



The Consumption Guide





Contents

| The campaign | 3 |
|--|----------|
| | |
| Resource Efficiency | 4 |
| What is it? | 4 |
| Why do we need it? | 4 |
| Turning waste into a resource | 4 |
| Water: a vital resource | 6 |
| Greening the EU economy | 7 |
| dreening the Eo economy | , |
| What is the green economy? | 7 |
| Transforming Europe into a green economy | 7 7 |
| Policies that preserve natural resources | 8 |
| The green economy and jobs | 11 |
| | |
| Tips | 12 |
| | |
| Air | 13 |
| Water Soil | 16 |
| Minerals | 24 26 |
| Wood/Timber | 28 |
| Biodiversity | 30 |
| Waste | 35 |
| Reusing | 44 |
| Recycling | 46 |
| Transport/Travel | 49 |
| Energy Efficiency | 51 |
| Overconsumption | 55 |
| Green Economy | 58 |

The campaign

Your choices make a world of difference!

Do you want to live life to the full while respecting nature? Then Generation Awake is for you. It's all about opening our eyes to our consumer choices and the consequences they have on the Earth's natural resources. When you're part of Generation Awake, you're aware that your choices not only change your world, but also the planet.

How? As life is all about choices, making smart day-to-day decisions that consider the environment also make a world of difference to your life and that of your family and friends. Firstly, it will help you save money and improve your lifestyle – and help the economy too. On top of that, smarter consumer choices make your city, your country, Europe and the planet more sustainable now and for future generations.

Together we can work towards a society where we have learned to get more from less, where the throwaway culture is a relic of the past, where waste is reduced to zero, and where all items have value and can be reused or reprocessed as new.

Generation Awake is a campaign created by the European Commission to highlight what each one of us can do in our daily life to save water, energy and other natural resources, and reduce waste. If you like what you see, share the message with your family and friends and join us on Facebook too. Thanks – it's great to have you on board.

Resource Efficiency

What is it?

We need natural resources like metals, minerals, forests, land, food, air and water for our prosperity and well-being, but we are using them up faster than they can be replaced. When we destroy animals and plants that keep our ecosystems in balance, we are storing up problems for the future.

To make sure we – and our children – can look forward to a good quality of life, a healthy environment and a vibrant economy, we need to change the way we use resources, as individuals and as a society. Resource efficiency is about doing more with less, using resources sustainably and minimising our impact on the environment.

Why do we need it?

By 2050, if we follow our current path, we will be extracting five times more resources than we do today. That probably won't be possible. More than 60% of our ecosystems are already over-exploited, global fish stocks face grave threats, and we are endangering the quality of our water and air by cutting down too many trees.

As the world population heads towards 9 billion, we need to become a society that uses resources more efficiently – one that works to improve the environment rather than damaging it.

This is why the EU is pushing for resource efficiency, which means using resources in a more sustainable way. Raw materials like water, minerals and timber need to be managed more efficiently throughout their life-cycle, from when they are first extracted to when they are finally disposed of.

Our biggest consumption impacts on the environment come from food, buildings and transport, and so these areas need changing the most. As consumers, we can play our part by considering the lifespan and impact of the products we buy, and how we use energy and water at home, and by talking to friends and family about our buying decisions.

Turning waste into a resource

Traditionally waste has been seen as a source of pollution. But well managed waste can be a valuable source of materials, especially when many raw materials are becoming scarce.

The best option is to stop creating waste. When that isn't possible, other good choices are reuse, and recycling.



Reducing

Think about the environmental impact of the things you buy, including the packaging. Always use recyclable bags for shopping, cut down on food waste, and choose product refills if you can, avoiding single-use containers. Why not put a 'no junk mail' sticker on your letterbox and unsubscribe from paper mailing lists in favour of online or e-mail newsletters, holiday brochures and catalogues? You could choose online billing for your bills and bank statements, or start a home compost for fruit and vegetable waste? When giving presents to loved ones, think about offering a service instead of a material item, like event tickets, or a course in a pastime they love. And if you do need a product that you will use only once – like a book or a tool – consider borrowing rather than buying. If you have a baby, think about investing in reusable nappies. By the age of two-and-a-half, a child using disposable nappies will have used approximately 6 500 nappies, equivalent to 1.5 tonnes of waste.

Reusing

Reusing objects has many benefits. It cuts demand for natural resources, saves energy, reduces waste, and it saves you money.

You may have no need for your old clothes, books, bags, furniture or mobile phone, but someone else might. Have you thought of selling or donating unwanted items through online stores or charity shops, or swapping with friends? You can also play your part by buying second-hand clothes and other items.

Consider buying reusables over disposables where you have the choice – such as rechargeable batteries – and reuse items for a second purpose if you can. Plastic food tubs are ideal for freezer storage, jam jars for spices and old greetings cards for gift tags or collages.

Find out if broken or worn items can be repaired before you ditch them, and think of repair potential when you are buying new products.

Local 'freecycling' websites are good for matching people who have items to donate with those who want to collect something for free, from baby clothes to old TVs to building rubble. Many designers and entrepreneurs are taking to upcycling, transforming old and unwanted items into desirable one-of-a-kind objects that can command a price. Broken jewellery, waste fabric and furniture – especially vintage items – make good supplies for creative minds. Why not take a look at crafting websites for inspiration, and have a go yourself?

Recycling

Recycling is the next best option after reuse. It converts used items into new products, helping to save finite resources and protect natural habitats. Recycling avoids the water and air pollution created by mining, quarrying and logging for raw materials, and requires less energy to make new products compared to raw materials. It also means reduces the amount of waste that goes to incineration and landfill sites, which are major emitters of methane, a greenhouse gas that has more than 20 times more impact on climate change than carbon dioxide.

Recycling rates of municipal waste have risen significantly in the EU – from 23% in 2001 to 35% in 2010 – but there is still plenty of room for improvement, as currently only 4 out of 28 countries meet the legislative target to recycle 50% of household and similar waste by 2020. The vast majority of our household waste can be recycled: organic waste including raw and cooked food, paper and card, textiles, metal, glass and certain plastics. Many municipalities offer a house-to-house collection for some or all of these kinds of recyclable waste. If yours doesn't, perhaps you have a local recycling centre where you can take the items directly.

Water: a vital resource

Water is plentiful in some parts of Europe and scarce in others, but wherever you live it pays to be aware of your water use and to avoid wasting it where possible. Water is a finite resource. It has to be treated to make it safe for drinking, and wastewater must be processed before it is returned to the environment: both activities consume energy and other resources. Looking to a future of greater water scarcity, more unpredictable weather events, and an increased global demand for fresh water, it is important that we all use water more efficiently, both in our direct and indirect use.

It's easy to see where you might be wasting water directly, and take steps to change your behaviour. You can take a shower instead of a bath, fit a water-saving shower-head, install water-saving toilets and other domestic appliances, fix leaky taps and toilets quickly, turn off taps when cleaning your teeth and collect rainwater to water the garden. And there are obvious 'don'ts', too: don't use your loo as a wet bin, and don't pour paint or other environmentally harmful substances down the drain.

Indirect water consumption is mainly invisible, and this means you probably use far more water than you think. That's because water is used to produce pretty much everything. When you buy a bag of potatoes from your local store, for example, the direct water use is the water you use to prepare, wash and boil the potatoes. But the indirect use is all the water used throughout the supply chain to produce the potato in the first place: the months of irrigation, transport, fuels for the machinery and so on. Many companies are starting to calculate and publicise the water footprint of their products, and if you choose products with smaller footprints, you're probably doing the environment a favour. Find out more about indirect and direct water usage in our Water Guide (http://www.imagineallthewater.eu).

Greening the EU economy

What is the green economy?

To face the challenges confronting us today, we need to change the way we produce and consume goods. We need to create more value while using fewer inputs, reduce costs and minimise impacts on the environment. We need to do more with less.

More efficient production processes and better environmental management systems can significantly reduce pollution and waste, and save water and other resources. This is good for business too, as it can cut operating costs and reduce dependency on raw materials.

This is the thinking behind the green (or circular) economy, a system that optimises the flow of goods and services to get the most out of raw materials and cuts waste to the absolute minimum.

In the green economy, materials are divided by type. Biological materials – food, vegetal waste, wood and textile fibres – are consumed and then returned to the environment as compost or fertiliser to restore nutrients to the soil, and/or processed to produce renewable energy. Technical materials are maintained, reused, refurbished or recycled over and over again in a closed-loop system. The system is energy-efficient and uses renewable energy as far as possible, reducing emissions of greenhouse gases.

The green economy will require a departure from the 'take-make-dispose' approach to manufacturing.

It will create a new dynamic in all sectors. There will be demand for innovation in product design and manufacturing as we seek to develop a new generation of products that have extended lives and that can be reused, repaired, dismantled and their components reused or recycled.

Governments and businesses will need to help the working population develop new skills to meet the demands of a green economy.

Transforming Europe into a green economy

Most Europeans enjoy a good quality of life, with easy access to a vast range of products and consumer goods. It's a situation that many take for granted, but the fact is that we are using natural resources faster than they can be replenished. As wealth grows worldwide, people in other regions expect, quite reasonably, to be able to enjoy a similar high quality of life.

YOUR CHOICES MAKE A WORLD OF DIFFERENCE!

THE CONSUMPTION GUIDE

This is why Europe needs a green economy. And it is possible to make more using fewer raw materials, and to reduce our impact on the environment through more innovation and resource-efficient business models and optimal management of waste as a resource. The path towards the green economy should learn from and build on the success of Europe's eco-industries, in fields like waste treatment and recycling, water treatment and supply, and renewable energies. These have been among the most resilient and fast-growing sectors in recent years and during the financial crisis.

Shifting to a green economy will also help provide leadership to a global economy in desperate need of solutions to the challenges of a growing population, scarce resources and a degraded natural environment.

Policies that preserve natural resources

The good news is that progress is being made. Our water and air are significantly cleaner than they were a few decades ago, and more of Europe's nature is protected than ever before. The EU is now turning its attention to making the European economy more resource-efficient, with new policies to mobilise business, industry, and individual consumers.

Many of the ideas can be found in the Roadmap to a Resource-Efficient Europe. It highlights the steps policymakers need to take to make our world more resource-efficient, and sets milestones on the way to show how we're getting along.

