

**LOCAL PLAN SUB COMMITTEE
4 JULY 2019**

PART I

**LOCAL PLAN
DCES**

1 Summary

1.1 TOPIC PAPER: CARBON DIOXIDE EMISSIONS AND ON SITE RENEWABLE ENERGY

1.2 This topic paper sets out the issues which the new Local plan will need to address in relation to carbon dioxide emissions and renewable energy and proposes policy wording to be contained within the new Local Plan.

2 Details

2.1 The Climate Change Act 2008 requires that the net UK carbon account for the year 2050 is at least 80% lower than the 1990 baseline and is the basis for the UK's approach to tackling and responding to climate change. It requires that emissions of carbon dioxide and other greenhouse gases are reduced and that climate change risks are prepared for.

2.2 The UK Government has set five-yearly carbon budgets¹ which currently run until 2032. They restrict the amount of greenhouse gases the UK can legally emit in a five-year period. The UK's fifth carbon budget aims to limit the annual emissions to 57% below 1990 levels by the year 2032.

Budget	Carbon Budget Level	Reduction below 1990 levels
1 st carbon budget (2008-2012)	3,018 MtCO ₂ e	25%
2 nd carbon budget (2013 to 2017)	2,782 MtCO ₂ e	31%
3 rd carbon budget (2018 to 2022)	2,544 MtCO ₂ e	37% by 2020
4 th carbon budget (2023 to 2027)	1,950 MtCO ₂ e	51% by 2025
5 th carbon budget (2028 to 2032)	1,725 MtCO ₂ e	57% by 2030

Table 1: UK Carbon Budgets

2.3 UK emissions were 43% below 1990 levels in 2017 and on track to meet the 3rd carbon budget but it is not on track to meet the fourth (2023 – 2027).²

¹ A carbon budget places a restriction on the total amount of greenhouse gases the UK can emit over a 5 year period.

² To meet future carbon budgets and the 80% target for 2050 there will need to be a reduction in emissions of at least 3% a year – Source – Committee on Climate Change - independent statutory

2.4 Current Local Plan Policy

2.5 At the time of drafting the Core Strategy and the Development Management Policies Local Development Document (LDD), the Government had published 'Building a Greener Future: Towards Zero Carbon Development and Planning Policy Statement: Planning and Climate Change (2007) which stated:

- Where the net carbon emissions from all energy use in the home would be zero carbon over a year, development may be described as zero carbon
- The Government's intention for all new homes to be zero carbon by 2016 (and zero carbon non-domestic buildings from 2019) with a progressive tightening of the energy efficiency building regulations.³

2.6 In 2009 the Minister for Housing and Planning confirmed the policy to require all new homes to be zero carbon from 2016 and set out the following proposals which would be taken to implement it.

2.7 Developments would not be required to achieve zero carbon emissions entirely within the site boundary. Instead there would be a minimum requirement for emission savings through energy efficient design of the building fabric⁴ (set by Building Regulations).

2.8 The table below sets out the then proposed changes to Part L of the Building Regulations which would result in a stepped approach to reducing carbon dioxide emissions through the building fabric.

Date	2010	2013	2016
Energy carbon improvement as compared to Part L of Building Regulations 2006	25%	44%	Zero carbon

2.9 Further measures would be required to achieve 'carbon compliance' on site bringing the emission savings on site up to 70% by 2016. These would include measures such as improved energy efficiency of the buildings fabric (above what was required by Building Regulation, on site low carbon and renewable technologies and/or connection to on site or off site heat networks or a combination of these measures).

body established under the Climate Change Act 2008 <https://www.theccc.org.uk/tackling-climate-change/reducing-carbon-emissions/carbon-budgets-and-targets/>

³ There was to be a step change in Part L of the Building Regulations in 2013 and 2016

⁴ This excludes unregulated emissions from items such as household appliances (fridges, computers etc.)

