APPENDIX 2

East Cambridgeshire District Council

Climate Change Supplementary Planning Document

Finance and Assets Committee Version

25 January 2021

[this version is, subject to the views of the Committee, intended to be the adopted version of the SPD, and will come into force once any call-in period for Committee's decision has lapsed.]

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1 Introduction, Purpose and Consultation Arrangements

Introduction

1.1. East Cambridgeshire District Council (ECDC) declared a Climate Emergency at its Full Council meeting on 17 October 2019. ECDC has joined over 200 Councils around the UK in declaring such an emergency.

1.2. The Council recognises that it has a significant role to play in protecting and improving the environment for future generations. In declaring a Climate Emergency, the Council committed to producing an Environment Plan, which it subsequently did so (adopted June 2020). One action within that Plan was to prepare a Climate Change Supplementary Planning Document (SPD).

Purpose of the Supplementary Planning Document (SPD)

1.3. In addition to responding to the declaration, and the subsequent Environment Plan, this SPD builds upon the 'Environment and Climate Change' section of the Local Plan (April 2015) as well as responds to National Planning Policy and guidance.

1.4. Paragraphs 1.9 to 1.12 below set out what an SPD is and what it can and cannot do.

Consultation on the draft SPD

1.5. We consulted on a draft version of this SPD between 13 October and 23 November 2020.

1.6. Full details of the consultation, including the representations received, the Council's response to those representations, and details of any amendments made to the SPD as a result of those representations, can be found in the 'Climate Change Supplementary Planning Document (SPD) - Reg 12(a) Consultation Statement', available on our website. This now adopted SPD has been amended from the draft version, not only to take account of representations received, but also further amendments for the purpose of clarity and accuracy.

Status of this document

1.7. On adoption, the SPD has become a material consideration for the purpose of determining planning applications, though the starting point for determining planning applications remains the East Cambridgeshire Local Plan (2015) (unless this is superseded) and, if one exists for the area in which the application falls, any Neighbourhood Plan. The SPD will be regularly reviewed, as necessary, to ensure that the content remains up to date and relevant.

What is an SPD?

1.8 An SPD is a document which adds further detail to the policies in a Local Plan (*Note: a Local Plan is sometimes also referred to as a 'Development Plan Document' (DPD)*). An SPD can be used to provide further guidance for development on specific sites, or on particular issues such as, in this case, climate change. SPDs are capable of being a material consideration in planning decisions.

1.9 There are legal and national policy limits on what an SPD can do. For example, legislation does not permit an SPD to allocate land for anything, nor should it introduce a new 'burden' (for example, a financial burden) on development which is not already covered in a Local Plan.

1.10 Thus, and to take an example relevant to the topic of this Climate Change SPD, national policy places a restriction on the development of commercial scale wind turbines: such development can only be approved if it is in an area designated in a Local Plan or Neighbourhood Plan. Because an SPD is not a Local Plan or Neighbourhood Plan, this Climate Change SPD cannot designate sites for wind turbine development. In turn, therefore, most wind turbine development in East Cambridgeshire should not be approved, as a matter of principle, because no such land is designated for such purposes (there are exceptions, such as small domestic wind turbines, many of which do not need planning permission at all).

1.11 To take another example, an SPD cannot ‘require’ development to do something, such as a higher level of energy efficiency, if the Local Plan does not already require it. An SPD could only, at most, encourage development to go beyond Local Plan policy or go beyond national minimum requirements.

2 The Climate Emergency: what this means for East Cambridgeshire

2.1 We are facing an unprecedented climate challenge. Leading scientists from the Intergovernmental Panel on Climate Change (IPCC) have warned that if we carry on our business as usual and don't take emergency action on Climate Change, we face the gravest threats to our global environment. This includes worsening risks of drought, floods, extreme heat and poverty for hundreds of millions of people. Extreme weather events are already being seen. During a heatwave in July 2019, which saw temperatures across Europe soar, the highest temperature ever recorded in the UK was reached in nearby Cambridge (38.1 degrees Celsius).

