



Sustainable Construction - Interim planning advice

Please complete the enclosed Sustainability Checklist using the following guidance and submit it with your planning application.

West Oxfordshire District Council recognises the urgent need to reduce greenhouse gas emissions and address climate change.

Early decisions about sustainable design and construction of new buildings and extensions can reduce energy use, conserve water and assist in recycling of materials. Consideration of these issues needs to be made for any development taking place in West Oxfordshire.

Targets for sustainable buildings

We expect all new development to comply with either:

- A. The Code for Sustainable Homes; or
- B. BREEAM standards; or
- C. Local Targets

A. Code for Sustainable Homes

The Code measures the sustainability of a new home against nine categories of sustainable design, rating the 'whole home' as a complete package. It uses a 1 to 6 star rating to communicate the overall sustainability performance of a home. The Code sets minimum standards for energy and water use at each level.

Building regulations set out compulsory minimum building standards.

The Government is committed to zero carbon for all new homes by 2016.

Target:

- All residential development to achieve at least Code Level 3.
- Developments of 10 or more dwellings to achieve at least Code Level 4.

Calculation method:

Compliance with Code criteria, as set out in 'Code for Sustainable Homes: Technical Guide'. (*Department of Communities and Local Government - October 2008 and any subsequent updates*).

For developments of 10 or more dwellings, monitoring, assessment and certification will be required by a qualified and registered assessor.

On sites of less than 10 dwellings, the use of Standard Assessment Procedure (SAP) calculations, along with details of other relevant sustainability features incorporated into the design will be required.

B. BREEAM

The Building Research Establishment Environmental Assessment Method (BREEAM) is regarded as the measure of best practice in environmental design and management of non-domestic buildings.

BREEAM assesses buildings' performance in aspects such as energy use, pollution and water consumption and efficiency. There are five rating levels from 'pass' to 'outstanding'.

The Government has set a target that all new non-domestic buildings be zero carbon from 2019.

Target:

- All new non-residential development to be at least BREEAM 'good'.
- All new non-residential development of 1000m² or more to be BREEAM 'very good'.

Calculation method:

Assessment in accordance with BREEAM standards, as set out at www.breeam.org

For developments of 1000m² or more, monitoring, assessment and certification will be required by qualified and registered assessors.

For developments of less than 1000 m², the use of Simplified Building Energy Model (SBEM) or Dynamic Simulation Model (DSM) calculations, along with details of other relevant sustainability features incorporated in to the design, will be required.

C. Local targets

If there are sound and well-justified reasons as to why complying with the Code for Sustainable Homes or BREEAM is not possible, achieving at least **5 of the 7** local targets will be required.

1. Reduction in energy use

Over 50% of the UK's CO₂ emissions come from energy used to heat, cool and light buildings.

Energy efficiency measures can provide a relatively easy and cheap means of reducing energy use throughout the lifetime of a building: www.energysavingtrust.org.uk

Other examples of energy efficiency measures include orientation, shading, natural ventilation and lighting, provision of intelligent metering and use of energy efficient appliances.

For larger scale proposals, energy use needs to be considered as a 'package', with energy generation measures being looked at alongside energy efficiency measures.

Target:

All new development to incorporate high levels of energy efficiency.

Calculation method:

At least 270mm of loft insulation to all roof voids (including within existing host-building when an extension is being proposed)

2. Energy generation

Renewable energy technologies, like solar panels and biomass boilers, offer an alternative to fossil fuels and can help reduce CO₂ emissions.

Once a building's energy demand has been minimised, consideration should be given to the feasibility and viability of on-site renewable energy provision.

Target:

To assess the opportunities to incorporate renewable energy technologies in all new buildings.

For development of 10 or more dwellings, or 1000m² or more of non-residential floorspace, at least 10% of the energy requirements must be secured from decentralised and renewable or low-carbon sources.

Calculation method:

Statement by equipment provider.

3. Surface water attenuation, flood resilience and reduction of potable water use

Water-related issues are particularly relevant in the District - periods of both water scarcity and flooding have occurred in recent years.

Climate change projections suggest the area will experience increasingly frequent extremes in weather.

Other measures to minimise water use include water efficient toilets, taps and showers and the installation of water re-use systems.

Target:

All new development to incorporate:

- Sustainable drainage measures, including water retention (such as rainwater harvesters and grey-water recycling) and flood storage measures
- High standards of water efficiency; and
- Flood resilience measures.

Calculation method:

Installation of water butts, of at least 100 litres capacity for every building, and all hard surfaces to be permeable.

4. Making space for wildlife

Enhanced biodiversity delivers important environmental, social and economic benefits by providing, for example, a carbon sink, a microclimate control and flood prevention and contributing to health and well-being, social cohesion and property values.

Target:

To ensure that the ecological value of the site is conserved and enhanced, maintaining and protecting existing natural habitats which can contribute to and enhance the amenity of the area.

