

# Easy ways to save energy & money

A step  
by step  
guide



**The ECO-ACTIV : Energy Efficiency Service  
Advice Booklet**

## Start saving energy and money today!

The Energy Efficiency Service is a States of Jersey initiative that provides FREE and impartial advice on how to stop wasting energy in the home.

If you want to reduce your energy consumption, cut your utility bills and make an important contribution to reducing Jersey's carbon footprint then the Energy Efficiency Service is the place to start! This leaflet is designed to introduce you to energy efficiency and to give you some ideas on making simple changes that can save you ££££s!

Help!  
Advice is  
available

Call the Energy Advice line on

441611



Email us at [energyefficiencyservice@gov.je](mailto:energyefficiencyservice@gov.je)

Or visit our webpage [www.gov.je/energyefficiency](http://www.gov.je/energyefficiency)



Step 1.  
Understanding  
your energy  
consumption

## Knowledge is power!

Before you start looking at ways to reduce your energy consumption you need to understand how you currently use energy in your home and how much it costs you.

Dig out your energy bills or request copies from your energy provider. If you don't understand your bill then phone up your utility provider and ask them to explain it.

Compare your bill with that from the same period last year and see if it has gone up, stayed the same or decreased. If it has gone up, is it because the unit price has changed or has your consumption increased significantly? If you're using more energy can you think why – colder weather, new appliances or more people in the house?

Think about  
which part of your  
energy use is costing  
you the most.

Heating? Hot water?  
Appliances?  
Lighting?



## Step 2. Behaviour changes

### Small change, big impact

There are numerous simple measures that you can take right now that will cost you nothing but will help you to start saving energy and money straight away.

#### As they're FREE is there any reason not to do them?



**Turn it down.** By turning your thermostat down by 1°C you could cut your heating bills by up to 10%.

Save: around £80 per year.



**Water temperature.** Is your water too hot? Your cylinder thermostat should be set at 60°C/140°F.



**Feeling the chill?** Close your curtains at dusk to stop heat escaping through the windows and check for draughts around windows and doors.

Save: £30 per year.



**Turn it off.** Always turn off the lights when you leave a room.



**Load it up.** If possible, fill up the washing machine, tumble dryer or dishwasher: one full load uses less energy than two half loads.



**Brew for one.** Only boil as much water as you need (but remember to cover the elements if you're using an electric kettle).



**A-rated.** When buying new appliances, (e.g. fridges, TV's) only the most efficient products carry the Energy Saving Trust Recommended logo.



**Fix it.** In one week, a leaking tap wastes enough hot water to fill half a bath, so make sure they're fully turned off!

Save: 5,500 litres of water a year.



**Switch it off.** Avoid leaving electrical appliances on standby, switch them off at the plug.

Save: £40 per year.



**Energy Saving Light Bulbs.** Switch to energy saving light bulbs as they last up to 10x longer than ordinary bulbs.

Save: up to £45 over the lifetime of the bulb.



**Cool wash.** Washing your clothes at 30°C.

Save: over 1/3 on your electricity bills.



**Keep a lid on it.** By keeping saucepan lids on and turning the heat down, your dinner will be cooked quicker and you will be reducing heat loss and saving energy.



**Spin & Drip dry.** Spinning your clothes on the washing machine's highest spin cycle will remove as much water as possible. Line dry clothes where possible.

## Step 3. Improve your home

### Rise to the challenge

What improvements can you make to your home? Although these do require an investment of time and money they deliver favourable paybacks through the resulting energy savings – read through the following pages to establish which would make the most difference to you.

#### Key for improvements

Like any piece of home improvement, the energy efficiency works described in this booklet vary in difficulty depending on who is carrying out the job. The symbols below indicate the approach the Energy Efficiency Service recommends but if you have any doubts we suggest you consult a professional installer or sales advisor from a local DIY store.



#### DIY

If you are competent at DIY this could be a straightforward job. Indicated items are available at most big DIY stores.



#### Professional Installation

For some installations a registered/qualified professional may need to carry out the work. Ensure the installer has the relevant qualifications required to carry out that installation, as explained in the following pages.



#### Directory

If you are uncomfortable with DIY or the job requires a qualified installer the best place to start is the telephone directory. The Energy Efficiency Service recommends that you obtain at least three quotes from different local contractors to ensure you get the best deal.



## Solid & cavity wall insulation



### Why?

- ✓ Around a 1/3 of all heat lost in an un-insulated house is through its external walls.
- ✓ Wall insulation acts like a giant tea-cosy around your home.
- ✓ Cavity wall insulation could save you around £190 per year on your heating bills, with payback within approximately 5 years.
- ✓ Solid wall insulation (external or internal) could save you over £610 on your heating bills every year.