In a similar vein, the EU's Environment Action Programme – Living well, within the limits of our planet – sets out a vision of a green, inclusive economy to be attained by the middle of this century. In this sustainable future, a prosperous, healthy environment stems from an innovative, circular economy where nothing is wasted and where natural resources are managed in ways that enhance our society's resilience.

http://ec.europa.eu/environment/newprg/index.htm

Resource efficiency is also a key component of Europe 2020, the EU's strategy to become a smart, sustainable and inclusive economy. A number of EU-level initiatives that contribute to this policy objective have now been launched, including in areas like transport and energy, increasing awareness about the need to use scarce resources more efficiently and consume more sustainably.

http://ec.europa.eu/resource-efficient-europe/



Efforts to promote the greening of the single market include the launch of EU-wide methods to measure the environmental performance of products and organisations, to build trust among producers and consumers. The proposed methodologies should help make sure that the most resource-efficient and environmentally friendly products on the market are known and recognisable.

http://ec.europa.eu/environment/eussd/smgp/index.htm

The EU will continue to promote and encourage resource-efficient production methods and goods. One example is the European Green Car Initiative. Currently 73% of all oil consumed in Europe is used in transport, and current estimates predict a doubling of passenger cars within the next 20 years. The Green Car Initiative aims to boost research and innovation in the field of environmentally friendly vehicles.

http://www.green-cars-initiative.eu/funding/open-fp7-calls/2013-call-texts/FP7-2013-MATERIALS_FOR GREEN CARS.pdf/view

http://ec.europa.eu/research/transport/road/green_cars/index_en.htm

You can also read in the Commission's Roadmap to a Low-Carbon Economy by 2050 how the sectors responsible for most greenhouse gas emissions in Europe – power generation, industry, transport, buildings, construction and agriculture – are expected to make the transition to a low-carbon economy over the coming decades.

http://ec.europa.eu/clima/policies/roadmap/index en.htm

Following on from the Low-Carbon Roadmap, see how the Energy Roadmap 2050 contributes to reducing greenhouse gas emissions in the Union, with the target of an 80-95 % reduction in EU emissions by 2050.

http://ec.europa.eu/energy/index_en.htm

Have you given much thought to how vital biodiversity is to our survival? And to how it's being lost? The Biodiversity Strategy aims to reverse this trend. By 2050 the EU's biodiversity and the ecosystem services it provides – its natural capital – should be protected, valued and appropriately restored.

http://ec.europa.eu/environment/nature/index_en.htm

The Birds Directive maintains wild bird populations in Europe and protects wetlands of international importance.

http://ec.europa.eu/environment/nature/legislation/birdsdirective/index_en.htm

The Natura 2000 network of nature protection areas was put in place to guarantee the long-term survival of Europe's most valuable and threatened species and habitats.

http://ec.europa.eu/environment/nature/natura2000/index_en.htm



The Habitats Directive restores protected habitats and species and helps to create a coherent European ecological network of protected sites.

http://ec.europa.eu/environment/nature/legislation/habitatsdirective/index_en.htm

The Water Framework Directive (WFD) and the Water Information System for Europe (WISE) contribute to protecting water systems from environmental damage. WISE is the gateway to information on European water.

http://ec.europa.eu/environment/water/water-framework/index_en.html http://www.water.europa.eu/

The 2012 Water Blueprint sets a path for better implementation of existing water legislation and further policy integration.

http://ec.europa.eu/environment/water/blueprint/index_en.htm

A new law on timber marketing entered into force in 2013 to counter the trade in illegal imports of timber to the EU.

http://ec.europa.eu/environment/forests/timber_regulation.htm

EU legislation on waste management is current being revised, with the aim to ensure that waste that cannot be avoided is treated as a resource. Reducing waste generation, increasing reuse and recycling rates, phasing out landfilling and strictly limiting energy recovery to non-recyclable waste, reducing plastic waste (including cutting down the number of plastic bags used in the EU), decreasing marine litter and improving implementation of waste legislation are among foreseen actions.

http://ec.europa.eu/environment/waste/index.htm

Europe relies significantly on imported raw materials and energy. You can find out how the Roadmap to a Resource-Efficient Europe recommends increasing resource productivity and decoupling economic growth from resource use to enhance Europe's competitiveness and reduce our dependency on imports, while better protecting our natural capital.

http://ec.europa.eu/environment/resource_efficiency/

An important step was taken at the beginning of 2012 with the launch of the European Innovation Partnership on Raw Materials. Innovation Partnerships bring together public and private stakeholders across borders and sectors in order to accelerate the uptake of innovation that helps reduce the EU's dependence on raw materials and boosts efficiency in material use and waste reduction by 2020.

http://ec.europa.eu/enterprise/policies/raw-materials/innovation-partnership/index_en.htm



Did you know that Europe's public authorities are major consumers? Every year they spend about EUR 2 trillion, equivalent to some 17% of the EU's Gross Domestic Product. By using their purchasing power to choose goods and services with lower impacts on the environment, they can make a major contribution to sustainable consumption and production. Find out about Green Public Procurement (GPP): http://ec.europa.eu/environment/gpp/what_en.htm

The green economy and jobs

The green economy holds opportunities for future growth and job creation in Europe. Sectors such as recycling, water treatment, natural resources management, sustainable forestry and agriculture, and ecofriendly products and services – together known as eco-industries – account for about 2.5% of EU GDP and have proven resilient to the economic crisis, growing by around 8% per year in the last 10 years.

Europe has a strong global market share in some of these sectors, for example an estimated 50% global market share in recycling industries. Organic farming is another growth area.

Exports of environmental goods and services increased nearly threefold from 1999 to 2010, to over EUR 24 billion. The eco-industries already employ more people than the steel, pharmaceutical or auto sectors.

A recent Harvard Business Review study showed that companies that invest in sustainability do better financially. It also showed that resource-efficient companies, which use less energy and water, and produce less waste in generating a unit of revenue, tend to produce higher investment returns than their rivals. See:

http://blogs.hbr.org/2012/09/sustainable-investing-time-to/

Developing new solutions for waste, by treating it as a resource instead of a burden, offers a significant opportunity to create new jobs as well as saving natural resources. New EU initiatives will be developed in the next few years to improve the way we deal with and treat different types of waste. According to a 2012 study, if all EU waste legislation were fully implemented, Europe would save EUR 72 billion a year, the turnover of the waste management and recycling sector would rise by EUR 42 billion, and there would be 400 000 new jobs by 2020.



Tips

We have gathered here all the tips available on our website – and many more.

The advice is grouped by theme – air, water, soil, minerals, waste and so on – to help you better understand the impact of various items and daily habits on natural resources and the environment, and to present sustainable alternatives, so that every day you can make wise consumption choices – for you and for the planet.

We also have a special guide about water [link to PDF], which reveals some surprising facts about the invisible amounts of water we consume indirectly.

Happy reading, and remember - your choices make a world of difference!





Access to clean air is one of our most basic needs. But the quality of our air is being compromised in many ways. These include the obvious things like emissions from cars and burning of fossil fuels, but even rearing livestock emits greenhouse gases like carbon dioxide and methane. We can do our bit to help by walking and cycling more and using more renewable energy sources, and perhaps eating less meat.



Is your paint green?

There are millions of do-it-yourself (DIY) enthusiasts in Europe. Every year, homeowners spend billions of euros on wood, paints, varnishes and other materials for DIY projects. But you can reduce your impact on the environment by reusing materials, checking your wood is sustainable and buying greener paints. With paint, in particular, there are big environmental benefits in following some simple rules. When choosing paint, wood finish or preservative look for the one with the lowest environmental impact. Work out how much you will need and try not to buy too much – a lot of paint that people buy never gets used and ends up as problem waste. If you have the choice, choose a product without a hazard warning on the label (in most countries, this is a black symbol on an orange or yellow square with a description of the hazard). 'Natural' or 'all natural' paints, milk paints and whitewash often contain less harmful substances than ordinary paint. These are nicer to work with and better for indoor air quality too. Some manufacturers even offer recycled paint. Finally, look for the European Ecolabel for indoor paints. That means they have less impact on the environment.





How many CO₂ emissions do you save when you use a bike?

If enough people switched from four wheels to two, the effect on CO_2 emissions would be enormous. And the trend seems to be pointing in this direction. You've probably noticed that more people in your town or city are cycling. Last year in the UK, there were 1.3 million more cyclists, taking the number of UK cyclists to 13 million (which is 27% of the population). Of these new cyclists, 500 000 use their bikes frequently or regularly.

Whether you cycle to work or just for fun, the benefits are many. First of all, it's a good way to keep fit. At the same time you contribute to a healthier and cleaner environment with less air pollution and easing congested roads. It's a far cheaper and easier way to get around too as you avoid traffic jams and fuel costs. There's no question about it, cycling is very resource-efficient. Want to be even more eco-trendy? If you haven't bought a bike yet, why not buy one second-hand? While the popularity of cycling is lowering carbon emissions and creating a more environmentally friendly society, the bike boom has also resulted in a rise in unwanted bicycles. Old bikes often end up in landfill, yet they are made of many recyclable materials, such as aluminium and rubber so they are still valuable as waste. If you are buying a new bicycle, make sure you buy one that is built to last – and look after it. So many bikes are bought with good intentions about cycling to work, and are then left to rust. This isn't a good use of resources. One idea is to borrow a bike for a couple of weeks and see how you go. Once you are hooked you can then go ahead and buy a second-hand or new bike.



Should your boss advise you to work from home more often?

Because it's better for the environment... Commuting doesn't just cause pollution; it also uses resources – think for instance about the wear and tear on roads and the new materials and resources needed to mend them. Of course, some of us have to drive to work, but how many of us don't? And the morning or evening rush-hour is one we'd all like to avoid. Did you know that crawling along in traffic roughly doubles your fuel consumption? Not to mention all the extra emissions you are causing. Cycling or walking to work is a great way to reduce your resource use and keep fit at the same time. Why not use public transport, or car-share with a colleague or someone else who travels to the same destination? This will cut your costs and carbon emissions. You could even get rid of your car and join a car club where members have access to a vehicle on an hourly, daily or weekly basis. But why not ask your boss if you can work from home?





Car keys

It's not easy to live without, but is that a reason to never try?

