage buildings to climate change.
Insulation	Improve insulation in Council homes.	Noted, although this is beyond the scope of the local plan.
Insulation	Provide funding for lower income households to improve insulation.	Noted, although this is beyond the scope of the local plan.
Insulation	New development should have energy efficient insulation, heated by electric boilers or heat pumps.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings.
Climate change research	Support and encourage research and development, prototype development, and high-tech and skilled manufacturing.	Noted the jobs theme and the development strategy seeks to respond to the need of the economy for different types of employment space.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Climate change research	Study the carbon capture potential of tree planting or re-wilding.	Noted. Such issues are explored in the Net Zero Carbon Study. Tree planting has a role to play, but the net zero carbon buildings policy seeks to respond more directly by addressing the energy used in buildings. The Great Places theme includes preferred options related to green infrastructure and enhancing tree canopy cover.
Climate change education	Encourage schools to address climate change, energy conservation and recycling issues.	Noted, but beyond the scope of the local plan.
Climate change education	Prioritise education.	Noted, but beyond the scope of the local plan.
Climate change education	Support low-income people in reducing carbon use.	Noted. The plan seeks to deliver affordable housing, which would also be subject to the policies proposed in the Climate change chapter, meaning that energy bills for these properties should be low.
Climate change education	Educate the public on achieving net zero carbon, support the establishment of local climate groups, and produce a dedicated climate and ecological website.	Noted, but beyond the scope of the local plan.
Climate change education	Promote low-carbon lifestyles, encourage low carbon activities, and promote alternatives to private car use.	Noted. The proposed approach to the development strategy in the local plan seeks opportunities for development to access sustainable transport.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Climate change education	Encourage everyone to recognise how climate change affects them individually and what they can do personally to mitigate it.	Noted, but beyond the scope of the local plan.
Carbon sequestration	Invest in carbon capture technology.	Noted. Carbon sequestration is addressed in the preferred options report climate change theme. Investment in wider carbon capture technology is beyond the scope of the local plan.
Carbon sequestration	Consider carbon sequestration.	Noted. Carbon sequestration is addressed in the preferred options report climate change theme.
Carbon offsetting	Measure and offset emissions when they occur.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings. The approach seeks to meet energy needs onsite where possible, and only then to seek contribution towards off site provision.
Carbon offsetting	Consider carbon offsetting instead of retrofitting heritage assets.	Noted. The Great Places theme of the preferred options report includes policy proposals regarding adapting heritage buildings to climate change. It proposes ways in which on site measures could be achieved while continuing to protect heritage assets.
Carbon offsetting	Consider the carbon management of existing gardens and agricultural land.	Noted. Carbon sequestration is addressed in the preferred options report climate change theme.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Carbon offsetting	Offset carbon emissions from development through biodiversity and nature restoration, including tree planting and hedging.	Noted. Carbon sequestration is addressed in the preferred options report climate change theme.
Carbon offsetting-funding	Establish a carbon offsetting scheme through S106.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings. The approach seeks to meet energy needs onsite where possible, and only then to seek contributions towards off site provision.
Carbon offsetting-funding	Provide carbon offset funds for projects contained in an SPD including historic and heritage schemes.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings. The approach seeks to meet energy needs onsite where possible, and only then to seek contributions towards off site provision.
Carbon offsetting-construction	Developers must offset emissions from transport and materials used for new development.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding reducing waste, including from materials, and the policy proposals regarding net zero carbon buildings includes seeking consideration of whole life carbon emissions.
Carbon offsetting-construction	Adopt the approach set out for construction carbon in the new London Plan Policy SI2 Minimising Greenhouse Gas Emissions.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding reducing waste, including from materials, and the policy proposals regarding net zero carbon buildings includes seeking consideration of whole life carbon emissions.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Carbon offsetting-construction	Developers should have control over carbon offsetting during construction.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings. The approach seeks to meet energy needs onsite where possible, and only then to seek contributions towards off site provision.
Achieving net zero carbon / reduction	Achieve net zero carbon by 2025, 2030 or 2050.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings.
Achieving net zero carbon / reduction	Achieving net zero carbon should be considered in every decision making process of the Local Plan.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings. Climate change and carbon impacts have been an important consideration during the development of the strategy proposed by the preferred options report. The net zero carbon study provided a carbon calculator which allowed different strategies to be compared.
Achieving net zero carbon / reduction	Take a collaborative approach to achieving net zero carbon.	Noted.
Achieving net zero carbon / reduction	Achieving net zero carbon should not render the plan undeliverable.	Noted. The net zero carbon study has considered issues regarding the feasibility regarding the standards it recommends. The Local Plan will also be subject to a viability assessment.
Achieving net zero carbon / reduction	Require all new development to be zero carbon.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Achieving net zero carbon / reduction	Focus on reducing carbon emissions instead of economic growth.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings. National policy requires local planning authorities to meet housing needs as well as employment needs.
Achieving net zero carbon / reduction	Achieve net zero carbon before 2050, such as 2035.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings. This includes consideration of whether aspects of net zero carbon can be brought forward ahead of 2050.
Achieving net zero carbon / reduction	Set clear objectives from the outset to achieve net zero carbon by 2050 and set interim carbon reduction targets.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings.
Achieving net zero carbon / reduction	Set a minimum on-site carbon reduction target of 35% below Building Regulations 2013 Part L.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings.
Achieving net zero carbon / reduction	Set aspirational targets and policies that go beyond national policy and legislative frameworks.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Measuring carbon	Require a Total Carbon Budget for new development, including the embedded carbon captured in materials, transport and construction emissions.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings, reducing waste, including from materials, and the policy proposals regarding net zero carbon buildings includes seeking consideration of whole life carbon emissions.
Measuring carbon	Undertake a whole life carbon analysis on new development over 500sqm.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding reducing waste, including from materials, and the policy proposals regarding net zero carbon buildings includes seeking consideration of whole life carbon emissions.
Measuring carbon	Measure carbon use through Energy Use Intensity (EUI).	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings and the use of energy use intensity.
Measuring carbon	Provide, maintain, protect, enhance and expand green space, green infrastructure, nature reserves, wetlands, carbon sinks and habitats.	Noted. Carbon sequestration is addressed in the preferred options report climate change theme. The Green Infrastructure theme also proposes enhancement to the Green Infrastructure network.
Measuring carbon	Ensure developers guarantee the long-term maintenance of green infrastructure they provide.	Noted. Provision of green infrastructure as part of new developments is included within the Great Places theme of the preferred options report.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Measuring carbon	Increase biodiversity and protect wildlife.	Noted. Carbon sequestration is addressed in the preferred options report climate change theme. The Green Infrastructure theme also proposes enhancement to the Green Infrastructure network.
Measuring carbon	Ensure on-site habitat creation and greenspace provision, and large scale wetland habitat creation in the Fens, through a combination of developer community contributions and the application of biodiversity net gain policy.	Noted. Biodiversity net gain is addressed in the Biodiversity and Green Space theme.
Measuring carbon	Restore peatland and halt farming on peatland.	Noted. Carbon sequestration is addressed in the preferred options report climate change theme. The Green Infrastructure theme also proposes enhancement to the Green Infrastructure network.
Measuring carbon	Encourage market gardens.	Noted. This issue is addressed in the Green Infrastructure theme.
Measuring carbon	Include community gardens or allotments with new development.	Noted. This issue is addressed in the Green Infrastructure theme.
Measuring carbon	Include open space with new development.	Noted. Biodiversity net gain is addressed in the Biodiversity and Green Space theme.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Measuring carbon	Undertake further research on the environmental capacity of the plan area to accommodate further growth.	Noted. The proposed options has been informed by a range of evidence exploring environmental, social and economic issues.
Increase planting	Install City Trees at busy junctions.	Noted. Biodiversity net gain, and policy approaches regarding trees and enhancement of the tree canopy, are addressed in the Biodiversity and Green Space theme.
Increase planting	Plant trees, including in new developments, set a tree quota for new development, rewild green spaces, plant wildflowers and reduce cutting verges.	Noted. Biodiversity net gain, and policy approaches regarding trees and enhancement of the tree canopy, are addressed in the Biodiversity and Green Space theme.
Increase planting	Replant forests and create woodlands, such as a forest around Cambridge.	Noted. Biodiversity net gain, and policy approaches regarding trees and enhancement of the tree canopy, are addressed in the Biodiversity and Green Space theme.
Increase planting	Identify land for tree planting or wildflower meadows and situate new development near woodland or meadows.	Noted. Biodiversity net gain, and policy approaches regarding trees and enhancement of the tree canopy, are addressed in the Biodiversity and Green Space theme.
Increase planting	Protect trees from removal.	Noted. Biodiversity net gain, and policy approaches regarding trees and enhancement of the tree canopy, are addressed in the Biodiversity and Green Space theme.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Empty homes	Identify empty dwellings and implement mechanisms to reduce the number of empty homes.	Noted, the Councils have policies in place to address empty homes. Further information can be found on the councils websites.
Health and wellbeing	In liaison with other bodies, encourage healthy communities and ensure communities are designed to be people friendly, dementia friendly and take account of disabled people's needs.	Noted. The Wellbeing and social inclusion theme proposes a policy approach to integrate health considerations into planning decisions.
Infrastructure delivery	New development should pay into a fund to develop sustainable infrastructure in the areas impacted by more development.	Noted. Issues are addressed under the infrastructure theme, and the plan will be informed by an Infrastructure Delivery Study.
Infrastructure delivery	Infrastructure should be in place prior to occupation of new development.	Noted. Issues are addressed under the infrastructure theme, and the plan will be informed by an Infrastructure Delivery Study.
Waste and recycling	Invest in waste recycling.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding reducing waste, including from materials, and the policy proposals regarding net zero carbon buildings includes seeking consideration of whole life carbon emissions.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Waste and recycling	Minimise the consumption of waste, maximise re-use and recycling, recycle building materials before demolition and set recycling targets.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding reducing waste, including from materials, and the policy proposals regarding net zero carbon buildings includes seeking consideration of whole life carbon emissions.
Local Plan policy approach	Policies should define circumstances in which departures from climate change mitigation and adaptation standards are permissible.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings. The approach seeks to meet energy needs onsite where possible, and only then to seek contribution towards off site provision. Departures from climate change adaptation standards would need to be considered on a case by case basis giving priority to the level of risk that this could expose developments and their future occupiers, as well as surrounding communities to.
