

Transition Scilly briefings

Simplifying difficult issues



TRANSITION
S C I L L Y

Energy in the home

Energy used to heat and power our homes accounts for over a quarter of national carbon emissions, so reducing how much we use is critically important in helping to reduce the impacts of climate change. Fortunately, not only are energy cuts very easy to achieve, they also save us money.

Heating

Space heating and water heating account for the largest proportion of energy use in the home, about 75%, so are the most important areas to start reducing energy usage. Whether you use oil, solid fuel, gas or electricity for space heating, water heating and cooking, there are easy ways to save energy.

[Find out more](#) →

[Energy efficiency in the home](#)

Lighting

Lights can consume a lot of electricity. The key principles are to turn off all lights that you don't need and to fit low energy light bulbs if you haven't already got them. Even halogen lights (often used in kitchens) can be replaced with LEDs now, that use about 10% of the energy and last 10 times longer.

Electrical appliances

Most appliances, such as radios, TVs, laptops and DVD players don't actually use much electricity – relative to heating. That's not an excuse, of course, to leave them on all day, but it's far more important to concentrate on heating and lighting first, because their impact is so much greater.

Maximum power requirements of some electrical appliances (in Watts):

Low-energy light bulb	11W
Laptop	75W
TV	100W
Fridge	125W
Freezer	300W
Microwave	750W
Washing machine	1200W
Hob ring	1300W
Kettle	2250W
Oven	2150W
Immersion	3000W

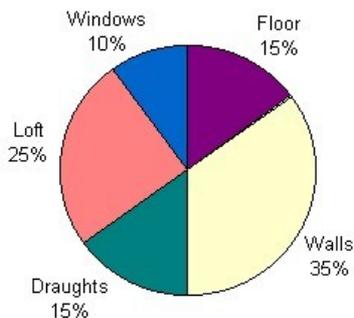
Reducing energy demand – heat loss

The first method of reducing energy demand actually saves money: turn down the thermostat and wear thicker clothes. The next method is low cost: increase insulation on your hot water cylinder and stop draughts around windows and doors.

After these steps, insulate as much of the house as practically possible, starting with the loft space, moving on to walls (is possible), and finally under the ground floor.

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Heat Loss from an average home



Finally fit double glazing if you haven't got it already. A fully insulated house will be over 100% more efficient than a poorly insulated one.

[Find out more](#) ➔

[More about home insulation](#)
[Energy efficiency in the home](#)

Measure what you use

The first step to lowering your usage is to find out exactly how much you use. There are now some great devices on the market to measure your electricity usage in real time, both total use and on individual appliances. Putting electricity use in to a visual form will undoubtedly change the way you use it! These devices offer outputs in kWh, tonnes of CO₂ and £. Not only can you reduce carbon emissions, you can save money too.

[Find out more](#) ➔

[Energy "smart" meters and appliance monitors](#)

Reducing your carbon emissions

The easiest change to make is to switch your electricity supply from a standard (non-renewable) tariff, to a renewable tariff – so that all the electricity you buy will have been produced from wind, solar, or hydro power. These tariffs are becoming more and more affordable and are currently (on average) just 20% more than standard tariffs.

Carbon emissions from electricity use can account for 10% of personal your total. By using renewable electricity you will turn this figure to zero.

[Find out more](#) ➔

[Find the best green electricity tariff](#)

Micro-renewables

Many people are now realising the benefits of micro-renewable energy installations on their own homes. The most cost effective method is solar thermal, which can supply up to 70% of your hot water requirements through the year. Photovoltaic (PV) units are coming down in cost, allowing you to generate your own electricity from the sun – and sell back to the grid what you don't use yourself.

Wind is a more contentious issue from an aesthetic point of view, but certainly feasible and worthwhile.

[Find out more](#) ➔

[Renewable energy generation options](#)
[Energy Saving Trust: taking the next steps](#)

New buildings

Many opportunities exist when starting from scratch to make buildings so highly energy efficient that they hardly need heating – especially when making the most of passive solar gain. Additional technologies such as ground and air source heat pumps become possible too (but are difficult to retro-fit).