2.2 The 'Special Report on Global Warming of 1.5°C' (IPCC, October 2018) describes the enormous harm that a 2°C average rise in global temperatures is likely to cause compared with a 1.5°C rise. Furthermore, it confirms that limiting global warming to 1.5°C may still be possible with ambitious action from national and sub-national authorities, civil society and the private sector.

2.3 East Cambridgeshire is, like most areas, a significant contributor to greenhouse gas emissions, possibly more so than average if our rich peat soils continue to dry out and release CO2 into the atmosphere (a matter presently being investigated by the Combined Authority's Climate Commission). As a district, we are also more reliant on burning oil and bottled gas for heating (which is far more harmful than being on a natural gas network); and we tend to use cars more than many areas due to the rural nature of the district and the limited public transport in many parts of the district.

2.4 However, acting as some balance against these emissions are, for example, the large-scale solar farms in the district.

2.5 Local authorities have a responsibility, both in their own activities and those undertaken with partners, as well as in the influence they can bring to bear to reduce the adverse effects of their populations on the planet. Cambridgeshire and East Cambridgeshire are growing areas; increasing populations result in increasing need for businesses, houses, health, retail and leisure outlets, transport and other supporting infrastructure, all of which (with few exceptions) lead to adverse impacts on the climate. With growth comes a responsibility to balance competing demands and mitigate the negative impacts of that growth as far as is reasonably possible.

3 Policy Review

Legislation

3.1 The Climate Change Act 2008 set a legally binding target to reduce the UK's greenhouse gas emissions by at least 80% in 2050 from 1990 levels. In 2019 this was amended (by The Climate Change Act 2008 (2050 Target Amendment) Order 2019) to a 100% reduction from 1990 levels by 2050- in other words, to net zero carbon.

3.2 Specific to planning, Section 19 of the Planning and Compulsory Purchase Act 2004 states that: "*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*."

National Planning Policy Framework (NPPF, 2019)

3.3 National policy places high importance on addressing climate change in plan making and decision taking, as highlighted by the paragraphs below.

Extracts of NPPF

'*Achieving sustainable development means that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways…* [including] *an environmental objective… mitigating and adapting to climate change, including moving to a low carbon economy.'* (para 8)

'Strategic policies should set out an overall strategy for the pattern, scale and quality of development, and make sufficient provision for… planning measures to address climate change mitigation and adaptation.' (para 20)

'The planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change. It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure.' (para 148)

'Plans should take a proactive approach to mitigating and adapting to climate change, taking into account the long-term implications for flood risk, coastal change, water supply, biodiversity and landscapes, and the risk of overheating from rising temperatures. Policies should support appropriate measures to ensure the future resilience of communities and infrastructure to climate change impacts, such as providing space for physical protection measures, or making provision for the possible future relocation of vulnerable development and infrastructure.' (para 149)

'New development should be planned for in ways that…avoid increased vulnerability to the range of impacts arising from climate change… and can help to reduce greenhouse gas emissions, such as through its location, orientation and design…'(para 150).

'To help increase the use and supply of renewable and low carbon energy and heat, plans should: a) provide a positive strategy for energy from these sources…b) consider identifying suitable areas for renewable and low carbon energy sources… c) identify opportunities for development to draw its energy supply from decentralised, renewable or low carbon energy supply systems and for colocating potential heat customers and suppliers' (para 151).

'Local planning authorities should support community-led initiatives for renewable and low carbon energy…'. (Para 152)

National Planning Practice Guidance (NPPG)

3.4 Further to national policy, the NPPG sets out examples of how to mitigate climate change by reducing emissions (Paragraph: 003 Reference ID: 6-003-20140612). It gives examples such as:

- Reducing the need to travel and providing for sustainable transport
- Providing opportunities for renewable and low carbon energy technologies
- Providing opportunities for decentralised energy and heating
- Promoting low carbon design approaches to reduce energy consumption in buildings, such as passive solar design

3.5 It also details considerations for adapting to a changing climate (Paragraph: 003 Reference ID: 6-003-20140612), such as:

- Considering future climate risks when allocating development sites to ensure risks are understood over the development's lifetime
- Considering the impact of and promoting design responses to flood risk and coastal change for the lifetime of the development
- Considering availability of water and water infrastructure for the lifetime of the development and design responses to promote water efficiency and protect water quality
- Promoting adaptation approaches in design policies for developments and the public realm

3.6 The NPPG also highlights the importance of integrating adaptation and mitigation approaches (Paragraph 004 Reference ID: 6-004-20140612):

'...local planning authorities should pay particular attention to integrating adaptation and mitigation approaches and looking for 'win-win' solutions that will support sustainable development. This could be achieved in a variety of ways, for example:

- *by maximising summer cooling through natural ventilation in buildings and avoiding solar gain;*
- *through district heating networks that include tri-generation (combined cooling, heat and power); or*
- *through the provision of multi-functional green infrastructure, which can reduce urban heat islands, manage flooding and help species adapt to climate change – as well as contributing to a pleasant environment which encourages people to walk and cycle.*

Local planning authorities should be aware of and avoid the risk of maladaptation (adaptation that could become more harmful than helpful). For example, designing buildings to maximise solar gain in winter without thinking through the implications for overheating in summer.'

3.7 The NPPG clarifies what local planning authorities can do in terms of setting higher energy performance standards than the building regulations (Paragraph: 012 Reference ID: 6-012-20190315). In summary, they:

- Can set energy performance standards for new housing or the adaptation of buildings to provide dwellings, that are higher than the building regulations, but only up to the equivalent of Level 4 of the Code for Sustainable Homes.
- Are not restricted or limited in setting energy performance standards above the building regulations for non-housing development.

Implementing national policy and guidance at a local level

3.8 The above national policy and guidance applies to the planning system as a whole, and it does not follow that this SPD should, or even is lawfully able, to cover it all. As discussed in section 1, much of the above is reserved (by legislation) to be matters which can only be addressed in Local Plans (or 'Development Plan Documents' (DPDs) to give them their proper legal title) or Neighbourhood Plans. As a reminder, an SPD is not a Local Plan, DPD or Neighbourhood Plan.

East Cambridgeshire District Council Local Plan (2015)

3.9 The Local Plan's spatial vision, which was drafted in the years approaching April 2015, states that in 2031, *"…the challenges presented by climate change will have been embraced, with new development being located and designed to minimise resource and energy use and reduce the risk of flooding. Renewable energy production will have increased, and a proportion of all energy will be created from local renewable sources such as bio-fuels, biomass, and wind power."*

3.10 The Local Plan goes on to set out various strategic policies aimed at achieving the wider vision, and includes specific policies aimed at reaching the visions' goals in respect of climate change. The key policies focusing on addressing climate change are ENV 4, ENV 5 and ENV 6, replicated below.

3.11 However, the provisions set out in Policy ENV 5 were (due to subsequent national policy changes) never progressed post adoption of the Local Plan in April 2015, and no Allowable Solutions Framework or Community Energy Fund presently exists, or is being progressed at present.

3.12 Also, the provisions of Policy ENV 6 are predominantly covered in already adopted supplementary planning documents, as discussed later in this section.

3.13 This SPD therefore predominantly focusses on providing addition guidance to the implementation of ENV 4.

Extracts from the East Cambridgeshire Local Plan, 2015

ENV 4 Energy and water efficiency and renewable energy in construction

All proposals for new development should aim for reduced or zero carbon development in accordance with the zero carbon hierarchy: first maximising energy efficiency and then incorporating renewable or low carbon energy sources on-site as far as practicable.

Applicants will be required to demonstrate how they have considered maximising all aspects of sustainable design and construction, as set out in the Code for Sustainable Homes (or its successor). Developments of 5 or more homes are required to achieve Code for Sustainable Homes Level 4 (or its replacement pending implementation of the zero carbon homes requirement). All non-domestic developments of 1000m2 or more are required to meet BREEAM Very Good standard or equivalent.

The Council will negotiate with applicants over the most appropriate solutions for historic buildings and Conservation Areas.

ENV 5 Carbon offsetting

Where allowable solutions are required for a development scheme, the Council will be prepared to accept alternative provision in line with the national Allowable Solutions Framework.