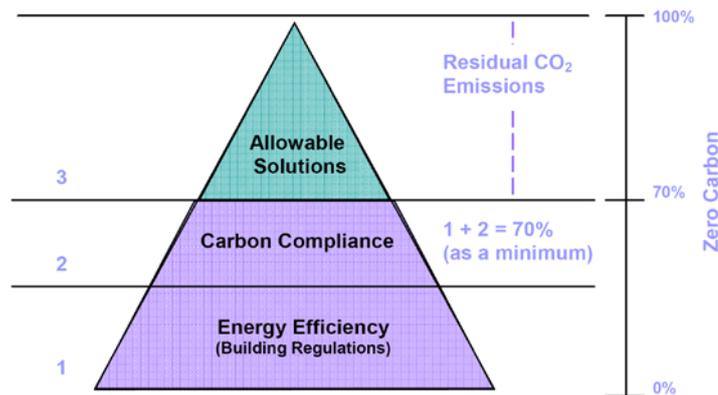


Figure 1 Achieving Zero Carbon Homes from 2016

- 2.10 The residual carbon dioxide emissions beyond carbon compliance in 2016 were to be dealt with through 'Allowable Solutions' which were likely to have included:
- Carbon compliance – beyond the minimum 70%
 - Credits or energy efficiency appliances or building to reduce energy demand
 - Exporting low carbon or renewable heat from development
 - Credit for contribution by the developer in low carbon or zero carbon energy infrastructures such as a local heat network
 - Improving the energy efficiency of existing buildings in the vicinity.
- 2.11 Policy CP1 of the Core Strategy (2011) set out the requirement that development proposals would produce 25% less carbon dioxide emissions than Building Regulations Part L (2006) requirements with a minimum of 10% being provided by on site renewable and/or low carbon (i.e. Combined Heat and Power) energy systems. Where on site renewable technology was not feasible then a connection to a local, decentralised, renewable or low carbon energy supply would be considered as a substitute for on-site renewables.
- 2.12 Policy CP1 also stated that the Council would set higher targets for carbon reduction and energy contributions from renewable sources in the forthcoming Development Management Policies Local Development Document in line with the Government's target for all new homes to be zero carbon by 2016 and non-domestic developments to be zero carbon by 2019.
- 2.13 Policy CP1 also required that applications for all new development of one unit and above and for all new commercial development submit a CPLAN Energy and Sustainability Statement demonstrating the extent to which sustainability principles had been incorporated into the development and the expected carbon emissions.
- 2.14 CPLAN was a web based carbon and energy compliance assessment tool which assessed the carbon impact of new development against our policy targets. The Council introduced CPLAN in May 2008 and the information collected from applications was used as part of the evidence base for the policies contained in the

Core Strategy and the Development Management Policies LDD. An example of a CPLAN Management Report is attached as Appendix 1 to this report.

- 2.15 Policy DM4 of the Development Management Policies Local Development Document set higher targets linked to the anticipated changes to the Building Regulations⁵.

DM4 Carbon Dioxide Emissions and On-Site Renewable Energy

a) From 2013, applicants will be required to demonstrate that development will produce 5% less carbon dioxide emissions than Building Regulations Part L requirements (2013) having regard to feasibility and viability. This may be achieved through a combination of energy efficiency measures, incorporation of on-site low carbon and renewable technologies, connection to a local, decentralized, renewable or low carbon energy supply.

In the event of a delay to the revision of Part L of the Building Regulations anticipated in October 2013, applicants will be required to demonstrate that development will produce 10% less carbon emissions than required by Building Regulations Part L 2010 until such a time the revisions are made.

b) From 2016, applications for new residential development will be required to demonstrate that the development will meet a zero carbon standard (as defined by central government). The same standard will be applied for non-domestic buildings from 2019.

c) In line with Government policy, the Council will support a range of allowable solutions for dealing with the remaining carbon emissions. This may include payment into a Carbon Offset Fund which will be used to retrofit existing building stock with energy saving measures for the future. The approach will be set out in a further SPD.