Some of the things we can do to live 'greener' lives take some real effort on our part. Others can be the easiest thing in the world. Take walking rather than driving – it's such a simple thing to do but with so many obvious environmental benefits: less air and noise pollution, less use of the resources needed to build, power and maintain a car, not to mention the health benefits associated with taking regular exercise. Of course, there are times when using a car is unavoidable but for short trips, such as to the local shops or to meet a friend for coffee, consider whether you really need to use a car to make the journey or whether you could just as easily walk. Does anyone really enjoy grocery shopping? The queues, the crowds, the battle to get out of the car park, it can all be such a drag. So the next time you find yourself at the checkout ask yourself whether you really needed to make the trip? Could you have had your groceries delivered instead? Shopping online for groceries is a more efficient way of getting food to your home. Just one tip though: make sure you check the dates on the food when it arrives so you know what you need to eat and when as wasting food is wasting resources. If you prefer to visit the store in person then think about whether you can buy what you need locally and try to travel on foot or by bicycle. And don't forget your shopping list.



Water

In some parts of Europe, it's easy to forget that water is a finite resource, while in others recurrent shortages are a reality. The way we use water affects other people so we have a responsibility to use it more efficiently, both directly – by having a shower instead of a bath for instance – and indirectly – by not wasting products that need lots of water for production. With the effects of climate change – and in the not so distant future – larger parts of Europe are likely to face the problem of water scarcity and limited access to good quality drinking water.



Why not have a shower instead of a bath?

We need to get used to the fact that water is a limited resource. Globally, almost one fifth of the world population now lives in areas of water scarcity, and another half a billion people are starting to face severe water shortages too. There is enough fresh water on the planet to support the current population of seven billion – although that number is bound to increase – but it is distributed unevenly and far too much of it is wasted. In Europe, ever more areas are exposed to water scarcity and droughts. So it is our responsibility to try to use water more efficiently. We can do this easily by making simple changes to our daily routine, like taking a shower instead of having a bath. Filling a bathtub takes a lot more water than having a quick shower. A five minute shower each day instead of a bath saves 400 litres of water a week – and uses far less energy. But if you do need a bath, try not to overfill it – and if you have it so hot that you need to add cold water, you are wasting energy as well as water!



Can you share your bath water?

If you do decide to take a bath, it is probably because you want to relax as much as get clean. So why not leave the water for someone else to use after you've finished? Half fill your bathtub instead of filling it to the brim and keep checking the temperature of the water so you don't need to top it up with cold or hot afterwards.





Shampoo

Ever thought about buying a 'green' shampoo?

To work effectively, some shampoos and conditioners need to be left in your hair for several minutes – while water just goes down the plughole. Try buying hair products you don't need to leave in so long. Or why not buy organic shampoos and conditioners? They are made with natural ingredients and are far kinder to the water ecosystems they end up in.



Tap

Has your tap sprung a leak?

A leaky tap can waste more than 100 litres of water a month. Sometimes it's just a case of making sure the tap is turned off properly, but if it has a permanent leak get it fixed as soon as possible.



Tap flow volume

Are you putting your water under too much pressure?

Taps vary hugely in flow volumes, from 2 to 25 litres per minute, but you hardly ever need more than 10 litres a minute. You can control it by turning the tap on less or not leaving it on so long. Or you can reduce flow rate by changing to low-flow tap and shower fittings, by fitting flow restrictors to taps and showers, or by fitting a pressure-limiting valve to reduce flow to the whole water system. Think about it when you turn on the tap: it takes a lot of energy to bring wastewater up to drinking water standard, so better to use only the quantity you actually need.



Water temperature

Is your water too hot to handle?

If your water is too hot you will have to add cold to get the right temperature. But you should be able to reduce the temperature by adjusting the thermostat on your heating system. And if you have to wait for the water to heat up, collect the unused cold water in a jug and use it as drinking water or to water plants. Even if your water temperature is fine it's still good to use hot water as sparingly as possible so as to save all the energy needed to heat water.





Clothes

Would your clothes really mind if you wore them again?

For reasons of hygiene, it's a good idea to wash clothes like socks and underwear each time you've worn them. But others, such as jumpers and trousers, can be worn several times before they need to be washed. The more times you wear clothes between washes, the more water you will be saving.



Washing powder

What do rivers think of your washing powder?

The powder you use for washing clothes eventually finds its way into rivers and seas. Some detergents contain inorganic nutrients like phosphates that can cause rapid growth of algae, resulting in water pollution. By using less detergent you can reduce the amount of phosphates that go down the drain into the ecosystem. Also, consider using organic detergents; their natural ingredients are much kinder to the water ecosystems they end up in.



Kitchen tap

Why not treat your plants to a glass of water?

If you pour yourself a glass of water and don't finish it, don't pour it away. Use it to water your houseplants. They'll thank you for it.



Coffee cup

Does your kettle really need refilling?

Don't empty and refill your kettle every time you make a hot drink. It's fine to use the water that's already in it. If you fill your kettle and saucepans with only the water you need you boil less and save energy.





Sink

Get them clean – but keep it green!

If you want to stop wasting water, it's the little things that help. For example, don't wash the dishes under running water. And remember that the volume of water coming out of a kitchen tap varies tremendously – from 2 to 25 litres per minute – so how far you turn the tap on and how long you leave it on have a huge effect on how much water you use.

Use a washing-up bowl or put a plug in the sink and reduce water waste by 50% or more. And, of course, turning on the hot water tap uses more than just water – you'd be amazed as to the cost of the energy required to heat the water. If your water is too hot, check the thermostat on your boiler. It may simply be a case of adjusting it.



Is your dishwasher as efficient as it could be?

If you choose to use a dishwasher rather than wash up by hand, buy a machine with a high energy efficiency rating and use the economic cycle whenever possible. This will use considerably less water than a regular cycle. Scrape any excess food into a bowl (and recycle or compost it!) but don't pre-rinse dishes under the tap before you put them in the dishwasher. Most dishwashers are powerful enough to clean stains without pre-washing them. And don't forget: don't run a dishwasher if it's half empty. Wait until it's full – and don't go overboard with the washing powder or tablets. Think of the devastating effects of phosphates and algal blooms on seas and rivers.



Car keys

Want to know how to cut your water usage?

You may think that washing your car at home is more water-efficient than going to a carwash – but in fact the opposite is true. An economical automated carwash tends to use less water per vehicle than if you washed the same car at home. If you really prefer to wash your car at home, avoid using a hosepipe as it will be spurting out water at about 18 litres a minute. Instead, use rainwater you've collected in a bucket. It works a treat on any car. And remember, cars don't need a weekly wash; in fact, some cars only get one bath a year!





Fruit

Are organic fruit and vegetables that much greener?

Organic vegetables and fruit are grown sustainably and are not drenched in insecticides and other chemicals. They are grown in soil that contains no man-made pesticides and composts. You might find a slug in your lettuce, but that will only prove that it is more natural. Using organic fruit and vegetables saves on water too, as you won't need to wash them as thoroughly as their chemically treated counterparts. And there won't be any wax in that carefully grated lemon zest!



Window

Make the most of those rainy days!

Using tap water on plants is such a waste when we get free water all year round. Instead, leave your plants where they can catch the rain or leave buckets in places where they catch the water running off roofs or down drainpipes. Even better, why not fit a water butt to your downpipe and collect enough to water the garden and wash the patio too? Your plants much prefer to drink rainwater and will thank you for it!



Lamp

What is the link between water and energy?

Energy production requires colossal amounts of water, principally for cooling power stations. While the water is often returned to rivers after use, the differences in temperatures and quantities can have a negative effect on the ecosystem. Even if electricity comes from hydropower, dams break the continuity of rivers, preventing fish from reaching their spawning grounds. Over time, these barriers can have the effect of causing a river to die.





Does your shower last longer than your favourite song?

We use a lot of water in the home each day but how much of it is really essential? Water is a finite resource and many parts of the world, including parts of Europe, are already suffering from supply shortages. You can help conserve this valuable resource. Morning showers account for a lot of the water used in Europe – but not all of them are efficient. Power showers, for example, use more water in five minutes than a full bathtub. There are several ways to shower more efficiently. You can turn off the tap while you're putting on your shampoo or shower gel. Or you can reduce your shower time. So think about getting a shower timer and replacing your power shower with a model that has a lower flow rate.



Is your toilet smarter than you think?

With dual-flush systems you can dispose of liquids and paper with a quick flush that uses 70% less water than a standard flush. If you don't have one, they are easy and cheap to install and work with almost all standard toilets.



Wash basin

Is running the tap just water down the drain?

It takes around two minutes to brush your teeth but you waste water if you leave the tap running while you do it. Only turn on the tap when you need to rinse your toothbrush. The same goes for shaving. Half fill the sink with water when you start but don't leave the tap running the whole time.



Washing machine

Wash at thirty, unless it's very dirty

Washing machines are heavy consumers of water in the home but there are ways to wash clothes more efficiently. Most modern machines have an eco setting that uses less water than a regular wash. In fact, many of the most efficient washing machines now use less than 50 litres of water per wash. It's also a good idea to wash clothes on low heat settings as they use far less electricity than hot settings (50 °C and above). But if you always wash on low temperatures, remember to do a hot wash from time to time to keep the machine and hoses clean.





Dirty laundry

Could you squeeze more into your load?

It is pretty obvious but if you half fill your washing machine for two washes you will use twice as much water as if you had squeezed the same amount of laundry into one wash. If you think ahead about when you will need to wear specific items of clothing, you won't end up needing to wash them at a time when you have no other dirty laundry.



Medicine cupboard

Where will all this medicine end up?

Medicines are vital, but there is a modern tendency to overuse them. The problem is that once they pass through your body the chemicals they contain pollute the water they end up in. So try to keep to the minimum necessary. And always dispose of any unused medicines responsibly by taking them back to the chemist. Never flush them down the toilet or throw them in the bin or they will end up in the water cycle again.



Towel

How clean is your towel?

A towel is for drying you once you are clean, so it gets wet, not dirty. That means you can use towels several times before they need to go in the laundry basket. Nowadays, many hotels give you the option of reusing your old towels, so don't leave them on the bathroom floor as this gives the message that you would like fresh ones.



Toy car

Want to know how to cut your water usage?

It's easy to wash a toy car, but what do you know about the best way to wash your real wheels? You may think that washing your car at home is more water-efficient than going to a carwash – but in fact the opposite is true. An economical automated carwash tends to use less water per vehicle than if you washed the same car at home. If you prefer to wash your car at home, avoid using a hosepipe as it will be spurting out water at about 18 litres a minute. Instead, use rainwater you've collected in a bucket. It works a treat on any car. And remember, cars don't need a weekly wash; in fact, some cars only get one bath a year!





