Appendix B - Analysis, responses and preferred approach to the Climate Change section, plus summaries of representations received.

The Local Plan will seek to ensure that Cambridge develops in the most sustainable way possible. This means delivering our social and economic aspirations without compromising the environmental limits of the city for current and future generations. The vision for Cambridge is for it to become a low carbon, water sensitive city with a thriving economy. For this to be achieved, a holistic approach to sustainable development should be embedded within all development proposals from the outset.

Chapter 6 of the Issues and Options Report focussed on how the Local Plan will contribute to the achievement of sustainable development. It looked at how the Local Plan will address the challenges of mitigating and adapting to our changing climate.

ISSUE: STRATEGIC PRIORITY – INNOVATIVE AND SUSTAINABLE COMMUNITIES
(Page 112 of the Issues and Options Report)

Total representations: 19	
Objections: 2	**Supports: 17**

OPTION NUMBER/OTHER	**KEY ISSUES ARISING FROM CONSULTATION**
Option 41: Innovative and sustainable communities – This option seeks to deliver truly sustainable communities that balance environmental, social and economic goals and minimise environmental impact	• Strong support - Should be fundamental approach to all new development; • Cambridge should lead by example; • Recent unpredictable weather patterns confirm the need for extreme caution. New development should not make the situation (re: flooding) worse. • Welcome the reference to innovative solutions, which may required some flexibility in the way that other policies are interpreted and put into effect.
NEW OPTIONS ARISING FOLLOWING COMMUNITY INVOLVEMENT	
• Make reference to the need for local communities to become more self-sufficient by producing their own energy; • Make reference to the role of sustainable transport, notably cycling, in reducing carbon emissions.	

SUMMARY OF INTERIM SUSTAINABILITY APPRAISAL REPORT
The Sustainability Appraisal concluded that this option should result in positive effects across the majority of sustainability topics. In particular, specific reference to efficient use of energy, water and natural resources should ensure improved water efficiency and reduced carbon emissions from all aspects of new developments. This would have subsequent benefits in terms of enhancing the public realm and improving the health and wellbeing of Cambridge residents. This option should also have beneficial effects on maintaining Cambridge's position as an economically competitive City now and in the future.

KEY EVIDENCE
• DEFRA (2011) Mainstreaming sustainable development; • ODPM (2005) Securing the future: The UK Sustainable Development Strategy; • Cambridge City Council Climate Change Strategy and Action Plan (2008); • Cambridge City Council (2007) Sustainable Design and Construction SPD; • Stern (2006). Stern review on the economics of climate change

CURRENT POLICY TO BE REPLACED
• Not applicable

ANALYSIS OF KEY ISSUES AND OFFICER RESPONSE
The Stern Review (2006) identified that climate change will have profound and rising costs for global and national prosperity, peoples health and the natural environment. Option 41 seeks to respond to the threats, and opportunities, presented by our changing climate, putting Cambridge at the forefront of the low carbon economy, and the wide level of support for this option is welcomed. This approach is in keeping with the requirements of the NPPF, which at paragraph 17 sets out an objective for planning to support the transition to a low carbon future, encouraging the reuse of existing resources and the use of renewable resources. Planning should play a key role in shaping places to secure radical reductions in greenhouse gas emissions, minimising vulnerability and providing resilience to the impacts of climate change, supporting the delivery of renewable and low carbon energy and associated infrastructure. As recognised by the Interim Sustainability Appraisal, Option 41 should have beneficial effects on maintaining Cambridge's position as an economically competitive City now and in the future, building on the city's expertise in the CleanTech sector, and helping to ensure the city's economy is resilient in the face of concerns over energy security and climate change impacts. Through requiring high levels of sustainable construction and energy efficiency in both new and existing homes, the Local Plan will also help to reduce fuel poverty and increase energy security amongst Cambridge residents, giving everyone access to decent homes that are affordable to run both now and in the future in the light of rising energy costs. This will have wider social and health benefits for Cambridge residents. Planning also has a wider role to play in ensuring the sustainability of new developments,

including helping to promote and enhance sustainable modes of transport.

RECOMMENDATION FOR PREFERRED APPROACH
The recommendation is to pursue option 41 and develop a strategic objective focussed on innovative and sustainable communities. Additional reference will be made to support for community energy schemes and the role of sustainable modes of transport in reducing carbon emissions.

ISSUE: OBJECTIVES
(Page 114 of the Issues and Options Report)

Five objectives were included within Chapter 6 of the Issues and Options Report but representations were only received to one of these objectives, which related to flood risk.

Total representations: 1	
Objections: 1	**Supports: 0**

OPTION NUMBER/OTHER	**KEY ISSUES ARISING FROM CONSULTATION**
Objective 3: To ensure development is safe and is undertaken in areas of least flood risk and ensuring flood risk is not increased elsewhere	• The wording is insufficiently strong and inconsistent with Strategic Objective 2 (to ensure that all new developments have a neutral impact on water, contribute to an overall flood risk reduction and help improve the quality of the River Cam and other water features in the city).
NEW OPTIONS ARISING FOLLOWING COMMUNITY INVOLVEMENT	
Not applicable	

SUMMARY OF INTERIM SUSTAINABILITY APPRAISAL REPORT
Not subject to appraisal

KEY EVIDENCE
• Cambridge and Milton Surface Water Management Plan (2011); • Cambridge and South Cambridgeshire Level 1 Strategic Flood Risk Assessment (2010); • Cambridgeshire Green Infrastructure Strategy (2011); • Great Ouse Catchment Flood Management Plan (2010); • Erosion Risk Management Strategy for England (2011)

CURRENT POLICY TO BE REPLACED
• Not applicable

ANALYSIS OF KEY ISSUES AND OFFICER RESPONSE
The Council has a statutory duty to manage flood risk under the Flood and Water Management Act 2010. In line with national planning policy, flood risk needs to be taken into account at all stages in the planning process in order to avoid inappropriate development in areas at risk of flooding, and to direct flooding away from areas of highest risk. It will also be important to ensure that development does not increase the risk of flooding to neighbouring communities. At the same time as managing the risk of flooding, planning has an important role to play in ensuring that new development does not compound the severe water stress experienced in Cambridge, through the application of high standards of water efficiency. The proposed objectives are intended to supplement the detailed wording contained within policies, but it is agreed that given the aspirations contained within the Issues and Options Report in relation to flooding and water efficiency that the wording of this objective should be strengthened.

RECOMMENDATION FOR PREFERRED APPROACH
The recommendation is to pursue this objective subject to the strengthening of wording in relation to reducing flood risk and managing water stress in line with the wording of Strategic Objective 2.

ISSUE: A HOLISTIC APPROACH TO SUSTAINABLE DEVELOPMENT
(Page 115 of the Issues and Options Report)

Total representations: 93	
Objections: 25	**Supports: 68**

OPTION NUMBER/OTHER	KEY ISSUES ARISING FROM CONSULTATION
Option 42: this option seeks to develop a comprehensive sustainable development policy in order that its principles can be embedded into all development proposals	• Strong support for development of this policy; • Learn from the best examples in Europe where this approach is much further advanced; • Policy needs to cover existing communities, infrastructure and buildings as well as new development. Existing communities should be offered opportunities to upgrade their homes as a way of being given a stake in the new more sustainable community; • A clear policy integral to the Local Plan will help assist with the design of development proposals; • Should place emphasis on smarter use of land, especially public realm; • Should include conservation and enhancement of the historic environment; • Promote local food production. Policy should specify

	amount of land to be set aside for allotment provision and local food growing; • Need to consider behavioural change; • There is a need for a definition of sustainable development, which should then be fed through to all other policies; • Consider the role of local materials and products or even local skills and services; • Need to build in locations that encourage sustainable lifestyle choices; • Sustainability should mean a building that has not consumed too much by way of energy or raw materials in its construction as well as its use; • Need for a policy that allows for the adaptation of existing buildings so that building owners can manage and maintain their properties and operate systems in a more sustainable way.

NEW OPTIONS ARISING FOLLOWING COMMUNITY INVOLVEMENT

- Green spaces could also be included as part of this policy as this would ensure a more integrated approach than a standalone policy;
- Policy needs to reflect economic and social considerations if it is to be properly considered as a comprehensive sustainable development policy;
- Provide support for communal meeting places to strengthen local communities;
- Should include policies to encourage and support mixed-use development;
- The plan should include a short waste section, recognising that growth and development will impact on waste arisings and may lead to a need for further infrastructure;
- It would be worth considering Hackney's proposals for a Wood First Policy.

SUMMARY OF INTERIM SUSTAINABILITY APPRAISAL REPORT

This option is likely to contribute positively across all sustainability topics. Embedding sustainability principles into all development proposals in Cambridge may have beneficial effects on maintaining Cambridge's position as a competitive city, if it is a leader in sustainability. Positive effects are likely to occur with regards to climate change adaptation and mitigation as the option seeks to incorporate sustainable drainage systems, reductions in carbon emissions and considerations of building design and adaptability.

KEY EVIDENCE

- Element Energy for Cambridge City Council. Decarbonising Cambridge Study (2010);
- Cambridge City Council (2007) Sustainable Design and Construction SPD

CURRENT POLICY TO BE REPLACED

- Policy 3/1 (Sustainable Development)

ANALYSIS OF KEY ISSUES AND OFFICER RESPONSE

The NPPF states that "The purpose of the planning system is to contribute to sustainable development". Sustainable development is key to tackling the linked challenges of climate change, resource use, economic prosperity and social well-being, and cannot be achieved without sustainable buildings and communities. The principles of sustainable design and construction, which option 42 seeks to integrate into all development proposals through a comprehensive sustainable development policy, seeks to implement sustainable development at the scale of individual sites and buildings. The general support for this option is therefore welcomed. This policy approach would build upon the Council's current sustainability checklist and requirement for the submission of Sustainability Statements, helping developers to clearly demonstrate how their development meets the 'presumption in favour of sustainable development', which lies at the heart of the NPPF. While policy 3/1 has been successful in securing sustainable development across the city, parts of the current sustainable checklist require updating, particularly in relation to climate change adaptation, which is often overlooked in development proposals, and the integration of water management into all development proposals.

As recognised by the Interim Sustainability Appraisal, this option should contribute positively across all sustainability topics, helping to maintain Cambridge's position as a competitive city and a leader in sustainability. The Decarbonising Cambridge study recognised that much can be done to improve the sustainability, and indeed reduce demand for energy and other resources, through good design and intelligent materials selection. This is best achieved, both in terms of cost and ease of integration, at the design stage. The design stage represents a unique opportunity to influence how a building, and indeed a development as a whole, will perform throughout its lifetime, and good design principles and sustainable construction practices should therefore be encouraged from the earliest stage in new development projects. The specification of materials with low embedded energy, and the sourcing of local materials will be encouraged through the policy.

While the focus of Option 42 is on physical measures that can be implemented through development, this option should also have positive benefits for the social and environmental aspects of sustainable development. For example, by ensuring that all new development has access to open space, this will enable new, and existing residents to engage in recreation, which will help improve health and well-being. It is the Council's intention that sustainability/sustainable development will be a common theme running throughout the new Local Plan, and it will be important that this policy is considered in light of other policy options. These include the Council's revised open space standards, which will include requirements in relation to allotment and wider open space provision, requirements for community facilities, and the Council's revised car and cycle parking requirements. This policy will also link to the proposed policy on Climate Change and the Historic Environment, which seeks to provide a balanced approach between protecting the heritage assets of Cambridge while ensuring that they contribute to tackling climate change and

reducing carbon emissions. The conservation and enhancement of the city's historic environment is an integral element of sustainable development.

The same can be said of the role of the Local Plan in terms of waste infrastructure provision. The Council recognises the importance of waste provision to meet the needs of the local area. Option 42 makes reference to the consideration of provision for recycling and waste facilities in designing new developments, as well as minimising construction waste, which will be expanded on as the policy is developed. Further detail will be added in the Draft Plan, however it is not the role of the Local Plan to make policy for waste, which is the responsibility of Cambridgeshire County Council as the waste planning authority. The Local Plan will form part of the Development Plan for Cambridge and as such will need to be read in conjunction with policies and proposals elsewhere in the development plan, which includes the Minerals and Waste Local Development Framework. To include a short section on waste in the Local Plan would merely duplicate the policies and proposals in the Minerals and Waste LDF, which is not considered appropriate. The Local Plan will of course make reference to the wider Development Plan for Cambridge within its introductory text.

An additional element to include within this policy will be a definition of what sustainable development means for Cambridge. As part of the Issues and Options consultation we asked people what they considered sustainable development to mean. Some of the representations received included:

- Encouraging growth that is symbiotic with South Cambridgeshire and encouraging economic development that is in character with the historic/academic heritage of the city;
- Maintain the green and compact nature of the city;
- Ensuring that there is a well thought out transport policy and infrastructure with significant investment in public transport and provision for cyclists and pedestrians;
- Balancing housing/employment needs without sacrificing the quality of life and tranquillity of residents and resource availability in the city (notably water);
- Ensuring that the historic qualities and character of the city, from individual heritage assets to the wider appreciation of townscape and landscape, and the interaction between them, is conserved and enhanced for future generations;
- Use the Brundtland definition of sustainable development as a starting point;
- That existing buildings, brownfield sites and infrastructure need to be optimised and retrofitted to meet future needs using high quality sustainable based design;
- Invest in high speed digital links to enable home working and a reduction in commuter and business travel;
- Supporting communities and individuals in community life – provision of social infrastructure for all ages.

The representations received to this question will be used to define what sustainable development means for Cambridge.

RECOMMENDATION FOR PREFERRED APPROACH

The recommendation is to pursue Option 42 with emphasis placed on the importance of ensure that the principles of sustainable design and construction is integrated in the design of all new developments. Reference will be added to the need to make efficient use of land, and the encouragement of mixed-use development, as well as promoting the use of materials with low embodied energy and the promotion of local skills development. This policy area will also include a local definition of sustainable development, either as part of the supporting text or policy wording itself.

ISSUE: SETTING TARGETS FOR SUSTAINABLE CONSTRUCTION
(Page 116 of the Issues and Options Report)

Total representations: 56	
Objections: 18	**Supports: 38**

OPTION NUMBER/OTHER	**KEY ISSUES ARISING FROM CONSULTATION**
Option 43: Sustainable construction standards. This policy considers setting specific standards of construction to be applied to new development, based on the Code for Sustainable Homes and BREEAM.	• Support for the policy – Cambridge should lead by example; • Standards should rise over time and higher standards should be sought from large scale development; • Concern surrounding how such an approach can be achieved where development incorporates historic buildings and redevelopment of existing buildings; • Sustainable construction standards should be achieved through Building Regulations as opposed to criteria set locally. The planning and building regulations regimes should not duplicate each other; • Need to reserve the right to raise our standards should higher national standards be introduced; • Need to give consideration to impact on viability and alignment with Building Regulations and zero carbon policy; • Consider alternatives to the Code and BREEAM, as these are not perfect methodologies; • Look to include some flexibility in the application of the policy standards if site specific circumstances necessitate it; • Set out a requirement for appropriate assessment of sustainable construction in the comprehensive sustainable development policy, with guidance on methodologies set out in an SPD. • Need to better understand the health implications of building to Code Level 4 and above before a policy requirement can be justified;

	• On small developments, these requirements would be too burdensome in terms of costs.

NEW OPTIONS ARISING FOLLOWING COMMUNITY INVOLVEMENT

- Develop a policy requiring a minimum level of the Code for Sustainable Homes (at least level 4 rising over the period), and BREEAM (very good rising to excellent);
- Set out a requirement for appropriate assessment of sustainable construction in the comprehensive sustainable development policy, with guidance on methodologies set out in an SPD.

SUMMARY OF INTERIM SUSTAINABILITY APPRAISAL REPORT

This option is likely to ensure the delivery of sustainable buildings and contributes to reduced emissions from buildings in both construction and operation. This option should result in positive effects across the majority of sustainability topics. For example, new homes will have to meet the needs to both the existing and future population helping to directly address a key 'communities and wellbeing' issue. In addition the requirement for cycle storage should help contribute to improving the modal share of cycling in the City.

KEY EVIDENCE

- Element Energy for Cambridge City Council. Decarbonising Cambridge Study (2010)

CURRENT POLICY TO BE REPLACED

- Not applicable

ANALYSIS OF KEY ISSUES AND OFFICER RESPONSE

Planning has an important role in encouraging and facilitating buildings that meet high standards of sustainability, as part of its objective to contribute to the achievement of sustainable development. The Climate Change Act (2008) contains a statutory target of reducing carbon emissions by 80% below 1990 levels by 2050, with an interim target of 34% reduction by 2020. Given that half of the country's carbon emissions come from energy used in constructing, occupying and operating buildings, a high standard of construction is vital in achieving these targets.