- 2.16 The DMPLDD also stated that it was the Council's intention to implement a 'Carbon Offset Fund' as part of the Government's 'allowable solutions' approach for cases where sufficient reductions in carbon dioxide emissions could not be met on site. The payments into the fund were intended to support initiatives to reduce carbon emissions within the existing building stock⁶ with energy savings measures.

- 2.17 In July 2015 the HM Treasury published a document entitled 'Fixing the foundations: Creating a more prosperous nation - a plan for increasing Britain's productivity'. It was this document that the Government stated that they were not going 'to proceed with the zero carbon Allowable Solutions carbon offsetting scheme, but will keep energy efficiency standards under review, recognising that existing measures to increase energy efficiency of new buildings should be allowed time to become established'.

- 2.18 Essentially this ended the policy for homes to be zero carbon by 2016 and non-domestic properties to be zero carbon by 2019 and revisions to the Building

⁵ The DMPLDD was submitted for examination in December 2012 and the examination hearings were in early March 2013 and the policy anticipated the change to the Building Regulations that were due in October 2013. Part L of the building regulations eventually came into effect on 6 April 2014.

⁶ The Hertfordshire Renewable and Low Carbon Energy Study (2010) highlighted that the existing residential building stock was responsible for a significant volume of total carbon emissions – accounting for 40% of total emissions within Hertfordshire.

Regulations which have not been updated since 2013. As a result we have only been able to apply part a) of Policy DM4 since July 2015.

- 2.19 In addition, due to the scrapping of the zero carbon standard, CPLAN (carbon assessment tool) was withdrawn by the company that provided it, in March 2016. It was replaced by a requirement for applicants to provide an Energy Statement to demonstrate compliance with Policy DM4. A copy of the Guidance on producing an energy statement is attached at Appendix 2 to this report.
- 2.20 Recently, a Climate Change (Net Zero UK Carbon Account) Bill⁷ had its first reading in the House of Commons. The aim of the Bill is to require the net UK carbon account by the year 2050 is zero. There is no indication on the progress of the Bill.

3 Legislation and National Policy

- 3.1 This section of the Topic Paper sets out the relevant legislation and national policy that the new Carbon Emissions and Renewable Energy policy will need to comply with.
- 3.2 There is a legal duty set out in Section 19 of the 2004 Planning and Compulsory Purchase Act (as amended) to ensure that, taken as a whole, plan policy contributes to the mitigation of, and adaptation to, climate change.⁸
- 3.3 The Planning and Energy Act 2008 (As amended) enables local planning authorities to set requirements for energy use and energy efficiency in Local Plans.
- 3.4 It states that a local planning authority may include policies imposing *reasonable* requirements for:
- a) a proportion of energy used in development in their area to be energy from renewable sources in the locality of the development
 - b) a proportion of the energy used in development in their area to be low carbon energy from sources in the locality of the development
 - c) development in their area to comply with energy efficiency standards that exceed the energy requirements⁹ of building regulations.
- 3.5 However, Section 43 of the Deregulation Act 2015¹⁰ will amend this provision but it is not yet in force. This amendment would remove the ability of local authorities (in England only) to require developers to exceed the building regulations for energy efficiency. Note that sections 1(a) and 1(b) would remain, allowing local authorities to

⁷ A Private Member's Bill introduced to Parliament on 30 April 2019

⁸ Section 19 of the 2004 Planning and Compulsory Purchase Act, as amended by Section 182 of the Planning Act 2008 (available at <https://www.legislation.gov.uk/ukpga/2008/29/section/182>), states: 'Development plan documents must (taken as a whole) include policies designed to secure that the development and use of land in the local planning authority's area contribute to the mitigation of, and adaptation to, climate change.'

⁹ 'energy requirements', in relation to building regulations, means requirements of building regulations in respect of energy performance or conservation of fuel and power.

¹⁰ Section 43 of the Deregulation Act 2015 will add '(1)(c) does not apply to development in England that consists of the construction or adaptation of buildings to provide dwellings or the carrying out of any work on dwellings.'

continue to require that a percentage of the energy consumption of a new development to be met with renewable or low carbon energy.

