

## **Appendix B: Extract from the Cambridge Local Plan Issues and Options Report (2012): Carbon reduction options**

### **Reduction of carbon emissions from new development**

- 6.9 The achievement of national targets<sup>1</sup> for the reduction of carbon emissions 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 greenhouse gas emissions, through measures such as improving energy efficiency and the provision of on-site renewable and low carbon energy generation. Consideration will also need to be given to the role of the Local Plan in supporting improvements to the existing building stock in Cambridge (see Option 50). There are also links with transport, in terms of encouraging the use of more sustainable modes.
- 6.10 The Decarbonising Cambridge Study considered the impact that setting targets for carbon reduction would have on the viability of new development. Such a policy approach would represent a move away from percentage renewable energy policies such as the Council's existing 10% renewable energy policy. It would take account of the hierarchical approach to reducing carbon emissions through improvements to building fabric and energy efficiency as well as provision of low carbon and renewable energy. It would also provide developers with greater flexibility in how to meet the levels of carbon reduction required. However, it is considered that there may still be merit in including a percentage renewable energy approach, similar to Policy 8/16 in the 2006 Local Plan, which requires 10% renewable energy to form part of the energy strategy for major developments, dependent on the levels of carbon reduction sought in the final plan. Under the government's initial proposals for zero carbon homes, which required zero regulated and unregulated carbon emissions from new homes, percentage renewable energy policies would arguably have become redundant. However, as part of the budget announcement of 2011, the definition of 'zero carbon' was relaxed to consider regulated emissions only. Add to this the recent consultation on future changes to Building Regulations, which proposed a further relaxation in the levels of carbon reduction required from new homes, and there may still be a role for percentage renewable energy policies in the future.
- 6.11 In light of the above, three options are put forward for possible future policy development, informed by the Council's evidence base. They are considered to be the most reasonable approaches that would help achieve the vision of the Plan for Cambridge to become a low carbon city and to achieve the aims of the NPPF for planning to help secure radical reductions in carbon emissions. There comes a point in levels of carbon reduction where

---

<sup>1</sup> As part of the Climate Change Act (2008) the UK has adopted a national target of reducing carbon emissions by 80% by 2050 with an interim target of a 50% reduction in carbon emissions by 2025

renewable energy provision becomes necessary to meet the required reduction, for example in line with the energy requirements of Level 4 of the Code for Sustainable Homes. However, the recent consultation on proposed changes to Part L of Building Regulations in 2013 recommends a lower level of carbon reduction than originally set out by government.<sup>2</sup> If this level were adopted nationally as part of Building Regulations, the utilisation of renewable or low carbon energy generation would no longer form a part of a development's carbon reduction strategy. While the hierarchical approach to reducing carbon emissions is fully supported, it is considered that the incorporation of renewable technologies into schemes should still form an important element of carbon reduction strategies in light of concerns surrounding fuel security and national targets for renewable energy generation. The Council's evidence base clearly shows that there are opportunities across the city for planning policy to help secure higher levels of carbon reduction than those being brought forward by changes to Building Regulations.

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

One option could be to develop a detailed policy requiring specific levels of on-site carbon reduction from all new major development sites in Cambridge. In line with Option 43 for the development of sustainable construction standards, for homes this would equate to a 44% reduction in carbon emissions for all development up to 2016. After 2016, the policy would need to reflect that new homes should be achieving 'zero carbon' status. For non-residential buildings, the timetable for zero carbon non-residential buildings (2019) would be followed.

Such an approach would be unlikely to have a significant impact on the viability of development, as it would be in keeping with the current levels of carbon reduction that will ensure development is on the path of meeting zero carbon policy by 2016 (for new homes) and 2019 (for non-residential development). 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 base for climate change, which suggests higher levels of carbon reduction would be viable. It would also fail to meet the NPPF's aims for planning to help secure radical reductions in carbon emissions.

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

A second option could be to develop a detailed policy requiring specific levels of on-site carbon reduction from all major new residential

---

<sup>2</sup> Communities and Local Government (2006), Building a Greener Future: Towards Zero Carbon Development. This document recommended a 44% reduction (compared to 2006 Building Regulations and equivalent to Level 4 of the Code for Sustainable Homes) in carbon emissions be incorporated into 2013 Building Regulations. This has now been revised down to an approximate 33% reduction in carbon emissions utilising energy efficiency and improvements to building fabric.

development that seek to go beyond the levels of carbon reduction that will be brought in through changes to Part L of Building Regulations in 2013 and 2016 and zero carbon homes policy. Evidence contained within the Decarbonising Cambridge Study suggests that a level of carbon reduction in the order of 70% (above 2006 Building Regulations levels) would be a feasible level to set, bearing in mind impacts on viability. This would set a level of carbon reduction higher than the energy requirements of the Code for Sustainable Homes target being considered under Option 43, consistent with the recommendations of the Decarbonising Cambridge Study. Indeed such a target would be greater than the levels of on-site carbon reduction being sought nationally through zero carbon homes policy, which comes into force from 2016.

The pathway for zero carbon non-residential buildings is less well defined. As such, it is suggested that levels of carbon reduction follow planned changes to Building Regulations. Opportunities to go beyond these levels could be pursued for those sites that could connect to infrastructure such as district heating.

While this approach 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 emissions, there could be a concern from developers of the impact on viability of their proposals.

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

A third option could be to leave the setting of carbon reduction for new development to Part L of Building Regulations, but continue to require a percentage of carbon reduction to be brought about specifically through the use of renewable energy. This requirement would be in addition to levels of carbon reduction sought by Building Regulations.

This approach is being considered in light of the recent consultation on changes to the 2013 Part L Building Regulations, which includes an option that would decrease the level of carbon reduction originally intended as part of the transition towards zero carbon policy in 2016.

The advantage of such a policy approach is that it will help to deliver renewables if the level of carbon reduction incorporated into Building Regulations is reduced. Such an approach is considered as part of the emerging Merton Rule Study<sup>3</sup>. There could be concerns about the impact of such a policy on the viability of new development, and this would need to be taken into account.

#### **Questions**

---

<sup>3</sup> Climate Works Ltd (2012), A review of Merton Rule-style policies in four LPAs in Cambridgeshire

6.8 Is there a need for a policy addressing this issue?

6.9 Which of the options do you prefer?

6.10 Are there any points which have been missed and you feel should be added (perhaps even an entirely new option)?

6.11 Are there any other reasonable alternatives that should be considered at this stage?