The NPPF is supportive of using local planning policy to set requirements for building sustainably, as long as this is consistent with the governments zero carbon policy and utilises nationally described standards. For new homes, this means the use of the Code for Sustainable Homes, and for non-residential buildings, the BREEAM standard should be used. Both the Code and BREEAM consider a range of categories that form a measure of a buildings sustainability, including energy and water, as well as issues such as biodiversity enhancement and health and well-being of building

occupants. While national standards should be used in policy, this does not, however, rule out the use of construction methods such as Passivhaus[1], which can form part of the strategy for achieving a required Code for Sustainable Homes or BREEAM rating. Flexibility could also be written into the policy so that if a development were to come forward using a different construction methodology that could be demonstrated as being equivalent to the Code for Sustainable Homes or BREEAM standard sought through policy this approach could be accepted. Flexibility will also be required should national standards change in the future.

With regards to BREEAM requirements for non-residential development, the Decarbonising Cambridge study suggested that BREEAM 'very good' be the minimum standard required by policy. As such, it is suggested that a policy be developed that sets a minimum requirement for BREEAM 'very good' and that officers explore the potential impact of raising this to BREEAM 'excellent' from 2016, in light of uplift in energy requirements required through Building Regulations.

With regards to consistency with the Governments zero carbon policy and changes to Building Regulations, amendments to Part L were always intended to provide a step change in sustainable construction, leading house building towards the introduction of the zero carbon standard by 2016. As part of the original proposals for changes to Part L in 2013, this included introducing the energy/carbon reduction requirements of Level 4 of the Code for Sustainable Homes, which is the level of construction suggested within Option 43 and supported by the City Council's evidence base. Indeed this option remained within the recent consultation on changes to Part L in 2013. It should also be noted that standards such as the Code for Sustainable Homes, while taking account of Building Regulations and zero carbon policy, cover a significantly wider range of issues that is covered by regulation and the Governments zero carbon policy. As such its application to new development is considered appropriate and in keeping with the Vision of the Local Plan for development to help support the city's transition to a more environmentally sustainable and successful low carbon economy. There have been recent press reports surrounding the future of national planning and housing standards, with the Government announcing in September that it would be carrying out a review of local and national housing standards. As such there may be some risks in taking such a policy approach if current standards are swept away, in terms of implementation of the policy. However, it is considered that should there be a change to national housing standards, there is a stronger argument for the introduction of local policy requirements for sustainable construction. Flexibility could be written into the policy that should national standards be removed, other sustainable construction standards will be considered.

The impact of requiring Code Level 4 on the viability of development was considered as part of the Decarbonising Cambridge Study, which also considered the viability of requiring higher levels of the Code. In addition to assessing the extra-over costs

[1] The Passivhaus standard was developed in Germany in the early 1990s. Buildings have excellent thermal performance, exceptional air tightness with mechanical ventilation. The use of Passivhaus can eliminate the need for traditional heating systems.

associated with achieving these standards, the study also considered the energy strategies that could be employed to meet the carbon reduction requirements of these standards and the acceptability of these strategies in planning terms. This study concluded that Code Level 4 would be a viable standard to target through policy for all scales of development, with extra over costs ranging between 1% and 4.5%, with these costs reducing further with subsequent amendments to Building Regulations as part of the introduction of national zero carbon policy. Many developments within Cambridge are already coming forward at Code Level 4, and as such the construction industry has considerable experience of building to this level. A policy requirement for higher levels of the Code on small and medium scale development was considered to be difficult to achieve, partly due to the increase in costs and in part due to restrictions on the use of biomass in Cambridge due to the presence of the Air Quality Management Area, which represents one of the most cost effective ways in which to achieve these higher levels of the Code. However, the policy will be expressed as a minimum so as not to discount higher standards coming forward where possible, and the Council will also investigate the potential to set higher standards for larger sites, where viable.

A number of representations raised concerns about the application of this policy to the refurbishment of existing buildings. Given that the Code for Sustainable Homes and BREEAM standard have been designed specifically for the new build sector, the requirement of this option would only apply to new build development. That is not to say that the redevelopment of existing buildings should not contribute to sustainable development, and these types of development should still adhere to the principles outlined in Option 42 (comprehensive sustainable development policy), as well as requirements of Part L of the Building Regulations. The Council will be supportive of attempts to develop assessment methodologies for redevelopment proposals, particularly where these can be applied to wider estates. It is therefore considered that Code Level 4 represents a viable step between current Building Regulations and the 2016 requirement for all new homes to be 'zero carbon'.

While concerns surrounding the health implications of Building to Code Level 4 are noted, as mentioned above many developers have considerable experience of delivering new homes to this standard. Code Level 4 does not require the same levels of mechanical ventilation as higher levels of the Code, and ventilation requirements, which are also considered further under Part F of Building Regulations, can be met with natural ventilation. There are additional benefits of building to Code Level 4 and higher that will have wider health benefits, including helping to reduce fuel poverty through efficient design and building services. Links to other policies such as integration of climate change adaptation into the design of new developments will also help to address health problems due to issues such as summertime overheating. As such, it is felt that Code Level 4 is an appropriate target to implement through planning policy.

RECOMMENDATION FOR PREFERRED APPROACH
The recommendation is to pursue Option 43, with a minimum of Code Level 4 being

sought for new housing and BREEAM 'very good' being sought up to 2016 with the option of BREEAM 'excellent' from 2016 onwards being explored. This could form part of an overarching sustainable construction standards and carbon reduction policy, which will also include carbon reduction requirements, water efficiency requirements and links to the development of a Cambridgeshire Community Energy Fund. There are some tensions in the light of the national review of housing standards and the impact that this may have on setting local standards, but flexibility could be written into the policy should there be any changes made to national housing standards.

ISSUE: REDUCTION OF CARBON EMISSIONS FROM NEW DEVELOPMENT
(Pages 118 – 120 of the Issues and Options Report)

Total representations: 50					
Objections: 12			**Supports: 38**		
Option 44: 2	**Option 45: 1**	**Option 46: 3**	**Option 44: 3**	**Option 45: 7**	**Option 46: 4**

OPTION NUMBER/OTHER	KEY ISSUES ARISING FROM CONSULTATION
Option 44: Detailed targets for on-site carbon reduction that relate to levels of the Code for Sustainable Homes being sought (i.e. 44% for all residential development up to 2016 and 'zero carbon' for all residential development post 2016)	• General support for this approach; • Some feeling that this would not be ambitious enough.
Option 45: Detailed targets for on-site carbon reduction in line with the findings of Decarbonising Cambridge (70% for residential development)	• Support for stronger level of policy intervention – Cambridge should lead by example; • Preferred on the grounds of long-term sustainability; • Based on local evidence base which supports higher level of intervention; • Support for approach for non-residential development being linked to Building Regulations; • Not clear on why the policy is targeting a 70% trajectory.
Option 46: Leave carbon reduction to Building Regulations and continue to	• General support for this approach; • Concerns over the impact of this approach on the viability of development. Building regulations would be the

operate a percentage renewable energy policy	preferred method for ensuring that development achieves carbon reductions; • On-site renewables are not always the most efficient option – policy should allow for off-site renewables to be taken into account; • Policy should focus on carbon reduction and not on-site renewables. More logical to minimise the necessary use of energy before considering generation.
NEW OPTIONS ARISING FOLLOWING COMMUNITY INVOLVEMENT	
• Policy could include a sliding scale whereby standards are higher for larger developments, with lower minimum standards for single dwellings and midway for small developments. • Policy should recognise that on-site renewables are not always the most efficient option and should allow for off-site renewables to be taken into account if on-site solutions are not appropriate or viable.	

SUMMARY OF INTERIM SUSTAINABILITY APPRAISAL REPORT	
Option 44	Option 44 would ensure that developments are on the path of meeting zero carbon in 2016 (2019 for non residential). This would result in positive effects on many topics, but it is uncertain the extent to which this would contribute to Cambridge's economy. The evidence base suggests that higher levels of carbon reduction are possible, and therefore tighter standards than those presented in Option 44 could potentially help Cambridge to achieve its Vision of being a low carbon city, with associated advantages in terms of competitiveness.
Option 45	This option would likely result in positive effects across nearly all of the sustainability themes. This is because a requirement for levels of carbon reduction beyond those required under Building Regulation, and zero carbon homes, would contribute positively to radically reducing carbon emissions across Cambridge. This will benefit Cambridge's position as a competitive city, would help address concerns surrounding fuel security and national targets for renewable energy generation.
Option 46	This option would likely result in positive effects across most sustainability topics, however using carbon reduction targets set under Part L is likely to result in fewer initiatives to drive to reduce carbon as much as Decarbonising Cambridge suggests is viable. The proposed continued requirement to apply a Merton Rule style policy would ensure opportunities to reduce energy demand through renewable technologies are maximised, however this aspect could be achieved through Option 45.

KEY EVIDENCE

- Element Energy for Cambridge City Council. Decarbonising Cambridge Study (2010);
- Climate Works for South Cambridgeshire District Council. Merton Rule Study (2012);
- Cambridge City Council (2007) Sustainable Design and Construction SPD;
- Zero Carbon Hub (2009). Defining a fabric energy efficiency standard for zero carbon homes. Task Group Recommendations;
- Zero Carbon Hub (2011). Carbon compliance: Setting an appropriate limit for zero carbon new homes. Findings and Recommendations.

CURRENT POLICY TO BE REPLACED

- Policy 8/16 (Renewable Energy in Major New Developments)

ANALYSIS OF KEY ISSUES AND OFFICER RESPONSE

The NPPF recognises the key role that planning has to play in securing radical reductions in greenhouse gas emissions. As part of the Climate Change Act (2008), the UK has adopted a national target of reducing carbon emissions by 80% by 2050 (compared to 1990 levels), with an interim target of a 50% reduction by 2025. The achievement of these targets will require action across all sectors of energy use. Within Cambridge, this will involve balancing the overall increase in emissions associated with new development with the opportunities that these developments offer for reducing carbon and other greenhouse gas emissions, through measures such as improving energy efficiency and the provision of renewable and low carbon energy generation.

Three carbon reduction options were put forward as part of the Issues and Options consultation. The first of these options (Option 44), suggested a policy approach whereby targets for on-site carbon reduction would relate to the carbon reduction required as part of the Code for Sustainable Homes target being sought through Option 43 (i.e. the 44% level of on-site carbon reduction associated with Code Level 4). From 2016, when national zero carbon policy comes into force, developers would be required to meet a slightly higher level of on-site carbon reduction, which would need to be reflected in the policy, if Option 44 is taken forward into the drat plan. The Code Level from 2016 would remain the same (i.e. Code Level 4) as evidence within the Decarbonising Cambridge study suggests that for the majority of sites in Cambridge, achievement of higher levels of the Code would be unviable for both technical and economic reasons. For non-residential development, the levels of carbon reduction sought would be linked to the national timetable for bringing forward zero carbon non-residential buildings.

Such an approach would be unlikely to have a significant impact on the viability of new development, as it would be in keeping with the current levels of carbon reduction that will ensure that new development is on the path of meeting zero carbon policy by 2016 for new homes and 2019 for non-residential development. Indeed many developments in Cambridge are already being delivered with this level of carbon reduction, and as such developers are already factoring in achievement of this Code Level to their development costs. The viability of Code Level 4 was

considered as part of the Decarbonising Cambridge Study and will also be tested as part of the ongoing viability work being undertaken as part of the Local Plan process. However, this approach would not be fully in keeping with the vision of Cambridge as a low carbon city, and would not take account of the evidence provided by the Decarbonising Cambridge Study, which suggests higher levels of carbon reduction would be viable. Many respondents to the Issues and Options Report also felt that this option was not ambitious enough. The Sustainability Appraisal noted that while such an approach would have many positive benefits, the extent to which it would impact the competitiveness of Cambridge's economy was more uncertain.

The second option presented in the Issues and Options Report (Option 45) suggested a policy approach whereby new homes would have to reduce 70% of their regulated carbon emissions on-site, subject to viability. This approach that would go beyond the levels of on-site carbon reduction that will be brought in through changes to Part L of Building Regulations in 2013 and 2016, when zero carbon policy comes into effect. This would also go beyond the carbon requirement of the Code for Sustainable Home Level being sought through Option 43. The Decarbonising Cambridge Study assessed the viability of a range of carbon reduction levels across all scales of development and concluded that an on-site carbon reduction level of 70%, while ambitious, would be a viable. This figure of 70% came from original work carried out by the Zero Carbon Hub Energy Efficiency Task Force to identify a suitable level of 'carbon compliance', given concerns that it would be unviable to achieve 100% reduction in carbon emissions through on-site measures alone. The Decarbonising Cambridge study noted that this level of on-site carbon reduction could be subject to change but by enshrining the 70% carbon compliance level in local planning policy would provide the opportunity to maintain a high on-site CO_2 reduction requirement, should zero carbon policy be amended to dilute the ambition in terms of on-site reduction.

It is noted that this 2009 Zero Carbon Hub report has been updated by the publication of a 2011 report on Carbon Compliance. This looked at technical considerations, commercial factors and policy issues of requirements related to carbon compliance. Technical feasibility was modelled for a range of standard house types and sizes, with a focus on the use of photovoltaic panels, in light of other technology limitations. While the reasons behind this are understood, the Decarbonising Cambridge study, while implementing a similar methodology, focussed on a greater range of energy strategies for meeting the 70% requirement, while assuming that certain technologies would be restricted, notably biomass due to concerns surrounding air quality, and wind turbines given their efficacy in Cambridge is limited. This was on the basis of the Cambridge specific renewable and low carbon energy resource assessment that formed part of the study. It found that by employing technologies such as gas CHP and district heating, air source heat pumps and photovoltaic panels, a 70% level of carbon compliance could be achieved across a range of development types and scales. The extra-over costs of achieving 70% were up to around a 6.5% increase compared to a Building Regulations compliant scheme. It is noted that these extra costs need to be set against additional development costs that developers might face, such as S106 and CIL costs.

However, due to the high level nature of the Local Plan, and the fact that detailed costings for development sites will not be known until the planning application stages, it is felt that there are too many variables and unknowns that would render any financial viability assessments as an unsound basis for determining policy. That is not to say that viability would not be taken into account in implementing such a policy approach, and where it would not be viable to achieve 70% carbon reduction on-site, developments would be able to revert back to the appropriate level of carbon reduction required for Building Regulations.

The advantages of such a policy approach is that would be in keeping with the vision for a low carbon city, helping to meet the NPPF's aim for planning to secure radical reductions in carbon emissions. This option is supported by the Council's evidence base, which recommends this approach as an ambitious but achievable level of on-site carbon reduction. Many of the respondents to the Issues and options consultation supported this stronger level of policy intervention, and considered that Cambridge should lead by example. Indeed the Sustainability Appraisal noted that taking such an approach would contribute positively to radically reducing carbon emissions across Cambridge. This will benefit Cambridge's economic position as a competitive city, putting it the forefront of the low carbon economy, and would help address concerns surrounding fuel security and national targets for renewable energy generation.

A key concern for developers was the impact of such a policy on the viability of development and consistency with the NPPF, which, at paragraph 95 states that "when setting local requirements for a building's sustainability, do so in a way consistent with the Government's zero carbon buildings policy". This in contrast to the previous Planning Policy Statement 1 Supplement on Climate Change, which enabled local authorities to set standards that went beyond national requirements as long as this was supported by an appropriate evidence base. While the Decarbonising Cambridge Study provides us with this appropriate evidence base, there is a concern that given the wording of the NPPF, this may not be sufficient to justify such a policy approach, which would no doubt be tested at examination. There are other factors that should be taken into consideration in determining the appropriateness of such a policy approach. Part of the reason why the definition of what constitutes a zero carbon home has been amended is due to concerns about the impact of such a policy approach on the viability of house building in light of the current economic climate across the UK, as well as the technical potential to achieve high levels of carbon reduction through on-site measures alone. While it is agreed that viability is a key issue that must be considered as part of developing local planning policy, this blanket approach does not take account of the fact that Cambridge has faired the economic downturn better than other parts of the UK. House builders are attracted to Cambridge as the housing market is still relatively strong, and it is clear from some developments in the City that homes with high levels of sustainability that go beyond the statutory minimum are highly attractive to new home owners. The ambition behind this policy is not to make it more expensive to build in Cambridge, or to say no to development but delivery of high quality housing that will be sustainable in the long term not just the short term. In addition

to the viability work contained within the Decarbonising Cambridge study, the impact of such a carbon reduction requirement will also be tested as part of ongoing viability work.

A common element within both policy options 44 and 45 is that levels of carbon reduction for non-residential buildings should be in line with the proposed national timetable for the introduction of zero carbon non-residential buildings, assuming that this continues as planned. Given that the pathway for zero carbon non-residential buildings is less well defined, it is considered that following the levels of carbon reduction planned for Building Regulations would be the most appropriate approach, which was supported by a number of respondents. Another common element with both options is that they would take a hierarchical approach to carbon reduction. Developers would have a choice in how they met the policy requirements, utilising the fabric first approach, followed by the implementation of energy efficiency measures followed by the use of some on-site renewable or low carbon energy generation.