Local Plan policy approach	Policies should identify clearly the basis on which schemes should be developed and assessed, following appropriate industry best practice as it evolves, from bodies such as RIBA, CIBSE and the UK Green Building Council.	Noted. The Climate change theme of the preferred options report has been informed by our net zero carbon evidence base, which has given consideration to emerging industry best practice.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Local Plan policy approach	Do not support environmental performance policies.	Noted, however, our Net Zero Carbon Study (2021) advises that new buildings need to be built to net zero carbon as soon as possible for Greater Cambridge to play its part in meeting the UK's carbon budgets. The Climate change topic paper provides further reasoning for proposing ambitious policies regarding climate change.
Local Plan policy approach	Policies should be clear and not challengeable on appeal and enforce the requirements.	Noted, the Net Zero Carbon Study (2021) provides detailed information on the feasibility of policies to ensure they are robust and can be implemented
Local Plan policy approach	Policies within the new Local Plan should be flexible to accommodate changing climate change policy requirements, technology and legislation.	Noted, the Net Zero Carbon Study (2021) provides detailed information on the feasibility of policies to ensure they are robust and can be implemented
Local Plan policy approach	Take a holistic view of the impact of new development on the surrounding area.	Noted. The proposed options has been informed by a range of evidence exploring environmental, social and economic issues.
Local Plan policy approach	Take an ambitious approach.	Noted. It is considered that the climate change theme does propose an ambitious approach.
Local Plan policy approach	The big themes should address affordable housing.	Noted, this is addressed in the housing theme.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Local Plan policy approach	Focus on land use objectives.	Noted. The proposed options has been informed by a range of evidence exploring environmental, social and economic issues.
Homeworking	Support home working.	Noted, this is addressed in the housing theme.
Homeworking	Provide high speed broadband to encourage home or village working.	Noted, this is addressed in the infrastructure theme.
Employment	Provide and retain employment space in local communities.	Noted, this is addressed in the jobs theme, which proposes policy approaches to enable new employment development and to protect existing sites.
Employment	Create a supply chain for off-site manufacture close to Cambridge.	Noted. A range of sites are already identified as commitments, and the Preferred Options Report seeks to add to those sites by responding to the recommendations of the Employment Land Review (2020). Further information can be found in the strategy theme of the preferred option report, and the accompanying strategy topic paper.
Employment	Support employment uses focusing on innovation and technology in the aviation sector.	Noted. A range of sites are already identified as commitments, and the Preferred Options Report seeks to add to those sites by responding to the recommendations of the Employment Land Review (2020). Further information can be found in the strategy theme of the preferred option report, and the accompanying strategy topic paper.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Retrofitting existing buildings	Retrofit existing development for energy efficiency and with zero carbon sources.	Noted. The plan does not however propose a retrofitting policy, as it is impractical to implement through new development. Further information can be found in the climate change topic paper.
Retrofitting existing buildings	Place greater weight on achieving sustainability when retrofitting Cambridge University College's heritage assets.	Noted. The Great Places theme of the preferred options report includes policy proposals regarding adapting heritage buildings to climate change. It proposes ways in which on site measures could be achieved while continuing to protect heritage assets.
Retrofitting existing buildings	Provide a clear methodology on how heritage significance should be weighed against energy efficiency.	Noted. The Great Places theme of the preferred options report includes policy proposals regarding adapting heritage buildings to climate change. It proposes ways in which on site measures could be achieved while continuing to protect heritage assets.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Retrofitting existing buildings	Undertake research to inform the evidence base on carbon offsetting and retrofitting of heritage assets. This research should include: collaborative research with Historic England and others to identify feasible options and/or a methodology for historic buildings or those in an historic setting to be adapted to improve their thermal performance; review of options for carbon offsetting within the Greater Cambridge area and the production of an Supplementary Planning Document (SPD) as part of the emerging Local Plan as per the London Plan.	Noted. The Great Places theme of the preferred options report includes policy proposals regarding adapting heritage buildings to climate change. It proposes ways in which on site measures could be achieved while continuing to protect heritage assets.
Retrofitting existing buildings	Introduce incentives to renovate old buildings to reduce demolition.	Noted, although this is beyond the scope of the plan.
Retrofitting existing buildings	Support a policy on the inclusion of renewable technologies within Conservation Areas, with regard to historic buildings and the wider historic landscape.	Noted. The Great Places theme of the preferred options report includes policy proposals regarding adapting heritage buildings to climate change. It proposes ways in which on site measures could be achieved while continuing to protect heritage assets.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Retrofitting existing buildings	Provide infrastructure to reduce carbon in existing development and industry, including sustainable transportation and electricity supply.	Noted. The Cambridgeshire & Peterborough Combined Authority and Greater Cambridge Partnership are bringing forward a range of transport schemes, and also explored issues regarding power infrastructure.
Retrofitting existing buildings	Recognise that the means of achieving net zero carbon in a new building is different from adapting or refurbishing a building, especially a heritage asset	Noted. The Great Places theme of the preferred options report includes policy proposals regarding adapting heritage buildings to climate change. It proposes ways in which on site measures could be achieved while continuing to protect heritage assets.
Retrofitting existing buildings	Grant permitted development to householders able to adapt their homes to zero carbon.	Noted. Many measures would already be permitted development. It is not in the scope of the plan to grant further permitted development rights.
Growth strategy	Support re-use of existing buildings, development on brownfield land and urban densification.	Noted. The strategy section of the preferred options report was based on consideration of a range of strategy options available to the plan, including the pros and cons of developing in a range of locations. A range of evidence has informed the preferred options report, and the preferred options report provides the opportunity to respond to the approach proposed for the new local plan.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Growth strategy	Support small, medium and large scale development.	Noted. The strategy section of the preferred options report was based on consideration of a range of strategy options available to the plan, including the pros and cons of developing in a range of locations. A range of evidence has informed the preferred options report, and the preferred options report provides the opportunity to respond to the approach proposed for the new local plan.
Growth strategy	Designate a small number of Conservation Areas and then redevelop and densify the rest.	Noted. The Local Plan needs to continue to support the important Cambridge economy, whilst also considering housing and other infrastructure needs, as well as the impact on the environment. A range of evidence has informed the preferred options report, and the preferred options report provides the opportunity to respond to the approach proposed for the new local plan.
Growth strategy	Build microapartments near employment sites, including converting the Grand Arcade Car Park.	Noted, although there are no proposals for this site.
Growth strategy	Do not support development in infill villages.	Noted. Responding to the testing of options, the preferred options does not propose significant development at infill villages.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Growth strategy	Support Green Belt development.	Noted. The Local Plan needs to continue to support the important Cambridge economy, whilst also considering housing and other infrastructure needs, as well as the impact on the environment. A range of evidence has informed the preferred options report, and the preferred options report provides the opportunity to respond to the approach proposed for the new local plan. The sustainability impacts of developing in the green belt compared with other alternatives have been compared.
Growth strategy	Do not develop the Green Belt, the countryside, greenfield or agricultural land.	Noted. The Local Plan needs to continue to support the important Cambridge economy, whilst also considering housing and other infrastructure needs, as well as the impact on the environment. A range of evidence has informed the preferred options report, and the preferred options report provides the opportunity to respond to the approach proposed for the new local plan. The sustainability impacts of developing in the green belt compared with other alternatives have been compared.
Growth strategy	Object to development towards the Fen Land and Great River Ouse.	Noted. The proposed development strategy does not identify significant new development in these areas.
Growth strategy	Limit development.	Noted. In accordance with national planning policy and guidance, the new Local Plan should seek to allocate sufficient land to meet the needs of the area.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Growth strategy	Support development within settlement boundaries.	Noted. The proposed strategy maintains approaches such as development frameworks around settlements, but further allocations outside development frameworks in order to meet the development needs identified.
Growth strategy	Consider eco-villages.	Noted, the potential of new settlements has been considered when developing the strategy proposed in the preferred options report. Further information can be found in the strategy topic paper.
Growth strategy	Support development in urban areas, near Cambridge, in key village settlements and employment areas.	Noted. Proximity to employment and access to sustainable modes of transport have been important considerations when developing the strategy proposed in the preferred options report.
Growth strategy	Deliver affordable housing near places of employment.	Noted. Proximity to employment and access to sustainable modes of transport have been important considerations when developing the strategy proposed in the preferred options report.
Growth strategy	Do not support centralising services, facilities and businesses in Cambridge.	Noted. The proposed development strategy will seek to deliver new district and local centres at proposed major developments so that people can meet their day to day needs locally.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
New development proposals	Support development of Cambridge Science Park North.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.
New development proposals	Support development of 104-112 Hills Road.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.
New development proposals	Support development at Abbey Stadium.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
New development proposals	Support development in Histon and Impington.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.
New development proposals	Support development of kett House and 10 Station Road.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.
New development proposals	Support development of land at Bennell Farm.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
New development proposals	Support development of land at Fishers Lane, Orwell.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.
New development proposals	Support development of land at Six Mile Bottom.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.
New development proposals	Support development of land at South West Cambridge.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
New development proposals	Support development of land east of Long Road, Comberton.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.
New development proposals	Support development of land north of Main Street, Shudy Camps.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
New development proposals	Support development of land off Beach Road, Cottenham.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.
New development proposals	Support development of land south east of Cambridge.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
New development proposals	Support development of land south of Hattons Road, Longstanton.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.
New development proposals	Support development of land to the west of Cambridge Road, Melbourn.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.
New development proposals	Support development of land to the west of Mill Street, Gamlingay.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
New development proposals	Support development of the Rural Travel Hub on Crow's Nest Farm.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.
New development proposals	Support for the development of land to the south east of Cambridge, which is in a sustainable location	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.
New development proposals	Support for the development of Station Fields, which is in a sustainable location	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
New development proposals	Support development of Travis Perkins site.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.
Sustainable transport	Services and infrastructure should be local and accessible by active travel.	Noted. The availability of sustainable transport choices has informed the proposed development strategy. The infrastructure theme proposes policies regarding a range of transport issues. The proposed options report is also accompanied by a transport study exploring the impact and opportunities of the proposals.
Sustainable transport	Support development in sustainable locations, in public transport corridors or near sustainable transport networks.	Noted. The availability of sustainable transport choices has informed the proposed development strategy. The infrastructure theme proposes policies regarding a range of transport issues. The proposed options report is also accompanied by a transport study exploring the impact and opportunities of the proposals.
Sustainable transport	Developments in Cambridge and the surrounding area should be required to plan for at least 40% of trips by bicycle.	Noted. The availability of sustainable transport choices has informed the proposed development strategy. The infrastructure theme proposes policies regarding a range of transport issues. The proposed options report is also accompanied by a transport study exploring the impact and opportunities of the proposals.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable transport	Consider the Cambridgeshire Metro when identifying development allocations.	Noted. The availability of sustainable transport choices has informed the proposed development strategy. The infrastructure theme proposes policies regarding a range of transport issues. The proposed options report is also accompanied by a transport study exploring the impact and opportunities of the proposals.
