

Home Manual

Save Energy
Save Money



Home Manual

caring for you & your environment

Contents

Introduction	02	Glazed balconies	14
Control your heating	04	Insulation	15
Water heating	06	communital heating	16
Water conservation	08	Solar water heater	17
Electrical appliances	11	How much energy do you use	18
Lighting	12	Useful information	19
Ventilation	13		

Introduction

This manual will help you **save money in your home & help the environment**

- * By using your heating system efficiently and wisely you will reduce the amount of energy you use, while maintaining high comfortable levels.
- * You will also be helping the environment by reducing your carbon footprint.



This manual covers topics such as; • your heating system • ventilation • water conservation • particular features of your home

Do you know that...

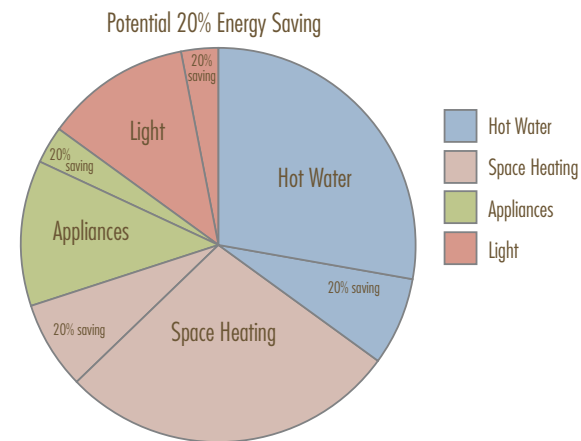
- * Energy use is responsible for two-thirds of Ireland's greenhouse gas emissions.
- * Irish homes use around a quarter of all energy used in the country - that's even more than industry.

Introduction

Energy use in the home

Every time we switch on a light, cook a meal or turn up the heating we use energy. Whichever type of fuel is used we add to our energy bills and to the release of carbon dioxide into the atmosphere which ultimately contributes to the threat of global warming. Whilst the use of energy within the home is an essential part of everyday life an unnecessary amount of this energy is wasted as a result of to bad habits.

You could save up to 20% on your energy bills just by changing how you use energy in your home (see diagram).



Control your heating

Do you know that...

- * An increase of the temperature of 1°C can increase energy consumptions by 10%.
- * Open fires are wasteful of energy with more than 70% of the energy going up the chimney.
- * Proper control and regular maintenance of your heating system can reduce fuel consumption by 10-20%.
- * A Thermostatic Radiator valve allows you to control the temperature of each room in your home.
- * TRVs measure the temperature in the room and turn the radiator on or off to maintain the desired temperature.



Control your heating

- * If the radiator is mounted below a window, a projecting windowboard or shelf above the radiator will direct warm air into the room, reducing heat loss through the window.
- * Remove furniture and other obstructions which are too near to radiators.
- * Close doors to separate heated from unheated areas of your home, and minimise the area you are heating.
- * Turn off the heating overnight and when you are out during the day.
- * Bedroom areas can be heated to less than 18°C - 20°C and still be comfortable.
- * 20°C is an ideal room temperature.



Water heating

Do you know that...

- * Heating hot water account for 40% of energy consumption in the home: you should be sparing in its use.
- * 90% of the energy consumption of washing machines goes on heating the water. Wash clothes whenever possible in cold or cool water.
- * Ensure that the hot water cylinder is insulated with a lagging jacket if it does not already have factory applied insulation, this keeps the water hot for a longer time.
- * Take a shower instead of bath and have a shorter showers.
- * Using immersion heaters for heating water is very costly and should only used if the gas boiler is not working.



Water conservation

Water is precious, please conserve it

Do you know that...

- * Approximately 1/3 of all water used in the home is flushed down the toilet.
- * All new dwellings in Dublin City have low flush or dual flush toilets, which use much less water per flush than traditional toilets.
- * Old toilets may be fitted with a Hippo Bag which helps to save water with every flush.
- * A Hippo Bag is a small plastic bag which can easily be fitted into your toilet cistern. Water is retained in the bag, helping to save water every time you flush.
- * Don't leave taps running when washing dishes, food or hands.
- * Don't leave the tap running while brushing your teeth.
- * Don't use your toilet as a bin.



Electrical appliances

Do you know that...

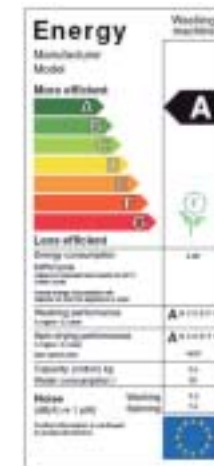
- * Electrical appliances such as the fridge, washing machine, TV, dish-washer, oven etc. are responsible for 60% of the domestic electric consumption.
- * Be demanding when you buy, check the energy labels on appliances. Purchase 'A' or 'A++' rated appliances whenever possible, they can save their replacement cost over their lifetime and benefit the environment.

Tips that will help you reduce your energy and electricity costs:

- * Microwave ovens & pressure cookers use less energy than conventional ovens.
- * Use pots & pans that cover the whole of the cooker ring and use a lid while cooking.
- * Use the toaster rather than the grill and use the kettle to boil water.
- * If possible choose a gas cooker rather than an electrical one, gas is less expensive than electricity and emits less carbon dioxide.