The third option (Option 46) consulted on at Issues and Options was to leave carbon reduction to Building Regulations and continue to operate a percentage renewable energy policy. Under this option, the levels of carbon reduction to be sought for new homes would link to future changes to Building Regulations in 2013 and 2016. This approach was considered in light of the Government's consultation on changes to the 2013 Part L Regulations, which included an option that would decrease the level of carbon reduction originally intended as part of the transition towards zero carbon policy in 2016. While the outcomes of this consultation are yet to be announced, if the lower level of carbon reduction is implemented in 2013, then it is likely that the utilisation of renewable or low carbon energy generation would no longer form part of a development's carbon reduction strategy. While the hierarchical approach to carbon reduction is supported, it is considered that the incorporation of renewable or low carbon technologies into schemes should still form part of carbon reduction strategies in light of issues such as energy security and national targets for renewable energy generation. Under options 44 and 45, the levels of carbon reduction would be such that energy generation would still need to form part of developments carbon reduction strategies.

To support this option, a study of Cambridgeshire local planning authorities current Merton Rule policies was carried out. This study not only considered the implementation of current policies but also considered the future of Merton Rule policies. It concluded that up to 2016, there is still a role for Merton Rule policies where planning authorities choose to follow levels of on-site carbon reduction set out in Part L of the Building Regulations. Beyond 2016, levels of on-site carbon reduction under zero carbon policy would be such that there would no longer be a need for percentage renewable energy requirements. The study did recognise that if Cambridge was to follow the policy approach suggested by the Decarbonising Cambridge Study then there would not be a need for a percentage renewable energy requirement.

In addition to recommending that Merton Rule continues to 2016, the Study also recommends the introduction of a technology specific policy, referred to as a 'solar first approach'. Under this option, residential developments would be required to utilise either photovoltaic panels or solar thermal systems, while non-residential development would be required to utilise photovoltaic systems. If these systems were not viable, then other forms of renewable or low carbon energy generation would be considered. A more flexible approach is recommended for large estates such as the University of Cambridge, where a site-wide approach to renewable energy generation may be more appropriate. The policy wording could also be flexible in relation to developments with an opportunity to connect to district heating.

The benefits of such an approach are that it would help to deliver renewable energy if the levels of carbon reduction incorporated into Building Regulations in 2013 are reduced. There is a clear need to continue to support the incorporation of renewable energy into new development given concerns surrounding fuel security and national targets for renewable energy generation. The role of such a policy approach in maximising opportunities to utilise renewable energy generation was acknowledged by the interim Sustainability Appraisal, although it also noted that this would be achieved through Option 45. Some of the respondents to the Local Plan raised concerns about the impact of such a policy on the viability of new development, and how such an approach would meet the requirements of the NPPF for any local requirements to be consistent with national zero carbon policy. The Merton Rule study does not provide an assessment of the viability of continuing to operate a 10% renewable energy policy on top of the requirements of Building Regulations, although this is being considered as part of the Viability Assessment, which is currently being carried out for the Council by consultants.

The solar first approach may also be of concern to developers. The arguments in favour of a solar first approach include that these technologies are mature and are relatively simple to monitor and enforce. However, in the past national planning policy has been opposed to the use of policies that are technology specific, and developers tend to be opposed to such an approach. There is no specific wording in the NPPF that would support or object to this approach, and as such it is likely to be tested at examination.

Conclusions:

Option 44 would be the least risky approach in terms of compliance with the NPPF. However, it does not take account of the Council's evidence base, which suggests that higher levels of on-site carbon reduction is viable.

Options 45 and 46 both have their risks in terms of conformity with the NPPF. There is a greater level of evidence to support Option 45 in terms of technical and economic viability, and it would be more in keeping with the ambitious approach supported by local residents. The hierarchical approach to reducing carbon emissions would be inherent in this policy option, and it could be more likely that it

would lead to the integration of energy generation into the design of new developments. While some respondents felt that renewable energy generation was a vital element in new developments, and therefore supported continuing with a Merton rule approach, Option 45 would set a level of carbon reduction at a level that would require on-site renewable or low carbon energy generation and therefore Option 46 would not be needed.

RECOMMENDATION FOR PREFERRED APPROACH
For non-residential development the recommended approach is to develop a carbon reduction policy linked to the timetable for introducing zero carbon non-residential buildings in 2019. With regards to the approach for residential development, it is recommended that Option 44 is pursued as a minimum, but with flexibility to allow for further investigation of the viability of pursuing Option 45 or Options 46. This flexibility would allow time for the implications of any changes from Government to be taken into account, and for further discussions with the CLG of the appropriateness of setting a higher level of carbon reduction than national zero carbon policy in light of the wording of the NPPF. This could form part of an overarching sustainable construction standards policy, which will include BREEAM and Code for Sustainable Homes requirements, water efficiency requirements, and links to the development of a Cambridgeshire Community Energy Fund.

ISSUE: THE ROLE OF COMMUNITY ENERGY FUNDS
(Page 121 of the Issues and Options Report)

Total representations: 32	
Objections: 17	**Supports: 15**

OPTION NUMBER	**KEY ISSUES ARISING FROM CONSULTATION**
Option 47: Establishment of a Cambridgeshire community energy fund. This option would enable the development of a community energy fund to provide developers with a route to compliance with national zero carbon policy.	• Concern that this is a way of allowing developers to do something on the cheap. Focus should be on on-site carbon reduction; • Support for the development of a fund particularly where projects for investment include retrofit of existing homes; • Support from some developers for the establishment of such a fund as a way of assisting them with meeting their zero carbon requirements; • Some concern about the extent to which the local benefit of such a fund would extend to City residents in circumstances where developers in the city would be paying into the fund which is then used to fund development elsewhere in the county;

	• More detail required on how such a fund would be governed and administered. • Developers should still have the choice of different allowable solutions routes, although general principle behind the development of a fund is supported.

NEW OPTIONS ARISING FOLLOWING COMMUNITY INVOLVEMENT
Not applicable

SUMMARY OF INTERIM SUSTAINABILITY APPRAISAL REPORT
Enabling developers to offset remaining issues in their carbon reduction targets through paying into a Community Energy Fund is likely to have a positive effect in ensuring greater deployment of energy efficiency, low carbon and renewable energy technologies across Cambridge. As the fund would look to invest in schemes that have a direct local benefit for Cambridge communities, this could have a significant positive effect in improving the wellbeing of Cambridge residents, for example by improving air quality locally and creating a greater sense of community through shared projects locally.

KEY EVIDENCE
• Zero Carbon Hub (2011). Allowable Solutions for Tomorrow's New Homes; • Element Energy (2010). Scoping Report: Feasibility of a Carbon Offset Mechanism for Cambridgeshire; • Element Energy, The Landscape Partnership & Manches (2012). Cambridgeshire Community Energy Fund Stage 2 Final Report • Camco (2012). Cambridgeshire Renewables Infrastructure Framework – Baseline Data, Opportunities and Constraints; • Zero Carbon Hub (2012). Allowable Solutions. Evaluating Opportunities and Priorities.

CURRENT POLICY TO BE REPLACED
• Not applicable

ANALYSIS OF KEY ISSUES AND OFFICER RESPONSE
A number of representations received raised concerns that a Carbon Offset Fund would enable developers to do things on the cheap and that the focus should be on on-site measures to reduce carbon emissions. While the Council agrees that the ideal solution would be for developers to offset all of their carbon emissions on-site, this is unlikely to be feasible on many small and medium scales sites, as evidenced by the findings of the Decarbonising Cambridge Study, and national work carried out by the Zero Carbon Hub. As such the concept of 'allowable solutions' has been developed, and it is this concept that gives rise to the possible development of a Cambridgeshire Community Energy Fund. Developers would still be required to deliver the majority of carbon reduction on-site but would then have range of opportunities available to them to 'off-set remaining emissions, including additional on-site measures or paying into a county-wide community energy fund. This approach is consistent with the requirements of the NPPF, which requires local

policy to be consistent with national zero carbon policy, in that it uses the nationally recognised allowable solutions framework, which recognises a policy role for local planning authorities.

The types of projects that could receive investment from the fund range from energy efficiency projects through to large scale renewable and low carbon energy projects. The key element in determining appropriate projects is the idea of 'additionality', i.e. projects that would not otherwise be delivered via existing support mechanisms. Example projects could include improvements to existing properties that would not be eligible for Green Deal funding, for example solid wall insulation, or the investment in energy schemes that are not currently being delivered by the private sector, such as district heating. The development of a Cambridgeshire fund would also present an opportunity to focus on those projects that would have direct benefits for communities in the county, which could include community energy projects. This would be different from the current proposals for allowable solutions, which included reference to a national fund, where money generated from developments in Cambridge could be used to fund projects across the UK. The advantages of local funds were considered in the recent Zero Carbon Hub Report on evaluating opportunities and priorities for Allowable Solutions, which recognised that in line with the Localism Agenda, preference would be for Allowable Solutions to be delivered locally. Developers would still be able to choose their preferred allowable solutions route, even with a policy in place, but there is recognition that local community energy funds represent an effective option, in keeping with the principles of Localism.

With regards to how such a fund would be governed and administered, work carried out by Element Energy in 2012 considered a range of legal structures for the management of the fund. The work concluded that a Company Limited by Guarantee (CLG) would be the most suitable structure as it would be suitable for the community investment mandate of an energy fund. While further work is required to determine the membership of the CLG, it would be likely that this would need to include all the district authorities who would be collecting monies into the fund. The study also considered appropriate collection mechanisms, concluding that a new purpose designed collection mechanism to enable developers to make direct payments into local community energy funds should be established nationally as opposed to utilising existing mechanisms such as S106 agreements and the Community Infrastructure Levy. Further work will need to include ongoing discussions with national government with regards to the timescales and practical arrangements for the establishment of the Allowable Solutions Framework.

The Element Energy study also considered the advantages of a county wide fund compared to a fund only covering Cambridge. Of the £55 million that a county wide fund could have generated by 2026, around £23 million would be generated by developments in the city. The average amount being invested into the fund across the districts would be around £6 million, which is not huge in the context of capital costs of low carbon energy projects. For example, the district heating project in Cambridge city centre has estimated capital costs of around £25 million. The

relatively limited scale of the fund is considered to be a strong argument in favour of the Cambridgeshire authorities partnering in a joint community energy fund that will invest in the most beneficial projects across the county. A fund at a smaller district level scale would be too limited in terms of the funds available to significantly influence development of large-scale strategic infrastructure projects.

RECOMMENDATION FOR PREFERRED APPROACH
The recommendation is to continue to explore option 47 and the potential to develop a policy to enable the establishment of a Cambridgeshire Community Energy Fund and identify of eligible projects. This will be subject to ongoing discussions with national government with regards to the timescales and practical arrangements for the establishment of Allowable Solutions, as well as further discussions about the scale of the fund, be this a county wide fund or a fund focussed on Cambridge and South Cambridgeshire. This could form part of an overarching sustainable construction policy, which will include carbon reduction requirements, BREEAM and Code for Sustainable Homes requirements and water efficiency standards.

ISSUE: RENEWABLE AND LOW CARBON ENERGY DEVELOPMENT
(Page 122 of the Issues and Options Report)

Total representations: 32	
Objections: 10	**Supports: 10**

OPTION NUMBER	**KEY ISSUES ARISING FROM CONSULTATION**
Option 48: Renewable and low carbon energy generation. This option would allow for the development of a policy to promote renewable and low carbon energy generation in Cambridge.	• General support for development of a positive approach to renewable and low carbon energy; • A clear local policy will help planning and provision of more renewables; • Some concern from developers about the impact of connecting to district heating on the viability of development (although aspiration is supported); • Support for designation of strategic district heating areas – look to connect existing properties as well as new; • Consider opportunities to work with the local universities to deliver pilot renewable energy projects; • Need to evaluate potential for renewable energy in Cambridge and, if necessary, allocate sites for energy provision; • Could be an opportunity to use the city sewage works to generate energy via anaerobic digestions. The City's green bin waste could also be added to this energy source; • Should include some indication of how energy is to be generated; • Policy should not solely focus on district heating.

NEW OPTIONS ARISING FOLLOWING COMMUNITY INVOLVEMENT
Not applicable

SUMMARY OF INTERIM SUSTAINABILITY APPRAISAL REPORT
This option is likely to have a positive effect on key issues identified under the climate change mitigation and renewable energy theme, such as ensuring the greater deployment of renewable energy technologies, and reducing carbon emissions from new developments. It will also provide opportunities to reduce energy demand as renewable energy technologies are maximised. The impact on the economy is uncertain as a requirement for supporting the development of renewable and low carbon energy projects may affect the viability of schemes. It would, however, also provide a cost effective way for developers to meet their carbon reduction obligations, and could be positive in positioning Cambridge competitively in terms of energy security and leading in low carbon initiatives. There will be a need to balance energy provision against other objectives such as the protection and enhancement of the historic environment.

KEY EVIDENCE
• Aecom (2011). East of England Renewable and Low Carbon Energy Capacity Study; • Element Energy (2010). Decarbonising Cambridge Study; • Camco (2012). Cambridgeshire Renewables Infrastructure Framework – Baseline Data, Opportunities and Constraints; • Cambridge City Council (2007) Sustainable Design and Construction SPD

CURRENT POLICY TO BE REPLACED
• Policy 8/17 (Renewable Energy)

ANALYSIS OF KEY ISSUES AND OFFICER RESPONSE
The NPPF requires local planning authorities to recognise the responsibility on all local communities to contribute to energy generation from renewable or low carbon sources. It requires local planning authorities to have a positive strategy to promote energy from renewable and low carbon sources while ensuring that any adverse impacts are addressed. Option 48 seeks to provide this positive strategy, and the general level of support shown for this option is welcomed. The option builds upon the energy resource evidence provided by the Decarbonising Cambridge Study and the Cambridgeshire Renewables Infrastructure Framework, which mapped the potential of a range of renewable and low carbon energy sources in the City, including district heating, wind, solar and biomass. These studies have shown that the opportunities for stand-alone renewable energy schemes within Cambridge are limited and new projects within the city are likely to be relatively small-scale. Even so, the Council wishes to support renewable and low carbon energy projects that will contribute to overall carbon reduction across the city, while at the same time ensuring that there will be no unacceptable impact on the local environment. These considerations will include air quality concerns

associated with proposals utilising biomass combustion, particularly where these fall within or close to the Air Quality Management Area or areas where air pollution levels approach the EU Limit Values, as well as noise issues associated with certain renewable and low carbon technologies. There could be links between identified projects and the proposals to develop a Cambridgeshire Community Energy Fund, in that some of these projects may be eligible for funding from the Community Energy Fund. Possible projects would be identified and form part of an energy efficiency and renewable and low carbon energy infrastructure projects list, which would then be used for the basis of allocating developers allowable solutions contributions.

Some representations, while supporting the aspiration for developments to connect to district heating, raised concerns around the impact on the viability of development. The Decarbonising Cambridge study highlights those parts of the city that show potential for heat networks, notably the city centre and the area around Addenbrookes Hospital. Cambridge City Council, working in partnership with other organisations, are actively exploring the potential of developing a district heat network in the city centre. As part of this project, future expansion of the heat network and the connection of new developments to the network are key considerations. Given the constrained nature of many city centre development sites, including redevelopment sites, not many energy options are available to developers to meet their carbon reduction requirements. District heating offers a cost effective solution for these sites, although viability will be an important consideration in any future policy requiring connection, not just economic viability but the ability to connect also. This approach is consistent with the requirements of the NPPF, which at paragraph 97 states that local authorities should "identify opportunities where development can draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers". As such it is felt that a policy requiring new developments to connect to district heat networks where these are available, subject to the consideration of viability issues, is appropriate. District heating will be the subject of a Local Plan allocation as other renewable energy options for the city are more likely to be small scale approaches such as solar panels and heat pumps, which are more likely to come forward on a case by case basis. District heating represents the best opportunity for large scale energy generation in the city, hence why a Local Plan allocation is considered to be important to help secure implementation of this technology in the city.

RECOMMENDATION FOR PREFERRED APPROACH

The recommendation is to pursue option 48, which will set out the a positive policy approach for supporting renewable and low carbon energy generation proposals, while at the same time ensuring that any adverse impacts are minimised. As part of this policy, a strategic district heating area covering the city centre will be identified, with developments within this area being required to connect to a heat network should one become available.