- 3.6 The Commencement Section of the Deregulation Act sets out when each section of the Act will come into force and as Section 43 is not specifically listed it falls under a provision that states that it will come into force on ‘such a day as the Secretary of State may by order made by a statutory instrument.’
- 3.7 Energy Performance of Buildings Directive 2010 is a European Directive that requires Member States to ensure that by 2021 all new buildings are so called ‘nearly zero energy buildings’. Nearly zero energy is described in the Directive as ‘a building that has a very high energy performance. The nearly zero or very low amount of energy required should be covered to a very significant extent by energy from renewable sources, including energy from renewable sources produced on site or nearby’.
- 3.8 The European Union (Withdrawal) Act 2018¹¹ will allow for the incorporation and adaptation of EU Law (EU Regulations) into UK Law so the Energy Performance of Buildings Directive is still an important consideration and given that the Government have not yet enacted Section 43 of the Deregulation Act 2015, it is reasonable to assume that the Government may still introduce changes to the Building Regulations to increase the energy performance of buildings by 2020 to meet this Directive.
- 3.9 The legal requirement to set out a local authority’s strategic priorities was set out in the Neighbourhood Planning Act 2017. Paragraph 20 d) states that this includes ‘planning measures to address climate change mitigation and adaptation’.
- 3.10 National Planning Policy Framework
- 3.11 Paragraph 148 of the NPPF states that the planning system should support the transition to a low carbon future and to ‘shape places in ways that contribute to radical reductions in greenhouse gas emissions’
- 3.12 Paragraph 149 of the NPPF states that local plans should take a proactive approach to mitigating and adapting to climate change.
- 3.13 Paragraph 150 of NPPF states new development should be planned for in ways that:
- a) avoid increased vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through the planning of green infrastructure, and
 - b) can help reduce greenhouse gas emissions, such as through its location, orientation and design. Any local requirements for the sustainability of buildings should reflect the Government’s policy for national technical standards.
- 3.14 However, there are no national technical standards for carbon emission reductions in the same way that there are technical standards for space, water and access (for example).
- 3.15 However, Planning Practice Guidance states that the Written Ministerial Statement on Plan Making (2015) clarified the use of planning policies and conditions on energy performance standards for new housing developments. The statement sets out the

¹¹ European Union (Withdrawal) Act 2018 became law by Royal Assent on 26 June 2018.

Government's expectation that such policies should not be used to set conditions on planning permissions with requirements above the equivalent of the energy requirement of Level 4 of the Code for Sustainable Homes (this is approximately 20% above current Building Regulations across the build mix).¹²

3.16 It should be noted that the same Written Ministerial Statement confirmed the following:

- that local plans could no longer include any additional local technical standards or requirements relating to the construction, internal layout or performance of new dwellings
- that local plans could no longer include policies requiring any level of the Code for Sustainable Homes (which was withdrawn)

3.17 Policy and Legislative Conclusions

3.18 As a result of the change in policy on zero carbon homes and allowable solutions and the removal of local planning authorities' power to set additional local standards for new buildings, Local Plan Inspectors are now reflecting this in their assessment of soundness of local plan policies. Cambridge City Council's policy for Zero Carbon Homes and Allowable Solutions was removed through their Local Plan examination as it did not comply with national policy.

3.19 Local Plan policies will be able to:

- a) set carbon dioxide emission reduction targets for new dwellings to a maximum of 20% below that which is required by Part L of the Building Regulations 2013 where there is evidence that this is achievable and viable, and
- b) require that a percentage of the energy consumption of a new development to be met with renewable or low carbon energy.

3.20 However, it should be remembered that when/if Section 43 of the Deregulation Act 2015 is enacted, a) cannot be applied to residential dwellings.