Where a local Community Energy Fund exists, developers will be expected to provide financial contributions to this Fund to offset the difference. The contribution will be used to finance specific renewable energy projects within the local area. Financial contributions will be required into CEF where developments do not achieve the CO2 reductions required under Policy ENV 4.

ENV 6 Renewable energy development

Proposals for renewable energy and associated infrastructure will be supported, unless their wider environmental, social and economic benefits would be outweighed by significant adverse effects that cannot be remediated and made acceptable in relation to:

- The local environment and visual landscape impact.
- Impact on the character and appearance of the streetscape/buildings.
- Key views, in particular those of Ely Cathedral.
- Protected species.
- Residential amenity.
- Safeguarding areas for nearby airfields; and
- Heritage assets.

Renewable energy proposals which affect sites of international, national and local nature importance or other irreplaceable habitats will be determined against the relevant sections of Policy ENV 7.

The visual and amenity impacts of proposed structures will be assessed on their merits, both individually and cumulatively.

Provision should be made for the removal of facilities and reinstatement of the site, should they cease to operate.

Fit between this Climate Change SPD and other existing SPDs

3.14 The Council already has a number of adopted SPDs, including the ones briefly reviewed below. The SPDs below remain in force until they are either withdrawn or otherwise superseded. This SPD does not in any way override them. As can be seen, the following SPDs already cover significant elements relevant to the theme of climate change.

East Cambridgeshire Renewable Energy Development (Commercial Scale) SPD (2014)

3.15 The Renewable Energy Development (Commercial Scale) SPD[1] details the considerations and requirements for applicants in relation to:

- Visual landscape impact and key views
- Heritage assets
- Biodiversity and geology
- Residential Amenity
- Safeguarding areas
- Access and Public Rights of Way (PROW)
- Site restoration and continuation of agricultural use
- Wind turbines and electromagnetic transmissions

3.16 For any renewable energy proposal in the district, that SPD remains an important document to assist in the preparation of proposals, and their subsequent determination.

East Cambridgeshire Natural Environment SPD (September 2020)

3.17 Biodiversity and nature issues are not covered in this Climate Change SPD, but are addressed in a separate SPD - the 'Natural Environment SPD[2]', which was adopted in September 2020.

3.18 The Natural Environment SPD provides advice on policy requirements relating to issues such as: 'net gain' in biodiversity through development proposals; protection and provision of trees; protection of existing nature sites, including technical advice in terms of discharging Habitat Regulation Assessments (HRA) obligations, especially in relation to swan and goose foraging in designated protection zones around the Ouse Washes; and supporting the Council's position in relation to the recently adopted Local Nature Partnership vision to 'double land for nature' by 2050 across Cambridgeshire.

East Cambridgeshire Design Guide Supplementary Planning Document (2012)

3.19 The Design Guide SPD[3] is a comprehensive document that includes numerous considerations which relate to climate change and sustainable development, with the most important set out below. This Climate Change SPD does not duplicate these considerations, but in some cases, it does offer additional guidance.

Extracts from the Design Guide SPD (2012)

Energy Conservation / Generation

All dwellings should be designed to reduce their carbon footprint and to be as sustainable and as self-sufficient as possible. The following issues should be considered:

- Orientation;
- Solar generation of heat and electricity;
- Ground source heat pumps;
- Future technologies;
- Storage and recycling of water;
- Use of sustainable urban drainage systems (SUDS). The only exception would be foul drainage, where the preference is for connection to the public drainage system;

[1] https://www.eastcambs.gov.uk/sites/default/files/Renewable%20Energy%20SPD%20Final_0.pdf
[2] http://www.eastcambs.gov.uk/local-development-framework/supplementary-planning-documents
[3] https://www.eastcambs.gov.uk/sites/default/files/FINAL%20design%20guide%202012_0.pdf

All dwellings should be designed to the highest possible standard. This shall not be less than Code 4 of the Code for Sustainable Homes 2008.

- Buildings wrapped in insulation
- Maximum air tightness in construction
- Use of lime mortars and renders
- Organic building materials
- Sustainable timber use
- Solvent free paints
- Low water use systems (i.e. toilets, washing machines, etc)

Renewables (The Historic Environment)
Renewable energy installations on historic buildings must be carefully considered to ensure they do not have a detrimental impact. The roof-scape of historic towns and villages is distinctive, and installations should be avoided on principal elevations.