ISSUE: CLIMATE CHANGE ADAPTATION

(Page 123 of the Issues and Options Report)

Total representations: 33	
Objections: 12	**Supports: 19**

OPTION NUMBER	KEY ISSUES ARISING FROM CONSULTATION
Option 49: Climate change adaptation. This option seeks to develop a policy setting out a broad range of adaptation criteria to be incorporated into all new development proposals.	• Strong level of support for policy development; • Urban greening very important, as well as design solutions and urban form, which are fundamental elements of a successful approach. We should be lining pavements with maturing trees, setting back the building line; • Need to consider long-term maintenance requirements for some adaptation measures (e.g. SuDs); • Further detail regarding setting tree canopy requirements needed; • Should be applied to existing communities as well as new development; • The requirement for the inclusion of a climate change adaptation strategy as part of the Design and Access Statement is not currently a national requirement; • Focus on large scale measures, leaving individual building issues to Building Regulations; • There is no need for a separate Local Plan policy but advice could be incorporated into an SPD.
NEW OPTIONS ARISING FOLLOWING COMMUNITY INVOLVEMENT	
Not applicable	

SUMMARY OF INTERIM SUSTAINABILITY APPRAISAL REPORT

This option should enable new and existing communities to be capable of adapting to climate change. There should be a positive effect on climate change mitigation, as the highest standards in low carbon design and construction will be encouraged. The role of landscaping, such as green roofs and enhanced tree canopies is likely to improve biodiversity and reduce habitat fragmentation. Measures to further urban greening will capitalise on the opportunity for green infrastructure to help Cambridge to adapt to climate change impacts, with subsequent positive effects on reducing flood risk, urban cooling and maintaining communities access to green infrastructure. Urban greening could also have a positive effect on landscape and townscape.

KEY EVIDENCE

- UK Climate Projections (UKCPO9);
- DEFRA (2012). UK Climate Change Risk Assessment;
- Element Energy for Cambridge City Council. Decarbonising Cambridge Study (2010);
- Cambridge City Council Climate Change Risk Assessment and Management Plan (2009);

- Cambridge City Council Climate Change Strategy and Action Plan (2008);
- Cambridgeshire Green Infrastructure Strategy (2011);
- Cambridge City Council (2007) Sustainable Design and Construction SPD
- ADAS (in progress). Analysis and Interpretation of Tree Audit Data for Cambridge City Council.
- DETR (2007). Trees in Towns II Survey

CURRENT POLICY TO BE REPLACED

- Not applicable

ANALYSIS OF KEY ISSUES AND OFFICER RESPONSE

The Stern Review (2006) identified that climate change will have profound and rising costs for global and national prosperity, people's health and the natural environment. Even with effective policies for reducing emissions in place, the world will still experience significant climate change over the coming decades from emissions of carbon dioxide and other greenhouse gases already released. The Planning Act (2008) places a legal duty on all local planning authorities to include climate change adaptation policies in their local plans. It is vital that new developments are planned with our changing climate in mind, as well as ensuring that they do not exacerbate climate impacts for neighbouring communities. Indeed, there may also be wider opportunities for climate change adaptation measures to be implemented that will benefit existing communities as well as new, such as urban greening and integrated surface water management.

The integration of climate change adaptation measures into the design of new development will help to reduce costs and will also increase the long-term sustainability and viability of developments. It will also ensure that climate change adaptation becomes an integral part of high quality place making. There are many aspects of climate change adaptation that have implications for the design of developments, and as such it is considered appropriate to require inclusion of climate change adaptation within Design and Access Statements. Such an approach is in keeping with guidance contained within the CLGs Guidance on information requirements and validation (2010), which at paragraph 105 states:
"Climate change considerations are integral to the planning system, including the design of new developments… Design and access statements for outline and detailed planning applications should therefore demonstrate how climate change mitigation and adaptation measures have been considered in the design of the proposals. These measures may be of particular relevance under the topic headings of amount, layout, scale, landscaping, context or access, depending on the nature of the proposed development and its anticipated impacts on the surrounding area".

In relation to the reference in the Issues and Options report regarding the potential to set tree canopy requirements for new developments, research suggests that even moderate increases in canopy cover within cities can help urban environments adapt to some of the adverse effects of climate change. These include direct and indirect cooling effects, for example reduction of the urban heat island effect, shelter from harmful solar radiation, improvement in air quality, reduction of energy

consumption from buildings, increasing soil water storage and absorption of atmospheric CO_2. The negative effects of climate change are predicted to reach highs in the 2080s, which is the time it takes for many tree species to mature. Tree planting and protection are a relatively cost-effective way of mitigating some of the adverse impacts of climate change, whilst also providing many other benefits, such as enhancement of biodiversity and provision of amenity value for those who live and work in the city.

The "Analysis and Interpretation of Tree Audit Data for Cambridge City Council" study, carried out by ADAS has measured canopy density across the city for various land use classes, using the methodology set out in the DETR "Trees in Towns II" survey (2007). This study suggests that tree canopy targets could be set for different land use types, in order to enhance the canopy cover of the city as a whole. The preference would be for the targets to be met through on-site planting, although where this is not possible, off-site provision could be secured. A second approach that could be adopted is a direct replacement method as used by Bristol City Council and Sefton Borough Council. Under this approach, policy would require a fixed number of replacement trees, determined by the size and number of tree losses proposed for a development site. Again, the preference would be for the replacement of trees within the development site, but where this is not possible, off-site provision would be considered. Work is currently ongoing to determine which approach would be the most appropriate for the city.

Development of a climate change adaptation policy will also give consideration to the long-term maintenance of certain adaptation features such as integrated surface water management and landscaping proposals. The City Council already has guidance in place for the adoption of sustainable drainage systems within public open spaces and would usually look to adopt open spaces where practicable.

RECOMMENDATION FOR PREFERRED APPROACH

The recommendation is to pursue Option 49. This would see the development of a policy requiring the integration of climate change adaptation measures into the overall design of new developments. Compliance with the policy would need to be demonstrated as part of Design and Access Statements submitted with planning applications, which will need to illustrate how climate change adaptation measures have been integrated into areas such as the layout, scale and landscaping of new developments. As identified in the Issues and Options Report, the criteria could include:

- The role of urban form and building orientation in maximising opportunities for natural ventilation strategies;
- The use of 'cool' building materials to reduce the impacts of higher temperatures;
- The role of water sensitive urban design in reducing flood risk and aiding urban cooling;
- The role of landscaping and features such as green roofs and the enhancement of tree canopy cover in aiding urban cooling and reducing flood risk;
- Protecting, enhancing and expanding green spaces (urban greening) and giving

consideration to the role of the River Cam and other water infrastructure in aiding urban cooling.

ISSUE: CONSEQUENTIAL IMPROVEMENTS POLICY
(Page 124 of the Issues and Options Report)

Total representations: 31	
Objections: 12	**Supports: 19**

OPTION NUMBER	**KEY ISSUES ARISING FROM CONSULTATION**
Option 50:	• Some support for the development of such a policy; • Concern over the cost implications for householders and landowners of such a policy; • Implementation should not be required but encouraged and long-term financial advantages of implementation should be made clear; • Need for care when dealing with heritage assets; • Make reference to the Cambridge Retrofit project.
NEW OPTIONS ARISING FOLLOWING COMMUNITY INVOLVEMENT	
Not applicable	

SUMMARY OF INTERIM SUSTAINABILITY APPRAISAL REPORT
In the case that Building Regulations are not amended to apply requirements for consequential improvements to all existing domestic buildings that undergo works to increase habitable space, Option 50 would contribute to carbon emission reduction targets. As a result this option should help to secure energy efficiency improvements. Retrofitting water conservation measures to existing buildings, as proposed under this option, should secure positive effects for high standards of water efficiency and reduce pressure on water scarcity in the region. The impact on heritage assets remains uncertain as the appropriate conservation of assets will be dependent on actual implementation of this Option within the historic environment.

KEY EVIDENCE
• Element Energy for Cambridge City Council. Decarbonising Cambridge Study (2010); • CLG (2012). 2012 Consultation on changes to the Building Regulations in England. Section two – Part L (Conservation of fuel and power); • Committee on Climate Change (May 2012). How local authorities can reduce emissions and manage climate risks.

CURRENT POLICY TO BE REPLACED
• Not applicable

ANALYSIS OF KEY ISSUES AND OFFICER RESPONSE

In order for Cambridge to play a role in tackling national targets for carbon reduction, it is important to tackle emissions from existing buildings as well as new. Such an approach is supported by the NPPF, which at paragraph 95 states that local planning authorities should "actively support energy efficiency improvements to existing buildings". For non-residential buildings there are many drivers for organisations to improve the efficiency of their buildings, but this is not the case for existing houses. At present requirements to improve the energy efficiency of new homes, sought through Building Regulations, only apply to dwellings over 1,000m^2, and as such many homes within Cambridge would not be required to meet these requirements. The Council's Housing Stock Survey found that of a total stock of 41,500 dwellings, there was scope for energy efficiency improvements in 95% of properties, including measures such as loft insulation, cavity wall insulation and cylinder insulation. Energy efficiency improvements typically provide relatively cost-effective CO_2 reduction, but can also help reduce energy bills for residents, which will become increasingly important in the face of rising energy costs. It is estimated that fuel poverty affects 14% of households in Cambridge, with this figure likely to rise. A recent report by the Committee on Climate Change recognises the scope for local authorities to require energy efficiency improvements in return for granting planning permission for extensions, citing Uttlesford District Council's approach as an example of best practice.

The intention behind Option 50 is to introduce a consequential improvements policy, similar to that developed by Uttlesford District Council. Such a policy would apply to planning applications for works such as an extension or loft conversion, and would require the implementation of cost effective measures to improve the energy efficiency of the entire property where such measures had not already been undertaken. Concerns surrounding the expense to homeowners of such a policy are recognised, but the focus of this policy would be on cost effective measures, defined as measures having a simple pay back of seven years or less. The type of measures that will be promoted include upgrading loft insulation, insulating cavity walls, improving draft proofing, heating controls upgrade and the installation of low energy lighting. Many of these measures may also be eligible for funding through the Green Deal, which is due to be implemented in January 2013, and the Energy Company Obligation (ECO). As such, the cost to homeowners would be limited, but they would still benefit from the reduced energy costs as a result of increase the energy efficiency of their home.

Some respondents raised concerns that such an approach would increase 'red tape' for those wishing to extend their homes. It is not the intention of the policy to increase red tape, but to encourage residents to take advantage of the opportunities that carrying out works to their homes present, opportunities that should help to reduce energy bills and enhance the comfort of their homes. There could be some risks associated with such a policy approach given the Government's recent announcements on increasing the size of household extensions that will be considered under permitted development rights. This could reduce the number of applications received for household extensions, thereby reducing the application of this policy, although planning permission would still be required within Conservation

Areas.

The focus of the policy would be on existing homes as opposed to non-residential properties, which are more likely to be covered by existing Building Regulations requirements for consequential improvements. As such, it would not apply to College buildings etc. Care will need to be taken in applying the proposed policy to historic buildings to ensure that they are not damaged by inappropriate interventions. The implementation of the policy will be on a case by case basis, with officers recommending measures that would be suitable for that particular property, bearing in mind its age and type of construction.

RECOMMENDATION FOR PREFERRED APPROACH

The recommendation is to pursue option 50 and introduce a consequential improvements policy, which will look to implement cost-effective energy efficiency measures in homes undergoing improvement works for which planning permission is required. Consideration will also be given to the retrofitting of simple water efficiency measures, such as water metres and low flow appliances. The policy should be linked to the Green Deal and Energy Company Obligation, to help reduce costs for homeowners. Applicants would be asked to complete a simple home energy questionnaire, from which a home energy report would be produced, recommending possible measures to be implemented.

REPRESENTATIONS SUMMARY - CHAPTER 6: CLIMATE CHANGE

CHAPTER: 6 - Sustainable Development, 6.1 Climate Change, Water &

11636 Support

Summary: strongly agree

14245 Support

Summary: Materials and construction waste:
It would be good to have some targets/bench-marking and also data collection and publication in this area. Perhaps this may only relate to key materials and products used (ie structure, cladding etc).
It would also be useful to ask where these key materials/products are coming from. I would like to see a policy which considers local materials and products or even local skills and services.

Adaptability/re-use of buildings:
Keeping good records of building designs is key to assessing adaptability and re-use at a later stage in the life. In particular structural engineering drawings and design criteria.

15522 Support

Summary: Sustainable development is defined in the NPPF in terms of its economic, environmental and social dimensions, and encompasses the historic environment. Sustainable communities have also been a term used to define communities that are well designed and built, reflecting all dimensions of sustainability. It is important that the terminology in this chapter is precise, and that where the subject matter relates to 'green' issues, then this is stated.

16336 Support

Summary: I strongly support this vision. Is it attainable?

CHAPTER: 6 - Sustainable Development, Option 41 - Innovative and Sustainable Communities Climate Change, Water &

16686 Object

Summary: I am opposed to the excessive priority given to climate change and the need for a low carbon City. I would like to see much more emphasis placed on jobs, quality family housing and protecting the historic built environment of the City.

18058 Object

Summary: Where to Build: Build in locations close enough to enable walking, cycling, frequent public transport with good existing infrastructure or the capacity to provide this.
Strengthening and diversifying existing settlements - detached suburbs / dormitory villages.
Redevelop/adapt existing structures/neighbourhoods (thinking of Newmarket Rd sheds) as these become inner - rather than edge - conditions. Densify and improve environment at every opportunity - there are no "straightforward schemes!
Site Strategies: Consider orientation, topography / gravity, access neighbourliness and inclusivity.

7750 Support

Summary: This must be fundamental to any new development and all other policies. I like the use of the work 'radical' but may be helpful to specify the need to make communities more self-sufficient by producing their own energy.

8038 Support

Summary: I agree this is fundamental at a period of overwhelming evidence of global warming.

8093 Support

Summary: I strongly support this option

8258 Support

Summary: We welcome the proposal that all developers demonstrate presumption in favour of sustainable development. We would place great emphasis on the sustainability of all development.

10247 Support

Summary: Truely environmentally sustainable development is the only option for future development in Cambridge and elsewhere.

10497 Support

Summary: not really an option, this is a given on which all other decisions are predicated.

11638 Support

Summary: Strongly agree. Cambridge should lead by example.

12897 Support

Summary: Sustainable communities is the only way forward, and Cambridge should be an example. Sustainable development is a key aspect, and policies and regulations to guarantee it, fundamental.

13558 Support

Summary: It is particularly important to consider the effect of any development on flood risk since development reduces the drainage capacity of a given area and increases risk of flooding. Recent unpredictable weather patterns would confirm the need for extreme caution.

13938 Support

Summary: We must continue to reduce our carbon footprint as individuals and as a city. We must find ways of building new homes, maintaining employment opportunities and encouraging healthy lifestyles without increasing the amount of water or fossil fuels we use. Sometimes we need a degree of compulsion to do the right thing that only comes with the force of planning law.
As a result of changes in regulations on new developments, many minority choices have become the norm, and this must continue.

14634 Support

Summary: Climate change is a reality and we should aim to deal with actual problems rather than chasing politically inspired

14703 Support

Summary: In respect of transport we agree that it is important to reduce carbon emissions. Cycling can play an important part of that so we want to see levels reach 40% of all journeys city wide. We also request that more cycling officer posts are put in place (at least two full time equivalent posts.) They are a key factor in enforcement and promotion of cycling in Cambridge.

16338 Support

Summary: Strongly support, but make the developers support it too.

16849 Support

Summary: Agree
Obviously it would be best in terms of Mitcham's Corner environment (as well as Cambridge and the whole world) to have the most stringent possible sustainability requirements in terms of energy uses, water usage and use of green roofs etc. on all new developments so we support this. We do not support the idea of developers being able to bribe their way out of delivering on the commitment to a specific site by contributing to a fund. We can ses that this would be used to the detriment of certain parts of the city such as Mitchams Corner!

16924 Support

Summary: We strongly support the intention behind this strategic policy as it applies to existing communities as well as to new development. We also welcome the emphasis on innovative solutions which may require some flexibility in the way that other policies are interpreted and put into effect.

17682 Support

Summary: Reduce public lighting, encourage green roofs and sustainable drainage. Want to live and contribute to a sustainable city. The issue is the conflict between growth and stagnation. I recognise that it is difficult to improve sustainability in terms of protection of resources, dealing with climate change and carbon reduction in the light of the need of economic growth including housing, water and flood requirements.

17709 Support

Summary: Natural England generally welcomes Options 41 - 59 which address sustainable development, climate change, water and flooding.

CHAPTER: 6 - Sustainable Development, Objectives Climate Change, Water &

9166 Object

Summary: The wording is insufficiently strong and inconsistent with Strategic objective 2:
To ensure that all new developments have a neutral impact on water, contribute to an overall flood risk reduction and help improve the quality of the River Cam and other water features in the city.

The reduction of flood reduction risk should be the primary environmental policy of the Council. Flood risk is a likely and serious local consequence of climate change, its importance appears to be recognised by Council in every area except strength of policy.

The next level of policy would be related to Adapation and Mitigation.

