

## LP23 - Sustainable Construction and Design

### Policy background and explanation

- 15.38 The NPPF (2021, Para.152) states that the Plan should help shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience.
- 15.39 The NPPF advocates good design whilst optimising the potential of the site for the use of alternative heat and energy initiatives.
- 15.40 The Plan supports proposals for sustainable construction and design providing that development proposals are sympathetic to local character and history, including the visual impact upon the surrounding built environment and landscape setting.
- 15.41 The NPPF urges that Local Planning Authorities should recognise the responsibility of all communities to contribute to energy generation from renewable or low carbon sources.
- 15.42 Whilst the planning system has a role to play in delivering sustainability in buildings, construction methods and the energy performance of buildings are primarily addressed via Building Regulations. These have been updated to increase the reduction in CO<sub>2</sub> emissions to 30% for new dwellings and 27% for other new buildings, with further reviews of Building Regulations expected in coming years. Whilst noting the role that Building Regulations play in driving forward these reductions in carbon dioxide emissions, the policy seeks further reductions where possible.
- 15.43 The Plan expects and actively supports developers to explore innovative ways to cut CO<sub>2</sub> emissions. This can include improving energy efficiency measures such as insulation, air tightness and efficient building layout, orientation and services.
- 15.44 Other technical standards to improve sustainability were introduced by the Government in October 2015 through the introduction of optional water efficiency Building Regulation standards. Both the Essex & Suffolk Water and Anglian Water areas are classified as experiencing 'serious' water stress ([www.gov.uk/government/publications/water-stressed-areas-2013-classification](http://www.gov.uk/government/publications/water-stressed-areas-2013-classification)) therefore, the Plan responds to these changes by requiring improvements to water efficiency on new dwellings to achieve the higher water efficiency standard of 110 litres/person/day (compared to 125 litres/person/day under Building Regulations). To ensure this lower water usage can be delivered through Building Regulations, a planning condition will be applied to any planning permission for new dwellings.

**Table 7– Maximum Fittings Consumption Optional Requirement Level**

Maximum fittings consumption optional requirement level	
Water fitting	Maximum consumption
WC	4/2.6 litres dual flush
Shower	8 l/min
Bath	170 litres
Basin taps	5 l/min
Sink taps	6 l/min
Dishwasher	1.25 l/place setting
Washing machine	8.17 l/kilogram

**Fittings based specifications for 110L/person/day from DCLG Building Regs 2010) (2016 amendments) part G2.**

- 15.45 The Anglian Water and Essex and Suffolk Water regions are particularly vulnerable to impacts of climate change including the potential reduction in summer rainfall, and lower available water resources. These factors are all compounded with Eastern England identified as the driest region in the UK. Therefore, all new commercial development is expected to give due consideration to water efficiency along with new residential development for the reasons set out in NPPF. In order to future-proof against climate change the Plan will encourage all residential development to achieve 100ltrs per person per day.
- 15.46 The NPPF requires all new development to be planned to avoid increased vulnerability to the range of impacts arising from climate change. This includes measures to protect against extreme winter and summer temperatures, flood risk and ensuring adequate water supply.
- 15.47 BREEAM (the British Research Establishment Environmental Assessment Method) can be used to assess the environmental performance of new and existing non-residential buildings and refurbished residential buildings. BREEAM measures environmental performance by energy use and the emissions it generates, water use, materials and waste management, land use and ecology, pollution, health and well-being and transport.

## **Policy LP23 - Sustainable Construction and Design**

- 1. All new development is required to minimise its dependence on fossil fuels and to make the fullest contribution to the mitigation of climate change through adopting a sustainable approach to energy use.**
- 2. All new residential development is required to:**
  - a. Achieve reductions in CO<sub>2</sub> emissions for the Target Emissions Rate of new dwellings and new buildings as set out in the 2021 Edition of 2010 Building Regulations (Part L) or any subsequent more recent legislation which would lead to a greater reduction in CO<sub>2</sub> emissions, where practicable;**
  - b. Meet the higher water efficiency standards of 110 litres per person per day, as set out in Building Regulations Part G2 (or any subsequent more recent legislation);**
  - c. Demonstrate climate change adaptation and mitigation measures by adopting effective design principles (including shading, landscaping, site layout and building orientation);**
  - d. Be designed to minimise the energy demand of the building through maximising natural sunlight and ventilation, effectively utilising solar gain and to help buildings respond to winter and summer temperatures and incorporating flood mitigation measures;**
  - e. Provide energy efficiency measures with a proactive approach to improving on the minimum standards specified in the Building Regulations where possible;**

- f. Provide feasible and viable on-site renewable and other low carbon energy generation to allow the greatest CO<sub>2</sub> reduction<sup>32</sup>;**
  - g. Demonstrate how it has incorporated sustainable building materials wherever possible; and**
  - h. Plan for the risks associated with future climate change as part of the layout of the scheme and design of its buildings to ensure its longer-term resilience.**
- 3. In meeting the above, all major developments<sup>33</sup> are required to submit a Sustainability Design and Construction Statement. This should be submitted at the appropriate stage in the application process and demonstrate how the principles set out in 2c)-2h) will be incorporated into the design of the development.**
- 4. Non-residential development of 1,000sqm and above must achieve a minimum of BREEAM 'Very Good' standard or equivalent. Developers will be expected to provide certification evidence of the levels for BREEAM at design stage and on completion of development. All new developments will also be expected to meet the higher water efficiency standards as set out in 2b), unless it is convincingly demonstrated that it is not possible.**
- 5. All residential developments are encouraged to achieve water usage of not more than 100 litres per person per day. This is in addition to criterion 2b) in accordance with recommendation from Anglian Water. Water re-use and recycling, rainwater and stormwater harvesting, and other suitable measures should be incorporated wherever feasible to reduce demand on mains water supply.**

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<sup>32</sup> The Sustainability Design and Construction Statement should investigate the technical feasibility and financial viability of the on-site renewable and other low carbon energy generation options available and the CO<sub>2</sub> savings achieved with each to allow the greatest CO<sub>2</sub> reduction is selected.

<sup>33</sup> Major Development – as defined in NPPF 2021