### How?

- Cavity wall insulation is blown into the cavity from the outside, through small holes drilled into the walls.
- Solid wall insulation is carried out by applying an extra layer of insulation to the external or internal walls. Although more expensive than cavity wall insulation, the savings on your heating bills are greater.
- For cavity wall insulation you must firstly determine whether your property has cavity walls and whether they are empty. Generally in Jersey, properties built between 1940-1980 are worth investigating.
- You can then arrange for a registered installer to carry out a quick assessment of your wall construction and determine whether the 'cavity' is unfilled and suitable for filling. This can be done through a visual inspection or with a simple test drill hole in the external wall.
- External solid wall insulation, will need to be carried out by a registered installer. However, internal insulation can be carried out room-by-room (and in some cases DIY), therefore spreading the cost.

### Useful tips

- 👍 Let the installer know if you have any cracks in walls, damp or condensation issues within the house when they complete their assessment.
  - 👍 All contractors installing cavity wall insulation, should be covered by CIGA (Cavity Insulation Guarantee Agency), which provides independent 25 year guarantees for cavity wall insulation fitted by registered installers in the UK and Channel Islands.
  - 👍 Renovating your house? Now may be a good time to investigate solid wall insulation.

For more information on cavity wall insulation visit - [www.ciga.co.uk](http://www.ciga.co.uk)

Approximately  
33% of all heat  
loss is through  
the walls of  
your home



## Loft insulation



### Why?

- ✓ It is generally the most cost-effective insulation to install.
- ✓ It is effective for approximately 40 years, and so will pay for itself over and over.
- ✓ Insulating your loft can save you up to £175 per year.

### How?

- The recommended depth for mineral wool insulation is 270mm, (11 inches).
- If you have less than the recommended depth of loft insulation, then topping up or laying new insulation to 270mm will trap the heat in your home more efficiently.
- Typically insulation quilts are laid down in-between the joists (the horizontal beams that make up the 'floor' of the loft), then another layer of insulation quilt can be 'cross-laid' over the joists to ensure maximum heat capture.
- If you wish to use your loft for storage, insulation can be laid between the joists and boarded over. If your joists aren't deep enough to allow 270mm of mineral wool insulation, a professional installer can recommend solutions.
- If you have a water tank or pipes in the loft these should also be insulated, but remember not to insulate beneath the tank. By increasing your loft insulation, the loft itself will be cooler during cold snaps meaning water pipes are at greater risk of freezing.

### Useful tips

- 👍 Always wear a mask and gloves when handling and laying loft insulation.
- 👍 Electrical cables should be lifted over the loft insulation to avoid overheating and fire risk.
- 👍 Insulation should not be laid over spot lights or downlighters in the loft floor without fire protection.
- 👍 It is important to leave areas near roof eaves and air vents un-insulated to allow sufficient ventilation in the loft space. If you have existing condensation or damp issues, contact a professional before undertaking any further insulation work.
- 👍 Try to avoid squashing down the insulation as this makes it less effective.
- 👍 If you have laid flooring in your loft, this will need to be lifted in order to lay insulation in-between the joists.
- 👍 Don't forget to insulate your loft hatch.

Save up to  
£175 per  
year on your  
heating bills



## Pipe and tank insulation



### Why?

- ✓ Insulating your hot water pipes, tanks and hot water cylinder can be one of the most cost-effective measures you can take to reduce your fuel bill and CO<sub>2</sub> emissions.
- ✓ Tank and pipe insulation will keep your water hotter for longer by reducing the amount of heat that escapes.
- ✓ Fitting a jacket around your hot water cylinder will cut its heat loss by over 75%. It can save you around £40 per year, paying for itself within 6 months.

### How?

- Hot water cylinder jackets, water tank insulation and pipe insulation can be easily fitted to accessible pipes and equipment.

### Useful tips

- 👍 Turn off your heating or wear gloves when insulating your hot water pipes so you don't burn your hands.
- 👍 Make sure that the insulation is securely fixed to ensure it is effective and long lasting.

## Heating controls



### Why?

- ✓ Effective heating controls allow you to determine exactly how hot, how often and whereabouts your heating is required therefore preventing unnecessary energy use.

### How?

- Thermostatic radiator valves (TRVs) can be fitted to radiators to provide manual control of temperature in individual rooms/areas of the house.
  - A hot water cylinder thermostat maintains water at a fixed temperature and prevents energy wastage through overheating.
  - A room thermostat monitors the air temperature in your house and automatically turns down the heating when the desired temperature is reached.
  - A heating time clock / programmer allows automated control over the times that your heating and/or hot water comes on and off, helping to ensure that they are off when not required.



## Heating systems



### Why?

- ✓ Space heating accounts for around 60% of what you spend on your energy bills over a year, so getting an efficient system can make a big difference.
- ✓ If you have an oil or gas boiler of more than 10 years old, replacing it with a new A-rated condensing boiler could save you up to £330 per year and nearly 2000 kg of carbon dioxide emissions.
- ✓ If you have electric heating aged more than 10 years old, it is worth investigating if modern units could save you money.