Washing up liquid

Why can't cleaning agents stick to removing just grease and grime?

All washing powders, cleaning products, disinfectants and detergents find their way through the sewers into rivers, lakes and oceans. Some of them contain inorganic nutrients that enrich water bodies and cause over-development of algae. When they eventually decompose, they remove oxygen from the water, and many species die on the sea bed as a result. You can avoid being part of the problem by using organic laundry detergents. And look up other green cleaning tips – older people could tell you a thing or two about being thrifty AND ecological. Your work surfaces, fabrics and floors will love the gentler treatment, and if your toilet, sink or drain gets blocked, try just using a plunger. It will work as well as a caustic cleaner, and you'll run less risk of hurting yourself – and the environment.



Soil

We take soil too much for granted. It is of essential importance for wildlife and provides the nutrients needed to grow the food that sustains us, so good soil management is vital to our future prosperity. However, vast areas of soil have been degraded by overgrazing, deforestation and poor agricultural practices causing malnutrition and other hardship to millions of people. There are simple ways in which we can help, like moderating our consumption of meat, choosing wood from sustainably managed forests and buying organic food.



Is the soil under your home dying of thirst?

Every year in Europe, more and more green spaces are being lost as we build more residential areas, roads, buildings and infrastructure. Of course, this development is often necessary to provide homes, transport links and jobs for local people, but once the land has been covered over the key functions of the soil are lost. But there are ways in which homeowners can help to preserve the link between this buried soil and so reduce the loss of the soil's vital drainage function and water storage capacity, and allow a minimum of soil life to survive. For example, if you're re-laying your driveway or your garden, consider using a permeable material such as porous asphalt, gravel turf or lawn, which keeps the soil in contact with the atmosphere and allows water to filter through. Where water can't permeate the soil naturally it risks causing flooding, so try to capture it and put it to good use. You can use a water butt to collect the water that runs off the roof and use it to water the garden instead of tap water. And if you're feeling really adventurous, why not make your roof a green roof? Rooftop 'gardens' can usually be created on a very thin layer of soil. They absorb rainwater, support biodiversity, and provide insulation. You might even create a new home for local wildlife!





How can growing plants starve the planet?

If you like gardening and love the planet, be careful when buying compost. Peatlands look like dull expanses of waterlogged wasteland, but their soils are highly important, supporting rare wildlife and biodiversity, producing food, and playing an important role in the water cycle. They also store carbon, which is released back into the atmosphere when peat soils are dug up. In fact, an estimated half a million tonnes of carbon dioxide a year is emitted as a result of peat extraction from sites in the UK alone for use in horticulture. Some countries are considering a tax on peat-based composts. For the time being, it's a good idea to buy compost labelled as 'peat free' where possible, as even compost labeled as 'multi-purpose' can contain between 70% and 100% peat. Better still, make your own compost. There's no surer way to use your resources efficiently than to compost your food or garden waste and use it to grow more plants.



How often do you eat meat?

Eating less meat will reduce the environmental impact of your diet - but do you know why? To rear livestock, you need not only the land on which to rear the livestock, but also land to grow the crops to feed that livestock. One of these crops is soy, the production of which has doubled in the last 15 years, largely because of its increasing use in animal feed. This is often at the expense of natural habitats such as the Brazilian Cerrado, a vast tropical savanna that hosts 5% of the world's biodiversity. Livestock is also a significant contributor to greenhouse gas emissions, particularly through the production of methane, and is estimated to account for 8% of our water use globally. All of these pressures will be exacerbated as the human population rises and demand for meat grows, particularly in the emerging economies. So what can we do about it? Well, it's not so drastic that we all need to become vegetarians; however, we could think about eating less meat, by adapting meals from time to time so that they don't require meat. For example, why not add raw tomatoes and mushrooms to a spaghetti sauce rather than a pack of mince? Above all, don't waste meat. Throwing meat away means all the precious energy and water that has gone into producing it has gone to waste.



Minerals

Minerals are all around us. They're in our household appliances, the mobile phone we carry in our pocket and the jewellery we wear. But the extraction of minerals can come at a cost both to humans – through exploitation of labour – and to the environment – through contamination of water supplies for instance. We have a role to play in reducing the impact of mineral extraction by shopping ethically and only replacing products when we need to.



Did you know that your old mobile phone is a valuable item?

Mobile phone technology changes so quickly. You get a new mobile phone for Christmas and by the summer it's out of date. And with so many new releases it's tempting to upgrade your phone every couple of years. In fact, many people do just that: some three quarters of a billion mobile phone subscribers in Europe replace their mobile phones on average every 18 months. This makes mobile phones unique: no other category of electronic devices has such a high replacement rate. So why the high turnover and is it sustainable? Sometimes we need a new phone because our old one gets damaged or stops working, but often we just want to buy the latest technology. Before you rush out to get the latest model consider the resources that have been used in its manufacture and ask yourself whether you can make do with your current phone for another year. New phones contain precious metals including gold, copper, silver and platinum, as well as numerous rare earth minerals. If you do decide to upgrade make sure you dispose of your old phone responsibly – give it to a friend, sell it or recycle it. Don't just leave it in a drawer.





Are you alarmed by the number of batteries you use?

Batteries have become essential to our modern way of life. But their production, use and disposal affect the environment so we have to find ways of using them more efficiently. Mercury, lead and cadmium found in batteries can end up in the soil if they are put into landfill, and incineration just adds to greenhouse gas emissions. All batteries can be recycled – the standard ones in your alarm clock and the special ones in your mobile phone, camera or watch. The thousands of tonnes of metals recovered in the process can then be routed back into the production of new batteries. A European directive was introduced recently to encourage more recycling of batteries, so you should be able to find special bins in places like your local supermarket to dispose of old batteries safely and responsibly. Buying rechargeable batteries will also save you money in the long run.



Cans in the fridge

Where does all the aluminium go?

There's a good reason why we find aluminium in so many everyday items, from drinks cans to CDs, bicycle frames and watches. Aluminium is not only the Earth's most abundant metal – it is also one of its most efficient. It is lightweight, durable, resistant and easily recyclable. In fact, producing a product from scrap aluminium requires 95% less energy than producing it from virgin raw materials. Aluminium is one of Europe's most widely recycled materials so be sure to recycle everything you can – not just obvious things like food and beverage cans but items such as computers, washing machines and mobile phones, which will almost certainly contain some aluminium.



Wood/Timber

Wood is the basis for many of the products we take for granted – from beds to books to park benches. But deforestation has serious environmental and social consequences so only by buying wood products from sustainable sources can we shop with a clear conscience.



Does the quality of your favourite chair have an impact on the planet?

Yes, it does. Many products seem cheap – so we buy them and don't worry about throwing them away a couple of years later when they break or we get fed up with them. This isn't a good use of resources. Many resources have been so cheap for so long that we assume they are plentiful, or at least not under threat. But their price does not reflect their real value or future scarcity. Furniture-making uses a lot of resources. So, when you are buying something new think about how long it will last. Consider whether your chair is well-made and whether you will still like it in two years' time when fashions change. You will probably be less inclined to get rid of it if you bought a product that is built to last. And if things do break, why not mend them instead of buying replacements? It is because we are locked into habits formed when we were being encouraged to consume, before resources and ecosystems were under threat. Broken furniture might be easier to mend than you think. And consider the reusability and recyclability of the materials. Solid wood can be fully reused, recycled or burned, and even if it does get dumped, it is still fully biodegradable.



How much information do you have time to read?

Must you automatically pick up newspapers in the metro just because they are free? Do you really need all that paper that comes unsolicited through your letter box? Just think about it. In fact, how much of it do you actually read? Could you get the same information in other ways? Of course, it's enjoyable to sit and read papers now and then, but if you're honest, most of the time you simply skim through them. Nowadays, it's easy to recycle newspapers, and much of the paper used to produce newspapers is from recycled or sustainable sources. Consider reading them online from time to time; and if you read a paper, make sure you recycle it. If you do not really need a paper, do not pick it up. You can also put a sign on your letterbox that you do not wish to receive unsolicited publications.





What if forests disappeared as quickly as your tissues?

Although disposable paper products can be produced from recycled paper, a lot are still produced from virgin fibre, i.e. wood cut for paper production. Where possible, try to buy products made from recycled fibres as their production uses much less energy – and saves trees. If fully recycled products are not available, you can look for the FSC (Forest Stewardship Council) or PEFC (Programme for the Endorsement of Forest Certification) logos, which guarantee that a certain percentage of the virgin fibre in the product comes from well-managed forests. Another reliable guarantee that you are buying the right product is the European Ecolabel which you will recognise from the flower logo.



You spend a third of your life in bed, but do you know where the wood came from?

Not all beds are made of wood, of course. They may also be made of metal or synthetic materials (look out for recycled steel, for example). But wood has two major advantages: it is a renewable and biodegradable resource, and its production causes fewer greenhouse gas emissions than alternative materials. But that doesn't necessarily make a wooden bed inherently sustainable. All the timber, wood and paper products we buy began life in a forest. And although much of our wood comes from well-managed forests, this is not the case for all of it. Illegal logging is still a big problem and is a major contributor to carbon emissions, the displacement of communities and the destruction of natural habitats. So how can you be sure you're choosing something that has been sustainably produced without causing harm to people or animals? When you buy wood products look for the FSC (Forest Stewardship Council) or PEFC (Programme for the Endorsement of Forest Certification) logos, both of which certify that the wood has come from well-managed forests. Or why not buy second hand furniture? That way you can save money too – and it will keep away those environmental nightmares!



Does cleaning up always mean using up?

A kitchen roll is a useful, versatile product, but try to use it efficiently. Stronger kitchen paper may cost slightly more but you will need less of it. Think about how the product has been made. Some products now carry the EU Ecolabel meaning that it has been made with minimum environmental impact. And when you throw it away, remember you can compost it as long as it hasn't been exposed to nasty chemicals.



Biodiversity

Biodiversity means the rich variety of life forms on our planet. The more biodiversity there is in an ecosystem the healthier it is and the higher the chance of survival for the species in it. We rely on biodiversity for many goods and services – food, water, soil fertility and carbon storage. Its richness is a source of pleasure – and leisure. So when we exploit nature unsustainably for our own short-term benefits, by cutting down ancient forests or overfishing seas, this comes at a long-term cost to society. To help maintain biodiversity we should protect nature and choose the least damaging and polluting products and services.