CHAPTER: 6 - Sustainable Development, 6.3 Climate Change, Water &

7653 Support

Summary: This is so fundamental and should drive all our other decisions.

11001 Support

Summary: Sustainability is the MOST important factor in all the ideas put forward for the development of Cambridge in future. Water, air quality, traffic emissions, are all vital considerations.

11642 Support

Summary: strongly agree

15523 Object

Summary: Conservation and enhancement of the historic environment should be included in any policy addressing sustainable development in the sense stated in the NPPF.

15929 Object

Summary: Ref the notion of sustainability, when applied to a particular house it should mean a building that has not consumed too much energy or raw materials in its construction as well as one that will not use too much energy when it is occupied. In addition, when applied to anew urban development, it should mean one that has good public transport links with the rest of the city, is socially balanced and architecturally (and, if you like, ergonomically) well arranged and has the appropriate amenities for a community of its size, just as a new settlement without the city limits should also have good public transport and amenities and enjoy a measure of economic independence, not simply export most of its workforce into Cambridge every day.

18069 Object

Summary: Behaviour: Information - Domestic information points, energy consumption / usage, bus times, car-sharing. Local enabler information: advice on lifestyle/maintenance, coordination of deliveries, veg boxes etc. Rewards for recycling - tokens for guided bus etc - as short-term incentives. Understand that these changes and technologies are not "fit and forget!, they require monitoring, feedback and modification - regular and ongoing. (SH - Federal Environment Agency - Dessau - Bretschneider)

18073 Object

Summary: Community: Existing "host" communities in/around new developments should offered opportunities (with grants, loans, subsidies if necessary) to upgrade their homes in terms of insulation, airtightness, renewables and link into new energy networks. To be given a "stake" in the new, more sustainable community.
Use proposed development of City-owned land at Clay Farm and Community Centre as an exemplar for the development of sustainability strategies (energy, fabric and community) across the spatial strategy.

Decision-making:
Developers to provide target EPC for proposed dwellings and communitues including performance against water usage, transport, information uptake, etc. Commit to establishing management organisation with long-term developer involvement, to ensure performance - with facilities to monitor this and report, improve (see fit and forget). Understand that CfSH and Passivhaus are only partial metrics. Develop more holistic, "Sensible Housing! requirements.

6911 Support

Summary: The policy should learn from the best examples in Europe, where low carbon low impact people friendly development is much further advanced.

9764 Support

Summary: Access to open spaces is very important for the well-being of the population, with access to spaces beyond the City boundaries important. Care should be taken with any road improvement schemes that make foot or pedestrian access dangerous. Where large roundabouts (such as at Histon and Milton) are unavoidable then foot/cycle bridges need to be seriously considered.

10783 Support

Summary: Much needed

11005 Support

Summary: This needs to come before any of the other detailed planning.

11060 Support

Summary: The College is keen to adapt its existing buildings, to manage and maintain their property and operate systems in a more sustainable way. The reduction of carbon emissions through improved energy efficiency, water efficiency and use of renewable energy are key to this. The College would like to see policy which positively supports this objective and seeks to facilitate it. For example, such improvements can require physical works. The College owns many heritage assets and would want a policy which allows for the sensitive alterations to building fabric.

11602 Support

Summary: We need to create a sustainable way of living, including in cambridge

12022 Support

Summary: It is the responsibility of the human species to demonstrate its wise stewardship of planet Earth, to care for the natural environment on all scales, and to preserve the best of valuable human made environments, all for the benefit of future generations. This ambitious objective has to be accomplished at this time of climate change, with the consequent increased variability of meteorological phenomena whilst simultaneously developing worthwhile and beneficial economic activities. I consider that it is best if those in employment can walk or cycle from their home or train station to their place of work, rather than having to use cars or buses that cause local pollution of the atmosphere. Thus the optimal siting of train stations and the appropriate uses of the buildings in their "catchment area" are crucial in this regard.

12314 Support

Summary: More needed on existing communities, infrastructure & buildings, as well as new development.

National 80% reduction target in carbon emissions by 2050 and the City's 89% target demand massive low-carbon changes across the city, not just in new developments.

Of the homes we will inhabit in 2050, around 80% are already standing and these have to be the main focus for carbon-reduction policies.

"Decarbonising Cambridge" calls for the "Council to show leadership by driving improvements in existing stock. Opportunities include when a house is purchased and when planning permission for building work is sought."

13066 Support

Summary: The Trust recognises the importance of adapting existing buildings and managing and maintaining those buildings in a more sustainable way. The reduction of carbon emissions could be through improved energy efficiency, water efficiency and use of renewable energy. Such a policy needs to facilitate this where improvements may mean alterations and adaptions to existing buildings.

13134 Support

Summary: We would support the principles of option 42 which proposes a comprehensive sustainable development policy for Cambridge. A clear policy guiding sustainability concerns would assist with development proposals and provide guidance to developers on issues for consideration during the working up of design proposals within the City. In relation to the Compass House site particular emphasis should be placed on the adaptability of buildings, including the re-use of existing buildings. In setting requirements for development proposals regard must be had to the NPPF and its guidance on viability (see paragraph 173 of the NPPF).

13298 Support

Summary: The College is at the forefront of Colleges in reducing carbon emissions in both their new and existing buildings and operation and management. There is an extensive green policy which is in line with the Council's objectives for sustainable communities.

13763 Support

Summary: With the lowest of of the growth options.

14635 Support

Summary: A policy is require that places emphasis on a smarter use of land, especially in the public realm. Devoting ever more land to traffic movement and parking is a luxury Cambridge cannot afford. Car parks need to be provided but should be multi-level and/or built over to make better use of the land on which they stand. This will reduce land take for development leaving more for open space and other uses.

14720 Support

Summary: I support, with the suggestion that policies to control pollution should include control of light pollution and noise pollution.

15013 Support

Summary: I support, with the suggestion that policies to control pollution should include control of light pollution and noise pollution.

15164 Support

Summary: Support. Resources are finite. City leaders should be taking a long term view. What will happen after the greenbelt land and other locations are all used up?

15824 Support

Summary: We welcome recognition that Cambridge is in an area of severe water stress and the proposed policies to reduce the level of water use in connection with new building. households. But we would argue that this problem requires, in addition, more radical policy changes: a total rethink on the level of growth envisaged.

16002 Support

Summary: CUH is committed to sustainable development and, to date through the early schemes for the expansion of the biomedical campus, has been requiring development to incorporate sustainable development measures as far as practicalities have allowed. We accept that there is every likelihood that sustainability standards will be raised in the future, and will endeavour to continue to meet whichever standards are in place. Nevertheless, we consider that the wording of these emerging policies should be such that there can be some flexibility in the application of the policy standards if site specific circumstances necessitate it.

16042 Support

Summary: Yes, there needs to be and a policy. It should, if possible, be applied to present development to ensure the best standards and cosniderations are being met.

16340 Support

Summary: I support all these points strongly.

16724 Support

Summary: This option would allow for the development of a sustainable development policy setting out the principles that should be embedded into all development proposals in Cambridge. This could also include "carbon neutral", low light pollution, low noise pollution.

16925 Support

Summary: We support a more detailed sustainable development policy covering the full range of issues listed in the report.

17721 Support

Summary: Natural England generally welcomes Options 41 - 59 which address sustainable development, climate change, water and flooding.
Option 42 Develop a comprehensive sustainable development policy - Natural England would welcome a sustainable development policy setting out the principles that should be embedded into all development proposals in Cambridge. We would particularly welcome the inclusion of requirements to consider carbon/greenhouse gas reduction, energy efficiency, pollution and protection and enhancement of biodiversity and adaptation to climate change.

CHAPTER: 6 - Sustainable Development, Question 6.1
Climate Change, Water &

11974 Object

Summary: Yes there should be a comprehensive policy but the National Planning Policy Framework (NPPF) makes clear that sustainable development is about positive growth and that LPA's should positively seek opportunities to meet the economic, social and environmental development needs of their areas.

The consultation option focuses on environmental matters and needs to reflect economic and social considerations if it is to be properly considered as a comprehensive sustainable development policy.

17560 Object

Summary: This is an important priority, but would beconcerned that it could be given precedence over other equally important priorities such as heritage, historic character, special interest etc. that make parts of Cambridge so uniquely special.

7088 Support

Summary: Yes, a policy is needed, but one which developers will have to abide by. It needs to be clear and unambiguous, or it's not worth having.

7276 Support

Summary: Good to see coherent policy in this area.

7353 Support

Summary: yes

7991 Support

Summary: Yes.

8095 Support

Summary: Yes, need a policy

8260 Support

Summary: need policy

8432 Support

Summary: Yes

8602 Support

Summary: The Trumpington Residents' Association supports the development of a comprehensive sustainable development policy and Options 41 and 42.

9076 Support

Summary: Yes. Let's start consuming less, having better quality of life and pass something decent onto our children and grandchildren.

9144 Support

Summary: of course

10155 Support

Summary: Yes. We need a definition of sustainable development which is then incorporated into other policies.

10250 Support

Summary: This policy is essential to any future development or re-development of the city

10356 Support

Summary: Most definitely agree there should be a policy for all new developments. Should also include a specified amount of land for allotments and food growing spaces to ensure that provision is made.

10784 Support

Summary: Necessary

10925 Support

Summary: Yes - this is a no brainer. However it must be crystal clear, and stuck to by everyone, no exceptions.

11181 Support

Summary: We support the principle of a single sustainable development policy within the Local Plan.

11295 Support

Summary: Yes, we need to develop a policy.

11420 Support

Summary: Support

12315 Support

Summary: This policy is much needed and important.
It will be the foundation for other policies and decisions in this area.

12498 Support

Summary: There is absolutely a need for a policy to support sustainability within our community. I completely agree that every single development proposal ought to have this policy at its core.

12703 Support

Summary: Essential

12949 Support

Summary: support. Add gardens

13092 Support

Summary: Yes. Urban food production space should include community gardens (for residents without gardens and the resources to manage an allotment)areas of semi- wild forage opportunities such as community orchards and nut trees and private gardens.

13185 Support

Summary: In order to be sound, the council's sustainable development policy should be in compliance with paragraph 14 of the NPPF which promotes a presumption in favour of sustainable development as a 'golden thread' running through plan making and decision taking.

13466 Support

Summary: Yes

13719 Support

Summary: Of course! Who wants an unsustainable Cambridge?

14109 Support

Summary: There is the greatest possible need for a policy on this issue. Carbon reduction should be a priority, via first reduced energy demand and second decarbonised energy supply. If we do not halt or slow climate change, then all other plans are a waste of time.

14939 Support

Summary: Yes, support.

16185 Support

Summary: We support the proposal to incorporate a policy to address the principles of sustainable development for Cambridge.

We would be happy to assist further in the development of a policy to address this issue, or indeed provide further evidence as required to justify the approach toward sustainable development.

16341 Support

Summary: Yes, there is a need for a policy

16805 Support

Summary: Yes - Support

18419 Support

Summary: The suggestion that 'recycling and waste facilities' could be included within a comprehensive sustainable development policy (option 42) is supported and this goes some way to acknowledging the strategic importance of waste. It is as vital as road links, schools, medical facilities parks and public art. Moreover, any policy addressing this issue could be a STRATEGIC PRIORITY given the overarching context of achieving sustainable development set out in International Resolutions, European and primary legislation primary eg The 2004 Planning and Compulsory Purchase Act, The 2008 Planning Act, The Climate Change Act 2008, The NERC Act 2006, The Localism Act 2011 and the NPPF.

18521 Support

Summary: We support the development of a comprehensive sustainable development policy and Options 41 and 42.

CHAPTER: 6 - Sustainable Development, Question 6.2
Climate Change, Water &

7354 Object

Summary: No priorities within the list? Too little focus on upgrading existing housing stock.

8261 Object

Summary: Support the principle of the policy, but other principles to add for all development proposals:

* Residential developments should include access to open space for all residents, to allow drying of clothes without using tumble dryers
* Consideration for secure bicycle storage for all properties.

8603 Object

Summary: The Trumpington Residents' Association notes that the document states that demand for water is likely to increase by 33% by 2031 but it is unclear on what this is dependent. Surely much will depend on the amount of growth of homes and jobs? This should be clarified against each of the options for homes.

10162 Object

Summary: All three aspects of sustainability - social and economic as well as environmental - should be required and one aspect cannot be traded against another. For example if a development provides jobs, that should not outweigh concern over unsustainable water use.

10166 Object

Summary: We need to evaluate the potential for renewable energy in Cambridge and set a target for developing it. This may mean allocating space for energy industry such as energy from waste plants.

10167 Object

Summary:

Regarding "Access to open space including space for urban food production," this could be expanded to include renewable materials production. Also, we propose an additional principle to be included in all development proposals in Cambridge which is the creative use of space for food production, for example community gardens on waste land, espalier trees against the sides of buildings, and edible landscaping.

11068 Object

Summary: The College would be keen to explore options to reduce its carbon footprint and improve water efficiency. However as much of its property is listed it can be both difficult and expensive to obtain the necessary approvals. The Council need to be working with colleges to facilitate this.

13292 Object

Summary: The policy needs to recognise that Colleges are very keen to adapt existing buildings, to manage and maintain their property and operate systems in a more sustainable way. The reduction of carbon emissions through improved energy efficiency, water efficiency and use of renewable energy are key to this. The policy should positively supports this objective and seek to facilitate it. For example, such improvements can require physical works. The College owns many heritage assets and would want a policy which allows for the sensitive alterations to building fabric.

14737 Object

Summary: Maximise use of natural materials (e.g. timber, recycled materials) to minimise climate emissions caused by manufacture of brick, concrete, steel. Cambridge cannot afford to trigger a rise in the sea level: the city is located next to a large region that is close to the present sea level. Flooding the city with refugees is not compatible with economic growth.

14940 Object

Summary: Not all of these concepts can be applied to developments which encompass existing Listed Buildings.

16806 Object

Summary: The local Plan should include planning policies that encourage and support mixed-use developments, particularly the development of low-rent studios and live/work schemes. Under this heading, there should also be protection and support for allotments and other open spaces.

17899 Object

Summary: This requires the city council to prepare for a future that takes into consideration the effects of combat climate change on residents lives and the need to embrace a reduction in the use of finite resources; moving towards what we produce locally at all levels.

We need to reduce our carbon footprint from a 3 Planet lifestyle to a 1 Planet lifestyle. We also need to adapt to a lifestyle that is not dependant on oil. The strategies that help us to reduce our carbon footprint also reduce our dependency on fossil fuels and while individuals have to take some responsibility for making these changes many of the changes can't be done without local authorities and government facilitating them.

18386 Object

Summary: Sustainable construction encompasses many aspects to be promoted e.g. quality construction, 'long life, loose fit', recycling of components e.g. bricks have a long life, take high energy to produce but many buildings still use cement mortar which means they cannot be recycled.

18420 Object

Summary: The County Council considers that the plan should include a short waste section. There should be a recognition that growth and development will impact on waste arisings and may lead to a need for further infrastructure to support the growth. The inclusion of a specific waste section would contribute to the public's understanding of this need. This section should also mention the RECAP guide so potential developers are aware of their responsibilities in regard to waste from the outset.

18522 Object

Summary: We note that the document states that demand for water is likely to increase by 33% by 2031 but it is unclear on what this is dependent. Surely much will depend on the amount of growth of homes and jobs? This should be clarified against each of the options for homes.

8096 Support

Summary: Should add that outdoor drying space should be provided for all homes to decrease use of tumble driers

8433 Support

Summary: The policy addresses the development of the new rather than correcting current problems, e.g the pollution created by our current buses.

8862 Support

Summary: Green spaces could also be part of this sustainable development strategy and this would ensure a more integrated approach than a stand alone green space policy(4.4).

11297 Support

Summary: The proposal here (option 42) mentions "Recycling and waste facilities" as part of sustainable development. While I think recycling for households is excellent in Cambridge, it is shocking that there is no mandatory recycling for businesses in Cambridge. People working in shops always say 'it's too expensive for us to recycle'. I think either the Council has to make this available for free or force business owners to eat the cost. They recycle nothing - while households are doing very well. It's mysterious why this isn't part of a sustainability vision.

11786 Support

Summary: Lip service only seems to be applied to this concept. The current sustainable housing is of poor quality. People have refused to take them up because the materials used have allowed them to hear what is going on above, below and to the sides of them. All housing developments now should be fully insulated against sound, and should be as near as possible carbon neutral. This costs developers money but if you do not wish to establish areas where most would not wish to live this aspect of building is very important.

12325 Support

Summary: in addition to our comment on Option 42, we propose:

a) Promoting and supporting behaviour changes that lead to carbon emissions reduction. Individuals' Low-carbon choices and demand reduction can make a big contribution towards a low-carbon Cambridge

b) Support for communal meeting places to strengthen local communities, as communal meeting places in each locality can strengthen local communities.

c) Other support of local food production (and open spaces). Allotments and communal gardens provide healthy low-carbon food.

d) Support for outlying market stalls, not just the central market. - for further localisation and small enterprise opportunities.

