Developer Guidance on Sustainable and Environmental Measures for new developments

Chapter 1: Purpose of this document

1.1 Canterbury City Council is committed to achieving sustainable development and contributing to national objectives for reducing carbon emissions. A number of policies in the Canterbury District Local Plan aim to reduce the impact of development on climate change.

1.2 This document brings together the various policies within the Canterbury District Local Plan related to sustainable and environmental measures required on new developments and sets out some practical measures available to meet these requirements.

Chapter 2: Policy Context

2.1 The Canterbury District Local Plan (Adopted July 2017) sets out the relevant policies addressing climate change mitigation and renewable energies as well as the expected requirements for new development for environmental measures.

2.2 Local Plan Policy DBE1 Sustainable Design and Construction sets the framework for how proposals for development, both residential and other uses, will be considered. The policy requires schemes to incorporate sustainable design and construction measures and importantly explains how any proposed development should address the range of environmental measures outlined in Table D1: Sustainable Design and Construction Measures Checklist.

2.3 For major developments (10 or more dwellings) and on strategic sites Policy DBE1 requires proposals to submit a sustainability statement providing information on how the scheme has responded to the objectives of sustainable development and had regard to the measures outlined in Table D1. Table D1, the list of environmental measures that should be considered is extensive and gives for flexibility to allow for optimum solutions that are tailored to the specific circumstances of each individual site.

Policy DBE1 Sustainable Design and Construction

All development should respond to the objectives of sustainable development and reflect the need to safeguard and improve the quality of life for residents, conserve resources such as energy, reduce/minimise waste and protect and enhance the environment.

The City Council will require development schemes to incorporate sustainable design and construction measures, to show how they respond to the objectives of sustainable development.

Sustainability statements will be required for all applications for major developments [1] and for the strategic housing sites identified in Policy SP3. They should demonstrate how the proposal has responded to the objectives of sustainable development and had regard to the measures outlined in table D1. Energy statements should be submitted for all strategic development sites. Non-residential developments should meet a 'very good' BREEAM rating and provide evidence as to why an 'excellent' rating cannot be achieved.

Development proposals should also show how measures outlined in any sustainable design guidance or SPD adopted by the City Council have been considered.

New developments will also need to be resilient to climate change. Appropriate climate change adaptation measures, include flood resilient measures, solar shading and drought resistant planting, limiting water runoff, reducing water consumption and reducing air pollution.

2.4 When justifying a proposed sustainable design, the following points in Table D1 concerning sustainability should be considered. Please see Chapter 3: 'Practical Measures' for guidance on appropriate and practical measures to meet the requirements of Table D1.

Issue	Measure
Site selection and layout design	• Efficient use of land • Orientation to minimise energy consumption and maximize • passive solar gain where applicable. • Limiting excessive solar gain and provision of shading both • on and around the building • Optimising natural ventilation • The presence of buildings of mixed use, tenure and type. • Design standard and accessibility

1 As defined in Article 2 of the Town and Country Planning(Development Management Procedure) (England) Order 2015(no.595) or any later amendment.

Issue	Measure
Materials	• Life cycle environmental cost analysis of construction materials • Choice of materials including using those that are locally sourced, are from renewable resources or are recycled (e.g. secondary aggregates), where appropriate. • Seek to minimize waste during construction • Life cycle environmental cost analysis of construction materials • Level of insulation • Efficient water use and re-use of water • The source of energy used and metering • Efficient heating, cooling and lighting • Effective building management systems • Adequate storage space for recyclable materials and composting • Bicycle storage • Improving resource efficiency • Reducing level and water waste
Energy	• Renewable energy • Home user guide and energy monitoring • Reduce energy demand, eg ; through high levels of insulation • Energy use and pollution – cooling, heat generation, pollution air noise and light • The source of energy used and metering • Preferential use of low carbon energy sources and evidence that onsite renewable energy generation has been explored. • Avoiding or minimising any emissions or discharges • Including energy reduction measures from the early design conception stage • Production of energy statements for strategic development sites, which should include: 1. A description of the overall energy strategy for the site 2. A calculation of baseline energy demand and emissions 3. An assessment of the feasibility of the available renewable and low carbon technologies 4. A calculation of the potential contribution of each technology to site energy savings and emissions reductions