Electrical appliances

- * The washing cycle selected on a washing machine should have the lowest water temperature required for the items being washed.
- * A full load of washing is more energy efficient than two half loads.
- * Don't fill the kettle for just one drink, boil the amount of water you need.
- * Dry clothes on a clothes line whenever possible instead of using a tumble dryer.
- * When drying clothes in a dryer, dry heavy articles separately from light articles and turn the dryer off as soon as the clothes are dry - don't over-dry the clothes!
- * Don't put really wet clothes into a tumble dryer; wring them out or spin dry them first.



Electrical appliances

- * Remember to defrost and clean the inside of your refrigerator and freezer at least every 6 months.
- * Check that the door seals on the refrigerator and freezer are tight fitting.
- * Don't leave fridge door open for longer than necessary.
- * Avoid putting hot or warm food straight into the fridge; allow it to cool first.
- * And don't forget leaving electrical goods on standby can use up to half the electricity as when it is switched on. So switch off the television, DVD player, washing machine etc fully by switching off at the wall.



Lighting

Do you know that...

- * Lighting is responsible for 15% - 25% of the energy consumption in a building.
- * Energy saving lamps last up to 10 times more than incandescent lamps, using 5 times less energy.
- * Energy saving lamps need some seconds in order to reach the maximum lighting level.
- * In the Kitchen: Fluorescent tubes are considerably more energy efficient than traditional tungsten filament bulbs. Where Fluorescent tubes are not suitable install Compact Fluorescent Lamps (CFL).
- * In the bedroom: Lighting levels in the bedrooms are generally lower than in other parts of the house, use CFLs to replace existing bulbs.



Ventilation

Do you know that...

- * Ventilation is very important to assure good air quality within a building.
- * Ventilation allows movement of air throughout the house and across the walls of the house.
- * Good ventilation stops condensation & damp spots around the house, musty smells and mould growth.
- * Opening windows for a short period of time will ventilate your home. However windows left open, especially when the heating is on will result in heat loss. Its important to get the balance right.
- * You may have permanent vents on some walls of your home. It is important not to block these.
- * If these vents are a source of draughts, it is possible to replace them with adjustable vents which can be opened and closed accordingly.
- * However, for rooms with open fires and flue appliances it is advised to seek advise.
- * Your home may be ventilated through trickle type air vents on windows or doors that can be opened & closed.



Glazed balconies

It is good to know...

- * That glazed balconies are "sun spaces" that not only increase the floor area of your home, but also, when used correctly can improve the thermal comfort of your home and help reduce your heating bills.
- * The sun space can trap heat from the sun during the winter (passive heat storage), and through opening windows during the summer can help avoid over-heating.
- * It is important, to avoid opening the door to your sun space unnecessary during the winter.



courtesy of Sean Harrington Architects

Insulation

Do you know that...

- * Insulation is a very important material to minimise heat loss through a building's walls, floors and roof.
- * By improving insulation standards of a home and/or increasing its thickness, the amount of heat loss is reduced.
- * Your home has been insulated to a very high standard.
- * Attic or roof insulation: it is important not to interfere with the insulation in your attic space. Areas where insulation has been removed or flattened will become a pathway for heat to escape into the attic and out of your home.



Communital heating

Do you know that...

- * Some homes, such as York Street flats are heated through a communal heating system which is a very efficient way of heating a block of apartments.
- * A condensing gas boiler provides heat for you and a number of your neighbours homes.
- * You therefore only pay for the heat you use rather than paying for the gas and the normal heat losses associated with having your own boiler.
- * This a more environmentally friendly way of heating your home.



Solar water heater

Do you know that...

- * One square meter on your roof receives the equivalent of more than 100 litres of oil in free solar energy per year.
- * A solar water heater produces hot water by transforming sunlight into heat through its solar panels. That heat is then stored in a large hot water cylinder so that it is available when you need it.
- * Solar water heaters can provide up to 50% of your hot water needs, which otherwise would be provided through gas or electricity.



How much energy do you use

How to calculate the amount of electricity you use

Collect your ESB bills for a one year period. In the top left corner (circled) you will find the meter reading for each two month period. Subtract the previous reading from the present reading and you will have the number of units used for that bill. Do the same for all the bills in one year and add the results together. Each unit is equal to 1 kWh (kilo Watt hour) of electricity. By comparing different years together you can see how much electricity and money you have saved.

How to calculate the amount of gas you use

If you gas is paid by bills, you may follow the steps above. Otherwise, you may contact Bord Gas to send you this information.



Safety

- * Never attempt to fix appliances yourself.
- * Do not tamper with controls panels, meters or boilers.
- * If you smell gas contact BORD GAIS 24 hour emergency service at [1850 20 50 50](tel:1850205050) and do not switch on any electrical appliances or light a cigarette.
- * Children should never be allowed play with electric wires or appliances.
- * Never put a fork or knife into a toaster. Make sure to unplug toaster first.




Useful contacts

Codema : 01 41 00 562
Dublin City Council Housing Department : 01 22 22 222
BORD GAIS 24 hour emergency service : 1850 20 50 50
ESB : 1850 37 23 72
Power of One : 1850 22 11 22
Change Campaign : 1890 24 26 43
Sustainable Energy Ireland : 1850 73 47 34

Or consult your phone directory for other contact numbers.

Notes

Notes

Intelligent Energy  Europe



50, Guinness
Enterprise Centre
Taylor's Lane
Dublin 8

T 01 410 0659
F 01 410 0576
E codema@codema.ie
W www.codema.ie