14248 Support

Summary: Materials and construction waste:
It would be good to have some targets/bench-marking and also data collection and publication in this area. Perhaps this may only relate to key materials and products used (ie structure, cladding etc).
It would also be useful to ask where these key materials/products are coming from. I would like to see a policy which considers local materials and products or even local skills and services.

Adaptability/re-use of buildings:
Keeping good records of building designs is key to assessing adaptability and re-use at a later stage in the life. In particular structural engineering drawings and design criteria.

17517 Support

Summary: I would like to propose an idea to reduce the carbon footprint of development. All new double glazed windows/doors allow light and warmth to enter a building. If a new build were to obstruct direct sunlight from entering an existing building, the consequence would be higher heating costs and emissions. If planning/building regs were to protect the warmth direct sunlight gives, this could impact on the reduction of Britain's CO2 emissions.

CHAPTER: 6 - Sustainable Development, Question 6.3
Climate Change, Water &

7355 Object

Summary: Use micro policies as well as macro-policies to deal with environmental impact, flood management and biodiversity. Thus, maintain/encourage hedges, lawns, trees and gardens and be much stricter about loss of these to hard surfaces for parking and inserted developments; allow council tenants and leaseholders to install solar panels rather than stopping them as now; encourage/support rain water collection and recycling.

14428 Object

Summary: I would like to see more explicit consideration for the basic essentials of life in our new plan. There is very little about food other than allotment provision and certain types of shops. So how about a policy that every new institutional building/community facility with a kitchen should also have a kitchen garden? And how about provision for local distribution of fresh produce (very local farmers markets)? If this seems unimportant, think back to the lorry drivers' strike when food nearly ran out in the shops.

17902 Object

Summary: We need to stop Cambridge growing in size so we can feed ourselves in 2031 and reduce the use of valuable farmland being used by corporate business interests for housing development. The council should be developing policy alongside South and East Cambs councils to release of the land for food production for young local farmers unable to get hold of land to start new business. Land needs to be freed up for young people to give them opportunities to develop food related businesses.

17905 Object

Summary: Future house building on rich productive green belt land is not appropriate we need to hold this land for food production especially land within a cycle ride of population so that people can participate at times of high labour need. Set a Passivhaus standard to be reached in all buildings. All new housing to include micro-generation suitable for the property e.g. PV and solar water and orientation of new buildings to draw on solar gain.

9039 Support

Summary: On small developments, policy should be advisory only, or it will add unnecessarily to building costs

14348 Support

Summary: It would be worth considering Hackney Council proposal for a Wood First policy (also support by DEFRA's recent independent panel report on Forestry):
http://apps.hackney.gov.uk/servapps/newspr/NewsReleaseDetails.aspx?id=2437
Such a policy could help reduce the environmental impact of construction and help boost low carbon construction skills.

CHAPTER: 6 - Sustainable Development, 6.5
Climate Change, Water &

17562 Object

Summary: Setting targets for sustainable development: Develop a policy for setting sustainable construction standards using BREEAM (Level 4 or higher) and Code for Sustainable Homes (very good or excellent). To also include standards for water consumption levels.

7654 Support

Summary: I'd like to see real innovation here and not only sustainable (ie wood, wool) building products, but sustainable design features.

CHAPTER: 6 - Sustainable Development, 6.6
Climate Change, Water &

17573 Object

Summary: Reduction of Carbon emissions from new development: Need to balance overall
increase in carbon emissions from new developments with reducing carbon greenhouse gas emissions. Also consider impact on viability of new development.
Option 44: detailed target of 44% reduction in CE up to 2016 and zero carbon (not yet well defined) after. In keeping with current standards.
Option 45: detailed targets in line with 'Decarbonising Cambridge', but may impact on viability.
Option 46: Leave carbon reduction to Building Regulations and continue with
percentage policy. This may have impact on viability.

CHAPTER: 6 - Sustainable Development, Option 43 - Sustainable Construction Standards Climate Change, Water &

11061 Object

Summary: Imposition of BREEAM and Code for Sustainable Homes standards may not be achievable particularly where development incorporates historic buildings. Retention of (updated) guidance would be a better option to reduce carbon emissions.

13041 Object

Summary: Cambridge City Council should create a specific Planning Strategy to ensure that new development in identified growth areas implement grey and rain water recycling, implement SUDS systems and require Sedum roofs on new properties, in addition to any CFSH level required

13069 Object

Summary: Requirements for development to achieve excessive BREEAM and Code for Sustainable Homes standards may not be viable or achievable. Retention of (updated) guidance would be a better option to reduce carbon emissions.

13135 Object

Summary: We would support the broad thrust of option 43 which in relation to Compass House would seek BREEAM very good or excellent. We would seek for sustainable construction standards to be achieved through Building Regulations at a national level as opposed to locally set criteria. We would oppose standards which are higher than those set by current Building Regulations as this would threaten viability and make Cambridge less attractive to investors and developers alike.

13304 Object

Summary: Imposition of BREEAM and Code for Sustainable Homes standards may not be achievable particularly where development incorporates historic buildings. Retention of (updated) guidance would be a better option to reduce carbon emissions. Such extreme policy would be counterproductive.

18061 Object

Summary: Accept that developers current use of "bolt-on" renewables as a way of apparently reducing carbon (and meeting current 10% policy) is tokenistic and neither sustainable nor
likely to meet proposed BR definitions (Part L)
New build
Fabric first for insulation, air tightness and thermal mass
Passivhaus (plus thermal mass)
Resilience to future climate
Use local/recycled materials
Lock up carbon in construction materials

18575 Object

Summary: CUH is committed to sustainable development and, to date through the early schemes for the expansion of the biomedical campus, has been requiring development to incorporate sustainable development measures as far as practicalities have allowed. We accept that there is every likelihood that sustainability standards will be raised in the future, and will endeavour to continue to meet whichever standards are in place. Nevertheless, we consider that the wording of these emerging policies should be such that there can be some flexibility in the application of the policy standards if site specific circumstances necessitate it.

7537 Support

Summary: New buildings must not make the same mistakes as previous builds which we're energy inefficient

7655 Support

Summary: This is a minimum.

11292 Support

Summary: Support

11646 Support

Summary: I favour higher construction standards for sustainable homes. I think the current standards are too low and that this is a false economy in the long run.

12337 Support

Summary: Strengthen Option 43 by:

"Requiring a minimum level of the Code for Sustainable Homes (at least Level 4, AND RISING OVER THE PERIOD) and BREEAM ('very good' RISING TO 'excellent')".

"Consideration SHOULD also be given to setting much higher standards for specific scales and types of development."

"Flexibility SHOULD be written into the policy to enable the standards set to rise should more ambitious national standards be adopted in the future through the government's Zero Carbon Policy."

12633 Support

Summary: Strongly agree- Cambridge should lead by example here.

14636 Support

Summary: We should require all new construction to meet the best accepted standard currently available. This also applies to dimensions for commercial premises and the application of 'whole of life' standards to new housing.

16343 Support

Summary: Strongly support, but why only a 'minimum' level of the Code? Shouldn't we be aiming at the highest standards. Why wait for 'more ambitious' national standards?

16926 Support

Summary: We welcome the intention to apply minimum standards to new developments and to reserve the right to raise those standards should higher national standards be introduced.

17724 Support

Summary: Natural England generally welcomes Options 41 - 59 which address sustainable development, climate change, water and flooding.

CHAPTER: 6 - Sustainable Development, Question 6.4
Climate Change, Water &

11187 Object

Summary: In summary whilst we support BREEAM standards we respectively suggest that the Council policy is aligned to national standards in order that it can be incorporating flexibility in circumstances where the Government will seek to change timescales and/or requirements to meet their Zero Carbon Policies.

11979 Object

Summary: The University carries out BREEAM assessments on all new buildings over 1000m2, with a target to achieve a rating of 'Excellent' with a minimum rating of 'Very Good'. There is no appropriate BREEAM for existing buildings, however, and we would be concerned if policy prescribed the use of BREEAM for all developments.

The preferred approach is to set out a requirement for appropriate assessment of sustainable construction in the comprehensive sustainable development policy, and then provide guidance on methodologies, if necessary, in the Sustainable Design and Construction (SD&C) Supplementary Planning Document (SPD).

16188 Object

Summary: We do believe that the need for a sustainable development policy is sound though would like the policy to go further.

7356 Support

Summary: yes

8262 Support

Summary: need policy

8434 Support

Summary: Yes. Developers will always try to cut corners. Good quality and sustainability are cheaper for users in the long run

8604 Support

Summary: The Trumpington Residents' Association supports sustainable construction standards and Option 43.

10169 Support

Summary: Yes. However, current standards for sustainable construction are not perfect now, with some buildings given surprisingly low or high ratings. The council should consider alternative standards to BREEAM and the Code for Sustainable Homes as they arise and are recognised.

10785 Support

Summary: Yes

11421 Support

Summary: Support

12342 Support

Summary: This policy is important and much needed.

By requiring building development with high standards of insulation and energy efficiency, this policy can result in significant on-going carbon emissions reductions in the use of the buildings, contributing to achieving the City and national reduction targets.

13467 Support

Summary: Yes

16344 Support

Summary: Yes, there is a need for a policy

17567 Support

Summary: Yes

17768 Support

Summary: Developers should be required to build environmentally sustainable dwellings and respect the limitations of the flood plain and water supplies/drainage.

18430 Support

Summary: The County Council is supportive in principle of this policy, but is mindful of Codes or Standards changing over the life of the Plan. In addition, existing buildings, facilities, and infrastructure also need to embraced.

18523 Support

Summary: We support sustainable construction standards and Option 43.

CHAPTER: 6 - Sustainable Development, Question 6.5
Climate Change, Water &

7357 Object

Summary: It is likely to be cheaper now to build to highest specification than it will be and most developers will try to cut costs if given chance, so go for highest reasonable spec now.

10411 Object

Summary: Neither objection nor suppor but question

Have maintenance costs been taken into account when considering sustainability. The best old fashioned boilers need very little maintenance. Unless you are very lucky condensing boilers cost a lot more in maintenance lowering their green credentials.

13211 Object

Summary: Option 43 suggests the development of a policy requiring a minimum level of the Code for Sustainable Homes of at least Level 4 and BREEAM Excellent or Very Good. Option 43 further states that flexibility could be written into the policy to allow for the standards set to rise to be adopted through the Government's zero carbon policy. We highlight to the Council that the Code for Sustainable Homes is due to be consulted upon and updated to reflect changes to Building Regulations Part L 2013 and the emerging definition of zero carbon homes. While recognising the need for sustainable development, our client cannot commit to achieving a standard when there is no certainty about what that standard will be following the above mentioned changes.

13219 Object

Summary: There is currently limited understanding of the health implications relating to living in homes with low levels of air leakage as required by Code for Sustainable Homes Level 4 and above. Until these implications are better understood, we consider it unwise for policy to prejudice these findings, and therefore Option 43 is not justified.

17836 Object

Summary: The policy requires compliance with regimes including the Code for sustainable Homes and the building regulations. This is unnecessary and burdensome and is demonstrated by the recent publication of the 'A Review of Local Standards for the Delivery of New Homes' report. Paragraph 11 of the supplement to PPSl makes it clear that the controls under planning and other regulatory regimes should not duplicate each other. In addition, Paragraph 95 of the NPPF notes that local standards are consistent with the Government's zero carbon building policy, and arguably should not require higher standards or be ahead of the respective trajectories.

12344 Support

Summary: We propose further extension of these standards into retrofit, in addition to Option 50 - "Consequential improvements policy"

Policy flexibility is also needed to enable appropriate changes as lower-carbon materials become available. For example cement production accounts for 5% of global CO2 emissions, but low-carbon cements are arriving.

See our comments on Option 42.

14241 Support

Summary: ref 6.7 - the use of materials with low environmental impact will not be achieved just through BREEAM or CfSH rating. Further policy would be required linking to embodied carbon calculation perhaps through the emerging EPD route?

CHAPTER: 6 - Sustainable Development, Climate Change, Water & Question 6.6

17570 Object

Summary: The same if not higher levels of sustainability should be set for non-residential development.

17837 Object

Summary: We would propose that BREEAM "Very Good" is adopted as the minimum standard for non-residential development. Achieving BREEAM "Excellent" cannot always be viably delivered, particularly where there is not an identified end use. Speculative development of non-residential development should be encouraged to ensure there is a supply of available high quality employment space in Cambridge and policies should not be adopted which could impact on the viability and delivery of this.

7358 Support

Summary: Going for highest reasonable spec now may provide a way to get only best employers with highest standards in the area and so control indirectly both numbers and quality of jobs.

8263 Support

Summary: Should target BREEAM excellent standards for non-residential development, because what is excellent at present will probably only equate to 'good' in the future when progress is made on building standards.

8605 Support

Summary: The Trumpington Residents' Association would support a target of BREEAM, either very good or excellent for non residential development.

13469 Support

Summary: Yes. All new development, and refurbishment of existing development (listed buildings/conservation areas exempted) to reach 'very good' or 'excellent' BREEAM standards

16167 Support

Summary: We would propose that BREEAM "Very Good" is adopted as the minimum standard for non-residential development. Achieving BREEAM "Excellent" cannot always be viably delivered, particularly where there is not an identified end use. Speculative development of non-residential development should be encouraged to ensure there is a supply of available high quality employment space in Cambridge and policies should not be adopted which could impact on the viability and delivery of this.

16345 Support

Summary: We should be aiming at the highest standards for both.

18524 Support

Summary: We would support a target of BREEAM, either very good or excellent for non residential development.

CHAPTER: 6 - Sustainable Development, Climate Change, Water & Question 6.7

17838 Object

Summary: The complexity of the three part policy has always been problematic for us, where it has made no sense (in all but exception locations) to require on-site district wide energy provision or a % of renewables energy source where a dwelling-centric approach is the most sensible solution. Developers should be required to construct fabric to high energy performance standards and then to mitigate remaining carbon via a levy i.e. Allowable Solutions that can be applied to more effective, larger-scale carbon mitigation. The end game of all policy should be carbon mitigation and broader sustainable solutions, not adherence to performance targets that may not mitigate carbon.

7509 Support

Summary: As a BREEEAM professional I know that BREEAM is a crude and far too bureaucratic system to work effectively. Many issues it covers are simply a repeat of items in the proposed local plan and the building regulations. Better to have a strong local plan suited to the context.

9040 Support

Summary: On small developments, policy should be advisory only, or it will add unnecessarily to building costs

11429 Support

Summary: One means of achieving sustainability and a low carbon footprint is self-build homes. An owner-builder is likely to be more adventurous in their use of low-carbon technologies, and to be invested in making sure they are used effectively as they live in the property. A commercial developer will, however, apply the lowest standards they can get away with, sometimes as a 'box ticking' exercise rather than as a genuine holistic contribution.

14274 Support

Summary: BREEAM just deals with design and construction. Consideration should be given to how the building performs in occupation. We have this for vehicles (MoT) and the mechanism is there for buildings EPC's and then DEC's. Post occupancy evaluation is something that should be carried out on all major new buildings and developements.

CHAPTER: 6 - Sustainable Development, Climate Change, Water &

Option 44 - Detailed targets for on site carbon emission reductions that relate to levels of the Code for Sustainable Homes being sought

7753 Object

Summary: Not sufficiently ambitious.

14637 Object

Summary: Setting targets can be counterproductive. The policy should lay stress on use of proven measures to secure carbon reduction, i.e. something that has an objective and provable basis

6912 Support

Summary: support but the role of renewables in decarbonisation should be recognised in this as well as the Merton approach.

11506 Support

Summary: Agreed

17725 Support

Summary: Natural England generally welcomes Options 41 - 59 which address sustainable development, climate change, water and flooding.

CHAPTER: 6 - Sustainable Development, Climate Change, Water &

Option 45 - Detailed targets for on site carbon emission reductions in line with the findings of Decarbonising Cambridge

14638 Object

Summary: Setting targets can be counterproductive. The policy should lay stress on use of proven measures to secure carbon reduction, i.e. something that has an objective and provable basis

7656 Support

Summary: I'd support the stronger level of policy intervention.

7752 Support

Summary: Support

12643 Support

Summary: Support this more stringent approach. I strongly feel that Cambridge should lead by example here. I think this would be good for the image of Cambridge but ultimately I think it is the right thing to do.

13137 Support

Summary: We would support the objective for carbon reduction in non-residential buildings being linked to planned changes in Building Regulations. Where opportunities exist to achieve standards beyond this (for example connecting to district heating systems) we would support this aspiration in achieving reductions in carbon emissions. All requirements for carbon reduction technology must have regard to development viability (see reference to paragraph 173 of the NPPF) and must not threaten the viability and deliverability of schemes.

