

HOW TO CREATE A BETTER HOME

Ideas to make your home more sustainable

We regularly hear that smart design can reduce our household bills. This guide offers advice on how homeowners building extensions or refurbishing properties can use sustainable techniques and technologies to improve their properties. For example ensuring your loft and cavity walls are well insulated can save money, is good for the environment and living in warm, dry, well ventilated homes can help your general health and wellbeing.

The guide also looks at outside spaces; e.g. using permeable paving products to create low maintenance spaces whilst reducing surface water runoff and clever planting ideas which enable you to attract and support wildlife and create attractive outdoor spaces.

A list of local and national organisations that can provide further advice on these technologies and where / how to source them can be found towards the end of the document.

At the end of each section potential benefits resulting from the alterations are listed (please note these benefits refer to the whole section not each point individually). The guide also highlights those alterations which may need planning permission or building regulations using the following symbol ⓘ.

If you are building a home you need to refer to Technical Advice Note (TAN) 22, which provides advice on national planning policy on sustainable buildings. For further information please contact the Council's Planning Department on 01792 635701.

In the Garden

1. Think about wildlife, plant native trees and shrubs, create a pond / wet area to help native species and avoid ornamental fish.
2. Use organic gardening methods to avoid using harmful / artificial chemicals.
3. If laying hard surfaces in the garden use permeable pavements that allow rainwater to percolate through to the soil.
4. Provide bird boxes / bat bricks to encourage native wildlife. Avoid work on roofs and trees during breeding seasons (mid Feb to mid Aug). ⓘ
5. Provide secure, accessible storage for bikes. ⓘ

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| ✓ Health benefits | ✓ Reduced travel |
| ✓ Reduced utility bills / costs | ✓ Selling point for property |
| ✓ Enhanced wildlife / environment | |

Household Waste

1. Dedicate space either inside or outside for sorting and storing your recycling.
2. Compost your kitchen scrapes and garden waste. Place composter in an easily accessible spot on the garden. Alternatively you can compost kitchen scrapes through the Councils kerbside collection scheme.
3. Reuse or recycle construction waste, e.g. clean rubble from demolition can be re-used for back filling.

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Design Tips

1. Exploit the way your building faces, south facing windows make the most of sunlight. ⓘ
2. Glaze extensions to maximise daylight / heat benefits. ⓘ
3. Think about your future needs for the space and design flexible spaces, e.g. level access, wide doorways and easily removable interior walls. ⓘ
4. Conservatories will help store the suns heat / provide a cold buffer from the house. ⓘ
5. Install artificial bird nests and bat roosts / bricks on wood fascias and soffits. Ensure there is a space for nests / roosts if refurbishing roofs.

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Building Materials

1. Use recycled, recovered or sustainably sourced materials in extension construction. ⓘ
2. Use durable, locally produced renewable materials, e.g. use timber from sustainable sources (FSC or equivalent), consider sustainable technologies like straw bale construction. ⓘ
3. Use environmentally friendly / biodegradable products, e.g. organic paints.
4. Use aluminium instead of uPVC for guttering. ⓘ

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Insulation Tips

1. Install insulation and draft proofing to a high standard, including cavity wall, lofts, water tanks and pipes. Use environmentally friendly insulation materials e.g. recycled paper, sheep's wool. ⓘ
 2. Install highly efficient glazing i.e. secondary glazing, double or triple glazing, and low emissivity K glass will help reflect heat back into the room. ⓘ
 3. Use thick or thermally lined curtains to keep the warm in.
- ✓ Health benefits
 - ✓ Reduced utility bills
 - ✓ Reduced greenhouse gas emissions

Energy Use

1. Consider installing alternative heating techniques i.e. domestic CHP / wood and biomass fuel, geo thermal ground source as appropriate for your circumstances. ⓘ
 2. Consider installing photo voltaics / small scale wind turbines for electricity or solar thermal for domestic hot water. ⓘ
 3. Install condensing / high efficiency boilers. ⓘ
 4. Install programmable heating controls so you can adjust your heating to meet you needs. ⓘ
 5. Design in designated secure line drying space to reduce tumble drying.
 6. Use energy efficient fixtures and fittings, i.e. low energy light bulbs and 'A' rated white goods. ⓘ
- ✓ Reduced maintenance costs
 - ✓ Reduced utility bills / costs
 - ✓ Selling point for property
 - ✓ Reduced greenhouse gas emissions

Water Use

1. Use water efficient appliances e.g. low energy use washing machines and dish washers.
 2. Install a rainwater butt in the garden for watering plants.
 3. Think about installing dual flush, small tank or even a composting toilet to save water.
- ✓ Reduced utility bills / costs
 - ✓ Enhanced wildlife / environment

Planning Permission and Building Regulations

Building Regulations and Planning Permission are sometimes thought of as the same thing; although both are dealt with by the Council, they are **separate**.

- Building Regulations make requirements on how you can build.

- Town & Country Planning controls what you can build.

Usually it is necessary to submit applications under both sets of legislation to the Council before work is started. Some minor changes to your home can be made as 'permitted development' and do not need planning permission. However, these may be restricted if you live in a Listed Building, Conservation Area or Area of Outstanding Natural Beauty. If you are considering making any alternations to your home it is always wise to contact the Council for advice.

Further Information and Contacts

Building Control: Peter Richards, Principle Building Control Officer, Environment Department, Civic Centre, City and County of Swansea, SA1 3SN, Tel: 01792 635636

Biodiversity Information: Nature Conservation Team, Planning Services, Civic Centre, City and County of Swansea, SA1 4PH, Tel: 01792 635784, e-mail: nature.conservation@swasnea.gov.uk

BRE (Building Research Establishment): www.bre.co.uk or www.breeam.org

Centre for Alternative Technology (CAT): Centre for Alternative Technology, Machynlleth, Powys, SY20 9AZ, Tel: 01654 705950, website: www.cat.org.uk

Design Commission for Wales: www.dcfw.org

Local energy savings advice: Energy Savings Trust, Tel: 0800 512 021 www.est.org.uk

Forest Stewardship Council (FSC) UK: 11-13 Great Oak Street, Llanidloes, Powys, SY18 6BU, Tel: 01686 413 916, website: www.fsc-uk.org

General Information on Sustainability: The Environment Centre, The Old Telephone Exchange Pier Street, Swansea SA1 1RY, Tel: 01792 480200, website: www.environmentcentre.org.uk

Listed Buildings and Building Conservation: Design Conservation, Planning Services, Civic Centre, City and County of Swansea, SA1, Tel: 01792 636000

Planning Issues and Information: Planning Services, Civic Centre, City and County of Swansea, Swansea, SA1 0SN, Tel: 01792 635701

Sustainability Information: Sustainable Development Unit, Regeneration Department, Guildhall, City and County of Swansea, SA1 4PE, Tel: 01792 636000

Tree Preservation Orders: Planning Services, Civic Centre, City and County of Swansea, SA1 4PH, Tel: 01792 635701