- Rear, and non-visible, roof slopes and locations are preferable for installations;
- The use of outbuildings to accommodate installations will be encouraged;
- Planning permission is always required for installations on, or within, the curtilage of a Listed Building;
- Ground source heat pumps may be acceptable in some cases. These may require planning permission and will nearly always require Listed Building Consent. They may also require archaeological investigation;

The mounting of wind turbines on buildings will not be encouraged, as this can have a dramatic impact on roof lines and views. Where possible, turbines should be located on the ground. Where the building is listed, regard must be given to the setting and context of the site/building.

Renewables – Small Scale

The following criteria must be addressed for any application to be successful:

- The individual or cumulative impact of turbines on the countryside/landscape;
- An exploration of the possibility of shared provision/use of the power generation with adjacent dwellings/buildings;
- The effect on the proposal on any designated landscape areas or historic views (e.g of Ely Cathedral);
- Whether the development achieves a net environmental gain;
- The effects of noise generation, vibration, shadow flicker and electromagnetic disturbance;
- As assessment of the chosen structure, paying particular regard to design, height, number, colour, density, positioning (particularly if on a building) and blade diameter (for turbines);
- Whether it is to serve local development or to supply the national grid;
- For roof-mounted panels, they will need to be as unobtrusive as possible. In Conservation Areas, this will generally mean positioning them on the rear elevation, or on outbuildings away from public views;
- Consideration must be given to any adverse effects on protected species and habitats, and if applicable, bird migratory routes.

Photomontages will be an important part of any submission, together with the information to deal with all of the issues indicated above, where relevant.

Renewables - Wind turbines over 15m in height

The initial criteria to be applied to wind turbine schemes will be as follows:

Recommended separation distances

Residential settlements/residential dwellings	600m
General settlements, villages, campsites, tourist development	
Isolated dwellings	600m
SSSIs or Ramsar sites	500m
Woodlands and hedgerows	50m buffer to edges of the rotor swept area
Watercourse or water body	Fall-over distance
Public highways	Blade tip height + 50m
Bridle Ways	Minimum of 200m
Footpaths	Should not oversail

Individual dwellings and groups of up to 9 dwellings should not have turbines in more than 180 degrees of their field of view for a distance of 10 km. Settlements of 10 dwellings or more should not have turbines in more than 90 degrees of their field of view for a distance of 5 km.

Landscape and visual impacts

- The siting of turbines should be determined by the direction and flow of the landscape and its contours;
- Layouts should be designed to avoid visual confusion and disordered clutter;
- There should not be 'tangles' of turbines where multiple turbines are seen behind each other;
- There should not be isolated turbines that are remote from the rest of the group;
- Within the Green Belt, turbines will only be permitted if they do not compromise the openness of the Green Belt or the purposes for which it was created;
- There should be no more than 9 turbines per square kilometre.

Other issues

Other issues that will have to be addressed in any application relate to:

- Noise levels which, in relation to residential dwellings, should not give rise to any significant increase in noise above the ambient background levels i.e. no greater 45dB LAEQ, 5 min at 1 metre from the window of a habitable room;
- The effect on heritage assets;
- Safety, particularly in relation to ice build up, where the formula d=(D + H) x 1.5 should be used with 'd' being the maximum falling distance of ice in metres; 'D' being the rotor diameter in metres, and 'H' being the hub height in metres;

The effects of flicker, both on residential amenity caused by light issues, and any effects on electrical equipment.

4 Reducing carbon dioxide emissions

4.1 Local Plan policy ENV4, *Energy and water efficiency and renewable energy in construction*, sets a requirement for all new development to aim for reduced or zero carbon, in accordance with the zero-carbon hierarchy.

4.2 Proposals of 5 dwellings or more, or 1000m^2 or more for non-residential development, are required by policy ENV4 to 'demonstrate how they have considered maximising all aspects of sustainable design and construction' and, for residential development, are required to achieve Code for Sustainable Homes Level 4 (or its replacement) or, for non-residential, BREEAM Very Good (or equivalent).