Sustainable transport	New development should prioritise active travel, efficient housing, people and access to train networks.	Noted. The availability of sustainable transport choices has informed the proposed development strategy. The infrastructure theme proposes policies regarding a range of transport issues. The proposed options report is also accompanied by a transport study exploring the impact and opportunities of the proposals.
Sustainable transport	Object to new development designed around cars.	Noted. The availability of sustainable transport choices has informed the proposed development strategy. The infrastructure theme proposes policies regarding a range of transport issues. The proposed options report is also accompanied by a transport study exploring the impact and opportunities of the proposals.
Sustainable transport	Ensure that new employment development is near and connected to residential areas by active travel infrastructure.	Noted. The availability of sustainable transport choices has informed the proposed development strategy. The infrastructure theme proposes policies regarding a range of transport issues. The proposed options report is also accompanied by a transport study exploring the impact and opportunities of the proposals.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable transport	Schools and libraries to be accessible by sustainable transport options and away from busy roads.	Noted. The availability of sustainable transport choices has informed the proposed development strategy. The infrastructure theme proposes policies regarding a range of transport issues. The proposed options report is also accompanied by a transport study exploring the impact and opportunities of the proposals.
Sustainable transport	Introduce measures to promote public transport over car dependency, including funding for lower income households to use sustainable transport.	Noted. The availability of sustainable transport choices has informed the proposed development strategy. The infrastructure theme proposes policies regarding a range of transport issues. The proposed options report is also accompanied by a transport study exploring the impact and opportunities of the proposals.
Sustainable transport	Provide affordable public transport.	Noted. The availability of sustainable transport choices has informed the proposed development strategy. The infrastructure theme proposes policies regarding a range of transport issues. The proposed options report is also accompanied by a transport study exploring the impact and opportunities of the proposals.
Sustainable transport	Sign short term public transport contracts to have flexibility for review and invest in public transport.	Noted. The availability of sustainable transport choices has informed the proposed development strategy. The infrastructure theme proposes policies regarding a range of transport issues. The proposed options report is also accompanied by a transport study exploring the impact and opportunities of the proposals.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable transport	Provide zero carbon, hydrogen or electric public transport.	Noted. The availability of sustainable transport choices has informed the proposed development strategy. The infrastructure theme proposes policies regarding a range of transport issues. The proposed options report is also accompanied by a transport study exploring the impact and opportunities of the proposals.
Sustainable transport	Provide hydrogen power charging points.	Noted. The Infrastructure chapter proposes to require electric charging points.
Sustainable transport	Provide self driving buses.	Noted, although this is more within the remit of the Local Transport Plan.
Sustainable transport	Increase bus service, including nighttime and rural services.	Noted, although this is more within the remit of the Local Transport Plan.
Sustainable transport	Consider a community transport scheme.	Noted, such schemes could form part of travel planning, required by proposed policies in the infrastructure chapter.
Sustainable transport	Support the Cambridgeshire Metro.	Noted. The latest position by the combined authority is that the CAM is not being taken forward, but significant transport improvements are still planned.
Sustainable transport	Provide a tram network.	Noted. The Greater Cambridge Partnership are taking forward a range of transport schemes.
Sustainable transport	Convert the guided busway to a railway.	Noted, although this is not within the scope of the local plan.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable transport	Build light rail between train stations.	Noted. The Greater Cambridge Partnership are taking forward a range of transport schemes including providing linkages to existing and planned railway stations.
Sustainable transport	Do not support diesel-powered trains.	Noted, although this is not within the scope of the local plan.
Sustainable transport	Provide free electric vehicle charging infrastructure, including at employment places and residential development.	Noted. The Infrastructure chapter proposes to require electric charging points.
Sustainable transport	Provide subsidised electric cycles in large scale developments.	Noted, such schemes could form part of travel planning, required by proposed policies in the infrastructure chapter.
Sustainable transport	Encourage car sharing schemes.	Noted, such schemes could form part of travel planning, required by proposed policies in the infrastructure chapter.
Sustainable transport	Increase cycling infrastructure in and outside of Cambridge.	Noted, such schemes could form part of travel planning, required by proposed policies in the infrastructure chapter.
Sustainable transport	Provide bike lockers with hourly rates.	Noted, such schemes could form part of travel planning, required by proposed policies in the infrastructure chapter.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable transport	Provide cycle storage at new development and existing developments should allow modifications that support cycle storage.	Noted. The infrastructure section of the preferred options report makes policy proposals regarding cycle parking.
Sustainable transport	Improve existing infrastructure and review the road structure, junctions, footpaths to ensure they promote sustainable transport.	Noted. Policies proposed would seek improvements to meet the needs generated by new developments. Wider issues would fall within the remit of the Local Transport Plan and the County Council.
Sustainable transport	Provide shuttle buses between stations and employment areas, provide rickshaws between buses and the city centre, community transport between towns and villages.	Noted. While these issues are also the remit of the Local Transport Plan, the local plan proposed options includes policies seeking to deliver accessible developments, which would include measures to ensure they support sustainable modes of travel. A range of measures could form part of travel planning packages in association with developments.
Sustainable transport	Reduce car parking and convert the spaces to cycle parking or other uses.	Noted. The infrastructure section of the preferred options report makes policy proposals regarding cycle parking.
Sustainable transport	Support active travel.	Noted. Opportunities for active travel and access to public transport have informed the development strategy set out in the preferred options report, and the Infrastructure theme includes policies to encourage active travel.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Transport - general	Introduce a one way system for vehicles.	Noted, although this is outside the scope of the local plan, and would primarily be a matter for the local highway authority.
Transport - general	Reduce road width and close roads.	Noted, although this is outside the scope of the local plan.
Transport - general	Do not build new roads.	Noted. The proposed development strategy seeks to focus development where there are opportunities to access public transport, cycling and walking opportunities.
Transport - general	Local employment to not increase HGV traffic.	Noted. The preferred strategy includes proposals for new employment. Highways impacts of sites have been considered.
Transport - general	Improve the quality and appearance of Cambridge car parks.	Noted, although this is outside the scope of the local plan.
Transport - general	Increase pay parking for pollutant vehicles.	Noted, although this is outside the scope of the local plan.
Transport - general	Provide discounted taxis for those with mobility issues.	Noted, although this is outside the scope of the local plan.
Transport - general	Support park and rides, improve security at park and rides, require schools to use park and ride.	Noted, although this is outside the scope of the local plan.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Transport - general	Provide a park and ride on Histon and Huntingdon Road and require sustainable transport to access community centre near Richmond Road.	Noted. While these issues are also the remit of the Local Transport Plan or the Greater Cambridge Partnership, the local plan proposed options includes policies seeking to deliver accessible developments, which would include measures to ensure they support sustainable modes of travel.
Transport - general	Include supermarkets and leisure centres at park and ride areas.	Noted. The opportunities provided by park and ride facilities are being considered by the Greater Cambridge Partnership. In policy terms most fall within the green belt, and would be subject to national policy requirements.
Transport - general	Pedestrianise Cambridge city centre.	Noted. While these issues are also the remit of the Local Transport Plan, the local plan proposed options includes policies seeking to deliver accessible developments, which would include measures to ensure they support sustainable modes of travel.
Transport - general	Increase pedestrian infrastructure in and outside of Cambridge.	Noted. While these issues are also the remit of the Local Transport Plan, the local plan proposed options includes policies seeking to deliver accessible developments, which would include measures to ensure they support sustainable modes of travel.
Transport - general	Increase safety for cycling and pedestrians.	Noted. While these issues are also the remit of the Local Transport Plan, the local plan proposed options includes policies seeking to deliver accessible developments, which would include measures to ensure they support sustainable modes of travel.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Transport - general	The Sustainability Appraisal (SA) should address variable climate change scenarios.	The SA includes consideration of Climate change.

Q9. How do you think we should be reducing our impact on the climate? Have we missed any key actions?

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Local Plan approach	Prioritise climate change in the new Local Plan.	Noted, the climate change section of the preferred options document sets out the proposed policy approach to climate change and is one of the 7 core topic themes of the emerging plan.
Local Plan approach	Integrate land use and transport planning.	Noted, the development strategy within the preferred options document sets out the approach to integrating the spatial options with the transport and infrastructure modelling work undertaken to date. Further to this the infrastructure section provides details on the policy approaches to ensure this integration.
Local Plan approach	Increase awareness of the benefits of carbon free or renewable energy.	Noted, the climate change section of the preferred options document sets out the proposed policy approach to energy use and renewable energy themes and begins to suggest policy approaches.
Local Plan approach	Use wellbeing indicators rather than economic ones;	We are required to use a range of indicators to determine the success and implementation on policies within the local plan. The wellbeing and social inclusion section of the preferred options document sets out the proposed policies which once taken forward will be monitored yearly through the Authority Monitoring Report. https://www.greatercambridgeplanning.org/current-plans-and-guidance/monitoring-delivery-in-greater-cambridge/#a1

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Local Plan approach	Change the key action 'Supporting local and community opportunities for growing food' to 'Creating and supporting local and community opportunities for growing food'.	Noted. This is addressed in the Great Places theme of the preferred options document
Tree planting and protection	Support rewilding and expanding meadows.	Noted, although the direct delivery of this would be outside of the scope of the local plan, the biodiversity and green spaces section of the preferred options sets out policy approaches to deliver 20% biodiversity net gain in development which could include this.
Tree planting and protection	Protect mature trees and increasing meadows.	Noted, although the direct delivery of this would be outside of the scope of the local plan, the biodiversity and green spaces section of the preferred options sets out policy approaches to improve canopy cover and tree population which includes the protection of existing trees of value. The meadow point is covered within previous response.
Tree planting and protection	Increase tree planting, including fruit trees.	Noted, although this is outside the scope of the local plan, and would primarily be a matter for the council departments responsible for maintaining tree stock.
Tree planting and protection	Develop a tree strategy, including proposals for addressing emergency tree issues	Noted, although this is outside the scope of the local plan, and would primarily be a matter for the council departments responsible for maintaining tree stock.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Tree planting and protection	Increase wildlife habitats and identify areas for habitat creation, including those which provide carbon storage.	Noted, the biodiversity and green spaces section of the preferred options sets out policy approaches to deliver 20% biodiversity net gain in development and should be noted alongside land based carbon sequestration policy proposals contained within the climate change section.
Tree planting and protection	Protect and enhance peat soils.	Noted. The climate change theme of the preferred options document addresses this issue.
Tree planting and protection	Support efficiently used green spaces.	Noted, although this is outside the scope of the local plan.
Tree planting and protection	Support the creation of large-scale wetland habitats in the fens, including Wicken Fen, the Great and adjacent to the Ouse Washes and peat soils.	Noted, the biodiversity and green spaces section of the preferred options sets out policy approaches to deliver 20% biodiversity net gain in development and should be noted alongside land based carbon sequestration policy proposals contained within the climate change section.