13749 Support

Summary: This seems like the best compromise, pushing the boundaries somewhat without putting developers off.

I'm not sure that I fully understand the wording. How can a 70% reduction in carbon emissions be greater than zero carbon?

16927 Support

Summary: We would support a policy which set more challenging targets for carbon emissions reduction from new developments, to be reviewed in the light of early experience.

17728 Support

Summary: Natural England generally welcomes Options 41 - 59 which address sustainable development, climate change, water and flooding.

CHAPTER: 6 - Sustainable Development, Climate Change, Water &

Option 46: Leave carbon reduction to Building Regulations and continue to operate a percentage renewable energy policy

11509 Object

Summary: No, little will be done.

13138 Object

Summary: We would have concerns regarding option 46 as it has the potential to impact upon development viability. A requirement for carbon reductions above that required by Building Regulations could impact negatively on development viability and in turn make developing in Cambridge less attractive to developers and potential investors. Building Regulations would be the preferred method for ensuring that development achieves carbon reductions. We would have concerns regarding any policy seeking standards higher than those required by Building Regulations.

17851 Object

Summary: We object to Option 46 which requires an additional reduction to carbon reduction to that being sought by Building Regulations, to be brought about specifically through the use of on- site renewable energy.
Whilst we acknowledge the need for energy security etc.., renewable energy
generation is the least cost effective way of abating carbon; therefore we strongly
recommend in accordance with Government Policy that a Fabric First approach to
development is undertaken. Thereafter Allowable Solutions should be instigated to leverage wider community improvements and to mitigate emissions. For onsite matters, we consider Building Regulations to be the appropriate control
mechanism.

7751 Support

Summary: Support

13303 Support

Summary: Regulations need to specify % renewables required, supported by planning guidelines. Because of changes in items such as FIT, planning responses need to be much more rapid.

14639 Support

Summary: Setting targets can be counterproductive. The policy should lay stress on use of proven measures to secure carbon reduction, i.e. something that has an objective and provable basis. This particularly the case with so-called 'carbon reduction' and 'renewable energy' initiatives that often owe more to hype and very generous subsidies than to evidence-based research and development.

17729 Support

Summary: Natural England generally welcomes Options 41 - 59 which address sustainable development, climate change, water and flooding.

6975 Support

Summary: Clearly there is need for a policy on reducing carbon emissions, as reducing carbon emissions is a public good with private cost, and will therefore only happen given (worldwide) regulation.

7360 Support

Summary: yes

8264 Support

Summary: need policy

8435 Support

Summary: Option 45

11433 Support

Summary: Support

12347 Support

Summary: A policy on reducing carbon emissions from new development is a key element in successfully reducing Cambridge Carbon emissions over the period.

As in paragraph 6.9: "The achievement of national targets for the reduction of carbon emissions will require action across all sectors of energy use."

13470 Support

Summary: Yes

16260 Support

Summary: In light of the importance of delivering sustainable development, we recognise the need for a sustainable development policy.

16347 Support

Summary: Yes, there is a need for a policy.

17574 Support

Summary: Yes

17849 Support

Summary: In light of the importance of delivering sustainable development, we recognise the need for a sustainable development policy.

CHAPTER: 6 - Sustainable Development, Question 6.9
Climate Change, Water &

6976 Object

Summary: I prefer Option 45. However, while reducing carbon emissions by ensuring that any new build conforms to higher standards is desirable, methods of reducing carbon emissions that involve more building in and around the city and its green belt for the purpose of reducing emissions by commuters is thoroughly undesirable - the latter should instead be addressed by relocating jobs to places where there is already adequate housing build, and by appropriate policies in regard to families at national level (to reduce split families).

11989 Object

Summary: The initial view of University Estate Management Officers is that policy should focus on carbon reduction rather than the provision of on-site renewables.

The level of carbon reduction for non-residential buildings should reflect the changes in Building Regulations (as set out in Option 45) but any more rigorous targets need to be the subject of further consultation and incorporate a degree of flexibility.

Option 46 - continuing to operate a percentage renewable energy policy - is not supported.

This matter will need to be subject to further discussion within the University before a definitive response can be given.

16061 Object

Summary: We suggest that the Council bases its local requirements for sustainability on the stepped targets detailed in the Building Regulations.

17850 Object

Summary: We would broadly support Option 44 that detailed targets for on-site carbon emission reductions should relate to levels of the Code for Sustainable Homes being sought at a national level, and which follows the zero carbon definition and its trajectories. Appropriate wording would however need to be adopted to capture non-residential development. In relation to Option 45, we welcome that the focus remains on delivering national policy via building regulations which is already challenging rather than placing additional impediments. We would object to any proposals which suggested that specific sites could go beyond these levels as the ability to connect into such things as district heating may be restricted due to non-planning issues. Indeed, why is the Policy targeting a 70% trajectory?

7361 Support

Summary: option 45 - enforceable and provides less wriggle room for developers

8266 Support

Summary: Option 45 is preferred on grounds of long-term sustainability

The technologies for renewable energy generation are developing and changing rapidly so care should be taken in mandating particular technologies. Policy should be phrased accordingly

9041 Support

Summary: Option 46

10170 Support

Summary: We prefer Option 46 promoting more renewable energy.

12350 Support

Summary: Option 45 is best.

But it needs extending into non-residential development and should include renewable energy provision.

It's well suited to an ambitious Cambridge Local Plan, being based on Decarbonising Cambridge, it derives from local data and this recent local proposal for meeting our carbon reduction targets.

13473 Support

Summary: Option 45

16268 Support

Summary: We would broadly support Option 44 and Option 45. We object to Option 46.

16349 Support

Summary: Option 45, but it should apply to existing housing as well as new developments.

17575 Support

Summary: Option 45 preferred

CHAPTER: 6 - Sustainable Development, Climate Change, Water & Question 6.10

13073 Object

Summary: The policy should recognise that significant carbon reduction is achieved through energy efficiency measures of a level which could not be achieved through renewable energy sources. It seems more logical to minimise the necessary use of energy before considering generation. Further renewable energy features tend to be more visibility than energy efficiency measures which can cause design issues.

17852 Object

Summary: Whilst covered in Option 47, this section should also recognise is that on-site renewables are not always the most efficient option and this option should allow for contributions to off-site renewables to be taken into account if on-site solutions are not appropriate or viable.

9042 Support

Summary: Requiring local standards will add unnecessarily to building costs

16273 Support

Summary: Whilst covered in Option 47, this section should also recognise that on-site renewables are not always the most efficient option and this option should allow for contributions to off-site renewables to be taken into account if on-site solutions are not appropriate or viable.

CHAPTER: 6 - Sustainable Development, Climate Change, Water & Question 6.11

9043 Support

Summary: No targets - rely on good practice

17576 Support

Summary: The policy could incorporate a sliding scale whereby the standards are higher for larger developments where there are greater profits but also greater increase in overall emissions. The minimum standards could be lower for single dwellings and midway for small developments.

8916 Object

Summary: Is this not a way of allowing developers to do things on the cheap? Wasted energy in the development will still have to be paid for (by the property/ householder). When eventually the conversion to lower carbon usage is unavoidable the developer will be gone and the cost will fall on someone else (probably also the householder). The scheme should be rejected.

9750 Object

Summary: Please disregard response 8267 which was entered in error at this point. The correct response should have been as follows:-
Is this not a way of allowing developers to do things on the cheap? Wasted energy in the development will still have to be paid for (by the property/ householder). When eventually the conversion to lower carbon usage is unavoidable the developer will be gone and the cost will fall on someone else (probably also the householder). The scheme should be rejected.

11647 Object

Summary: I am sceptical of `carbon offsetting'. It seems to me that many of the offsets purchased may be used to finance schemes that would have gone ahead anyway. Developers should be responsible for producing environmentally-friendly buildings, and not just pay a bit extra in order to absolve themselves of this responsibility. If this causes the resulting buildings to be more expensive, so be it. Hopefully, over time this cost will pay for itself. Even if it does not, we have a responsibility to future generations. Think long-term!

12647 Object

Summary: I would need to understand more about this to be convinced. I would not want this to be a way that developers can wriggle through a loophole to avoid putting in the most carbon efficient measures. It should be for cases where such measures cannot be put in place by developers and this is the next best option. The rules for being allowed to go down this route should be very carefully thought through.

13308 Object

Summary: Offsets are not acceptable alternatives to making real improvements and, in a historical buildings context, this would permit planners to oppose reasonable fabric upgrades while imposing an 'environmental tax', which does nothing to help us improve the building stock.

14186 Object

Summary: Support move away from on-site, or specific site related, provision of eg. heat and power generation.

Focus ought be on making energy supply via the national gas and electricity grids efficient and resilient.

Funding should be from all, not via another tax on those wanting to buy homes.

14640 Object

Summary: No. This will be abused as a cheap way out as is done so often with S.106 obligations where you pay a small sum, check to see if it has been spent for a proper purpose within the time allowed and then claw it back if you can.

18576 Object

Summary: We do not support the idea of developers being able to bribe their way out of delivering on their carbon reduction commitments by contributing to a fund. We can see that this would be used to the detriment of certain parts of the City such as Mitchams Corner.

7657 Support

Summary: I am supportive of this, but think that developers often don't contribute enough to these types of funds and really should be encouraged to rethink their model of development instead.

12362 Support

Summary: The fund's "investment in carbon reduction projects" should include "Smaller scale projects, such as retrofit of low carbon technologies to existing buildings"

New developments should deliver CO2 reductions on site, rather than offsetting these. Tough negotiations with developers are called for.

The Fund's projects must result in real carbon savings of at least those the developer would have been obliged to deliver on-site.

Excellent management, communications and transparency of the Fund is needed to attract public support.

13139 Support

Summary: We would support the objective of option 47 to establish a Cambridgeshire Community Energy Fund. This would provide developers with an alternative to providing on-site renewables where this is not possible. Further work would be required in order to identify a suitable mechanism for calculating financial contributions to a Cambridgeshire Community Energy Fund. Where financial contributions or on-site provision has been made to other infrastructural improvements consideration of reduced contributions should be considered in order to ensure development viability and to facilitate development within Cambridge.

17731 Support

Summary: Natural England generally welcomes Options 41 - 59 which address sustainable development, climate change, water and flooding.

CHAPTER: 6 - Sustainable Development, Climate Change, Water & Question 6.12

6977 Object

Summary: Yes, there is a need for a policy on offsetting carbon emissions, as almost always people choose to "offset" rather than comply with carbon emission restrictions, and most such means of "offsetting" actually achieve almost nothing. It is important that developers should have to comply with, rather than get round or offset, carbon emission regulations.

7362 Object

Summary: No - best to require full carbon reduction on site; less wriggle room for developers. Less costs to the council of administering and enforcing the scheme; less complex altogether NOT to have such a scheme.

8606 Object

Summary: The Trumpington Residents' Association comments that there is insufficient information available on how this would work in practice and more research is needed. Developers should be encouraged to meet their zero carbon obligations and not be able to buy their way out by contributing to a Common Energy Fund.

10005 Object

Summary: No policy needed for reasons given in response to option 47 (representation 9750). Is this not a way of allowing developers to do things on the cheap? Wasted energy in the development will still have to be paid for (by the property/ householder). When eventually the conversion to lower carbon usage is unavoidable the developer will be gone and the cost will fall on someone else (probably also the householder). The scheme should be rejected.

11194 Object

Summary: St John's College wish to raise concerns about the direct relevance of any funding that would occur having regard to the location of the development to which it relates.

13101 Object

Summary: Qualified support, developers should seek to address zero carbon obligations primarily through design - the energy fund should not offer 'wiggle room' for avoiding design responsabilities.

17577 Object

Summary: Possibly, but only if it could be reliably demonstrated that local Government has the ability to manage and deliver effective and efficient community energy projects, and that the cost of administering such a fund was reasonable.

18525 Object

Summary: We comment that there is insufficient information available on how this would work in practice and more research is needed. Developers should be encouraged to meet their zero carbon obligations and not be able to buy their way out by contributing to a Common Energy Fund.

8436 Support

Summary: yes

9044 Support

Summary: Unworkable in practice. Rely on good practice.

10171 Support

Summary: We are in favour of a community energy fund which allows developers to contribute to energy saving in existing homes. It is more cost effective, usually, to upgrade existing houses than to build PV panels.

We would also like to have a fund in which Cambridge people can invest for community renewable energy projects in Cambridge

12045 Support

Summary: The initial view of University Estate Management Officers is that the option to off-set any carbon reduction that cannot be achieved on site is worthy of further consideration. We suggest that this is dealt with as part of any policy developed to secure carbon reduction, so as to avoid a proliferation of policies in the Local Plan.

This matter will need to be subject to further consultation with the University on detailed proposals before a definitive response can be given.

12353 Support

Summary: Offsets are problematic. Often people feel free to continue their emissions, instead of reducing them to the minimum, because they're being offset. Offset schemes often fail to deliver their claimed savings because they are double-counted by more than one scheme or because of high overheads or poor management and monitoring. These worries also apply here. Offsetting should be a last resort when all possible carbon reductions have been made.

The actual on-site reductions should be maximised. Any payment to a Community Energy network must result in off-site savings, equivalent to the residual on-site emissions.

12364 Support

Summary: Yes, clear policy and transparency of the Fund will help attract public support and assist it making real carbon savings.

13478 Support

Summary: Yes

16170 Support

Summary: Adopting a policy that allows developers to contribute towards off-site renewables in lieu of on-site provision is supported. Restricting this only to the Cambridgeshire Community Energy Fund is considered too limiting and there should be flexibility for off-site contributions to be made to other properly constituted bodies. In part, this is due to the local opposition to certain types of renewables within Cambridgeshire which could limit the effectiveness of the Fund.

16350 Support

Summary: Yes, there is a need for a policy.

CHAPTER: 6 - Sustainable Development, Climate Change, Water & Question 6.13

17803 Object

Summary: How would such a fund be administered?
How would such projects be selected to receive funding? How would effectiveness be monitored?
Would Developers use this as a cheap and easy option to avoid their environmental responsibilities that they will always be able to negotiate lower?

CHAPTER: 6 - Sustainable Development, Climate Change, Water & Question 6.14

8270 Object

Summary: An option for offsetting carbon reduction often provides an easy way to 'meet targets' without achieving the purpose of the target (i.e. reducing emissions). Developers must be required actually to reduce emissions by providing good quality housing.

16173 Support

Summary: Contributions should be allowed to other appropriate bodies, not just the Cambridgeshire Community Energy Fund - as recognised in the current 'Allowable Solutions' policy proposals.

17805 Support

Summary: Developers would still be required to meet minimum emission standards (e.g. present standards or above, but could offset any excess requirements against a payment to the fund.

CHAPTER: 6 - Sustainable Development, Climate Change, Water & 6.14

6913 Support

Summary: UK lags the rest of Europe in district heat. New development (especially mixed use development) offers opportunities for renewable CHP with district heat and these should be supported and promoted in the plan

15200 Support

Summary: There could be an opportunity to use the city sewage works to generate energy via anaerobic digestion. The industry already has the expertise to do this for their own internal needs. Perhaps they could also provide district heating for Northern Fringe East developments, especially if the works are modernised and down-sized.

When additional organic feedstock is required to meet the demands of winter CHP a solid waste stream arising from the Green Bin scheme could be added to the process.

CHAPTER: 6 - Sustainable Development, Climate Change, Water & Option 48 - Renewable and low carbon energy generation

8271 Object

Summary: This option is too vague. There should be some indication of how energy is to be generated.

14641 Object

Summary: No. Having experienced the benefits of a district heating system it is something that needs very careful planning and an essential criterion is that those connected to it have the means to control the level of heating provided, other than by opening windows, the method we found necessary on the Tachbrook Estate in Pimlico.
Low carbon generation should be encouraged but many systems have poor performance and reliability records as yet. The aim should be that any installation should relate to the specified minimum lifetime of the building, around 30 years for many commercial buildings.

17844 Object

Summary: Whilst the aspiration to connect into existing district heating systems or encourage new ones is perfectly reasonable, there seems to be little recognition of the potential difficulties of achieving this. This is not simply a cost or planning issue but extends to legal issues (iei.e. developers may not have the right to connect into systems owned and controlled by others) and such things as the impact on adoptability of services and highways, all of which must be taken into account.

18067 Object

Summary: Maximise micro and mid-scale
Local energy networks to efficiently use treated heat and power
Large scale - waste to power plant
Waste:
Local collection/recycling points

7658 Support

Summary: Good plan.

11512 Support

Summary: Sounds good.

12370 Support

Summary: We Support the development of a policy to promote the development of renewable and low carbon energy generation within Cambridge, including community energy projects.

Solar, Wind, Biomass, waste and district heating show promise for generating significant low-carbon energy.

District heating has some promise, particularly in developments around Addenbrookes.

Community energy projects build public support and finance for renewables. They enable participation by people who don't own a suitable site for renewables.