Issue	Measure
	5. Approximate costs of each feasible technology, to inform discussion about viability 6. Other potential impacts of renewable and low carbon energy technologies selected 7. Long term management of energy supply on the site
Water	• Sustainable urban drainage • Efficient water use and re-use of water e.g.Grey water recycling systems • Surface water • Permeable surfaces • Flooding and Drainage – avoidance / reduction / mitigation
Ecology and Landscape	• Biodiversity – protection creation and enhancement • Integrated landscape structure and open space system including shelter belts linked where possible to the surrounding landscape • Conservation and retention of high quality natural features (trees, hedgerows, watercourses, water bodies etc.) and the contribution made to increasing and enhancing biodiversity. • Biodiversity – impact loss of habitat, trees, features • Use of land form and landscaping to minimise energy consumption
Transport	• Accessibility of the site to a choice of travel alternatives. • Transport: Major developments- Traffic Assessment; Small developments – transport statement • A safe circulation system for vehicles, pedestrians and cyclists with priority clearly given to pedestrian and cycling safety and links to public transport nodes. • Bicycle storage
Pollution	• Avoiding or minimising any emissions or discharges. • Avoid potentially polluting developments • Avoid/minimize noise, olfactory, air and light pollution
Health and Wellbeing	• Inclusive design and accessibility

Issue	Measure
	• Adaptable buildings • Provision of public and private outdoor space • Appropriate landscaping • Passive surveillance

Table D1: Sustainable Design and Construction Measures Checklist

Policy DBE2 Renewable Energy

In determining applications for the development of renewable or micro-generation equipment (apart from wind energy development), the City Council will expect applicants to:

a. Avoid any significant adverse impacts (visual, noise and amenity impacts);

b. Have given weight to the environmental, social and economic benefits;

c. Have minimised the visual impacts by providing the optimum layout and design of the development including screening;

d. Ensure that the development will not have a significant adverse effect on the amenity of local residents;

e. Ensure that the installation would not have an adverse cumulative impact on the environment;

f. Show there is no adverse impact on heritage assets (Policy HE1);

g. Demonstrate that there is no significant impact on the landscape setting, habitats, biodiversity, wildlife or designations such as the AONB, AHLV, Ramsar, SACs or SPAs as outlined in Chapter 10;

h. Ensure protection of the best and most versatile agricultural land unless it is demonstrated that it is necessary and no alternative poor quality land is available.

It should be noted that wind energy development will be assessed in accordance with the Written Ministerial Statement (HCWS42) and the briefing paper Planning for Onshore Wind (House of Commons, June 2015) until sites can be allocated and relevant policies developed in either a review of the Local Plan or a specific Development Plan Document.

2.5 In addition to Policy DBE1, Policy QL11 Air Quality requires development to include acceptable measures to offset or mitigate any potential impacts on air quality. This policy is intrinsically linked to the Draft Air Quality Action Plan which states vehicle

charging points should be included in the air quality mitigation measures for new developments. Once the AQAP is adopted relevant actions contained therein will be implemented to meet the requirements of Policy QL11.

Policy QL11 Air Quality

Development that could directly or indirectly result in material additional air pollutants and worsening levels of air quality within the area surrounding the development site or impact on the existing Air Quality Management Area will not be permitted unless acceptable measures to offset or mitigate any potential impacts have been agreed as part of the proposal. An air quality assessment will be required if the proposal is likely to have a significant effect taking account of the cumulative effects on individual sites.

2.6 Chapter 7: Climate Change, Flooding, Coastal Change and Water Resources in the Local Plan sets out the Council's response to climate change and the actions it expects.

Climate Change Action

Council responses to Climate Change

Action to reduce the Canterbury District's impact on climate change will include:

- giving priority to development in urban or edge of urban locations that are well served by sustainable forms of transport; and
- ensuring development encourages and improves access to these sustainable forms of transport; and encouraging walking, cycling and the use of public transport; and
- promoting developments that generate renewable energy; and
- encouraging local renewable and low carbon energy schemes at strategic development sites;
- designing development to increase energy efficiency and reduce energy consumption and carbon emissions; and
- undertaking an assessment of the District to ascertain, and where appropriate, allocate suitable sites for wind energy development and wind turbines in either a Development Plan Document or a review of the Local Plan.

Action to adapt to expected climate change will include:

- giving preference to development of previously developed land where this is sustainably located;
- encouraging environments that promote biodiversity and a green infrastructure network;
- locating and designing development to eliminate unacceptable flood risk;
- ensuring that there is no inappropriate development at designated coastal Overtopping Zones and Coastal Protection Zones experiencing erosion;
- adopting sustainable drainage systems; and
- designing development to ensure water efficiency is an integral part of design.

2.7 The development of renewable and low-carbon energy is a key means of reducing the District's carbon emissions. Renewable and low carbon energy encompasses a wide range of technologies, including Combined Heat and Power (CHP); Combined Cooling, Heat and Power (CCHP); district heating; energy from waste; biomass; wind; solar thermal; photovoltaics; geothermal sources and heat pumps. Chapter 7 contains three key policies on climate change.

Policy CC1Renewable and Low Carbon Energy Production Development (apart from wind energy development)

Proposals for the utilisation, distribution and development of renewable and low-carbon sources of energy, including freestanding installations, will be encouraged in appropriate locations. In considering such proposals, the Council will give significant weight to their environmental, community and economic benefits, alongside consideration of public health and safety and impacts on biodiversity, air quality, landscape character, the historic environment and residential amenity of the surrounding area and the protection of the best and most versatile agricultural land. Specific considerations are outlined in Policy DBE2.