Tree planting and protection	Avoid pollution, habitat fragmentation and loss of biodiversity, while protecting and enhancing the natural environment's resilience to change.	Noted, the biodiversity and green spaces section of the preferred options sets out policy approaches to deliver 20% biodiversity net gain in development and should be noted alongside land based carbon sequestration policy proposals contained within the climate change section.
Tree planting and protection	Restore green and blue infrastructure.	Noted, approach to Green and Blue Infrastructure is proposed in the climate change and biodiversity and green spaces sections of the preferred options document.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Tree planting and protection	Provide allotments or orchards alongside large-scale new development.	Noted, this is covered in the policy approach proposed in biodiversity and green spaces section under green infrastructure.
Tree planting and protection	Protect allotment sites from development.	Noted, this is covered in the policy approach proposed in biodiversity and green spaces section under protection of valued open spaces
Sustainable design and construction	Support energy efficient development.	Noted, the preferred options document contains a comprehensive proposed policy approach to addressing this in the climate change section.
Sustainable design and construction	Review policies on external insulation.	Noted, the preferred options document contains a comprehensive proposed policy approach to addressing this in the climate change section.
Sustainable design and construction	Install green roofs.	Noted. Green roofs are addressed in the Flooding and Integrated Water Management and Designing for a changing climate proposed policy approaches.
Sustainable design and construction	Reuse waste materials, recycled and naturally produced materials and low-carbon concrete in construction.	Noted, the preferred options document contains a comprehensive proposed policy approach to addressing this in the climate change section.
Sustainable design and construction	Support strong policies for sustainable materials in new development.	Noted, the preferred options document contains a comprehensive proposed policy approach to addressing this in the climate change section.
Sustainable design and construction	Consider the origin of materials.	Noted, although this is outside the scope of the local plan.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable design and construction	Set design standards that support sustainable design.	Noted, the preferred options document contains a comprehensive proposed policy approach to addressing this in the climate change section and also within the great places section in achieving high quality development.
Sustainable design and construction	New development should meet BREEAM and Passivhaus standards.	Noted, The standards contained within the proposed policy policies in the climate change section of the Preferred Options Report are such that they will exceed current BREEAM requirements.
Sustainable design and construction	New development should use carbon neutral materials.	Noted, the preferred options document contains a comprehensive proposed policy approach to addressing this in the climate change section.
Sustainable design and construction	New build should be carbon negative.	Noted, the preferred options document contains a comprehensive proposed policy approach to addressing this in the climate change section.
Sustainable design and construction	Set a maximum kgCO ₂ e/m ² for different building types.	Noted, the preferred options document contains a comprehensive proposed policy approach to addressing the approach in the climate change section. Further detail on the modelling work undertaken to form the proposed approach can be found in the climate change topic paper.
Sustainable design and construction	Divert fossil fuels and invest in clean technology.	Noted, although this is outside the scope of the local plan.
Sustainable design and construction	Use renewable energy.	Noted, the preferred options document contains a comprehensive proposed policy approach to addressing this in the climate change section.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable design and construction	Allocate renewable energy schemes.	Noted, the preferred options document contains a comprehensive proposed policy approach to addressing this in the climate change section.
Sustainable design and construction	Support self-build and community ownership of energy projects.	Noted, the preferred options document contains a comprehensive proposed policy approach to addressing this in the climate change section.
Sustainable design and construction	Support initiatives to increase opportunities for virtual renewable energy generation, sharing, trading and procurement, including community participation and affordability initiatives.	Noted, the preferred options document identifies this as a proposed policy direction in the climate change section.
Sustainable design and construction	Support community energy schemes including locally owned windfarms, municipally managed energy service companies and joint renewable energy schemes between villages.	Noted. The preferred options does seek to support community renewable energy.
Sustainable design and construction	Deliver strategic district heating centre networks.	Noted, the preferred options document includes a requirement for energy masterplans for certain scales of development.
Sustainable design and construction	Heat homes with renewable wind-based energy stored in heating stations.	Noted, the preferred options document describes the proposed policy direction in relation to wind energy in the climate change section.
Sustainable design and construction	Use geothermal energy below parks.	Noted, although this is outside the scope of the local plan.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable design and construction	Use biofuels.	Noted, although this is outside the scope of the local plan.
Sustainable design and construction	Support electricity generation from renewable sources.	Noted, the preferred options document contains a comprehensive proposed policy approach to addressing this in the climate change section.
Sustainable design and construction	Expand the electricity supply network.	Noted, the preferred options document contains a comprehensive proposed policy approach to addressing energy masterplanning in the infrastructure section.
Sustainable design and construction	Review policies on solar panels.	Noted, the approach to all forms of renewable energy are covered in the climate change topic paper and the proposed policy approach is set out in the climate change section of the preferred options document.
Sustainable design and construction	Install solar panels to make development self-sufficient.	Noted, the approach to all forms of renewable energy are covered in the climate change topic paper and the proposed policy approach is set out in the climate change section of the preferred options document.
Sustainable design and construction	Require ventilation systems to use heat exchangers.	Noted, although this is outside the scope of the local plan.
Sustainable design and construction	Require communal heating systems in large scale development.	Noted, the approach to this is set out in the climate change chapter and supporting topic paper.
Sustainable design and construction	Install heat pumps instead of gas boilers for new and existing development.	Noted, the approach to this is set out in the climate change chapter and supporting topic paper.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable design and construction	Identify empty dwellings and implement mechanisms to reduce the number of empty homes.	Noted, although this is outside the scope of the local plan.
Sustainable design and construction	Bring back empty homes on the market instead of building new development.	Noted, although this is outside the scope of the local plan.
Sustainable design and construction	Require grey water use in new development and encourage rainwater harvesting.	Noted, the approach to this is set out in the climate change chapter and supporting topic paper.
Sustainable design and construction	Produce more ambitious water consumption targets.	Noted, the approach to this is set out in the climate change chapter and supporting topic paper.
Sustainable design and construction	Install water meters.	Noted, the approach to this is set out in the climate change chapter and supporting topic paper.
Sustainable design and construction	Update the existing Flood and Water SPD to reflect current biodiversity net gain and net zero carbon targets.	Noted, the approach to this is set out in the climate change chapter and supporting topic paper.
Sustainable design and construction	Consider flooding and natural soil resources.	Noted, the approach to this is set out in the climate change chapter and supporting topic paper.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable design and construction	Findings from the Integrated Water Management Study should recommend the implementation of integrated drainage including SuDs in all development.	Noted, the approach to this is set out in the climate change chapter and supporting topic paper.
Sustainable design and construction	Support suggested measures from Section 4.1.3 of the draft Local Plan.	Noted, the approach to this is set out in the climate change chapter and supporting topic paper.
Sustainable design and construction	Support development in sustainable locations.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.
Sustainable design and construction	Support new development in rural communities.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable design and construction	Support the re-use of existing buildings, development on brownfield land and urban densification.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.
Sustainable design and construction	Encourage Central Government to increase regeneration, particularly in the Midlands and the North.	This is outside of the scope of the Greater Cambridge local plan
Sustainable design and construction	Reduce our impact on the climate with land use change.	Noted. Elements of this are considered in the climate change section of the preferred options document.
Sustainable design and construction	Plan land uses and patterns of development that increase opportunities for energy sharing.	Noted. Elements of this are considered in the climate change and infrastructure sections of the preferred options document.
Sustainable design and construction	Acknowledge in the new Local Plan that lower growth would reduce the impact on the climate.	Noted. Growth numbers and the spatial strategy have been informed by carbon analysis work.
Sustainable design and construction	Limit development to reduce our impact on the climate.	Noted. Growth numbers and the spatial strategy have been informed by carbon analysis work.
Sustainable design and construction	Limit development on farmland.	Noted. The preferred options does seek to limit development on high grade agricultural land.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable design and construction	Do not support development in flood risk areas.	Noted. The Climate Change theme of the preferred options report includes policies to address and manage flood risk.
Sustainable design and construction	Do not support development on farmland and garden.	Noted. The preferred options does seek to limit development on high grade agricultural land.
Sustainable design and construction	Do not support development on greenfield and agricultural land, and near industrial and business areas.	Noted. The preferred options does seek to limit development on high grade agricultural land.
Sustainable design and construction	Encourage businesses to mitigate their carbon footprint, for example through grants.	Noted, although this is outside the scope of the local plan.
Sustainable design and construction	Encourage businesses to review their energy use.	Noted, although this is outside the scope of the local plan.
Sustainable design and construction	Encourage local employers to support home working.	Noted, although this is outside the scope of the local plan.
Sustainable design and construction	Require a circular economy.	Noted, this is addressed in the climate change section of the preferred options document
Sustainable design and construction	Encourage supply chain transparency to reduce carbon.	Noted, although this is outside the scope of the local plan.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable design and construction	Provide high speed broadband to encourage home or village working.	Noted, the infrastructure section of the preferred options documents sets out a proposed approach to ensuring development contributes to Greater Cambridges requirements for broadband. However most aspects of upgrading infrastructure falls outside of the scope of the local plan.
Sustainable design and construction	Upgrade broadband.	Noted, the infrastructure section of the preferred options documents sets out a proposed approach to ensuring development contributes to Greater Cambridges requirements for broadband. However most aspects of upgrading infrastructure falls outside of the scope of the local plan.
Sustainable design and construction	Deliver a sustainable alternative to relieve traffic between Cambridge and Haverhill.	Noted. The Greater Cambridge Partnership are taking forward a range of transport schemes.
Sustainable design and construction	Support local and community initiatives and amenities that encourage residents to stay local and travel short distances on sustainable transport.	Noted. The availability of sustainable transport choices has informed the proposed development strategy. The infrastructure theme proposes policies regarding a range of transport issues. The proposed options report is also accompanied by a transport study exploring the impact and opportunities of the proposals.
Sustainable design and construction	Provide a plan for a public transport and cycling network.	Noted. The proposed development strategy seeks to focus development where there are opportunities to access public transport, cycling and walking opportunities.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable design and construction	Promote low-carbon transport to key centres, including London Stansted, Harlow Gilston Garden Town and Great Chesterford.	Noted, although this is outside the scope of the local plan.
Sustainable design and construction	Prioritise sustainable transport in urban areas and workplaces.	Noted. The availability of sustainable transport choices has informed the proposed development strategy. The infrastructure theme proposes policies regarding a range of transport issues. The proposed options report is also accompanied by a transport study exploring the impact and opportunities of the proposals.
Sustainable design and construction	Make cycling a safer transport option.	Noted, although this is outside the scope of the local plan.
