



# Energy Savers

## White knights

When buying new white goods like freezers and washing machines check out the energy consumption and choose A++ or A+++.

Keep the fridge/freezer door closed. Every time you open the fridge/freezer door, approximately 30% of the cold air escapes leading to more power consumed.

Set your appliances at the most efficient temperature. For every degree lower that the temperature is set, a fridge will use four per cent more electricity.

Keep your fridge and freezers in tip top condition by defrosting regularly. Frost free freezers can use as much as twice the energy as standard freezer.

Positioning of your white goods is important.

For example don't place your oven next to your fridge. Or the fridge next to a radiator.



## Heads up, not down

Limit your time on electronic devices. Every search query, every email, every song or film you stream causes CO<sub>2</sub> emissions because energy is used to produce the data.

According to Google, they use 0.0003 kWh of energy to answer an average search query which gives out about 0.2g of carbon dioxide.

One single streaming provider currently consumes 15 percent of the world's internet bandwidth.

By 2018, the use of digital technologies had overtaken the aviation industry in terms of CO<sub>2</sub> emissions.

You can reduce your digital footprint by using "green" search engines, clean your email inbox and download rather than stream.



## Cooking for Wales

How does your household cook your food?

A gas oven consumes about half the energy of an electric oven because it can generate heat instantly.

An electric oven produces an average of 253 grams of CO<sub>2</sub> per use, while a gas oven has lower emissions - just 166 grams of CO<sub>2</sub>.

Cooking in a microwave can help save energy. A microwave uses about 50% less energy compared to an oven.

Using the right sized pan on the hob can help save energy. Using a smaller pan on a larger burner will waste more than 40 percent of the oven's energy. Use pan lids so you can cook at a lower temperature.



## Unplug

Home electronics consume a lot of energy even when turned off and left on standby.

Approximately, 75% of electricity used to power home electronics is consumed while the products are off. They use energy in standby mode so that they start up instantly when we want them. Each TV or computer left on standby is estimated to cost you 2p per hour.

Only 5% of the power used by a phone charger, charges the phone.

A typical microwave uses more electricity to keep the digital clock going than it does heating food.

Save energy by switching off and unplugging electric items when not in use.



## Think it over

Do you really need the energy using item you are considering purchasing?

If you do need it, can you share one with somebody else, buy a refurbished or second-hand model rather than a new one?

The less we buy, the less items are produced, the more money and energy we save.



## Active travel

Vehicles burn more energy than most industries.

Almost 1/5th of the world's energy is used for transporting people, produce and goods.

Car sharing, travelling by public transport, cycling or walking can all help to reduce energy consumption.



## Turn off

Turn off unnecessary lights.

Compared with conventional lightbulbs, energy-saving lightbulbs save 70% on electricity costs, and their production produces 80% less CO<sub>2</sub> emissions.

Unfortunately, energy-saving lightbulbs contain toxic mercury and are therefore hazardous waste.

LED lights are the ultimate energy saver. LEDs are very energy efficient and cheap to run. Lights in our homes and offices should be replaced with LEDs to conserve energy.



## Cut out plastic

Reduce your household's use of plastic and recycle it whenever possible.

The production of plastic bags uses fossil fuels, and in every single phase of its life cycle, plastic emits greenhouse gases.

Bring your own shopping bag and buy products that are not plastic packed wherever possible.

Look for non-plastic options where possible and avoid daily use items with microbeads such as shampoo or plastic such as some teabags and wet wipes.



## Turn down

Reducing a room's temperature by just one degree saves about six per cent of heating energy.

Shut doors, service heating systems before winter and turn off heating in unused rooms. Grab a blanket or sleeping bag or put on an extra jumper.



## Go sustainable

When buying food, soft furnishings, clothing, household products such as cleaning agents and toiletries, try to buy organic.

Many natural materials such as bamboo, coconut husks, cotton, etc., are used to make textiles such as rugs and clothing.

Organic items are usually healthier because they contain fewer harmful substances. Less energy is used to make, grow or harvest them. This helps to protect the environment and the climate.



## Buy local

Buy local produce or manufactured goods.

This supports your local farmers, manufacturers and suppliers.

This will help cut down on the emissions caused by transporting produce and goods across the world.



## Eat more fruit and vegetables

In Europe meat and dairy production is estimated to be responsible for 12-17% of total greenhouse gas emissions. Throughout the world, the global livestock industry produces more greenhouse gas emissions than all cars, planes, trains and ships combined.

A small shift in diets, with a reduction in meat and dairy products, and more plant-based foods instead, could reduce the pressure that agriculture places on the environment.

Even better, grow your own healthy produce.



## Plant trees!

It is well known that trees and forests help protect us from climate change.

A research team at Eidgenössische Technische Hochschule Zurich, has estimated that two thirds of man-made CO<sub>2</sub> emissions could be removed from our atmosphere if we were to reforest 900 million hectares.

Plant a tree in your garden or at your setting.



## No fly zone

Air travel is the fastest mode of transport available to most of us, but it emits large quantities of CO<sub>2</sub> while transporting relatively few people in a short time.

Avoid air travel as much as possible. For instance, stay local for holidays or use more sustainable forms of travel such as electric vehicles.



## Be a discerning customer

Exercise your rights as a consumer and as a citizen.

We can choose products from companies that are sustainable and ethical.

By supporting companies that act responsibly, we can hold companies that don't act in this way to account for their environmental practice and help persuade them to make positive changes.

Look out for the symbols on sustainably sourced products such as Forest Stewardship Council (FSC) and Fairtrade.



## Use small appliances

Small kitchen appliances can save energy rather than using the hob. For example, egg boilers, kettles and coffee machines consume around 40 per cent less energy than boiling water in saucepans on the hob, to cook and make drinks.

To reduce CO<sub>2</sub> emissions, only boil the kettle with the amount of water you actually need.

Try and avoid coffee pod machines that use aluminium capsules. They use a lot of energy to produce them, and they are not usually recyclable.





## Go green

Use a green electricity provider.

An average household with a consumption of 2,900 kWh can cut down on 820 kg CO<sub>2</sub> emissions per year.

Use a smart meter to monitor your energy consumption.



## Save water

Save water by collecting grey water (used dish water, condensed water from the tumble drier, etc) to water your plants.

A quick shower instead of a bath uses less water.

Don't leave the tap running when brushing teeth or lathering up.

Wash clothes using an economy programme and save up to two thirds of electricity.

Use the economy button to flush the toilet and save 3 litres of water.



## Efficient gardening

Say no to the mow! This will support more biodiversity.

Don't cover the ground with plastic grass, concrete or tarmac. This will help to prevent flooding.

Don't buy peat compost as its removal destroys valuable habitats.

Look for plants that are water efficient and install a water butt to catch rain to water the garden with.

Compost food and garden waste and use to add nutrients to the soil.