Permission will only be granted for large scale or commercial renewable and low carbon energy installations and associated equipment and buildings if there are commitments to ensure their removal after the use has ceased and land restored to its previous use and, where relevant, productive condition.

Until suitable sites are allocated for wind energy development any applications for wind farms or wind turbines will be assessed in accordance with the Written Ministerial Statement (HCWS42) and the briefing paper Planning for Onshore Wind (House of Commons, June 2016).

Policy CC2 Reducing Carbon Emissions From New Development

Development in the Canterbury District should include proportionate measures to reduce carbon and greenhouse gas emissions (as outlined table D1 and Policy DBE1)

As well as incorporating measures to reduce carbon emissions development proposals shall show how they have taken account of landform, layout, building orientation, massing and landscaping to minimise energy consumption.

Policy CC3 Local/District Renewable and Low Carbon Energy and Heat Production Schemes

Strategic Sites (as shown on the Proposals Map) and other sites over 200 units, health facilities, education institutions and schools or substantial commercial developments should provide site wide local renewable or low carbon energy and/or heat generation schemes such as gas fired Combined Heat and Power (CHP).

If a local renewable/low carbon scheme or district heating scheme is not proposed it will need to be demonstrated that the provision would not be viable or feasible, or it can be demonstrated that an alternative carbon reduction strategy would be more appropriate.

Chapter 3: Practical Measures

3.1 This section sets out the practical measures the Council considers appropriate in meeting the requirements of Policy DBE1 and QL11, as well as other policies related to climate change and sustainable development contained within the Local Plan. 'Developer Guidance on Environmental Measures' highlights the measure the Council will expect all new developments to consider and this should be demonstrated via the sustainability statement submitted alongside planning applications. These measures offer developers a practical means of achieving the objectives of the Council's policy on sustainable design and construction and it is therefore appropriate that these potential measures are highlighted by the Council.

Developer Guidance on Environmental Measures

Canterbury City Council is committed to achieving sustainable development and contributing to national objectives for reducing carbon emissions. A number of policies in the Canterbury District Local Plan aim to reduce the impact of development on climate change.

Local Plan Policy DBE1 Sustainable Design and Construction sets the framework against which proposals for development, both residential and other uses, will be considered. The policy requires proposals to incorporate sustainable design and construction measures and importantly address the range of environmental measures outlined in Table D1: Sustainable Design and Construction Measures Checklist. For major developments (10 or more dwellings) a sustainability statement is required in which information will be provided on how the scheme has considered the environmental measures set out in Table D1.

In seeking to address the requirements of policy DBE1, the Council will expect applicants to demonstrate that consideration has been given to the orientation of roofs to enable solar renewable solutions, such as solar panels or roof tiles.

The Council will also expect to see that consideration has been given to installing vehicle charging points on new developments to meet the requirements of policies DBE1 and QL11.

3.2 Including information about the sustainability principles incorporated in the development can be a useful method of clarifying the ways in which the objectives of sustainable development have been incorporated. A sustainability statement should provide information on the subjects contained within Table D1. This statement could be included in the design and access statement. The sustainability statement is an important means by which applicants should demonstrate design quality. For major developments, as defined in the General Development Procedure Order 2015 or subsequent amendments, and on strategic sites, a sustainability statement should form a separate document that focuses in detail on measures taken to reduce environmental impact and enhance social and economic benefits. An energy statement may also be required as part of

this process. New homes should be constructed using sustainable methods and built to meet the needs of present and future occupants. Homes should provide good internal and external spaces and be constructed to use the minimum of energy consumption for heating.

3.3 For the installation of renewable energy (micro-generation) equipment applicants may need to apply for both planning permission (and listed building consent if relevant) and Building Regulations approval. Permitted development rights allow householders to install specified types of micro-generation equipment without applying for planning permission in certain circumstances. If a proposal is not 'permitted development' then a planning or listed building consent application will need to be submitted to the City Council before work can begin. If the proposal relates to a listed building, or is within a conservation area or in the Kent Downs Area of Outstanding Natural Beauty (AONB), the controls over permitted development are slightly more restrictive.

3.4 Renewable technologies are easiest to fit in a new build as part of an integrated design. However, they can be retrofitted to existing buildings depending on their location and orientation. It is nearly always cheaper to save a kWh of electricity than to produce one. Therefore, the most important starting point is to reduce energy demand in the building. For some renewable or micro-generation applications it may be necessary to include detailed proposals for the restoration of the site once the apparatus has reached the end of its functional life and is no longer required or the use ceases. Conditions may be used to ensure restoration of the site in these cases.

3.5 The Council will continue to monitor the Local Plan policies to see how effective they are and these issues will be kept under review.