How can I grow herbs without a garden?

Adding the right herb can make the difference between a good meal and a great meal. But pre-packaged herbs can be expensive to buy from food stores and all too often we end up using a small quantity in a recipe and then throwing the rest away. If this sounds familiar then why not create your own herb garden? Growing your own herbs is a fantastic way to save resources. Think of all the energy that goes into drying, packing and transporting herbs – energy that you can save by growing your own. You don't need to have a garden to start growing herbs. Sunny windowsills are ideal for growing chives, mint, basil, parsley, sage and thyme (not to mention peppers, baby tomatoes and chillies). Just remember to look after your plants. Cut and use them often to encourage bushy growth and where possible plant them in peatfree compost. Before you know it you'll be able to add your own home-grown herbs to your home-made 'squishy tomato' sauce!





Can I get healthy sustainable food straight to my door?

If you find grocery shopping a chore you'll be pleased to know that getting your groceries delivered is a far 'greener' way of filling up your fridge. Not only do supermarkets offer delivery services but more and more local businesses are operating veggie box schemes where fruit and vegetables are delivered right to your door. There are lots of advantages to these schemes. You'll be supporting local farmers and cutting down on food miles; you don't have to drive anywhere saving carbon emissions and the food will also be guaranteed fresh. To ensure your scheme is the most eco-friendly possible check that it sells local produce and uses seasonal fruit and vegetables, and look for honest schemes that give information on what products you can expect to receive and when. Try to find schemes that supply organic vegetables as organic production methods use fewer chemicals and require less fertiliser. Box schemes will also give you recipe ideas for the produce they send and eating more vegetables and less meat is a win-win situation in terms of resource efficiency and your own health. Lastly, if you're trying a veggie box scheme for the first time, start with a smaller box so you don't waste any of the food.



Can plants kill bad smells?

House plants are a great way to bring nature into your home but did you know they act as natural air filters and can keep colds at bay too? Plants remove up to 87% of volatile organic compounds – found in manmade fibres, plastic bags, paint, inks and cigarette smoke – in 24 hours, according to NASA research. The plants pull the toxins into the soil where organisms convert them into food for the plant. So instead of adding pollution to your home by using chemical air fresheners that mask, rather than dispel, nasty smells, choose house-plants that purify the air. At the same time, they absorb carbon dioxide and release oxygen during the day, the opposite of what we do when we breathe. This means they boost the levels of oxygen in a room. Not only that, by releasing most of the water they absorb into the air, they create humidity, which helps to reduce coughs, colds, sore throats and dry skin in an indoor environment. When choosing houseplants, pick according to light and other growing conditions, and water only when the soil on the surface is dry, and until the drainage holes are moist.





How far have these flowers travelled to get here?

Flowers are a great natural way to brighten up and freshen up your home, but they can also have a significant impact on the environment. Many of the flowers purchased in Europe each year have been imported from countries with scarce supplies of water, so they are grown using this precious resource. Of course, the flower industry can also bring much needed revenue to developing countries but there is still a debate about whether we should be growing flowers rather than food in water-scarce areas of the world. What's more, flowers and plants imported from Africa have been transported long distances by air and have often been grown using harmful fertilisers and pesticides. As a general rule, try to buy organic or locally grown flowers where possible. If you are buying flowers that have been imported, choose ones that have been Fairtrade certified, which means the suppliers have treated their workers fairly and invested money in social or environmental projects. Buy flowers that are in season – that way you can be sure they haven't been grown in artificial conditions in greenhouses using a lot of energy and water. Better still, why not grown your own flowers? Not only will they brighten up your garden, but they will also attract bees and butterlies.



Did they use pesticides to make your cotton sheets?

Cotton is big business. There are 30 million cotton farmers around the world and cotton covers 2.4% of the world's farmland. But did you also know that cotton cultivation accounts for around 50% of all chemical pesticides used in farming? We all need bed linen but there are ways to make sure the linen you buy has a minimal impact on the environment. Organic production maintains or even improves soil fertility and keeps groundwater and rivers free of synthetic chemicals. A lot of water is also used to make cotton. If it takes 2 700 litres to produce one t-shirt just think how much it takes to produce your bed linen! Try to make your bed linen last as long as possible and when you get rid of it recycle it. When you need to replace it make sure the new linen is designed to last – cheap textiles often deteriorate quickly and end up being thrown away very soon. You might also want to consider the social impact of the cotton you buy. Fair-trade labels guarantee that the cotton has been grown to high ethical as well as environmental standards.





What would an orang-utan think of your body lotion?

It isn't just the chemicals in your soaps and shower products that have an impact on the environment. Did you know, for example, that your choice of shower gel or body lotion could have a direct effect on deforestation on the other side of the world? Palm oil is used in a variety of products – from cosmetics to food – to make them more creamy, but oil palms only grow in the tropics in countries such as Malaysia and Indonesia.

The growing demand for palm oil means that huge areas of their rainforests are being cut down and vast tracts of peatland are being drained to make way for new palm oil plantations. Not only does this contribute to climate change but it also hastens the destruction of the natural habitat of threatened species of animals, such as the orang-utan and the Sumatran tiger, and the displacement of local people who rely on the forest for food and shelter. Current labelling laws allow manufacturers to list palm oil as 'vegetable' oil without singling out the palm oil content on the packaging. When you buy products, look out for palm oil that is certified as sustainable. By doing this you can help break the link between palm oil and deforestation and put pressure on companies to commit to sustainable palm oil production.



Do you feel like drinking 140 litres of water with your breakfast?

For most of us, a morning cup of coffee or tea is a part of our daily routine, but both of these products are heavily resource dependent. Energy and water are required at each stage of the supply chain, from production and transport through to processing and consumption, and then there may be milk and sugar to be added into the equation. Coffee and tea suppliers are becoming increasingly mindful of the need to ensure they can keep producing coffee and tea for many years to come and are looking to sustainability schemes (such as Rainforest Alliance, Fairtrade and Utz Certified) to offer consumers proof of their good practice. These schemes are all different but are based on the same principles: to set social, environmental and economic sustainability standards for the production of tea and coffee. Wherever possible choose products that carry their logos; that way you can be sure the product was produced to these standards. Oh, and one more thing: if you buy a takeaway coffee regularly, why not take along your own cup?





How clean are your cleaning products?

A key indicator of a product's sustainability is how often you have to replace it. Cleaning products are a good example of how to optimise the use of resources. Many types of cleaning products, from detergents to window cleaner, now come in concentrated formats, meaning a smaller quantity of the product delivers the same result as a non-concentrated alternative. Smaller bottles use less plastic, which means less fuel is needed to ship the products and leaves you with less packaging to recycle after use. The key to using concentrated products is to make sure you use the right amount. Be sure to read the label carefully or else you are undoing the work the manufacture has done in improving the resource efficiency of the product.



Do sustainable fisheries mean you can eat fish for the rest of your life?

The old adage that there are plenty more fish in the sea is now open to debate. Yes, fish are a common resource but they are also a resource that we are failing to manage in a sustainable way. In large areas of European waters, more than 70% of known stocks are overfished. The European Union recently reformed its fisheries policy to bring stocks back up to sustainable levels. In the meantime we consumers can do our bit to help stocks recover. When shopping for fish look out for labels such as MSC (Marine Stewardship Council), which shows the fish has been taken from a sustainable fishing area. Also, why not try a new variety from time to time? The most popular species, such as cod, haddock, prawns and tuna (and especially bluefin tuna) are some of the most overfished, and stocks need time to recover. Alternative white fish such as pollock and coley can taste just as good as cod and haddock and are often cheaper. Or try organic fish from certified fish farms: currently only organically farmed salmon and trout are available, but other species, like cod, halibut, and sea bass should be available soon.



Did you know that our lives are in the hands (legs) of bees?

It takes a lot of effort, energy and time to produce all the food we put into our shopping baskets each week. For much of that effort we must give thanks to the bee. Bees don't just produce honey; more importantly they act as pollinators. In fact, a massive 80% of our food crops rely on insects for pollination. But bee populations are in decline in many countries due to a combination of environmental pollution, agricultural pesticides, diseases and changing habitats. You can help support the bee population by creating a pollinator-friendly environment in your own garden. Most plants in the rose, mint, pea and aster families are good for this. And if you really want to make a difference, why not become a beekeeper? It's easier than it sounds and you don't need expensive equipment – most of what you need you can make yourself.



Waste

When we waste a product we waste all the resources like water, energy, etc. that went into it throughout its lifecycle from production to disposal. If you think about the combined environmental impact of those lost resources you'll think twice next time before you throw something in the bin.



Drinks

If food waste is bad, what about drinks waste?

It's not just food we throw away – think about the drink that gets poured down the sink every day. Every time you pour away a drink it's not just the liquid itself being wasted: it's the water and energy used to grow the crops, to process the drink, to clean the factory and to treat the discarded drink at the sewage works. As with food there are some simple ways in which we can reduce the amount of drink we waste. Only make what you're likely to drink, especially things like tea and coffee which use a lot of resources in their production; buy concentrated drinks, which use the same packaging but last longer than non-concentrated products; and try to use up products that are past their best – for example, why not add left-over red wine to that sauce with your squishy tomatoes and your home grown herbs?



Fruit basket

How far did that pineapple travel to get to your fruit basket?

We're being encouraged to eat five portions of fruit and vegetables a day, but choosing which fruit to buy can cause a number of ethical headaches. A lot of organisations are still not sure what advice to give. At the end of the day, how far it travels matters less than we think. Food miles are often considered a major contributor to environmental impact. And of course, if fruits and vegetables are shipped by airplane, their journey adds to carbon emissions. But in certain seasons, imported fruit has a lower impact than fruit grown at home (in greenhouses, for example). Ultimately, we all need to eat more fruit and vegetables – and generally fruit will have a lower environmental impact than other foods like dairy products, pasta and meat. So don't worry too much about fruit, but when you can, choose local fruit that is in season and, ideally, organic. Also look out for Fairtrade or Rainforest Alliance labels which will guarantee that products are grown to high ethical and environmental standards.





Rotten tomatoes

Do you have to put old tomatoes in the bin?