4.3 The Code for Sustainable Homes was withdrawn by Government in 2015. However, NPPG, as updated in March 2019, (Ref 6-012-20190315) states as follows:

> "*The Written Ministerial Statement on Plan Making dated 25 March 2015 clarified the use of plan policies and conditions on energy performance standards for new housing developments. The statement sets out the 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).*"

4.4 It can be seen, therefore, that the 2015 Local Plan, which seeks Code Level 4, remains broadly consistent with the latest (March 2015, reiterated March 2019) national position. However, this SPD cannot seek to go beyond either national policy or Local Plan policy on this matter. The national guidance, above, also makes it clear that only the aspects relating to the energy requirement of Code Level 4 can be sought (not the wider aspects of the Code).

4.5 The ENV4 policy requirement for non-residential proposals of 1000 sq m or more, namely to achieve BREEAM Very Good, remains appropriate and deliverable because BREEAM remains in place as a national standard.

4.6 CC1 below outlines how the requirements of ENV4 could be met, and also sets out the desired standard for development that is below the thresholds referred above, and also development that involves conversion or change of use.

CC1: Reducing carbon dioxide emissions and maximising all aspects of sustainable design and construction

Energy hierarchy and sustainable design

Local Plan (2015) Policy ENV4 states:

> *All proposals for new development should aim for reduced or zero carbon development in accordance with the zero carbon hierarchy: first maximising energy efficiency and then incorporating renewable or low carbon energy sources on-site as far as practicable.*

And:

> *Applicants will be required to demonstrate how they have considered maximising all aspects of sustainable design and construction…*

In order for an applicant to demonstrate how the above Local Plan policy requirement is to be met, a Sustainability Statement could usefully be prepared and submitted as part of the Design and Access Statement. The Sustainability Statement could outline the applicant's approach to:

a. Minimising demand for energy through design;
b. Maximising energy efficiency through design;
c. Carbon dioxide reduction achieved through items a and b above, and through incorporation of renewable and low carbon energy sources;
d. Water efficiency (including whether, for residential development, the design intends to voluntary incorporate the Part G Building Regulations option of estimated water

consumption set at no more than 110 litres per person per day, rather than the standard 125 l/p/d);

e. Site waste management;
f. Use of materials (such as low carbon-embodied materials); and
g. Adaptability of the building, as the climate continues to change.

More generally, such a Statement could usefully explain where, if any, the development proposes, on any of the above themes, to go beyond what is the statutory minimum in Building Regulations.

For developments of 5 dwellings or more, the Statement could explain how the development will meet the policy requirement in ENV 4, which requires such development to "achieve Code for Sustainable Homes Level 4". For the avoidance of doubt, and following the Ministerial Statement of March 2015, the requirement to meet the Code for Sustainable Homes Level 4 only applies to that aspect of Level 4 relating to energy performance standards for new housing or the adaptation of buildings to provide dwellings. Other aspects of Level 4 are encouraged, but not required to be met. Level 4 should result in, across the build mix, energy efficiency improvements 20% above present (as at Jan 2021) Building Regulations.

Whilst not a requirement, developers are encouraged to consider the benefits of building to a higher than required standard of environmentally conscious design, for example Passivhaus Standard or achieving a Home Quality Mark[4].

For non-residential development of 1000m^2 or more, the Statement could explain how the development has met policy requirement in ENV 4, which requires the development "to meet BREEAM Very Good standard or equivalent."