Calculation method:

Aim to achieve a net gain of biodiversity on or near the site by at least two of the following:

- Creating or restoring a wildlife habitat
- Providing landscaping and water management features which benefit biodiversity and promote local species
- Incorporating vegetation into built structures, such as green roofs and green walls
- Contributing to green corridors and networks
- Incorporating appropriate nesting boxes and roosting structures

5. Sustainable travel

A high percentage of journeys made by car are less than 5km.

Making these journeys more attractive for people to walk or cycle them could give significant benefits eg reducing congestion, improving air quality and providing opportunities for exercise with positive health effects.

Target:

To encourage walking, cycling and public transport use and reduce the use of private cars for shorter journeys.

Calculation method:

Provide covered, secure and convenient cycle storage/cycle parking in accordance with the Oxfordshire Cycle Parking Standards. See Appendix 2 of the West Oxfordshire Local Plan 2011 www.westoxon.gov.uk/localplan

For office developments - also provide shower and changing facilities.

For development catering for people with mobility impairment - provide covered, secure and convenient storage for wheelchairs and/or mobility scooters.

6. Use of local and recycled materials

Local materials include local stone slates, recycled natural blue slate or clay tile, oak or cedar shingles, recycled sheet roofing, local stone, recycled brick and block, straw bale and natural render, virgin timber from certified sources, reclaimed or recycled timber and cladding materials.

Further guidance is included in the West Oxfordshire Design Guide: www.westoxon.gov.uk/designguide

If local/recycled materials cannot be used a full explanation setting out the justification needs to be given eg assessing carbon footprint over the lifetime of the building.

Target:

Use of local natural and/or recycled materials with a low embodied energy - including those that are reclaimed, non-polluting, recyclable and manufactured using renewable energy sources.

Calculation method:

Materials should be locally sourced (generally from within approx 50 miles of the site) or reduce energy use through the lifetime of the building.

7. Planning for waste

We operate a waste collection service for household rubbish, household recycling, food waste recycling and garden waste recycling.

Collection is from the kerbside, but also from communal bin stores or other specified collection points.

Early consideration needs to be given to the design of development to allow manoeuvrability of collection vehicles and ensure adequate provision of bin storage, in locations that will encourage consistent recycling.

Providing areas for home-composting, wormeries and larger scale composters for business/industrial operations should also be considered.

Target:

Bin storage areas must be included in the design of all new and converted buildings

Calculation method:

For residential development, compliance with advice given in our 'Guidance note on the provision for waste storage and collection.'

For other forms of development the same principles contained in the guide need to be incorporated.

Further information

Biodiversity Planning Toolkit

www.biodiversityplanningtoolkit.com

Biodiversity for Low and Zero Carbon Buildings: A Technical Guide for New Build

Williams, C. (2010)

BRE Environmental Assessment Method

A standard for best practice in sustainable design.

www.breem.org

BRE Green Guide to Specification

www.thegreenguide.org.uk

Construction Industry Research and Industry Research and Information Association (CIRIA)

Delivers a programme of business improvement services and research activities for those engaged with the delivery and operation of the built environment.

www.ciria.org

Dept for Communities and Local Government

www.communities.gov.uk

- National Planning Policy Framework (2012)
- Technical Guidance to the National Planning Policy Framework (2012)
- Planning practice guidance for renewable and low carbon energy (2013)
- Research to Assess the Costs and Benefits of the Government's Proposals to Reduce the Carbon Footprint of New Housing Development
- Improving the energy efficiency of buildings and using planning to protect the environment (2013)

Environment Agency

Useful resources on water related issues, wildlife and green spaces and climate change.

www.environment-agency.gov.uk

Oxfordshire Eco-renovation

www.ecovation.org.uk

Thames Valley Environmental Records Centre

www.tverc.org

Town and Country Planning Association

www.tcpa.org.uk

- Climate change adaptation by design: a guide for sustainable communities (2007)
- Biodiversity by Design - A guide for sustainable communities (2004)
- Sustainable Energy by Design (2006)

United Kingdom Climate Change Impacts Programme

www.ukcip.org.uk

Energy

Carbon Trust

Specialist support to business and public sector to help cut carbon emissions, save energy and commercialise low carbon technologies

www.carbontrust.co.uk

Energy Saving Trust

Free independent advice and information on renewable energy, energy efficiency, water and waste

www.energysavingtrust.org.uk

USEA

Sustainable energy advice and services.

www.usea.org.uk

National Energy Foundation

Technical expertise on reducing carbon emissions and improving energy efficiency of buildings

www.nef.org.uk

TV Energy

Promotes practical sustainable energy solutions in the Thames Valley.

www.tvenergy.org

Nature

Barn Owl Trust

www.barnowltrust.org.uk

Bat Conservation Trust

www.bats.org.uk

Berks, Bucks, Oxon Wildlife Trust

www.bbowl.org.uk

Living Roofs

www.livingroofs.org

Natural England

www.naturalengland.org.uk

RSPB

www.rspb.org.uk

Swift Conservation

www.swift-conservation.org

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