Putting food in the bin is not sustainable. Think of the resources required to grow, pack, transport and store the food that ends up in your fridge; think of the energy and water that is wasted when you throw it away. Each year, Europeans discard millions of tonnes of food, a large proportion of which is perfectly good to eat. Studies in Sweden and the UK estimate that households throw away about a quarter of the food they purchase – and probably much more. A lot of this food is still fine to eat. If it had been eaten, the carbon saving would be the equivalent of taking one in every four cars off the road! You can do your bit to prevent food waste very easily. If tomatoes have gone too squishy to eat raw then why not use them in a sauce or a soup? You then don't need to buy a jar of ready-made processed sauce, so you save money as well as helping the environment. Not only that: it tastes better and it's more healthy.



Peelings/eggshells

Where can you find a home for your vegetable peelings?

Peelings and eggshells can ideally be put into a home composting bin and used as compost to improve the quality of the soil in your garden. An equally 'green' way of using unavoidable kitchen waste is in a wormery. You can make your own wormery using an old dustbin or cardboard box. In some areas the local authorities collect kitchen waste and use it to make compost on a large scale, or send it to anaerobic digestion where bugs break down the food to produce biogas which can be used for heating and electricity. Make sure you only include the right kind of waste, otherwise you risk contaminating your bin with packaging waste.



Week's menu on the fridge

Do you know how to shop to save money?

Every year, we throw away massive quantities of the food we buy, a large proportion of which is still OK to eat. One of the best ways to reduce the amount of food you throw away is to plan what you are going to eat. Firstly, check what food you already have before you head to the shops; that way you remove the risk of buying duplicate items. Secondly, make a list of the meals you plan to prepare during the week and the ingredients you will need to cook each meal; this will ensure you buy exactly what you need. If you're cooking for a family, why not get each of them to help with the list? That way they get their own choice of meal, and it gets the whole family thinking about the important issue of food waste.





Packaged apples

How much packaging do apples need?

Most fruit comes in its own natural packaging so there's rarely any need to add more. If you're given the choice between buying a pack of apples or buying apples loose, consider the extra resources used to produce, transport and dispose of the packaging. With pre-packed fruit you may find you have to buy more than you need and end up throwing the rest in the bin, massively increasing the environmental impact of the apple. It's a great idea to eat more fruit though: not only is it healthy, it generally has a lower environmental impact than other foods such as dairy products and meat.



Compost bin

Turn food waste into black gold

Studies show that Europe wastes 90 million tonnes of food each year, not including agriculture and fisheries. Think of the implications – all that energy and resources to grow, store, transport and dispose of food that ends up in the bin. Composting your food waste can help mitigate the damage.

Food waste decomposes in air to produce rich compost, which helps plants to flourish and reduces the need for water, fertilisers and pesticides. Compost improves the structure and nutrient content of soil, enabling it to retain more water. A fertile soil is also better at warding off plant pests and diseases, due to the complex food web that it supports. In contrast, food waste sent to landfill is deprived of air and emits methane, a potent greenhouse gas. Hardly any methane is produced if the same waste is composted.

If you compost at home, you'll produce a constant supply of excellent soil improver for your garden and houseplants. Municipal food waste collections can, in addition, safely handle food waste for centralised recycling systems like composting or anaerobic digestion.





Glass bottles and jars

Want to know why glass is a first class material?

It may have been around for 5000 years but there's no sign of glass going out of fashion – and for good reasons. It is 100% reusable and infinitely recyclable. If possible, buy drinks in reusable bottles: glass bottles can be safely reused, because they don't lose their properties and are easy to clean. If they exist in your area, use bottle deposit schemes where you receive a small refund for certain empty glass bottles returned to the retailer. They are then returned to the manufacturer where they can be reused, and you only pay for the drink – not the packaging. Alternatively, reuse glass bottles and jars as drinks containers, candle or pencil holders or, if you're feeling creative, upcycle them as a stylish coat rack, lamp or glass bottle chandelier. Alternatively, give your old jars and bottles to someone else who can use them. If sending glass for recycling, think of the greenhouse gas emissions you're helping to reduce: the energy saved from recycling a single bottle could power a television for 20 minutes.



Broken PC

Hidden treasure in your home

Did you know that computer circuit boards and mobile phones contain precious metals including silver and gold? Or that whereas mining companies have to shift a tonne of ore to extract a gram of gold, the same amount could be collected from 41 old mobile phones? Meanwhile, 7 500 tonnes of silver are used each year to make PCs, mobile phones and other electronic devices. Other metals found in electronic goods are also highly recyclable. Aluminium can be simply melted and recast using just 5 % of the energy needed to produce it from the raw material, bauxite. And steel can be recycled and reformed to make bridges, train tracks, cars and bikes, as well as paperclips and food cans. Precious metals are in scarce supply and mining harms the environment, yet we throw old gadgets away without thinking. Such electrical and electronic waste -'e-waste' – is one of the fastest growing waste streams in Europe, increasing by 3-5% a year. If you have an old TV, phone or PC that is still working, why not gift, donate or sell it to prolong its useful life? This will help reduce the demand for raw materials mining, saving natural resources. If it no longer works, find a local company that reconditions old devices. This helps create jobs in the circular economy and ensures the availability of more affordable gadgets. Despite EU efforts to improve collection and recycling rates, large quantities of e-waste are still shipped abroad (illegally) to Africa or Asia, where local people, including children, dismantle the components by hand to recover scrap metal, and burn the rest, releasing toxic fumes and contaminating food, soil and surface water. Next time you have scrap e-waste, be sure to take it to the proper collection point – and why not ask your local authority how exactly they deal with the e-waste they collect?





Tin of opened paint

This not the way to paint the town red

Old paint, varnish, batteries and much DIY waste is hazardous and needs to be disposed of carefully to avoid causing pollution. When buying paints and varnishes, look for the European Ecolabel and avoid buying a product with a hazard warning on the label (in most countries, this is a black symbol on an orange or yellow square with a description of the hazard). Also, don't buy too much – a lot of paint that people buy never gets used and ends up as problem waste. 'Natural' or 'all natural' paints, milk paints and whitewash often contain less harmful substances than ordinary paint and some manufacturers even offer recycled paint. If you do have unwanted paint left over, take it to your local recycling plant. As for batteries, all of them can be recycled. The thousands of tonnes of metals recovered in the process can then be routed back into the production of new batteries. Without this, the mercury, lead and cadmium found in batteries can end up in the soil. A European directive encourages more recycling of batteries, so you should be able to find special bins in places like your local supermarket to dispose of old batteries safely and responsibly. And buying rechargeable batteries will save you money in the long run.



Broken iron

Don't bin it, fix it!

Repairing a broken or damaged item may be easier than you think. Internet forums and tutorials contain a wealth of information and video demonstrations on how to fix things. Your friends and family might also be able to help. Or look out for local repair cafés and shops: many exist; they just don't occupy prime locations in high streets or shopping centres. They may also be social initiatives providing much-needed jobs and training in the community. How much better to support a local enterprise and help protect the environment than throw a nearly new item away?

If you do have to buy a new product, ask the retailer what they can do to repair the item if it breaks down. And read product reviews to make sure you are choosing a model that is likely to last.

If a product is unusable for its original purpose, it may be possible to reuse it to meet another need. Turn an old suitcase into a dollshouse; cut up old garden canes made of bamboo and tie them in a bundle to make a bee hotel; and use old cushions, pillows and duvets to stuff a pouffe or ottoman covered with an old rug. Get crafty and creative – and if you find you have a talent for it, why not set up an online shop?





Old clothes

Wasting resources is out of fashion!

Have you ever bought a suit for a job interview and found that when you come to wear it for a second time it no longer fits? Or bought a dress for a special occasion and never worn it again? The clothes you never use at the back of your wardrobe took a lot of materials and energy resources to make. So when you next go shopping for new clothes think of what went into them – all the water and energy use, possible pollution, etc. – and ask yourself if you really need it. Think how much money you could save by making better use of the clothes you already have instead of regularly buying new ones.

Or why not buy second-hand? You should be able to find many nearly-new bargain items in second-hand shops in your neighbourhood or on internet auction sites. If you have unwanted items, get together with friends or colleagues for a swap party and have fun exchanging garments. Or donate your items via dedicated web platforms, or to charity. A recent UK study found that we could spend just 10% of the money we spend buying new clothes on hiring high-end items, such as suits and dresses, and so save 1.7 million tonnes of carbon dioxide each year. Why not consider this option next time you receive an invitation to a special event?



Bin (residual waste)

How light is your load?

Only 40% of household waste in Europe is reused or recycled, on average, and in some countries more than 80% still goes to landfill. This is madness: we are filling our bins with materials that still have value; wasting money, energy and the natural resources – water, metals, minerals, soil and plants – used to produce the item in the first place. With each person in Europe currently producing, on average, around half of tonne of household waste, that's an awful lot of wasted materials. Turning waste into a resource is what the green economy is all about. Everything can be reused, recycled or composted – it's just a question of good sorting and proper waste management. You can start at home by reducing the contents of this bin as far as possible, thus taking your first step towards a zero waste society. Of course, getting there also requires innovation in product design, manufacturing and waste management. But we can all do this: buy only what you need; buy products that can be reused; repair things when they break; use up leftovers before they go off; avoid unnecessary packaging, and sell or give away unwanted items, and be an active rubbish sorter, at home, at work and by advising family and friends.





Bin (paper and card waste)

Are you making the most of the trees?

Reduce your paper waste by asking your favourite retailers and travel companies to send e-mail newsletters and updates rather than hefty catalogues and brochures through the post, and opt for e-billing in place of paper bills. Rather than buying a new book that you will only read once, use your local library, swap books with friends or use a local 'swap shop' (some cafes have bookshelves for this purpose). Don't forget to stick a 'No Junk Mail' sticker on your letterbox, too.

Never throw paper away. Paper can be recycled up to six or seven times, in theory, although in Europe – the global leader in paper recycling – we still only manage to recycle it between three and four times. Still, the European paper industry now uses more recovered paper than wood pulp as a raw material, blending recycled and virgin fibres in as high a proportion as possible to save natural resources and energy: 70% less energy is needed to recycle paper than to make it from virgin raw materials. Even paper soiled with food can be recycled, but not in this bin. Put it on the compost or use it as a bag if you have a food waste collection.



Bin (plastic waste)

What a stylish former yoghurt pot you are wearing!