Sustainable design and construction	Support inclusive cycle parking standards.	Noted. Cycle parking is addressed under the infrastructure theme of the preferred options document
Sustainable design and construction	Improve and increase cycling infrastructure.	Noted. The proposed development strategy seeks to focus development where there are opportunities to access public transport, cycling and walking opportunities.
Sustainable design and construction	Increase and improve pavements.	Noted, although this is outside the scope of the local plan.
Sustainable design and construction	New development should be permeable with pedestrian and cycle paths.	Noted. Opportunities for active travel and access to public transport have informed the development strategy set out in the preferred options report, and the Infrastructure theme includes policies to encourage active travel.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable design and construction	Ensure bus providers have higher sustainability standards.	Noted, although this is outside the scope of the local plan.
Sustainable design and construction	Improve public transport.	Noted. Opportunities for active travel and access to public transport have informed the development strategy set out in the preferred options report, and the Infrastructure theme includes policies to encourage active travel.
Sustainable design and construction	Increase bus service frequency in rural areas, Steeple Morden and Cambridge, and provide dial a bus in Steeple Morden.	Noted, although this is outside the scope of the local plan
Sustainable design and construction	Support electric and self-driving public transport and taxis.	Noted, although this is outside the scope of the local plan.
Sustainable design and construction	Support car sharing and incentives to reduce car use.	Noted, although this is outside the scope of the local plan.
Sustainable design and construction	Support car clubs in major urban areas and villages using electric and hybrid cars.	Noted, although this is outside the scope of the local plan.
Sustainable design and construction	Close off main roads to Cambridge to increase demand for buses.	Noted, although this is outside the scope of the local plan.
Sustainable design and construction	Make one way routes for cars to increase space for cycling and walking.	Noted, although this is outside the scope of the local plan, and would primarily be a matter for the local highway authority.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable design and construction	Reduce car use, including the use of private cars at peak times and traffic entering Cambridge and set up traffic exclusion zones around schools.	Noted, although this is outside the scope of the local plan, and would primarily be a matter for the local highway authority.
Sustainable design and construction	Support car free and car limited development.	Noted. The proposed development strategy seeks to focus development where there are opportunities to access public transport, cycling and walking opportunities.
Sustainable design and construction	Establish park and rides outside Cambridge centre.	Noted. The Greater Cambridge Partnership are considering a range of projects to support sustainable modes of transport and reduce congestion in the city centre
Sustainable design and construction	Assess the need to deliver electric vehicle charging points in the context of emerging technologies.	Noted. Consideration of electric vehicle charge points is included in the infrastructure section of the preferred options document.
Sustainable design and construction	Deliver electric vehicle charging infrastructure alongside new development.	Noted. Consideration of electric vehicle charge points is included in the infrastructure section of the preferred options document.
Sustainable design and construction	Install electric vehicle charging points for free for electric vehicle owners.	Noted. Consideration of electric vehicle charge points is included in the infrastructure section of the preferred options document.
Sustainable design and construction	Build new homes without garages or parking spaces.	Noted. Measures to reduce car use are considered in the infrastructure section of the preferred options document

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable design and construction	Convert car parks to other uses, such as green spaces.	Noted, although this is outside the scope of the local plan.
Sustainable design and construction	Do not support new major road infrastructure.	Noted. The proposed development strategy seeks to focus development where there are opportunities to access public transport, cycling and walking opportunities.
Sustainable design and construction	Do not support the Cambridge Metro.	Noted, although this is outside the scope of the local plan.
Sustainable design and construction	Consider methane capture and use at sewage works.	Noted, although this is outside the scope of the local plan.
Sustainable design and construction	Explore opportunities for carbon capture in the Fens.	Noted, although this is outside the scope of the local plan.
Sustainable design and construction	Support low carbon technologies.	Noted, the approach to this is set out in the climate change chapter and supporting topic paper.
Sustainable design and construction	Support carbon monitoring.	Noted, the approach to this is set out in the climate change chapter and supporting topic paper.
Sustainable design and construction	Support a local carbon tax.	Noted, the approach to this is set out in the climate change chapter and supporting topic paper.
Sustainable design and construction	Build space for community sustainability initiatives into the Local Plan.	Noted, the approach to this is set out in the climate change chapter and supporting topic paper.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable design and construction	Recommend putting in place stakeholder behaviour change initiatives in order ensure sustainable choices become part of everyday life, such as neighbourhood Sustainability champions or hubs.	Noted, although this is outside the scope of the local plan.
Sustainable design and construction	Support the creation of a Citizens Assembly to consider strategies to reduce our impact on the climate.	Noted, although this is outside the scope of the local plan.
Sustainable design and construction	Consider a points based system rating submitted sites and planning applications for their contribution to climate change objectives.	Noted, the approach to site selection weighs all statutory requirements for land use planning including climate change and is set out in the supporting topic paper.
Sustainable design and construction	The new Local Plan should consider further measures to achieving net zero carbon.	Noted, the approach to achieving net zero carbon is set out in the climate change chapter and supporting topic paper.
Sustainable design and construction	Pledge to achieve net zero carbon by 2030 using the C40 plans.	Noted, although this is outside the scope of the local plan.
Sustainable design and construction	Take a collaborative approach to achieving net zero carbon.	Noted, the approach to achieving net zero carbon is set out in the climate change chapter and supporting topic paper.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable design and construction	Offset large-scale agricultural and commercial activities, including air travel.	Noted although this is outside the scope of the local plan
Sustainable design and construction	Support carbon offsetting measures.	Noted.
Sustainable design and construction	Provide a clear methodology on how heritage significance should be weighed and monitored against energy efficiency and sustainability standards.	Noted. The Great Places theme of the preferred options report includes policy proposals regarding adapting heritage buildings to climate change. It proposes ways in which on site measures could be achieved while continuing to protect heritage assets.
Sustainable design and construction	Support a policy on the inclusion of renewable technologies within Conservation Areas, with regard to historic buildings and the wider historic landscape.	Noted. The Great Places theme of the preferred options report includes policy proposals regarding adapting heritage buildings to climate change. It proposes ways in which on site measures could be achieved while continuing to protect heritage assets.
Sustainable design and construction	Place greater weight on achieving higher sustainability when considering the protection of heritage assets and Conservation Areas.	Noted. The Great Places theme of the preferred options report includes policy proposals regarding adapting heritage buildings to climate change. It proposes ways in which on site measures could be achieved while continuing to protect heritage assets.
Sustainable design and construction	Renewable and low carbon energy policies should consider landscape, townscape and heritage.	Noted, consideration of these issues is included in the renewable energy preferred option in the climate change section of the preferred options document

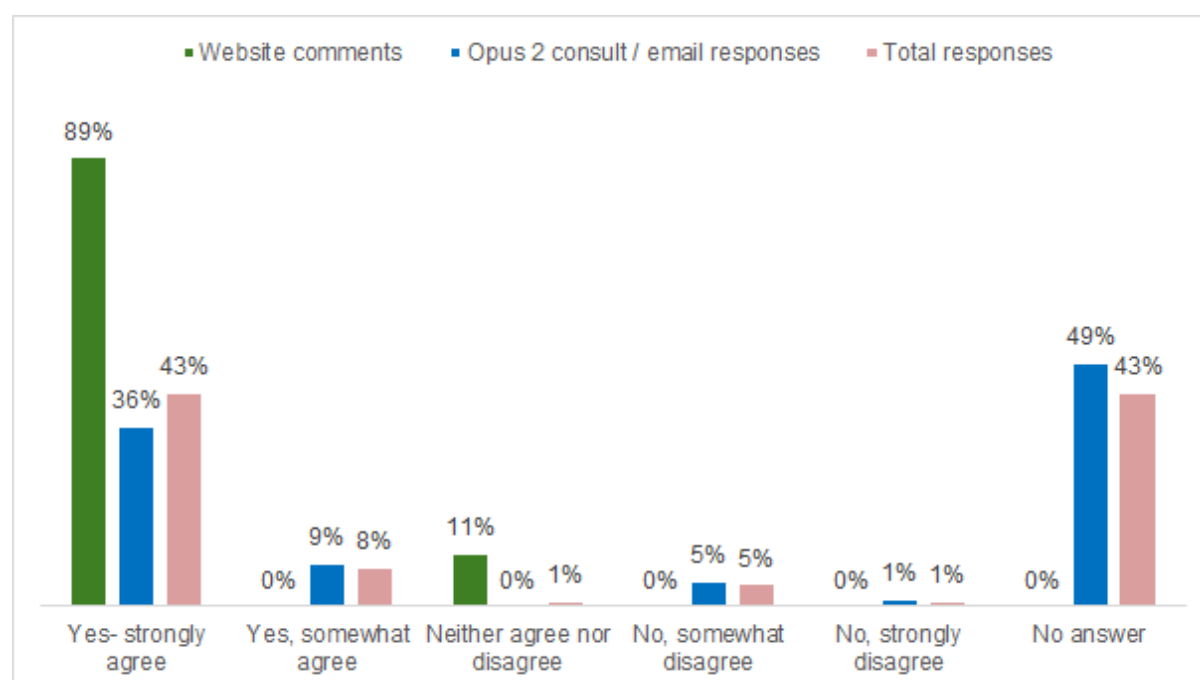
Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable design and construction	Consider carbon offsetting instead of retrofitting for heritage assets.	Noted. The Great Places theme of the preferred options report includes policy proposals regarding adapting heritage buildings to climate change. It proposes ways in which on site measures could be achieved while continuing to protect heritage assets.
Sustainable design and construction	Support a national approach to improving the environmental performance of residential developments.	Noted. However, our Net Zero Carbon Study (2021) advises that new buildings need to be built to net zero carbon as soon as possible for Greater Cambridge to play its part in meeting the UK's carbon budgets. The Climate change topic paper provides further reasoning for proposing ambitious policies regarding climate change.
Sustainable design and construction	Support greater weight on achieving sustainability when retrofitting the College's heritage assets.	Noted. The Great Places theme of the preferred options report includes policy proposals regarding adapting heritage buildings to climate change. It proposes ways in which on site measures could be achieved while continuing to protect heritage assets.
Sustainable design and construction	Support retrofitting, including heritage assets, publicise free guidance on retrofitting, and address the skill shortage in traditional building knowledge.	Noted. The Great Places theme of the preferred options report includes policy proposals regarding adapting heritage buildings to climate change. It proposes ways in which on site measures could be achieved while continuing to protect heritage assets.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable design and construction	Conduct an assessment of national and international guidance on retrofitting to inform the approach in Cambridge.	Noted. The Great Places theme of the preferred options report includes policy proposals regarding adapting heritage buildings to climate change. It proposes ways in which on site measures could be achieved while continuing to protect heritage assets.