If a Sustainability Statement (or similar) is not submitted, and it is not evident from the application how Policy ENV4 is to be met, then, instead of a potential refusal, the Council may instead, at its discretion, apply a condition to any approval along the lines of the following template conditions:

- (Outline approvals) *Prior to or as part of the first reserved matters application, an energy and sustainability strategy for the development, including details of any on site renewable energy technology and energy efficiency measures, shall be submitted to, and will need approving in writing by, the Local Planning Authority. The development shall be carried out in accordance with the approved strategy*.
- (Full permission) *Prior to the commencement of development, an energy and sustainability strategy for the development, including details of any on site renewable energy technology and energy efficiency measures, shall be submitted to, and will need approving in writing by, the Local Planning Authority. The development shall be carried out in accordance with the approved strategy.*
- (non-residential permission) *The development hereby approved shall meet BREEAM Very Good standard or equivalent. If this standard cannot be achieved by virtue of the site's location then prior to above floor slab construction works it must be demonstrated by a BRE Licensed Assessor how all other BREEAM standards have been fully explored in order to meet the highest standard of BREEAM Good or equivalent and agreed in writing by the Local Planning Authority. A certificate, following post construction review, shall be issued by a BRE Licensed Assessor to the Local Planning Authority, indicating that the relevant BREEAM standard has been achieved or its equivalent within six months of first occupation of the site for written agreement by the Local Planning Authority*.

Low and zero carbon energy networks
Developers are encouraged to incorporate renewable / low carbon energy generation provision onsite, or connect into an existing nearby renewable, low or zero carbon energy generation network where they exist.

[4] https://www.homequalitymark.com/

Combined heat and power (CHP)
In the case of large-scale residential development, and non-residential developments of 1000m sq or more, developers could consider the inclusion of Combined Heat and Power (CHP) generation or a network connection to an existing CHP facility.

However, the use of other technologies - for example solar photovoltaics or thermal systems, wind turbines, biomass heating or ground source heating – are also encouraged and may provide a better solution than CHP on a case by case basis.

5 Reducing energy demand in existing buildings

5.1 Whilst there is significant new development planned for the district, the vast majority of buildings that will be occupied over the coming decades will be those built in earlier times when energy and performance standards were much lower than at present.

5.2 An Energy Performance Certificate (EPC) provides details of the energy performance of a property and is required for properties when constructed, sold or let.

5.3 The Minimum Energy Efficiency Standards (MEES) Regulations require all applicable properties[5] to achieve an Energy Performance Certificate (EPC) of E or better. Separately, the Clean Growth Strategy (2017)[6] has set a target for as many buildings as possible to achieve an EPC of C by 2030/35 and commits to keep energy efficiency standards under review.

5.4 Also of value, and supported by the Council, is PAS 2035:2019 Retrofitting Dwellings for Improved Energy Efficiency: Specifications and Guidance. Whilst targeted at existing homes (rather than new development, or home extensions) it is a key document in a framework of new and existing standards on how to conduct effective energy retrofits of existing buildings. It covers how to assess dwellings for retrofit, identify improvement options, design and specify Energy Efficiency Measures (EEM) and monitor retrofit projects.

5.5 The standard drives the 'whole house approach' including the 'fabric first' methodology. It defines the qualifications and responsibilities of individual retrofit roles and respective activities required prior and post EEM installation. TrustMark Registered Businesses carrying out work within its scope are required to be compliant with its requirements, so if you are planning to have work done on your home, you may wish to ask about PAS 2035 and whether the builder is a TrustMark registered business. Further details available here:

www.trustmark.org.uk/ourservices/pas-2035/

5.6 While the Local Plan (2015) does not set any policy requirements for development related to existing buildings, CC2 below aims to assist in improving the energy efficiency of existing buildings, complementing both Policy ENV 4 requirement that "*All proposals for new development should aim for reduced or zero carbon development"* and the Council's Environment Plan[7].

CC2: Reducing energy demand in existing buildings

For all development proposals which involve the change of use of a building, or an extension to an existing building, the applicant is encouraged to look at all opportunities to improve the energy efficiency of that building (including the original building, if it is being extended)*.

Proposals which do consider and take such viable opportunities will, in principle, be supported.

In particular, residential properties which, following an extension or conversion, will achieve an improved EPC rating overall will, in principle, be supported. To gain this in principle support, a pre-

[5] The Minimum Energy Efficiency Standard (MEES) which came into force in England and Wales on 1 April 2018, applies to private rented residential and non-domestic property and is aimed at encouraging landlords and property owners to improve the energy efficiency of their properties by a restriction on the granting and continuation of existing tenancies where the property has an Energy Performance Certificate Rating of F and G.