Plastic is cheap, lightweight and tough. No surprises, then, that global production of plastics grew from 1.5 million tonnes (Mt) a year in 1950 to 288 Mt in 2012, with 57 Mt in Europe alone. The problem we now have to face is that plastic waste is everywhere, and it can take up to 500 years to decompose. Plastic waste can be recycled, but still barely a quarter of that collected is recycled in Europe. Plastics can be melted and remoulded into new products such as bottles, pens, garden furniture or water butts, or else shredded and remade into polyester for clothing: it takes 25 plastic bottles of 2 litres in size to make one adult size fleece top. But still nearly half of Europe's plastic waste is disposed of in landfill, which is neither recycling nor recovery. Be assured, separating plastic waste for collection is vital, but reducing the volume of waste should always be your first priority.





Plastic bottle

How much oil does a plastic water bottle take?

Did you know that producing plastics uses an enormous amount of fossil fuels – around 8% of the world's oil production, according to most estimates? Think of it like this: it takes a quarter of a litre of oil to produce a single one-litre water bottle. That's a lot of natural resources for a throwaway item, and doesn't even take account of the energy needed to transport, market and dispose of the bottle. The fact is, in most places in Europe it is perfectly OK – not to mention loads cheaper – to drink tap water, and if you don't like the taste you can change that with a filter jug. If you do need to buy plastic bottles, choose one big bottle rather than a pack of smaller ones. And make sure to recycle them: most municipalities collect plastic bottles, and if they don't now, they will be obliged to do so by 2015.



Snorkel and mask

Do you want to swim in plastic soup?

Taking part in a beach or river clean-up day is about more than picking up unsightly litter. It could save lives. Each year, millions of tonnes of rubbish ends up in the ocean. Plastic is a particular problem: balloon ribbons, 'six-pack' rings, and discarded fishing nets entrap seals, whales and marine turtles and many seabirds unwittingly eat plastic items that they have mistaken for food. Eventually, plastic waste in the sea breaks up into microscopic 'plastic dust', whose oil base attracts other harmful chemicals in the ocean. These concentrate on the fragments in levels up to a million times higher than elsewhere in seawater, forming tiny poison pills. Fish and seabirds ingest these particles, which thus enter the food chain and can end up on our plate. Besides joining the European clean-up day (www.letscleanupeurope.eu), we can help reduce marine litter by taking care to dispose of our waste carefully when we are out and about, and by avoiding single-use plastic bags and other unnecessary plastic packaging.





Wipes

Think before you throw

Things flushed down the toilet can end up in rivers, lakes, seas and soil, where they can harm the environment. Wastewater treatment plants can deal easily with human waste and paper, but detergents and other contaminants are harder to remove, and wipes and other solid objects block the filters and are costly to remove. Once released into nature, contaminants build up and threaten habitats and wildlife. Did you know that traces of pharmaceuticals such as antibiotics and ibuprofen are frequently found in drinking water, too? You can help by making sure that nothing but human waste and loo roll goes down the toilet. Pharmaceuticals, cotton buds, wipes and sanitary towels should all be put in the bin or disposed of properly (you can take out-of-date or unused medicines to pharmacists, for example).



Plate

Are your eyes bigger than your belly?

Try to avoid preparing more food than you can eat or serve smaller portions to minimize food waste. Resources are required to grow, pack, transport and store all the food you buy; think of the energy and water that is wasted when you throw it away. Each year, Europeans discard millions of tonnes of food, a large proportion of which is perfectly good to eat. You can do your bit to prevent food waste very easily. Buy only what you need and use up fresh produce by making soup or sauces. This will save you money well as helping the environment. Not only that: it tastes better and it's healthier. Many local authorities collect food waste for recycling now, but if yours doesn't, start your own compost. If you're stuck for space, consider a wormery, which can sit on a balcony or indoors, and can even process cooked food and meat.



Reusing

Resource efficiency means getting the maximum value out of the things we have. And when we no longer need them it means offering them to others so that they can get some use out of them. For example you can give clothes, shoes and books to charity to extend their life.



You CAN judge a book by its cover!

If you think of all the paper we use the mind boggles. Even though book manufacturing accounts for only 2% of paper use, that doesn't mean it makes no difference to the environment. What about all the trees that have to be cut down to make paper for books? So when you buy a book, have a look inside the cover. Many leading book manufacturers are now using recycled paper or paper than has been accredited by forest certification systems. If it's printed on recycled paper or is made from sustainable sources it will say so. Once you've finished reading a book don't throw it in the bin: give it to a friend, take it to a second hand book store or, as a last resort, make sure it is recycled. And if you've swapped your paper books for an e-book, don't leave it charging once the battery is full and be sure to switch off the power when you're not using it.



Game over? Not if you play it right.

Computer games can provide hours of entertainment, but most games have a natural shelf life. Once you've reached the highest level there's nowhere else to go. Well, the most important thing to do is to dispose of the game responsibly. Don't simply put the game in the bin. Many of the materials used in video games, CDs and DVDs are toxic and need special processing. Once you have completed the game why not pass it on to a friend, take it to a charity shop, or swap it for another game? Many shops offer exchange services where they will give you money off another game or buy your old version.



OO Rags

Why not use a cloth instead of paper?

You've probably wondered whether it's more resource efficient to use paper towels or a hand drier after washing your hands in public places. But what about around the home? Paper towels are great for mopping up spills and mess but they're hardly eco-friendly. Why not use a cloth instead? A paper towel has to be thrown away after a single use, whereas a cloth can be washed and used again and again. Even buying a new cloth is better than buying lots of kitchen roll.



Recycling

Sending products to landfill is not sustainable. It damages the environment and wastes valuable resources that could be used again. Recycling materials, such as paper and plastic, is a simple way to reduce the environmental impact of our daily activities.



Is it time to start using your rag?

You've probably heard the debate about whether it's more resource efficient to use paper towels or a hand drier when washing your hands in public places. But what about using paper towels around the home? Sure, they're great for mopping up spills and mess but they're hardly the most eco-friendly cleaning item. If you use them to clean up or wipe your kitchen then why not consider using an old rag instead? Unlike the paper towel, which has to be thrown away after one use, an old rag can be washed and then used over and over again. Even buying a new cloth is better than buying lots and lots of kitchen roll, but try to make sure the cloth is organic or has been made from Fairtrade cotton.



Why not increase your family of bins?

As European society grows wealthier we create more and more rubbish. Each year in the EU alone we throw away 3 billion tonnes of waste – about 6 tonnes of solid waste for each of us. Of course, the best thing we can do from a resource efficiency point of view is not generate this waste in the first place, but where waste does occur we need to do our best to reuse or recycle it. Recycling is an excellent way of saving energy and conserving the environment: the more we recycle, the fewer new materials we have to use. For example, did you know that 70% less energy is needed to recycle paper than to make it from virgin raw materials? Make sure you check what can be recycled in your local area – it's likely to be around 60% to 80% of all your waste. If there are some materials that your local council doesn't collect separately, why not buy some extra bins so you can save them and take them to your nearest collection site?





How much water does a plastic water bottle take?

We are all worried about the growing volume of plastic waste, but there's plenty we can do to prevent that waste from occurring in the first place. Plastic bottles can be easily recycled, but better still they can be safely reused several times over so long as you follow a few simple rules. Each time you reuse a bottle, be sure to wash it in warm soapy water and dry it thoroughly to guard against bacteria. Then, once the condition of your bottle starts to deteriorate, you can recycle it. Most municipalities will collect plastic bottles, but if they don't, take them to a local collection site. In most places in Europe it is perfectly OK to drink tap water, but if you need to buy water, remember to buy one big bottle rather than a pack of smaller ones. It's cheaper, and you'll be using resources more wisely!



Takeaway plastic container

Can a plastic container have a second life?

Takeaway food is a guilty pleasure for many of us but it can also offer ways of improving your resource efficiency. Buying new plastic containers in which to store food involves using new resources but the containers that your takeaway Chinese or curry come in are ideal for storing leftover food, such as sauces or salads, in the fridge or freezer. To ensure the containers last, make sure you reheat the food in a separate dish. Not only will your container last longer it is also safer as plastic chemicals can sometimes leach into food when heating.



Can you get extra mileage out of one-trip bags?

Plastic bags have become synonymous with today's wasteful society. We use millions of them every day, often for only a few minutes before tossing them in the bin. Every year, the average EU citizen uses nearly 250 plastic bags and most them are only ever used once. Some are so flimsy that they never get recycled but instead end up in the sea or in landfill, where they can take hundreds of years to decay. The best idea is to bring a bag from home; cotton or cloth bags are light and easy to carry along – preferably go for organic ones with eco-labels. Or why not go back to the traditional shopping basket?





Want to know why glass is a first class material?

It may have be around for 5 000 years but there's no sign of glass going out of fashion – and for good reason. It is 100% recyclable and can be recycled time and time again. Before you take glass bottles and jars to the recycling bank, though, think about whether you can use them again. Reusing products is more resource-efficient than recycling because it doesn't require the extra energy, water and other resources needed to create new products from recycled materials. Glass bottles can be safely reused an almost limitless amount of times, because they don't lose their properties and are easy to clean. Use them as drinks containers, candle or pencil holders or, if you're feeling creative, upcycle them as a stylish a coat rack, lamp or glass bottle chandelier. Alternatively, give your old jars and bottles to someone else who can use them. Many shops have a bottle deposit system whereby you receive a small amount of money for every empty bottle you return. Bottles are then returned to the manufacturer where they can be reused time and time again, and you only pay for the drink – not the packaging.



Transport/Travel

Together with housing and nutrition, transport is one of the main pressures on natural resources. Moving things from A to B uses energy and resources. By thinking more carefully about our transport and mobility needs we can substantially reduce the environmental impact of our everyday lives.



How much can your family holiday affect climate change?

The impact of your holiday largely depends on how far and how you travel. Flying has a far higher environmental impact than driving or taking the train. Of course, that does not mean you should not go on holiday! But just think about whether you need to fly. Flying burns large amounts of fuel and releases lots of CO_2 . Aviation accounts directly for around 3% of the EU's greenhouse gas emissions – and if indirect effects are considered the overall impact on climate change could be two to four times higher. So why not take the train if you can? Sharing a car would have less impact too. If you do take a flight, make the most of it; go for a longer time and perhaps less often. While it's always nice to go on holiday, it's worth thinking about the resources you use when you do. And of course, carbon compensation schemes do help to reduce the negative environmental impacts of flying and other polluting activities. There are many websites where you can pay to offset emissions by investing in green measures, such as planting trees or installing solar panels on community buildings. And when you get to your holiday destination go for accommodation that respects the local environment, eat local food, and try not to use a car.