Sustainable design and construction	Insulate existing development.	Noted although this is outside the scope of the local plan
Sustainable design and construction	Convert existing retail businesses to sustainable businesses.	Noted although this is outside the scope of the local plan
Sustainable design and construction	Provide and retain employment space in local communities.	Noted. The wellbeing and inclusion section of the preferred options document gives consideration to these issues.
Sustainable design and construction	Support development of 104-112 Hills Road.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable design and construction	Support development of Kett House and Station Road.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.
Sustainable design and construction	Support development of the Travis Perkins site.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.
Sustainable design and construction	Support development at Trumpington South.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable design and construction	Support development of land at Papworth.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.
Sustainable design and construction	Support research to achieve net zero carbon.	Noted.
Sustainable design and construction	Undertake further research on the environmental capacity of the plan area to accommodate further growth.	Noted. The proposed options has been informed by a range of evidence exploring environmental, social and economic issues.
Sustainable design and construction	Support re-use and recycling.	Noted, although this is outside the scope of the local plan.
Sustainable design and construction	Provide sports and recreation facilities	Noted. Provision of sports and recreation facilities is included in the Wellbeing and inclusion section of the preferred options document

Q10. Do you think we should require extra climate adaptation and resilience features to new developments?



19 website comments and 136 Opus 2 Consult/email responses were received to this question.

Most respondents agreed, with 51% either agreeing or strongly agreeing overall. Among web respondents, 89% strongly agreed.

68% of website commenters (13 in total) and 93% of Opus 2 Consult/email respondents (126) left a written comment.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Water management	Accompany SuDs with bodies of water in large-scale development.	Noted, the proposed policy approach in the preferred option consultation seeks to require use of SUDS.
Water management	Address water abstraction; ensure sustainable sourcing and use of water; consider the Water Crisis Forum: Final Report (2020).	Noted. The Integrated Water Strategy which accompanies the consultation has considered water supply issues and guided the development of the preferred options report.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Water management	Consider sustainable water sourcing and use in new development, and retrofitting existing development.	Noted. The Integrated Water Strategy which accompanies the consultation has considered water supply issues and guided the development of the preferred options report.
Water management	Ensure run-off water is redirected to the aquifer.	Noted, the proposed policy approach in the preferred option consultation seeks to require use of SUDS.
Water management	Ensure sufficient water resources.	Noted. The Integrated Water Strategy which accompanies the consultation has considered water supply issues and guided the development of the preferred options report.
Water management	Include rainwater collection / harvesting and grey water systems in new development.	Noted, the proposed policy approach in the preferred option consultation seeks to require higher standards of water efficiency in both residential and non-residential development.
Water management	Support resilient, and energy and water efficient design, and grey water systems in new development.	Noted, the proposed policy approach in the preferred option consultation seeks to require higher standards of water efficiency in both residential and non-residential development.
Water management	Support strong water management, groundwater protection and water consumption measures.	Noted, the proposed policy approach in the preferred option consultation seeks to require higher standards of water efficiency in both residential and non-residential development.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Water management	Support SuDS which recharge water to the ground and aquifer, provide grey water systems for non-potable uses, and design new development to limit clean water use to 75-80 litres per person per day.	Noted, the proposed policy approach in the preferred option consultation seeks to require higher standards of water efficiency in both residential and non-residential development. Policy approaches also continue to support the use of SUDS.
Water management	Support water conservation measures.	Noted, the proposed policy approach in the preferred option consultation seeks to require higher standards of water efficiency in both residential and non-residential development.
Water management	Support water storage measures.	Noted, the proposed policy approach in the preferred option consultation seeks to require higher standards of water efficiency in both residential and non-residential development.
Water management	Support permeable paving.	Noted, the proposed policy approach in the preferred option consultation seeks to require use of SUDS.
Amenity of residents	Acoustic standards must not override the ability to naturally ventilate in secure and rapid ventilation modes.	Noted, the proposed policy approach in the preferred option consultation seeks to prioritise natural ventilation, including acoustically attenuated natural ventilation.
Sustainable design of new buildings	All housing developments should follow the latest methods of insulation, on-site water recycling and district heating	Noted, all of these measures are addressed by proposals in the climate change theme of the preferred options report.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable design of new buildings	Climate adaptivity should be considered on a site by site basis.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding designing for a changing climate which addresses this point.
Sustainable design of new buildings	Decarbonise homes by 2050.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings, setting out potential standards that could be applied to new development, guided by the findings of the Net Zero Carbon Study.
Sustainable design of new buildings	Design of new development should recognise climate change.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding designing for a changing climate.
Sustainable design of new buildings	Support energy efficient homes.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings.
Sustainable design of new buildings	Support extra climate adaptation and resilience features for new development.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding designing for a changing climate.
Sustainable design of new buildings	Support Passivhaus standards	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings.
Sustainable design of new buildings	Support planting, green roofs and green walls on new and existing development.	Noted. Green roofs are addressed in the Flooding and Integrated Water Management and Designing for a changing climate proposed policy approaches.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable design of new buildings	Support solar protection shielding in new development.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding designing for a changing climate, this includes addressing overheating issues.
Sustainable design of new buildings	The new Local Plan should require extra climate change adaptation and resilience features to new developments	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding designing for a changing climate.
Sustainable design of new buildings	Balance heritage significance with achieving energy efficiency in heritage assets.	Noted. The Great Places theme of the preferred options report includes policy proposals regarding adapting heritage buildings to climate change.
Sustainable design of new buildings	Build development adapted / resilient to flooding.	Noted, policy approaches are proposed in relation to flooding and drainage in the climate change theme. This includes managing flood risk.
Sustainable design of new buildings	Consider surface water flood management for new development.	Noted, policy approaches are proposed in relation to flood and drainage in the climate change theme, including in relation to surface water management.
Sustainable design of new buildings	Do not support development on or near flood plains.	Noted, policy approaches are proposed in relation to flood and drainage in the climate change theme. Flood risk has been considered to inform the selection of the preferred options.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable design of new buildings	Do not support development on land at risk of flooding.	Noted, policy approaches are proposed in relation to flood and drainage in the climate change theme. Flood risk has been considered to inform the selection of the preferred options.
Sustainable design of new buildings	New development should demonstrate flood mitigation.	Noted, policy approaches are proposed in relation to flooding and drainage in the climate change theme.
Sustainable design of new buildings	Objection to development on the edge of flood zones 2 and 3, to ensure there is space for flood water storage.	Noted, policy approaches are proposed in relation to flood and drainage in the climate change theme. Flood risk has been considered to inform the selection of the preferred options.
Sustainable design of new buildings	Retrofit existing development to improve energy sources and insulation.	Noted. The plan does not however propose a retrofitting policy, as it is impractical to implement through new development. Further information can be found in the climate change topic paper.
Sustainable design of new buildings	Support additional resilience measures that can be retrofitted without disproportionate cost and disruption.	Noted. The plan does not however propose a retrofitting policy, as it is impractical to implement through new development. Further information can be found in the climate change topic paper.
Sustainable design of new buildings	Support improving the resiliency of existing development.	Noted. The plan does not however propose a retrofitting policy, as it is impractical to implement through new development. Further information can be found in the climate change topic paper.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable design of new buildings	Consider using district heating and cooling, heat from landfills or wastewater treatments centres, and deep aquifer or rivers; consider hot water storage in development with electric water heating; design new development without gas heating or cooking, or with the potential to retrofit; design new development to be resilient to flooding from drainage.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding energy masterplanning that could be applied to new developments. The preferred option related to net zero carbon buildings includes a requirement for no gas connections for new developments.
Sustainable design of new buildings	New development should be built with heat pumps instead of gas boilers, retrofit heat pumps in existing development, require homes to have solar panels, provide local allotments and encourage water re-use systems.	Noted, the climate change theme addresses each of these issues, although retrofitting is considered beyond the scope of the plan.
Sustainable design of new buildings	The new Local Plan should seek to adapt to climate change through approaches to net biodiversity gain, regulated CO2 emissions, zero carbon homes, low impact materials and lower water usage	Noted, the climate change theme addresses each of these issues.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable design of new buildings	Consider using land at future flooding risk for biodiversity creation or woodland planting.	Noted, although this is beyond the scope of the local plan.
Sustainable design of new buildings	Define the future climate using the 'High Emissions Scenario' for 2050 as defined by UK Met Office Climate Projections 2009 (UKCP09)	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding overheating risk and the use of the CIBSE methodology. These are based on the recommendations of the Net Zero Carbon study
Sustainable design of new buildings	Development should respond to the most up to date risks identified by the Climate Change Committee and demonstrate a clear adaptation strategy including a risk assessment and mitigation measures.	Noted. The Climate Change theme of the preferred options report includes a designing for a changing climate policy that will address this issue.
Sustainable design of new buildings	Support encouraging new developments to go further than 'business as usual'.	Noted, this is reflected in the preferred options climate change theme.
Sustainable design of new buildings	Ensure new development is resilient to climate change.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding designing for a changing climate.
Sustainable design of new buildings	New development should demonstrate a clear adaptation strategy including a risk assessment and mitigation measures	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding designing for a changing climate.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable design of new buildings	Support climate adaptation and resilience features in all new development.	Noted, such measures are proposed in the climate change theme.
Sustainable design of new buildings	Encourage low carbon energy generation, particularly employment schemes with low carbon and renewable energy.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding renewable energy, building on the findings on the Net Zero Carbon Study.
Sustainable design of new buildings	Support large scale renewable energy projects.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding renewable energy, building on the findings on the Net Zero Carbon Study.
Sustainable design of new buildings	Use fertiliser sewage plant for energy.	Noted, although this is beyond the scope of the local plan.
Sustainable design of new buildings	Require PV panels in new development; engage with utility suppliers at the beginning of development projects, consider linking PV panels in community schemes.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding energy masterplanning that could be applied to new developments.
Sustainable design of new buildings	Ensure bus routes through new development are viable.	Noted. Proximity to employment and access to sustainable modes of transport have been important considerations when developing the strategy proposed in the preferred options report.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable design of new buildings	Support better access requirements.	Noted. Proximity to employment and access to sustainable modes of transport have been important considerations when developing the strategy proposed in the preferred options report.
Sustainable design of new buildings	Support sustainable transportation.	Noted. Proximity to employment and access to sustainable modes of transport have been important considerations when developing the strategy proposed in the preferred options report.
Sustainable design of new buildings	The new Local Plan should seek to adapt to climate change through approaches to a centralised parking strategy within new developments to enable a pedestrian scale environment and a shift away from car usage	Noted. The infrastructure section of the preferred options report makes policy proposals regarding parking. This includes taking opportunities for reduced levels of parking when there are opportunities for sustainable travel available.
Sustainable design of new buildings	Protect local biodiversity and nature.	Noted , the Green Infrastructure and Biodiversity theme seeks to address these issues.
