

Home choices

Option	Impact	Cost	Yes now	No Never	Yes Future	Order
Insulation in the cavity walls	High	Medium				
External wall insulation	High	High				
Double glazed windows	Medium	Medium				
Triple glazed windows	High	Med - High				
Install 300mm loft insulation	Medium	Medium				
Replace incandescent lightbulbs with LED bulbs	Medium	Low				
Energy management system to turn off unused appliances	Medium	Low				
Solar photovoltaic panels (Solar PV) to generate electricity	High	High				
Solar thermal panels to heat water	Medium	High				
Ground source heat pump	High	High				
Air source heat pump	High	High				
Turn room thermostats down by one degree	Low	Free				
Turn room thermostats down by three degrees	Medium	Free				
Take short showers instead of baths	Medium	Free				
Dry clothes outdoors instead of using tumble dryer	Medium	Free				
Turn everything off when not in use	Low	Free				
Close curtains at dusk, making sure they don't block radiators	Low	Free				
Use the washing machine at 20 or 30°C and only when full	Low	Free				
Defrost fridge and freezer regularly	Low	Free				
Replace white goods with high efficiency rated (fridge, freezer, washing machine)	Medium	Medium				

To think about...

What could you do in your home from the list?

Find out your fuel bills (gas, electricity, oil, wood). How do these compare with the average? How could you reduce them?

Get a Smart meter and see how much electricity different appliances use. How could you reduce your use?

Who supplies your energy? Are they a 'green' supplier (100%renewable energy)?

What is this?

Wall insulation

Cavity wall insulation goes in the gap between the bricks on the outside of a wall and concrete blocks in the inside of a wall. New houses must be built with 100mm insulation. Older houses may have a cavity but not insulation and this can be 'blown' into the cavity.

Other houses may have solid walls. These can have a layer of insulation added to the outside or the inside of the walls.

Loft insulation

Insulation that goes in the loft/roof space above the ceiling

Double and triple glazing

Windows and doors with two or three layers of glass with a gas between the layers.

Incandescent vs LED light bulbs

Incandescent light bulbs are electric lights with a wire filament heated to such a high temperature that it glows with visible light. Less efficient than other types of electric lighting; incandescent bulbs convert less than 5% of the energy they use into visible light. A light-emitting diode (LED) is a semiconductor light source that emits light when current flows through it. Advantages are lower energy consumption, longer lifetime, more robust, and smaller size,

Solar photovoltaic panels (Solar PV)

Solar PV panels generate electrical power by converting light into electricity using semiconducting materials. Usually put on a south facing roof. An additional battery system would mean that the energy can be stored and used when needed.

Solar thermal panel

Solar thermal panels are renewable energy source that harness heat from sunlight by capturing energy which is radiated by the sun within solar panels or collectors to provide hot water. Usually put on a south facing roof.

Ground source heat pump

A ground source heat pump is a system that extracts heat from the ground by circulating fluid through buried pipes and then transfer the heat to provide heating and hot water

Air source heat pump

An air source heat pump absorbs heat from outside air and releases it inside the building, as hot air, hot water-filled radiators, underfloor heating and/or domestic hot water supply. The same system can often do the reverse in summer, cooling the inside of the house.

Room thermostats

Room thermostats control the temperature by switching heating or cooling devices on or off according to the setting chosen.

High efficiency rated white goods

White goods (fridges, freezers, washing machines, tumble dryers, dishwashers) are graded from A to G on their efficiency, with A being the most efficient and G being the least. The grade is based on how many units of energy they use per hour (their kWh consumption). The lower their kWh consumption is, the more efficient the appliance is.