



# **Domestic Energy Conservation**

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## DOMESTIC ENERGY CONSERVATION

Over the last thirty years, our economy has doubled in size, while energy use has barely increased. Nonetheless, we are still using far more energy than we need, in particular because we are using it inefficiently. Energy is often wasted because of poorly insulated buildings or where heating, ventilation, air conditioning and lighting are poorly controlled. Products are less energy efficient than they could be - for example, the average upright freezer on the market today uses nearly three times as much energy as the most efficient one. Energy saving light bulbs use less than a quarter of the energy of ordinary light bulbs, and also last ten times longer.

Businesses and householders may not know how to cut energy use, which is just one of many demands on their time and capital.

Today's homes contain more household appliances than our grandparents ever dreamt of - cookers, microwaves, washing machines, fridges and freezers, TVs and videos (with multiple sets in many homes), computers and game machines. UK households spend around £5 billion each year on electricity to power lights and appliances, which account for around a quarter of UK electricity consumption.

And as these basic products achieve near universal take-up, new, energy-hungry services such as digital TV and broadband communications pose a new challenge.

Not only are these new gadgets energy-hungry, but as users most of us are also energy-lazy. Each year, video recorders and televisions in the UK consume around £150m worth of electricity while on standby, and our homes have increasing numbers of power supplies and chargers permanently plugged in.

So its important that we as consumers look at all ways to save energy.

## WHY CONSERVE ENERGY?

Every time we switch on a light or turn up the thermostat, or even cook a meal we use energy. Whatever kind of fuel we use, whether we burn it directly or indirectly when electricity is generated, we are releasing Carbon Dioxide (CO<sub>2</sub>) into the atmosphere. CO<sub>2</sub> is one of the main gases that contributes to global warming, which is now scientifically recognised as a real threat to today's climate. This doesn't just mean warmer summers and milder winters: global climate is responsible for there being more floods, storms and droughts around the world than ever before. Over a quarter of the CO<sub>2</sub> produced in the UK comes from the fuel we use in our homes. We strongly advise everyone to investigate all methods of increasing the overall energy efficiency of their homes. This includes strategies such as either installing maximum insulation in their homes, purchasing household electrical equipment with an 'A' energy rating e.g. fridges, freezers, dishwashers, washing machines and low energy light-bulbs.

## SIMPLE TIPS

The following list of simple tips will help you conserve energy and improve on your home's overall energy efficiency and therefore save you money, at the same time helping conserve energy for future generations.

### IMMEDIATE IMPROVEMENTS POSSIBLE

- **Heating** - by turning down your thermostat by only 1 C you can reduce your heating bills by up to 10%. If you are away from home over winter leave the thermostat on a low setting to provide protection from freezing at minimum cost.
- **Exterior Doors** - fit easy to fix brush or PVC seals to your external door, this will eliminate draughts and get rid of cold spots
- **Floorboards and Skirtings** – fill any gaps in floor boards with newspapers or silicon sealant. Fill any gaps in skirting boards with silicon sealant.
- **Windows** - the ideal situation is to fit double glazing, but many DIY shops stock much cheaper alternatives, again fill in gaps and fit stick on draught-proofing tape around any opening windows.
- **Letterboxes and keyholes** - Nylon brush seals or a spring flap for the letterbox can help. And a cover on the keyhole.
- **Hot water** - have a look at the cylinder thermostat, the ideal temperature for most people is 60°C/140°F.
- **Basins and Sinks** - always put the plug in your basin or sink. Leaving hot water taps running with it removed is like pouring money down the plughole.
- **Curtains** - close your curtains at dusk to stop heat escaping through the windows.
- **Lights** - turn them off when you leave a room and adjust your curtains or blinds to let in as much light as possible during the day. If you do use a particular light for an average of four hours or more a day, then replace it with an energy-saving equivalent, using around a quarter of the electricity and lasting up to 12 times longer. Energy efficient bulbs cost around £5 each, but will give you a saving on your bills of £10 over the year.
- **Fridges** - defrost your fridge regularly to keep it running efficiently and cheaply. Avoid putting hot or warm food straight into the fridge. If it tends to frost up quickly, check the door seal.
- **Washing machine and tumble dryers** - always wash a full load and if you can't, use a half-load or economy programme if your machine has one. Always use the low temperature programme bearing in mind that modern washing powders will be just as effective at lower temperatures. And don't put really wet clothes into a tumble dryer; wring them out or spin-dry them first. Dishwashers: Try and use the low temperature programme, and ensure you wash a full load.
- **Pots and pans** - choose the right size pan for the food and cooker (the base should just cover the cooking ring) and keep lids on when cooking. With gas, the flames only need to heat the bottom of the pan. If they lick up the side then you're wasting heat.
- **Kettles** - heat only the amount of water you really need.
- **Tap** - turn them off after use, a dripping hot tap can waste enough water to fill a bath.

