



# Summary of Good Practice



What Is Climate Neutral Development?

- Development that is neutral risk to the climate, by not contributing to greenhouse gas emissions and;
- Is at neutral risk from the climate, by ensuring it is resilient to the changes in climate that are expected over the lifetime of the development

The Council has adopted a five point Good Practice Guide for Climate Neutral Development

## 1 Location and Transport

**Lowering CO<sub>2</sub> emissions by reducing dependence on private car-borne transport:**

- New development should be located close to local travel destinations (such as the town centre) or where there is the good access to public transport.

**Enabling alternatives to fossil-fuelled transport:**

- New development should include facilities to support the use of low/zero carbon fuelled vehicles, such as the charging of electric vehicles from green electricity sources.

**Locating development away from areas liable to flooding:**

- New development should be located away from areas liable to flooding and not be dependent on transport links that are liable to flooding.

**Information and guidance:**

The PTAM (Public Transport Accessibility Model) shows how well located development is for access to public transport.

Advice on setting up and operating car clubs: [www.carclubs.org.uk](http://www.carclubs.org.uk)

Information on the current Indicative Floodplain Map for Woking can be viewed on the Environment Agency's website: [www.environment-agency.gov.uk](http://www.environment-agency.gov.uk)

## 2 Site Layout and Building Design

**Lowering CO<sub>2</sub> emissions by reducing energy demands for heating and cooling:**

- Site layout should maximise the potential for passive solar gain.
- Site layout should use landform and landscape to benefit from shelter and avoid over-shadowing of dwellings.
- Design principles should be applied to new buildings that maximise the capture and use of passive solar energy, whilst avoiding excessive solar gain in summer.

**Building in resilience to high summer temperatures:**

- Site layout and landscape should provide adequate shade in summer.
- Building design should ensure thermal comfort in summer by using passive cooling and ventilation, and preventing excess solar gain through techniques such as shutters, sun screens and p.v. shading.

**Information and guidance:**

Design guidance for passive solar - Passive Solar Estate Layout General Information Report 27 (BRE/Energy Efficiency Best Practice Programme) available from the Energy Saving Trust [www.est.org.uk/bestpractice](http://www.est.org.uk/bestpractice)

Energy efficiency in non-domestic developments [www.actionenergy.org.uk](http://www.actionenergy.org.uk)

# CLIMATE NEUTRAL DEVELOPMENT A good practice guide





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Copies of the full Practice Guide are available from Woking Borough Council Planning Service: Tel 01483 743483 or at [www.woking.gov.uk/planning](http://www.woking.gov.uk/planning)

## 3 ENERGY

### Reducing CO<sub>2</sub> emissions by building developments that use sustainable and renewable energy:

- ☀ The energy consumed by new development should meet the target of reducing greenhouse gas emissions to a level equivalent to 80% of CO<sub>2</sub> emissions (compared to the previous use of the land in 1990).
- ☀ Resilience to climate change should be designed into new developments by making them less dependent on grid distributed energy and fossil carbon fuels.
- ☀ The energy requirements of new development should be met through on-site generation of sustainable energy and/or renewable energy.

### Information and guidance:

Advice on energy efficiency in housing is available from the Energy Saving Trust

Tel: 020 7222 0101 Email: [info@est.co.uk](mailto:info@est.co.uk) [www.est.co.uk](http://www.est.co.uk)

The Carbon Trust offers advice to businesses to help them move to low carbon futures

Tel: 020 7170 7000 Email: [info@thecarbontrust.co.uk](mailto:info@thecarbontrust.co.uk) [www.thecarbontrust.co.uk](http://www.thecarbontrust.co.uk)

Energy Services Manager, Woking Borough Council

Tel: 01483 743490 Email: [allan.jones@woking.gov.uk](mailto:allan.jones@woking.gov.uk) [www.woking.gov.uk/html/climate/index.html](http://www.woking.gov.uk/html/climate/index.html)

## 4 SUSTAINABLE DRAINAGE SYSTEMS

### Responding positively to predicted increases in rainfall by ensuring that:

- ☀ New development should include appropriate sustainable drainage systems (SUDS) for the disposal of surface water.
- ☀ Wherever possible SUDS should be provided within the curtilage of the development site. Exceptionally, if this is not possible, developments should contribute towards the cost of off-site SUDS.
- ☀ The opportunity should be taken to develop SUDS which provide multi-use benefits, such as public amenity and wildlife improvements, and are combined with water conservation measures.

### Information and guidance:

General information on SUDS: [www.ciria.org/suds/index.html](http://www.ciria.org/suds/index.html)

**Publications:** Sustainable Urban Drainage Systems - design manual for England and Wales (C522, CIRIA 2000)

Sustainable Urban Drainage Systems - best practice manual (C523, CIRIA 2001)

Sustainable Urban Drainage Solutions: An Introduction (Environment Agency/SEPA)

A Guide to the Design, Construction and Maintenance of Concrete Block Permeable Pavements is available at [www.paving.org.uk](http://www.paving.org.uk)

## 5 WATER CONSERVATION / RECYCLING

### Reducing dependence on mains water in new development by providing :

- ☀ Measures to reduce water consumption (water conservation).
- ☀ Facilities for rainwater harvesting and recycling of grey water.
- ☀ An integrated approach to water demand and rainwater disposal that combines the benefits of reduced consumption and sustainable urban drainage systems ('SUDS').

### Information and guidance:

National Water Demand Management Centre guidance 'Conserving Water in Buildings' available from [www.environment-agency.gov.uk](http://www.environment-agency.gov.uk)

Suppliers of rainwater harvesting systems: [www.ukrha.org](http://www.ukrha.org)

Guidance on the conservation of water and the design, installation and maintenance of reclaimed water systems is available from [www.wras.co.uk](http://www.wras.co.uk)

WOKING BOROUGH COUNCIL

Civic Offices, Gloucester Square, Woking, Surrey, GU21 6YL

Endorsed by:

[www.woking.gov.uk](http://www.woking.gov.uk)

Endorsed by:

South East Climate Change Partnership  
A partnership of the public, private and voluntary sectors  
President: John Crawley OBE