Sustainable design of new buildings	Provide vision of a carbon neutral Greater Cambridge to ensure understanding.	Noted, the plan seeks to deliver a robust approach to climate change. Both councils also have Climate change strategies.
Sustainable design of new buildings	Reference the role trees play in climate change adaptation in the new Local Plan.	Noted. Biodiversity net gain, and policy approaches regarding trees and enhancement of the tree canopy, are addressed in the Biodiversity and Green Space theme.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable design of new buildings	Retain trees.	Noted. Biodiversity net gain, and policy approaches regarding trees and enhancement of the tree canopy, are addressed in the Biodiversity and Green Space theme.
Sustainable design of new buildings	Support shelterbelt trees.	Noted. Biodiversity net gain, and policy approaches regarding trees and enhancement of the tree canopy, are addressed in the Biodiversity and Green Space theme.
Sustainable design of new buildings	Support tree planting in green spaces, urban areas, and near development.	Noted. Biodiversity net gain, and policy approaches regarding trees and enhancement of the tree canopy, are addressed in the Biodiversity and Green Space theme.
Sustainable design of new buildings	Reintroduce guidance on power supply, water usage and drainage, designing for heavier rainfall, insulation, and more, possibly as SPDs.	Noted, this range of measures are addressed in the climate change theme.
Sustainable design of new buildings	Provide clear guidance on planting and biodiversity.	Noted. Biodiversity net gain, and policy approaches regarding trees and enhancement of the tree canopy, are addressed in the Biodiversity and Green Space theme.
Sustainable design of new buildings	Set minimum standards for adaptation and resilience features for new development.	Noted. The Climate change theme proposes minimum standards in relation to a range of issues.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable design of new buildings	Support densification.	Noted. The strategy section of the preferred options report was based on consideration of a range of strategy options available to the plan, including the pros and cons of developing in a range of locations. A range of evidence has informed the preferred options report, and the preferred options report provides the opportunity to respond to the approach proposed for the new local plan.
Sustainable design of new buildings	Support development at Trumpington South.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.
Sustainable design of new buildings	Support development in rural communities.	Noted. The strategy section of the preferred options report was based on consideration of a range of strategy options available to the plan, including the pros and cons of developing in a range of locations. A range of evidence has informed the preferred options report, and the preferred options report provides the opportunity to respond to the approach proposed for the new local plan.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable design of new buildings	Support development in sustainable locations.	Noted. The strategy section of the preferred options report was based on consideration of a range of strategy options available to the plan, including the pros and cons of developing in a range of locations. A range of evidence has informed the preferred options report, and the preferred options report provides the opportunity to respond to the approach proposed for the new local plan.
Sustainable design of new buildings	Support drilling for ground heat pumps.	Noted.
Sustainable design of new buildings	The new Local Plan should include flexible policy requirements which allow for different solutions to be considered throughout the Plan period.	Noted. The Climate Change theme of the preferred options report includes a net zero carbon buildings policy that allows for the use of different technologies.
Sustainable design of new buildings	The new Local Plan should refer to the Circular Economy (the principle of designing out waste and pollution, and keeping materials in use).	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding reducing waste, including from materials, and the policy proposals regarding net zero carbon buildings includes seeking consideration of whole life carbon emissions.
Sustainable design of new buildings	The new Local Plan should require developments to respond to the most up to date risks identified by the Climate Change Committee	Noted. The Climate Change theme of the preferred options report includes a designing for a changing climate policy that will address this issue.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Sustainable design of new buildings	Explore alternate strategies to combat climate change beyond climate change adaptation and resilience features.	Noted, although this is beyond the scope of the local plan.

Q11. Are there any other things we should be doing to adapt to climate change? We want to hear your ideas!

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Implementing a range of climate change adaptation and mitigation measures	Adapt to climate change by planning for flood risk and extreme weather events, designing development for a warming climate, efficient water use, ensuring food security and the adaptation of agriculture, selecting resilient trees and plants.	Noted. Each of these measures are addressed in the preferred options report.
Implementing a range of climate change adaptation and mitigation measures	Adapt to climate change with food security, planning for flooding risk, planting, adopting appropriate farming strategies and biofuels.	Noted. Each of these measure are addressed in the preferred options report, although biofuels may be beyond the scope of the plan.
Implementing a range of climate change adaptation and mitigation measures	Support all measures to adapt to climate change.	Noted.
Implementing a range of climate change adaptation and mitigation measures	Support designing buildings to cope with hotter summers.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding designing for a changing climate which addresses this point.
Implementing a range of climate change adaptation and mitigation measures	Support mitigation measures instead of adaptation measures.	Noted, although we have a legal duty to support both climate change adaptation as well as mitigation.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Implementing a range of climate change adaptation and mitigation measures	Use local roof space for solar heating/electrical energy and battery storage.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings, which would seek to address energy needs onsite.
Implementing a range of climate change adaptation and mitigation measures	Adapt to climate change through education and lifestyle changes.	Noted. The Climate Change theme of the preferred options report seeks to address issues which are within the scope of the local plan.
Implementing a range of climate change adaptation and mitigation measures	Address overheating.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding designing for a changing climate which addresses this point. There are also policies in the green infrastructure theme which seek to enhance the tree canopy.
Implementing a range of climate change adaptation and mitigation measures	Ban development in flood zones, focus development south of Cambridge on higher ground.	Noted. The Climate Change theme of the preferred options report includes policies to address and manage flood risk.
Implementing a range of climate change adaptation and mitigation measures	Consider the location of grid infrastructure when allocating development.	Noted, the Councils are working with the Greater Cambridge partnership to explore grid capacity issues.
Implementing a range of climate change adaptation and mitigation measures	Consider water supply when planning for growth.	Noted. The Integrated Water Strategy which accompanies the consultation has considered water supply issues and guided the development of the preferred options report.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Implementing a range of climate change adaptation and mitigation measures	Support densification.	Noted. The plan making process has considered the sustainability impacts of different strategy options, which has informed the selection of the preferred approach. Further information can be found in the strategy topic paper.
Implementing a range of climate change adaptation and mitigation measures	Support development in sustainable locations.	Noted. The plan making process has considered the sustainability impacts of different strategy options, which has informed the selection of the preferred approach. Further information can be found in the strategy topic paper.
Implementing a range of climate change adaptation and mitigation measures	Support development of Cambridge Science Park North.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.
Implementing a range of climate change adaptation and mitigation measures	Support development of Kett House and 10 Station Road.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Implementing a range of climate change adaptation and mitigation measures	Support development of land at Frog End.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.
Implementing a range of climate change adaptation and mitigation measures	Support development of land at Papworth.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.
Implementing a range of climate change adaptation and mitigation measures	Support development of land to the north of Station Road.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Implementing a range of climate change adaptation and mitigation measures	Support redevelopment of the Travis Perkins site.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.
Implementing a range of climate change adaptation and mitigation measures	Support the redevelopment of 104-112 Hills Road.	Noted. Site proposals have been considered through the Housing and Employment Land Availability Assessment which accompanies the preferred options report. The development strategy proposed in the preferred option report has considered the alternatives available, and details regarding how the approach was identified can be found in the strategy topic paper.
Implementing a range of climate change adaptation and mitigation measures	Consider adaptation measures in building design, including resilient architecture, SuDS, and green infrastructure.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding designing for a changing climate.
Implementing a range of climate change adaptation and mitigation measures	Incorporate passivhaus technology in all new development.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings, which would seek to address energy needs onsite.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Implementing a range of climate change adaptation and mitigation measures	Incorporate water saving devices in all development that uses potable water, replace old fixtures and fittings with sustainable versions and ensure potable water is provided at source.	Noted. The Integrated Water Strategy which accompanies the consultation has considered water supply issues and guided the development of the preferred options report. Water efficiency measures are proposed in the climate change theme.
Implementing a range of climate change adaptation and mitigation measures	Support homeworking.	Noted, this is addressed in the housing theme.
Implementing a range of climate change adaptation and mitigation measures	Support Lifetime homes.	Noted, this is addressed in the housing theme, which proposes to require homes to be adaptable.
Implementing a range of climate change adaptation and mitigation measures	Consider carbon offsetting instead of retrofitting for heritage assets.	Noted. The Great Places theme of the preferred options report includes policy proposals regarding adapting heritage buildings to climate change. It proposes ways in which on site measures could be achieved while continuing to protect heritage assets.
Implementing a range of climate change adaptation and mitigation measures	Consider proposals to retrofit heritage assets in a sympathetic manner.	Noted. The Great Places theme of the preferred options report includes policy proposals regarding adapting heritage buildings to climate change. It proposes ways in which on site measures could be achieved while continuing to protect heritage assets.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Implementing a range of climate change adaptation and mitigation measures	Consider electric bike and cycle storage	Noted. The infrastructure section of the preferred options report makes policy proposals regarding cycle parking.
Implementing a range of climate change adaptation and mitigation measures	Improve the safety and use of cycle routes.	Noted. While these issues are also the remit of the Local Transport Plan, the local plan proposed options includes policies seeking to deliver accessible developments, which would include measures to ensure they support sustainable modes of travel.
Implementing a range of climate change adaptation and mitigation measures	Large businesses should contribute towards public transport and housing for their staff.	Noted. The infrastructure theme includes policies regarding travel plans, which would require developments to support travel by sustainable modes.
Implementing a range of climate change adaptation and mitigation measures	Promote sustainable transport schemes.	Noted. The local plan proposed options includes policies seeking to deliver accessible developments, which would include measures to ensure they support sustainable modes of travel.
Implementing a range of climate change adaptation and mitigation measures	Support car-free developments or residential schemes with limited parking.	Noted. The infrastructure section of the preferred options report proposes a policy approach to parking which would seek to keep parking levels low where there are sustainable transport modes available.
Implementing a range of climate change adaptation and mitigation measures	Consider energy security.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings, which would seek to address energy needs onsite.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Implementing a range of climate change adaptation and mitigation measures	Encourage but do not require low carbon energy generation.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings, which would seek to address energy needs onsite. This is an important aspect of achieving net zero carbon and meeting the UK's legally binding carbon budgets.
Implementing a range of climate change adaptation and mitigation measures	Ensure energy for electric vehicles is renewable.	Noted. This is primarily beyond the scope of the plan, but the preferred options does seek to support renewable energy in appropriate locations.
Implementing a range of climate change adaptation and mitigation measures	Subject heat pumps to a cooling hierarchy test.	Noted. This is primarily beyond the scope of the plan, but the preferred options does seek to support renewable energy in appropriate locations. Heat pumps form an important role in the decarbonisation of heat, although further guidance on minimising impacts could be provided in an SPD.