- **Showers** - a shower uses only two-fifths of the water needed for a bath

#### **LONGER TERM IMPROVEMENTS**

- **Boiler** - replacing a 15-year old model could save you over 20% on your fuel bills, around 32% if you're installing a condensing boiler and up to 40% if you also install good heating controls.
- **Wall Insulation** - this can be the most cost-effective way to save energy around the home. Up to 33% of the heat in your home is lost through the walls. If you're wanting to insulate against this, the first thing to do is to check the type of walls you have.
- **Double glazing** - you could be losing up to 20 per cent of your home's heat through single glazed and poorly insulated window frames. With double glazing you can actually cut these losses by over a half.
- **Hot water tank** - fit an insulating jacket to your hot water cylinder. Fit a British Standard jacket that's at least 7.5cm thick. It will cost around £10 and will give a saving of £10-£15 a year.
- **Hot water pipes** - these can also be insulated to stop heat escaping from them. The best pipes to insulate are the ones between the boiler and hot water cylinder. Cost: around £1 per metre.

#### **GRANTS AVAILABLE**

##### **Energy Efficiency Grants Available**

Grants are available from all sorts of sources to improve energy efficiency in your home including the Government, your energy supplier and local authorities.

They are offered for various reasons, but often as a result of government policies to reduce damaging CO2 emissions by investing in energy efficiency.

You could be entitled to one or more of these grants to help you install certain energy saving measures. Grants are available for people in all sorts of circumstances and are not restricted to the elderly, or those on a low income or benefits.

The type of grant and amount of money available varies depending on your own personal circumstances.

Specific information can be obtained from your local **Energy Advice Centre** on 0800 512 012.

## Renewable Energy Grants Available

The £10 million Clear Skies Initiative aims to give homeowners and communities a chance to become more familiar with renewable energy by providing grants and advice. Homeowners can obtain grants between £500 to £5000 whilst community organisations can receive up to £100,000 for grants and feasibility studies.

Clear Skies supports projects in England, Wales and Northern Ireland.

To be eligible you must conform with the undernoted criteria:

1. Applicant must be the owner of the property for which grant is applied for.
2. Applicant will be resident of the UK.
3. Property must be located within England, Wales or Northern Ireland.
4. System must supply a building (mobile homes, caravans, house boats, etc are not eligible).
5. System must be designed, installed and commissioned by an accredited installer (see the 'Installer' page for a list).
6. System must use components on the DTI's recognised product list.
7. Installer will provide an estimate of the annual energy output of the system.
8. Grants must be spent within 1 year of grant offer being made.
9. Maximum of two grants awarded per applicant provided they are for different technologies

**This guide was supplied by [Energylinx](#)**

Business Cost Consultants are consultants for businesses that spend more than £50,000 on their total utility and telecoms spend.

Please call us on 0141 943 3344 or email [info@businesscostconsultants.co.uk](mailto:info@businesscostconsultants.co.uk) if your business qualifies and you would like to discuss how we could minimise your utility and telecoms costs.



Business Cost Consultants  
Hope House  
125 Milngavie Road  
Bearsden  
Glasgow  
G61 2QJ  
Tel: 0141 943 3344  
Fax: 0141 943 3345  
[www.businesscostconsultants.co.uk](http://www.businesscostconsultants.co.uk)