

Glossary

Acid deposition	Also known as acid rain, this is caused by emissions of sulphur dioxide and nitrogen oxides from fossil fuel use which can be converted into nitric and sulphuric acid once in the atmosphere. Often carried long distances by prevailing winds, these cause great harm to water bodies and ecosystems.
Activity node	A location where services and facilities are centred due to good accessibility on foot, by bicycle or public transport and where population density is increased to take advantage of proximity to the services and facilities provided.
Biophilic design	Biophilic designs are those that connect people to nature and natural processes, enabling them to act in more productive ways.
Biosolar roof	Dual technology roofs combining green roofs with photovoltaic panels.
Climate change adaptation	Initiatives and measures to reduce the vulnerability of natural and human systems to actual or predicted climate change effects.
Climate change mitigation	Action to reduce the impact of human activity on the climate system, primarily through reducing greenhouse gas emissions.
District heat networks	District heating is a system for distributing heat generated in a centralised location for residential and commercial heating requirements. The heat is often obtained from a co-generation plant burning fossil fuels but increasingly biomass, although heat-only boiler stations, geothermal heating and central solar heating are also used, as well as nuclear power.
Fuel poverty	Households are considered to be in fuel poverty when they have to spend more than 10 per cent of their household income on fuel to keep their home in a 'satisfactory' condition.
Heritage asset	A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions because of its heritage interest. Heritage asset is a term that includes designated

heritage assets, listed buildings, world heritage sites, conservation areas, scheduled monuments, protected wreck sites, registered parks and gardens and battlefields) and non-designated assets which are identified by the local planning authority. Non-designated heritage assets include sites of archaeological interest, buildings, structures or features of local heritage interest listed by, or fulfilling criteria for listing by the local planning authority.

Integrated water management

This is the coordinated development and management of water, land and related resources in order to maximise the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems. It considers the multiple benefits that can be derived from the management of water such as biodiversity enhancement and climate change adaptation.

Large scale major development

For dwellings, a largescale major development is one where the number of residential units to be constructed is 200 or more. Where the number of residential units to be constructed is not given in the application a site area of 4 hectares or more should be used as the definition of a largescale major development. For all other uses a largescale major development is one where the floor space to be built is 10,000 square metres or more, or where the site area is 2 hectares or more.

Microgeneration

A term used for the generation of low carbon or renewable energy at a micro scale. The primary source of current renewable microgeneration is solar energy (photovoltaic cells for electricity generation and solar thermal panels for the generation of hot water). Other technologies include micro wind turbines, micro hydro, micro combined heat and power (CHP), heat pumps and small-scale biomass.

Minor development

For dwellings, minor development is one where the number of dwellings to be constructed is between 1 and 9 inclusive. Where the number of dwellings to be constructed is not given in the application, a site area of less than 0.5 hectares should be used as the definition of a minor development. For all other uses, a minor development is one where the floor space to be built is less than 1,000 square metres or where the site area is less than 1 hectare.

Net zero carbon

A “net-zero” target refers to reaching net-zero carbon emissions by a selected date, but differs from zero carbon, which requires no carbon to be emitted as the key criteria. Net-zero refers to balancing the amount of emitted greenhouse gases with the equivalent emissions that are either offset or sequestered. This should primarily be achieved through a rapid reduction in carbon emissions, but where zero carbon cannot be achieved, offsetting through carbon credits or sequestration through rewilding or carbon capture and storage needs to be utilised.

Off gauge bike

A term used to denote bikes that are larger than standard bikes, for example those with trailers. These bikes require additional space for parking both in terms of width and length.

Passive solar design

An element of energy efficient building design that involves optimising heating and lighting gain from the sun, thus reducing the need for space heating, lighting and potentially also cooling. Passive solar design must be carefully balanced with the need to avoid overheating in the summer and shoulder (spring and autumn) months.

Regulated energy use

Building energy consumption resulting from the specification of controlled, fixed building services and fittings, including space heating and cooling, hot water, ventilation and lighting.

Small scale major development

For dwellings, a small scale major development is one where the number of residential units to be constructed is between 10 and 199 (inclusive). Where the number of dwellings to be constructed is not given in the application a site area of 0.5 hectare and less than 4 hectares should be used as the definition of a smallscale major development. For all other uses a small scale major development is one where the floor space to be built is 1,000 square metres and up to 9,999 square metres or where the site area is 1 hectare and less than 2 hectares.

Sustainable Drainage Systems (SuDS)

Development normally reduces the amount of water that can infiltrate into the ground and increases surface water run-off due to the amount of hard surfacing used. Sustainable drainage systems control surface water run-off by mimicking natural drainage processes through the use of surface water

storage areas, flow limiting devices and the use of infiltration areas or soakaways.

Sustainable modes of transport

Sustainable modes of transport include walking, cycling and public transport.

Thermal mass

The property of some materials like stone and concrete to store heat whilst abundant and to release it slowly, flattening out daily temperature variations, thereby reducing the overall need for active heating and/or cooling systems. However, just including large amounts of concrete in the construction will not necessarily mean the material is utilising its potential thermal mass properties, unless specifically located and designed to do so. Thermal mass must also be combined with a means of secure ventilation to enable night purge ventilation to take place in order to ensure that the use of thermal mass does not contribute to overheating.

Urban Heat Island Effect

Describes the increased temperature of urban air compared with rural surroundings. The term 'heat island' is used because warmer city air lies in a 'sea' of cooler rural air.

Walkable neighbourhood

Areas typically based on 400m (five-minute walking time) catchments. The Urban Design Compendium (2000) Paragraph 3.1.2 describes the principles of 'The Walkable Neighbourhood', describing what facilities should be within a five- and ten-minute walk from home.

Water eutrophication

Caused by the enrichment of an ecosystem with chemical nutrients, typically compounds containing nitrogen or phosphorous. Frequently the result of nutrient pollution such as the release of sewage effluent into rivers. It generally promotes excessive plant growth and decay, favours certain weedy species over others and is likely to cause severe reductions in water quality.