Implementing a range of climate change adaptation and mitigation measures	Support community heating infrastructure and support communities to source renewable energy.	Noted. The preferred options does seek to support community renewable energy.
Implementing a range of climate change adaptation and mitigation measures	Support fossil fuel disinvestment.	Noted. This is beyond the scope of the local plan.
Implementing a range of climate change adaptation and mitigation measures	Support innovation in energy and renewable technologies.	Noted. This is primarily beyond the scope of the plan, but the preferred options does seek to support renewable energy in appropriate locations.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Implementing a range of climate change adaptation and mitigation measures	Consider flood risk measures including SuDS, Natural Flood Management schemes, retrofit existing buildings with Property Level Resilience measures, strategic tree planting and wetlands to enhance ground interception of water, and resilient infrastructure and trees adapted to strong winds.	Noted. The Climate Change theme of the preferred options report includes policies to address and manage flood risk.
Implementing a range of climate change adaptation and mitigation measures	Create retention ponds on poor-quality farmland.	Noted. Outside the consideration of development proposals this is likely to be outside the scope of the plan, but the Environment Agency are exploring flood storage and mitigation opportunities.
Implementing a range of climate change adaptation and mitigation measures	Do not support development on flood plains.	Noted. The Climate Change theme of the preferred options report includes policies to address and manage flood risk.
Implementing a range of climate change adaptation and mitigation measures	Do not support impermeable driveways and enforce this.	Noted. The Climate Change theme of the preferred options report includes policies to address and manage flood risk and promote the use of sustainable drainage systems.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Implementing a range of climate change adaptation and mitigation measures	Identify the level of need for increased flood and water storage capacity up to and beyond 2040, using climate projections to estimate increased flood storage and water resource needs in the Ouse catchment.	Noted. Outside the consideration of development proposals this is likely to be outside the scope of the plan, but the Environment Agency are exploring flood storage and mitigation opportunities.
Implementing a range of climate change adaptation and mitigation measures	Prepare for increased flood events.	Noted. A new Strategic Flood Risk Assessment has been produced which considers the impacts of climate change.
Implementing a range of climate change adaptation and mitigation measures	Protect the Fens from flooding and high-quality farm land.	Noted, but this is beyond the scope of the local plan.
Implementing a range of climate change adaptation and mitigation measures	Use nature-based solutions to address flood storage and water resource.	Noted. The climate change theme proposes that policies will continue to require implementation of SuDS
Implementing a range of climate change adaptation and mitigation measures	Support SuDS.	Noted. The climate change theme proposes that policies will continue to require implementation of SuDS
Implementing a range of climate change adaptation and mitigation measures	Consider water stress in the region in the new Local Plan and Water Cycle Study.	Noted. The Integrated Water Strategy which accompanies the consultation has considered water supply issues and guided the development of the preferred options report.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Implementing a range of climate change adaptation and mitigation measures	Recommend a study on the impacts growth and the Cambridge aquifer.	Noted. The Integrated Water Strategy which accompanies the consultation has considered water supply issues and guided the development of the preferred options report.
Implementing a range of climate change adaptation and mitigation measures	Support a more holistic and integrated approach to water management.	Noted. The Integrated Water Strategy which accompanies the consultation has considered water supply issues and guided the development of the preferred options report.
Implementing a range of climate change adaptation and mitigation measures	Consider retrofitting rainwater collection systems.	Noted. The Integrated Water Strategy which accompanies the consultation has considered water supply issues and guided the development of the preferred options report. Water efficiency measures are proposed in the climate change theme.
Implementing a range of climate change adaptation and mitigation measures	Retrofit existing development to switch away from fossil fuels.	Noted. Retrofitting existing properties is beyond the scope of the local plan.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Implementing a range of climate change adaptation and mitigation measures	Retrofit external shading devices, reduce existing glazed areas where it causes excessive solar gain, retrofit windows to facilitate secure means of ventilation, retrofit to cope with higher rainfall intensity, alter window openings and entry points to semi-basements to reduce risk of water ingress due to surface water flooding, change roof build-ups.	Noted. Retrofitting existing properties is beyond the scope of the local plan.
Implementing a range of climate change adaptation and mitigation measures	Consider the impact on health from climate change.	Noted. The climate change theme includes a range of preferred options that should help to minimise the health impacts associated with climate change. The health and wellbeing theme also includes preferred options to address the issue of health.
Implementing a range of climate change adaptation and mitigation measures	Support vulnerable groups in coping with a changing climate.	Noted. To a great extent this may be beyond the scope of the plan, but there are measures that can be delivered through planning, such as helping with access to shops, services and infrastructure, delivering enough of the right sort of homes, and supporting access to public transport.
Implementing a range of climate change adaptation and mitigation measures	Include particulates when addressing air pollution.	Noted. The health and wellbeing theme includes a preferred option related to air pollution, which includes consideration of particulates.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Implementing a range of climate change adaptation and mitigation measures	Make climate change adaptation the first criteria for each policy in the new Local Plan.	Noted. Climate change is a key theme for the plan.
Implementing a range of climate change adaptation and mitigation measures	Support actions identified within the draft Local Plan.	Noted.
Implementing a range of climate change adaptation and mitigation measures	Align policies with the aim of reducing carbon emissions.	Noted. Carbon emissions has been considered when developing the strategy proposed in the preferred options, along with a range of policy measures.
Implementing a range of climate change adaptation and mitigation measures	The new Local Plan should include flexible policy requirements which allow for different solutions to be considered throughout the Plan period.	Noted. The net zero carbon study highlights the importance of implementing the full policy requirements as soon as possible.
Implementing a range of climate change adaptation and mitigation measures	Support rural communities to reduce carbon footprints.	Noted although this sits outside of the scope of the Local Plan. The South Cambridgeshire Zero Carbon Strategy identifies actions to support rural communities.
Implementing a range of climate change adaptation and mitigation measures	Take a collaborative approach to achieving net zero carbon.	Noted. The Councils both have Climate change strategies which seek to achieve range of measures with communities, many of which are beyond the scope of the local plan.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Implementing a range of climate change adaptation and mitigation measures	Monitor biodiversity to help set and measure targets.	Noted. When the plan reaches the draft plan stage it will include proposals regarding how it will be monitored.
Implementing a range of climate change adaptation and mitigation measures	Offset carbon through green and blue infrastructure.	Noted. The climate change theme of the preferred options report sets out our approach to net zero carbon buildings, which includes an option for carbon offset.
Implementing a range of climate change adaptation and mitigation measures	Plant fruit and nut trees.	Noted, tree planting is addressed in the Green Infrastructure theme.
Implementing a range of climate change adaptation and mitigation measures	Protect and increase green spaces, and plan green spaces efficiently.	Noted, this is addressed in the Green Infrastructure theme.
Implementing a range of climate change adaptation and mitigation measures	Protect existing green spaces.	Noted, this is addressed in the Green Infrastructure theme.
Implementing a range of climate change adaptation and mitigation measures	Support a policy on the loss of peat-based soil.	Noted. Carbon sequestration is addressed in the preferred options report climate change theme.
Implementing a range of climate change adaptation and mitigation measures	Support increased tree planting.	Noted, this is addressed in the Green Infrastructure theme.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Implementing a range of climate change adaptation and mitigation measures	Support planting trees and plants and clean up rivers, parks and pavements.	Noted, tree planting is addressed in the Green Infrastructure theme.
Implementing a range of climate change adaptation and mitigation measures	Support the Cambridge Canopy Project.	Noted, this is addressed in the Green Infrastructure theme.
Implementing a range of climate change adaptation and mitigation measures	Support tree planting at new development and a plan-wide network of cycle and footpaths between villages, railway stations and places of employment.	Noted, tree planting is addressed in the Green Infrastructure theme.
Implementing a range of climate change adaptation and mitigation measures	Support re-wilding.	Noted, although this sits outside of the Local Plan
Implementing a range of climate change adaptation and mitigation measures	Place greater weight on achieving higher sustainability when considering the protection of heritage assets.	Noted. The Great Places theme of the preferred options report includes policy proposals regarding adapting heritage buildings to climate change. It proposes ways in which on site measures could be achieved while continuing to protect heritage assets.
Implementing a range of climate change adaptation and mitigation measures	Provide a clear methodology on how heritage significance should be weighed against energy efficiency.	Noted. The Great Places theme of the preferred options report includes policy proposals regarding adapting heritage buildings to climate change. It proposes ways in which on site measures could be achieved while continuing to protect heritage assets.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Implementing a range of climate change adaptation and mitigation measures	Position street furniture outside of protected watercourses.	Noted, although though it is likely that street furniture location is largely beyond the scope of the plan.
Implementing a range of climate change adaptation and mitigation measures	Require developers of major schemes to produce Whole-Life Carbon Assessments that address all impacts associated with the construction, operation, and demolition of buildings and infrastructure.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding reducing waste, including from materials, and the policy proposals regarding net zero carbon buildings includes seeking consideration of whole life carbon emissions.
Implementing a range of climate change adaptation and mitigation measures	Require developers to produce a 'climate change adaptation' study instead of prescribing specific adaptation measures.	Noted. It is considered that the plan does need to require specific measures to ensure development has achieved appropriate adaptation.
Implementing a range of climate change adaptation and mitigation measures	Require developers to produce a full Carbon Budget for planning applications and rate the budget with a red/amber/green rating for Council to assess.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding net zero carbon buildings, reducing waste, including from materials, and the policy proposals regarding net zero carbon buildings includes seeking consideration of whole life carbon emissions.

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Implementing a range of climate change adaptation and mitigation measures	Require new development over 500sqm to undertake full operational energy and comfort modelling in line with CIBSE TM54 for operational energy and TM 59 for overheating risk, using 2050 climate data, and demonstrate they pass future climate data requirements.	Noted. The Climate Change theme of the preferred options report includes policy proposals regarding overheating risk and the use of the CIBSE methodology. These are based on the recommendations of the Net Zero Carbon study
Implementing a range of climate change adaptation and mitigation measures	Strengthen the infrastructure in Cambridge centre.	Noted. Issues are addressed under the infrastructure theme, and the plan will be informed by an Infrastructure Delivery Study.
Implementing a range of climate change adaptation and mitigation measures	Support community based initiatives including Think Communities.	Noted although this is largely beyond the scope of the local plan
Implementing a range of climate change adaptation and mitigation measures	Support local assemblies and community involvement.	Noted although this is largely beyond the scope of the local plan
Implementing a range of climate change adaptation and mitigation measures	Support retrofitting and raise awareness of available grants.	Noted although this is largely beyond the scope of the local plan

Overarching theme / topic	Summary of issues raised in comments	How the comments have been taken into account
Implementing a range of climate change adaptation and mitigation measures	Support the AgriTech sector.	Noted.