3.21 Draft Policy

3.22 The preferred approach is for reductions in carbon emissions to be met on site. This may be achieved through a combination of improved energy efficiency of the buildings fabric (above what is required by Building Regulations), on site low carbon and renewable technologies and/or connection to on site or off site heat networks or a combination of these measures.

3.23 In practice the policy does not prescribe how the requirements should be met, rather it is the choice of the applicant how they go about meeting the requirements and this presents the opportunity to the applicant to research cost-effective and viable solutions.

¹² Planning Practice Guidance Paragraph: 012 Reference ID: 6-012-20190315 Revision date: 15 03 2019

- 3.24 There will also be a requirement for applicants to submit an Energy Statement (Appendix 2) with planning applications to demonstrate how development proposals have met the policy requirements.
- 3.25 A review of the CPLAN Energy Statements and Energy Statements submitted with planning applications since the implementation of Policy DM4, demonstrates that a range of renewable technologies are being used to meet (and exceed) our current policy requirements.
- 3.26 An initial review of the carbon dioxide emission reductions achieved indicate that a policy requirement for applicants to demonstrate that development will produce 20% less carbon dioxide emissions than Building Regulations Part L requirements (2013) would be supported (see paragraph 2.12).
- 3.27 The proposed Draft Carbon Dioxide Emissions and On Site Renewable Energy Policy as set out in Appendix 3.
- 3.28 The supporting text to the policy will include the Council's support for proposals for zero carbon development and support for the retrofitting of buildings for energy efficiency where planning permission is required.
- 3.29 It should be noted that where it's likely that a policy will impose greater financial burdens on developers, regard should be had to its potential adverse consequence on the delivery of other important policy objectives e.g. the provision of affordable housing.

4 Policy/Budget Reference and Implications

The recommendations in this report are within the Council's agreed policy and budgets.

Financial, Legal, Equal Opportunities, Staffing, Environmental, Community Safety, Public Health, Customer Services Centre, Communications & Website, Risk Management and Health & Safety Implications

None specific.

5 Recommendation

- 5.1 That the Local Plan Sub Committee note the contents of this report and recommend to the Policy and Resources Committee the Draft Carbon Dioxide Emissions and On Site Renewable Energy Policy as set out in Appendix 3.

Report prepared by: Claire May, Head of Planning Policy & Projects

Background Papers

The Climate Change Act 2008

The Planning and Energy Act 2008 (As amended)

<http://www.legislation.gov.uk/ukpga/2008/21/contents>

Core Strategy (2011)

Development Management Policies Local Development Document (2013)

Building a Greener Future: Towards Zero Carbon Development

Planning Policy Statement: Planning and Climate Change (December 2007)
<https://webarchive.nationalarchives.gov.uk/20120920012642/http://www.communities.gov.uk/documents/planningandbuilding/pdf/ppsclimatechange.pdf>

Fixing the foundations: Creating a more prosperous nation (HM Treasury July 2015)
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/443897/Productivity_Plan_print.pdf

The Hertfordshire Renewable and Low Carbon Energy Study (2010)

Deregulation Act 2015 <http://www.legislation.gov.uk/ukpga/2015/20/section/43>

Planning Practice Guidance

National Planning Policy Framework (2019)

Written Ministerial Statement on Plan Making (2015)
<https://www.parliament.uk/business/publications/written-questions-answers-statements/written-statement/Commons/2015-03-25/HCWS488/>

Code for Sustainable Homes
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/5976/code_for_sustainable_homes_techguide.pdf

Report on the Examination of the Cambridge Local Plan (29 August 2018)
<https://www.cambridge.gov.uk/media/6789/local-plan-2018-inspectors-examination-report.pdf>

Energy Performance of Buildings Directive 2010

The European Union (Withdrawal) Act 2018
<http://www.legislation.gov.uk/ukpga/2018/16/contents/enacted>

APPENDICES

Appendix 1 CPLAN Management Report

Appendix 2 Guidance on producing an Energy Statement

Appendix 3 Draft Carbon Dioxide Emissions and On Site Renewable Energy Policy