The Energy Efficiency (Private Rented Property) (England and Wales) Regulations 2015 (Principal Regulations) as amended by The Energy Efficiency (Private Rented Property) (England and Wales) (Amendment) Regulations 2016 and Energy Efficiency (Private Rented Property) (Amendment) Regulations 2019

[6] https://www.gov.uk/government/publications/clean-growth-strategy

[7] https://www.eastcambs.gov.uk/sites/default/files/agendas/5%20-%20080620%20V12%20ApA.pdf

development EPC should be provided as part of the application, together with evidence as to how a completed development EPC is likely to be rated.

More generally, for any work on a residential property, the Council encourages the use of the PAS 2035:2019 Specifications and Guidance.

**Note: for any heritage asset, any improvements to the energy efficiency of that asset must not cause harm to, or loss of, the significance of the asset. This may limit any feasible energy efficiency improvements.*

6 Resilient and adaptable design

6.1 East Cambridgeshire will need to adapt to the impacts of extreme weather and climate change. In addition to the various measures set out in the Local Plan (such as managing flood risk; promoting sustainable drainage systems; protecting and enhancing the green infrastructure network, the natural environment and biodiversity), there must be greater resilience to extreme weather conditions in the built environment.

6.2 Furthermore, the built environment should be built to last: buildings should be designed in a way that they are adaptable and can be fit for purpose in the long term, even if their use changes. Adaptable building design avoids, or at least minimises, waste, the use of materials, and overall emissions from the demolition and redevelopment of buildings that are no longer fit for purpose and incapable of being easily changed.

6.3 CC3 offers support for resilient and adaptable design, and complements Policy ENV 4 which requires that "all proposals for new development should aim for reduced or zero carbon development."

CC3: Resilient and adaptable design

Heat resilience
In order to prevent and minimise the impacts of overheating in the built environment, applicants are encouraged to demonstrate, commensurate with the scale and location of the proposal, consideration of:

a. how the design of the development minimises overheating and reduces demand on air conditioning systems, including considering:
   - orienting buildings to maximise the opportunities for both natural heating and ventilation and to reduce wind exposure; and
   - measures such as solar shading, thermal mass and appropriately coloured materials in areas exposed to direct and excessive sunlight;

   In considering the above, the balance between solar gain versus solar shading will need to be carefully managed.

b. the potential to incorporate a green roof and/or walls to aid cooling, add insulation and enhance biodiversity.

Adaptable design
Applicants are encouraged to design proposals to be adaptable to future social, economic, technological and environmental requirements in order to make buildings both fit for purpose in the long term and to minimise future resource consumption in the adaptation and redevelopment of buildings in response to future needs. To meet this desire, applicants are encouraged to consider the following, where applicable:

a. Allow for future adaptation or extension by means of the building's internal arrangement, internal height, detailed design and construction, including the use of internal stud walls rather than solid walls to allow easier reconfiguration of internal layout;
b. Provision of internal space to successfully accommodate 'home working';
c. Provision of electric car charging infrastructure;
d. Infrastructure that supports car free development and lifestyles;
e. Having multiple well-placed entrances on larger non-residential buildings to allow for easier subdivision; and
f. Is resilient to flood risk, from all forms of flooding.

7 Safeguarding renewable and low carbon energy sources

7.1 Local Plan policy ENV 6 supports the development of renewable energy.

7.2 CC4, below, aims to safeguard renewable energy sources in order to ensure the continued operation of renewable energy generating technology. The Council also recognises the importance of low carbon energy sources, therefore CC4 applies to both renewable and low carbon energy sources.

CC4: Safeguarding renewable and low carbon energy sources

In order to ensure that East Cambridgeshire can maximise its outputs from renewable and low carbon energy sources, development will be strongly resisted if it would result in significant harm to any existing or approved renewable or low carbon energy generation facility and/ or associated infrastructure. Specifically, it is important that development avoids harming:

a. the performance of any existing or approved renewable/ low carbon energy generation facility; or
b. the potential for optimisation of strategic renewable energy / low carbon installations; or
c. the availability of the required resource, where the operation is dependent on uninterrupted flow of energy to the installation.