From October Solar Thermal installations will be supported by the Renewable Heat Incentive

12649 Support

Summary: This sounds good in theory, but I'm not sure I fully understand how it would work.

13143 Support

Summary: We support the principle of Option 48 regarding renewable and low carbon energy generation. We would have concerns regarding the impact of such requirements on viability and would seek for any policy to have regard to site specific issues including an assessment of the impact of providing energy generation on site and the cost of providing infrastructure to allow connection to district heating systems for example. Issues of development viability must be considered when drafting this policy. Requirements should not be above and beyond those set out in current Building Regulations as this could threaten development viability within the city.

13309 Support

Summary: A positive approach to more strategic renewable and low carbon energy generation is welcomed.

17733 Support

Summary: Natural England generally welcomes Options 41 - 59 which address sustainable development, climate change, water and flooding.

CHAPTER: 6 - Sustainable Development, Climate Change, Water & Question 6.15

6978 Object

Summary: Yes. The suggested policy to support the development of community heating methods is good. However, it should not be applied to new build only, but also be made available to existing buildings where it is the most appropriate next method to reduce energy wastage.

Further, the need to cool as well as heat should not be overlooked, particularly given the predictions for increases in mean temperature outlined in this report.

9045 Object

Summary: Not an efficient solution. Rely on good practice.

17807 Object

Summary: Possibly, but will this not be covered by the standards for low energy emissions above

17845 Object

Summary: Whilst the aspiration to connect into existing district heating systems or encourage new ones is perfectly reasonable, there seems to be little recognition of the potential difficulties of achieving this. This is not simply a cost or planning issue but extends to legal issues (iei.e. developers may not have the right to connect into systems owned and controlled by others) and such things as the impact on adoptability of services and highways, all of which must be taken into account.

7363 Support

Summary: yes

8272 Support

Summary: need policy

8437 Support

Summary: yes

10172 Support

Summary: Yes. We support strategic district heating areas.

12374 Support

Summary: Yes:
The developing UK renewables market has suffered from uncertainty and sudden changes in incentives, as when the Feed in Tariff was suddenly halved.
Clear local policy will help planning and provision of more renewables.

12506 Support

Summary: An excellent proposal.

13480 Support

Summary: Yes

16176 Support

Summary: Whilst the aspiration to connect into existing district heating systems or encourage new ones is perfectly reasonable, there seems to be little recognition of the potential difficulties of achieving this. This is not simply a cost or planning issue but extends to legal issues (ie developers may not have the right to connect into systems owned and controlled by others) and such things as the impact on adoptability of services and highways, all of which must be taken into account.

16351 Support

Summary: Yes, there is a need for a policy. What already exists?

CHAPTER: 6 - Sustainable Development, Climate Change, Water & Question 6.16

12046 Object

Summary: Any policy encouraging renewable and low carbon energy generation should not focus solely on district heating.

7364 Support

Summary: should be applied to/encouraged for existing communities, not just to new ones - especially council owned stock.

9176 Support

Summary: The Council should look to work with the local universities to seek funding and provides locations suitable for piloting renewable energy / carbon reduction schemes. Benefits include action on climate change, integration of town and gown, real-life testing of "blue-sky" ideas, jobs, investment.

14941 Support

Summary: There is an opportunity at Jesus Green weir to install a hydro-power scheme.

16355 Support

Summary: Yes, agree with this. Vital that new developments are planned with our changing climate in mind, as well as ensuring that they do not exacerbate climate impact for neighbouring communities.

CHAPTER: 6 - Sustainable Development, Question 6.17
Climate Change, Water &

15078 Object

Summary: The other point is in relations to sustainable energy. There is no mention anywhere of wind energy. I appreciate that the City has fairly tightly defined boundaries fairly close to the urban footprint but it should nonetheless seek to establish whether there may be locations potentially suited to an appropriate scale of wind energy use particularly towards the boundaries and, having regard to the duty to co-operate with neighbouring authorities, the potential for cross boundary sites that may have application for generating carbon free electricity in the context of land/co-operation traversing planning authorities

CHAPTER: 6 - Sustainable Development, 6.16
Climate Change, Water &

9180 Support

Summary: The policies on flooding and new development do not match the strength of wording.

CHAPTER: 6 - Sustainable Development, Option 49 - Climate change adaption
Climate Change, Water &

13311 Object

Summary: It is recognised that climate change factors need to be considered but such a policy is overly restrictive. It is already part of the general design principles. It should be noted that inclusion of a climate change adaption strategy in the Design and Access Statement is not currently a national requirement.

7659 Support

Summary: Urban greening, design solutions, and urban form itself are all fundamental elements of a successful approach.

10786 Support

Summary: Basically good ideas

11513 Support

Summary: Sounds good.

12167 Support

Summary: The considerable biodiversity (see p. 169), as evidenced by many bird species (e.g., herons, owls, woodpeckers) on the river Cam, in the trees and hedgerows, and other wild fauna and flora, contribute essentially to the character of these Green Belt areas; they are highly valued by walkers and others involved in recreational activities. Encouragement and the taking of personal responsibility may be preferable ways of achieving them, rather than via Regulations.

12651 Support

Summary: Sounds good in theory but would like more detail on this policy please.

13147 Support

Summary: We would support the objectives of option 49. The redevelopment of Compass House would allow for the inclusion of a range of features which would aid climate change adaptation. If a Climate Change Adaptation Strategy is proposed to be included in Design and Access Statement's, we would welcome guidance from Cambridge City Council on the requirements of this. There may be impacts on development viability as a result of the application of a policy on climate change adaptation. At all times regard should be had to the NPPF guidance on ensuring the viability of sustainable development (see paragraph 173).

14642 Support

Summary: I like the aspiration but can this be turned into a sensible policy aim? Orientation is often constrained by other factors and trees, whilst beneficial, can sometimes be very bad neighbours, especially when that pretty garden shrub turns out to be a giant standard tree.
Conserving and recycling energy and water makes sound economic sense and it is to be hoped that the capital costs of doing both will come down to encourage both.

16191 Support

Summary: We would support the development of a policy to address climate change adaptation and would be happy to assist further in the development of a policy to address this issue.

17735 Support

Summary: Natural England generally welcomes Options 41 - 59 which address sustainable development, climate change, water and flooding.

17848 Support

Summary: We broadly support these objectives and have used an emerging methodology for incorporating climate change adaptation measures into masterplan's and urban design. To mitigate and adapt to future climate change, places will to incorporate green and blue infrastructure to ameliorate future temperatures and to reduce the effect of urban heat island affect. However, whilst the building design will utilise proven passive approaches this must not be at the expense of high-quality placemaking. In addition, the legacy costs and the future funding of maintaining such places will need to be carefully reviewed in light of S106, CIL and the emerging Flood and Water Management Act.

CHAPTER: 6 - Sustainable Development, Question 6.18
Climate Change, Water &

9046 Object

Summary: Council would have to make automatic grants of at least 75% of costs as an incentive.

11200 Object

Summary: The fourth bullet point within Option 49 refers to "consideration could be given to setting a tree canopy cover requirement for new developments" - this reference to tree canopies is unclear and further detail is sought as to the intentions of any such policy as it relates to new development.

12047 Object

Summary: There is no need for a separate Local Plan policy but advice could be incorporated into the Sustainable Design & Construction SPD and should cover alterations to existing buildings. Any guidance should be realistic in its aspirations and have regard to viability issues.

7365 Support

Summary: yes

8273 Support

Summary: need policy

8438 Support

Summary: yes

10175 Support

Summary: There are two parts to this policy which is confusing. The adaptation measures listed address both:
* Large scale problems such as the heat island effect and drainage problems
* Individual building scale problems due to high temperatures
Planning policy should be targeting mainly the large scale problems which can be mitigated by landscaping whereas the individual building issues should be handled through building regulations.

However, we agree that adaptation is needed at all levels.

10266 Support

Summary: Support as this is a vehicle to help protect, enhance and increase the area of wildlife habitats and gren spaces throughout the city.

10787 Support

Summary: Yes

10934 Support

Summary: Yes, although the measures listed and further development do not go hand in hand.

11434 Support

Summary: Support

12377 Support

Summary: Clear information and policy on likely climate change impacts will help good planning for adaptation. Requiring developers to produce a climate change adaptation Strategy will improve attention to adaptation.

Developers and planners need to anticipate changes in climate and design for them.
eg: The expected rising summer temperatures will increase the demand for cooling in buildings, which could be eased by clever design of natural ventilation and shading.

13039 Support

Summary: Living in a flood risk zone and having faced recently two flood alerts I find it essential that climate change be taken into account in planning new development, especially when it comes to water management.

13482 Support

Summary: Yes

13788 Support

Summary: This area seems currently rather overlooked - but measure to mitigate the effects of climate change will have a very positive impact on everyday lives of the population

16356 Support

Summary: Yes, there is a need for a policy.

17809 Support

Summary: Seems to be legal requirement

CHAPTER: 6 - Sustainable Development, Question 6.19
Climate Change, Water &

10520 Object

Summary: I should like to see the inclusion of green walls as a suggested element in building design.

17811 Object

Summary: Measures only focus on global warming and rising sea levels.

7366 Support

Summary: should be applied to/encouraged for existing communities, not just to new ones - especially council owned stock. Why does council prevent individual leaseholders investing in solar panels? More enforcement and planning control needed to control 'hard surfacing' of gardens etc.

14301 Support

Summary: Regarding urban landscaping and the role of trees reference should be made to DEFRA's recent independent panel report on forestry:
http://www.defra.gov.uk/forestrypanel/

CHAPTER: 6 - Sustainable Development, Question 6.20
Climate Change, Water &

14321 Support

Summary: The use of 'cool' building materials to reduce the impact of higher temperatures needs to be better explained. Heavy materials retain heat and act as a radiator (good in winter, bad in summer).
In extended periods of hot weather thermal mass can be counter-productive.
Also the colour of materials needs to be considered, ie lighter coloured materials for roofs and walls can help reduce the effect of the urban heat sink effect.

CHAPTER: 6 - Sustainable Development, 6.18
Climate Change, Water &

6979 Support

Summary: Yes, as indicated above all methods of cheap cooling available need to be considered. A provision on minimum level of tree canopy cover, affecting not only new build but also existing parts of the city, would be most welcome.

11294 Support

Summary: I work in a Council owned building which must the THE most energy-inefficient building on the planet. Council needs to get its own house in order in this respect.

CHAPTER: 6 - Sustainable Development, Climate Change, Water & Option 50 - Consequential improvements policy

8274 Object

Summary: We do not believe that implementation should be 'required' although we do believe it should be encouraged and that the long term financial advantages of implementation should be made clear.

11935 Object

Summary: I think that compulsion in this matter is inappropriate. The cost/benefit impact to the householder should be a consideration. For example, insulating an older (non-cavity wall) property could be very expensive.

13313 Object

Summary: Such a policy would put a severe financial strain on major landowners, and suggests that small improvements would unleash major upgrading to the entire building. In College terms, this could mean that an improvement in an attic area might require (unaffordable) work to an entire range of buildings in order to achieve planning approval. Equally it may have the opposite effect of delaying minor works until they are affordable.

14643 Object

Summary: Cambridge has many older buildings the are likely to be retained for the foreseeable future. The policy should allow and encourage the fitting of double-glazing, insulation and other measures to reduce the their carbon footprint and make them more user-friendly even if this 'compromises' the character of the building for the purists. Compulsion is not the best way of achieving this object given the powers of some agencies and specialists to raise issues with even the most modest proposals that affect a building of architectural or historic interest.

14841 Object

Summary: Strongly object. Property owners wishing to do loft conversions/extensions should not be encumbered by 'yet more red tape'.

18063 Object

Summary: Don't just rely on "consequential-improvements" stick - offer carrots
Provide finance opportunities (Bank of Dave, Boring Bank of Cambridge, Cambridge Retrofit, Community Energy Funds - locally targeted) for private and public sector housing
upgrade to address climate change mitigation and adaptation.
Adopt mandatory/advisory standards with regard to conservation/heritage (as Historic Scotland) with regard to replacement d/glazing etc
Build on / coordinate multifarious existing initiatives, bodies to give simple, relevant, consistent advice about priorities, constructions, risks etc. Use College/Universities experience/expertise to inform this (Guthrie, Middleton, New Ct). Monitor and understand - can't fit and forget.

12653 Support

Summary: I think this is really important for a city like Cambridge. There are for example a lot of houses with solid walls that have no cavity to fill. Insulating these properties is very expensive though, so there should be some sort of (meaningful!) grant to help people to carry out this work. I could see this as a potential option for the community energy group policy- essentially getting develpoers to subsidise. As above this would have to be very tightly controlled to stop developers just taking the easy (cheap) option!

16357 Support

Summary: Agree, but why does this poilcy only apply to planning permissions for new work on existing houses? Should it not apply to all properties?

16928 Support

Summary: This is an imaginative policy which would require other cost effective energy improvements or water saving measures to be made to a property as and when loft conversions or extensions (needing planning permission) were undertaken. It would have a marked and positive impact on existing residential areas such as this, particularly if it were applied sensitively so as not to discourage the more limited but worthwhile schemes.

17736 Support

Summary: Natural England generally welcomes Options 41 - 59 which address sustainable development, climate change, water and flooding.

CHAPTER: 6 - Sustainable Development, Climate Change, Water & Question 6.21

7488 Object

Summary: It is highly unfair to penalise householders who attempt to improve their homes by imposing additional work to the rest of the house!
Firstly many will be on a tight budget and may not be able to afford the additional work, secondly many may not want to submit to the added inconvenience. The result of this restrictive policy wil be to discourage improvementts in private homes!

9461 Object

Summary: Further regulation which restricts the freedom of existing home and business owners should not be introduced. Imposing onerous energy improvement requirements acts as a disincentive to owners to make any improvements at all. Much better to have a small improvement to what might be an old and very inefficient building (which owners can afford), than to insist on big improvements which the owners cannot afford and end up doing nothing.

12051 Object

Summary: There is no need for a separate Local Plan policy as Building Regulations deal with this matter sufficiently.

17812 Object

Summary: Not necessarily. The new build component would be covered by the policies above, and the heritage asset of the existing building should have precedence over energy conservation.

6980 Support

Summary: Yes - and I would support the policy entitled Option 50.

7367 Support

Summary: yes

8097 Support

Summary: Need for policy. I support option 50

8275 Support

Summary: need policy

10176 Support

Summary: Yes - especially we should be considering requiring water efficiency measures in existing homes.

10936 Support

Summary: Yes, which should focus on the small scale e.g. grants for loft insulation, water butts etc.

12385 Support

Summary: This policy is needed for improving the energy performance of the city's current housing stock.

We support the City Council leading on this, in spite of the government shelving a similar scheme.

Low-carbon Retrofit has a bigger part to play than new development in reducing carbon emissions from buildings.

Consequential improvements are one of the few planning levers that can require work to improve building energy performance.

Since builders are already on-site for the extension (or other work being undertaken), it's a cost-effective time to improve other aspects of the building's energy performance.

13483 Support

Summary: Yes

16360 Support

Summary: Yes, there is a need for a policy.

CHAPTER: 6 - Sustainable Development, Climate Change, Water & Question 6.22

17813 Object

Summary: How is 'cost effective' defined and would such a policy prevent people form considering upgrading homes

7368 Support

Summary: Why does council prevent individual leaseholders investing in solar panels? More enforcement and planning control needed to control 'hard surfacing' of gardens etc.

12404 Support

Summary: Other energy efficiency opportunities in existing buildings:

New Option 1: Private Rented property EPC policy:

that Cambridge City Council develop a stronger policy based on The Energy Act 2011 that requires from April 2018, all private rented properties to be brought up to a minimum energy efficiency standard likely to be EPC rating "E", especially if the national requirements slip further.

New Option 2: Policy to Support low-carbon choices in buildings.

Choices made by people who use and control buildings are key to reducing their carbon emissions.

eg:
* thorough draft-proofing
* better heating controls, used effectively
* improving insulation, (with Green Deal help?)

13484 Support

Summary: I agree with the principle of adapting buildings to better cope with climate change, but would like to stress that this should not be at the expense of adversely affecting the historic environment or character of conservation areas. It is entirely possible to develop sustainable, energy-saving measures within old buildings without affecting their character.

13888 Support

Summary: There has been no reference to the Cambridge Retrofit project. This seeks to achieve carbon reductions in line with national targets by focusing on the existing housing stock; the whole stock not just houses undergoing other improvements.

It will require a financing model of course and the Government Green Deal will be the first test. As it seems unlikely this will appeal to the majority, Retrofit will explore other models as well as seeking a skilled workforce and cost reductions.

The Local Plan should support this project wholeheartedly.

CHAPTER: 6 - Sustainable Development, Climate Change, Water & Question 6.23

17815 Object

Summary: Surely incentives to increase energy efficiency are more effective than compulsion