### How?

- Condensing boilers reclaim heat from the boiler exhaust gases, capturing much more usable heat and therefore making them up to 30% more efficient than non-condensing boilers.
- Modern electric heating solutions are efficient to run and feature improved controls so your heating comes on where you want, when you want it.

### Useful tips

- 👍 Remember to check with your installer how long the work will take and how long you will be without heating and hot water for.
- 👍 Your existing boiler may be oversized for your property. Ask your installer to calculate the size of the boiler you require for your property and not to assume you want the same size as your current boiler. Remember that a smaller boiler will cost you less both to purchase and to run!
- 👍 Ask your installer to confirm the make, model and rated efficiency of the new boiler in his quote – the boiler should be A-rated or over 88% efficient.
- 👍 It is the installer's responsibility to ensure that any heating installation is compliant with the current Building Bye-Laws and that the installation is notified to the Department of the Environment. This is for your safety and can be important when you come to sell your property so make sure that your contractor does so!
- 👍 Make sure that the installer clearly explains how your new heating system and its controls operate. Also ensure they provide you with the operations manual, guarantee and commissioning paperwork.
- 👍 Ask for evidence from your installer that they are either, 'OFTEC' (Oil Firing Technical Association) registered for oil boiler replacements or 'Gas Safe' registered for gas boiler replacements.

Save up to  
£330 per  
year on your  
energy bills





## Draught proofing



### Why?

- ✓ The average home has draughts equivalent of an open window the size of an A4 piece of paper.
- ✓ Draught proofing is one of the easiest, cheapest and most efficient ways to save energy but is often over-looked.
- ✓ Draught proofing blocks unwanted gaps that let cold air into your home and warm air out.
- ✓ Draughts can occur through gaps in floorboards, between the floor and skirting boards, through letter boxes, around loft hatches and also through gaps caused by poorly fitted windows and doors.

### How?

- Windows - draught-proofing strips (either self-adhesive foam or brushes) can be stuck around the window frame to fill gaps.
- Doors - use a brush or hinged flap draught excluder for the gap at the bottom of the door.
- Fit foam, brush or wiper strips to gaps around the edges of the door.
- Fit a purpose-made cover that drops a metal disc over the keyhole.
- Fit a letterbox flap or letterbox brush.
- Inactive chimney - get a professional to fit a cap over the chimney pot or buy a chimney balloon, an inflatable cushion that blocks up the chimney (you must remember to remove these before lighting a fire!)
- Floorboards and skirting boards - cracks or gaps can be blocked using flexible silicon based filler.
- Other gaps around loft hatches, pipe-work and cracks in walls can also be made draught proof, again with silicon fillers or hard setting fillers for solid walls.

### Useful tips

- 👍 Carefully consider whether you want to draught proof rooms that require good ventilation i.e. where there are open fires or where a lot of moisture is produced, such as utility rooms.



## Low energy lighting



### Why?

- ✓ By replacing standard incandescent bulbs with new energy saving bulbs you could save approximately £2.50 per bulb per year, as they use 80% less electricity than standard bulbs, but still generate the same amount of light.
- ✓ Energy saving light bulbs last up to 12x longer than standard bulbs and so could save you up to £25 a year for the average home or £390 over the life time of the bulbs.

### How?

- Advances in technology mean that energy saving light bulbs are now available in a wide variety of fittings, shapes, sizes and colours.
- Their warm up times have improved and they are now available to fit nearly all light fittings including downlighters and fittings on dimmer switches.
- In addition you can buy low energy light fittings which will only take low energy light bulbs.

### Useful tips

- 👍 Check the expected life of the light bulb (in hours) - the longer the life of the bulb the longer it will deliver savings for you!
- 👍 Look for the light output in Lumens - this is the only reliable way to check that one bulb is as bright as another.

## Need an incentive?

### Home Energy Scheme

The Energy Efficiency Service Home Energy Scheme provides FREE energy saving measures to Islanders who meet certain criteria. Call 441611 to find out if you qualify for the scheme.

### Community Buildings Programme

Charities and not-for-profit organisations that provide services to vulnerable Islanders may also be eligible for FREE energy audits and improvement works.

Call **441611** for more information or advice.

Email us at [energyefficiencyservice@gov.je](mailto:energyefficiencyservice@gov.je)

Or visit our webpage

[www.gov.je/energyefficiency](http://www.gov.je/energyefficiency)



Save energy & money today!



To find out more get in touch

**Tel: 441611**

[www.gov.je/energyefficiency](http://www.gov.je/energyefficiency)



This project is a States of Jersey initiative started with £0.5m donation from Jersey Electricity.  
Printed on post-consumer recycled paper.