It's not easy to live without your car, but is that a reason never to try?

Some of the things we can do to live 'greener' lives take some real effort on our part. Others can be the easiest thing in the world. Take walking rather than driving. It's such a simple thing to do and with so many obvious environmental benefits: less air and noise pollution, less use of the resources needed to build, power and maintain a car, not to mention the health benefits associated with taking regular exercise. Of course, there are times when using a car is unavoidable but for short trips, such as to the local shops or to meet a friend for coffee, consider whether you really need to use a car to make the journey or whether you could just as easily walk. Does anyone really enjoy grocery shopping? The queues, the crowds, the battle to get out of the car park, it can all be such a drag. So the next time you find yourself at the checkout ask yourself whether you really needed to make the trip? Could you have had your groceries delivered instead? Shopping online for groceries is a more efficient way of getting food to your home.

Just one tip though: make sure you check the dates on the food when it arrives so you know what you need to eat and when as wasting food is wasting resources. If you prefer to visit the store in person then think about whether you can buy what you need locally and try to travel on foot or by bicycle. And don't forget your shopping list.



Energy Efficiency

As a society we are too reliant on non-renewable energy sources such as oil and gas. We need to look at ways of incorporating renewable sources like solar and wind power into our everyday lives. But efficiency is also about getting the most out of the energy we already use — and not wasting it. By doing simple things like turning off lights when we leave rooms and turning down the heating, we can help save the environment — and save ourselves money as well.



Washing clothes

Is your washing machine harming the environment?

Washing machines are much more efficient these days but we can still do our bit to maximise resource efficiency. To get the most from the water and energy you use there are some simple rules to follow. Use the programme you need to get the clothes clean, but this does not always need to be at a very high temperature. Cotton washes at 40 °C are designed to take a full drum of laundry so try to fill your machine. If you find you are often not able to fill it, it might be worth buying one with a smaller drum size next time. Look out for eco-cycles on machines – many new ones will have them and they will use less water and energy. Check the labels on clothes too: many will say 'dry clean' only, but you can in fact wash them by hand. Finally, use a washing product that is as harmless to the environment as possible – look for the Ecolabel flower.



Window frame (living room)

Are you sure you're not throwing money out of the window?

Remember that some 30% of heat loss in the home is through windows – so energy-efficient windows will do a lot to stop heat loss. You'll quickly recoup the initial cost in money saved on heating bills. A double-glazed or triple-glazed window works by trapping noble gases between two or three panes of glass to create an insulating barrier. The most common benefit is that it keeps heat in and offers superb protection from the elements. Shutters and heavy curtains will also improve heat and sound insulation. If keeping your house cool during warmer weather is a challenge, shutters and solar blinds will help save on the energy costs of fans or air conditioning. But if you are planning to change your windows, why not check the insulation of the whole building (doors, walls, roof, cellar, and so on)? You can get an expert to visit and tell you the energy efficiency improvements that would be worth making.





Light bulb

Does changing your light bulbs brighten the future for your grandchildren

It does – and the more people that do it the better. Low-energy light bulbs can use five times less electricity than the old bulbs, reducing carbon emissions. These days they're widely available at low prices, even in supermarkets. You can buy low-energy bulbs that look and feel similar to old-style bulbs and give the same quality of light. A 20-watt 12,000 hour low-energy bulb will save around €70 over its lifetime compared with its predecessor, the 100-watt incandescent bulb. The EU has now phased out the sale of old-style bulbs for household use across all Member States. By 2020, these efforts will be saving enough energy to power 11 million households each year. Meanwhile, light bulb-makers have moved quickly to develop attractive energy-saving bulbs, such as LEDs, and their price is coming down all the time. But there are still some types of less efficient bulbs on the market so do check labels and select the most energy efficient ones. And even if a bulb is energy efficient, this doesn't mean you should leave it on when it is not needed.



Dishwasher

To consume less energy do you just need to buy a more efficient dishwasher?

If I want to be more resource efficient, should I use a dishwasher or wash dishes by hand? It all depends on how you use the dishwasher, the type of dishwasher you use and how efficient you are at washing up. There really is nothing wrong with a dishwasher – for a start it can use three to four times less water than washing the same amount by hand – but it's important you choose the right one. Find a dishwasher with a high energy rating, use the economy cycle when you can and run it fully loaded. Ideally you should run it at night: not only can this be cheaper but you'll be using the grid at a time when the least efficient power stations won't be running so each unit of power will have a slightly lower carbon footprint. If you wash dishes by hand make sure you buy an ecological washing up liquid, don't leave the water running and don't overheat the water.





Gas/electricity bill

Isn't it better to have your bills in your computer rather than on your table?

There is no escaping the fact that we will have to use more renewable and green energy in the future. We have to think about the high carbon emissions associated with traditional energy sources like coal and oil. One way we can all encourage the use of renewable energy is to demand it. The more people who use green sources of energy, the cheaper they will become. Of course the greatest saving you can make is by using less energy in the first place, but finding ways to power your home with renewable energy can also be a winwin situation. The installation of solar panels, for example, may cost a lot in the short term but will provide a source of free energy for years to come without the worry of fluctuating energy prices. But for most people the quickest and easiest way to reduce energy consumption is to become more energy efficient. The first step to making better use of energy is often to install a smart meter, which will let you monitor your energy consumption and see where it is being wasted. Some energy suppliers already provide them. The EU's target is to have smart meters installed in 80% of households by 2020.



Media player

How many tracks could you buy with the money you waste charging overnight?

Why do so many of us leave items like mobile phones and portable media and music players plugged in once they are fully charged? Many people wrongly assume that constantly charging their electronic gadgets helps keep them working properly. In fact, the reverse is true: constant charging reduces battery life over the long term, meaning you will have to replace the battery or gadget sooner, which is bad for the environment and costly for you. Lithium-ion batteries such as those used in smartphones perform best if they are not left to run empty and are not fully charged each time. The best practice is to recharge them when they have about 40% charge remaining and stop charging when they are around 80% full. The solution is simple: find out how long your device takes to charge and make sure you are around to disconnect it.





Window frame (bedroom)

Aesthetic? Economic? Ecological? Why not choose all three?

The best way to make your house as energy-efficient as possible is to stop the energy leaving. Heat will escape through any gap given the chance so it makes financial and environmental sense to keep it trapped indoors. One of the main ways in which heat escapes from houses is through windows. In fact, some 30% of heat in the home is lost through poorly insulated or single-glazed windows. So why not consider double- or even triple-glazing your windows? Of course this will require an initial outlay, but in the long term your house will stay warmer and you will use less energy heating it, which is not only good for the environment but good for your pocket. When choosing a window frame, give some thought to the thermal properties of the materials as well as their sustainability: timber frames come from a renewable source and are biodegradable, for example. Finally, don't insulate without providing for adequate ventilation: many new or recently insulated homes have indoor air quality problems, due to the build up of humidity and pollutants such as radon and formaldehyde, all of which can cause health problems for adults and children.



Fridge

Is it cool to stuff your fridge?

It's a popular misconception that a full fridge is an efficient fridge – three quarters full is the optimum, and saves most energy. And don't forget other ways in which you can make it better for the environment. Defrost your freezer regularly to keep it running at maximum efficiency; don't leave the doors open too long as this allows cold air to escape; and don't put warm food into your fridge or freezer – let it cool down first. Also, check food regularly – there is no point in keeping food cool and then letting it go off. As we shift to a circular economy, there should more opportunity to lease large items such as fridges and freezers. Manufacturers will retain responsibility for servicing, refurbishing and reusing parts at the end of the product's life, saving energy and resources. Look out for cost-effective leasing options if you are kitting out your home.



Overconsumption

In the western world consumption is often positively associated with quality of life. However, most resources are finite or unevenly distributed so should not be wasted, especially as waste usually has a significant environmental impact. As the global population continues to increase, the world's resources have to stretch even further, so we consumers should start thinking less about what we want and more about what we need.



Will you still want them when you're no longer in love with them?

When shopping for shoes try not to buy a pair you will only wear once or twice. It's worth paying a bit more for a good pair that will last a long time. When you do decide to get rid of a pair, don't just toss them in the bin. Think about recycling them or taking them to a local charity shop.



Are your eyes bigger than your stomach?

Food waste is a big problem. When we throw food away we don't just create waste that has to be disposed of, we also waste the energy and materials that went into growing it, transporting it, processing it, storing it and getting it into our kitchen. One of the ways we can cut down on food waste is to cook only what we're likely to eat. Then if there is still food left in the pan or on the plate save the leftovers to eat the next day. If you're in a restaurant why not ask the chef to omit an ingredient you know you won't eat or ask for a doggy bag to take home your leftover food? If you do end up with leftovers that can't be reused then make sure they go into the right waste bin. If your local authority doesn't doesn't collect food waste then why not invest in a wormery or garden composter? You can even buy ones that can be stored in a kitchen cupboard and don't smell. In fact, even if you have no separate food waste collection it's a good idea to compost waste yourself as it saves on transport costs and means you don't have to buy earth for your own plants. But the best way to be resource-efficient is not to create waste in the first place.





Will Santa be green this year?

Everyone loves to give and receive gifts but have you ever considered giving with an eye to resource efficiency? Giving someone your time may be far more welcome than an unwanted gift that might end up in a cupboard – or the bin. Offer to take them on a hike or a tour of your town, give them a babysitting voucher or some lessons in a language you know but they don't. Or make them a handmade gift – jam, biscuits, knitted socks or jewellery. Or how about theatre or concert tickets? Online craft stores have become enormously successful in recent years, and are great for sourcing original, handmade and upcycled items. Or why not buy someone their own tree in the Amazon rainforest, or a voucher for an eco-store, or pay for them to do a course in growing vegetables? As well as being novel ideas, such eco-gifts have the added bonus of helping raise awareness of issues such as deforestation and resource efficiency. Finally, don't forget the details – re-use wrapping paper or make your own card using recycled materials.



Wasting resources is out of fashion!

Have you ever bought a suit for a job interview and found that when you come to wear it for a second time it no longer fits? Or bought a dress for a special occasion and never worn it again? The clothes you never use at the back of your wardrobe took a lot of raw materials to make. So when you next go shopping for new clothes think of what went into them – all the water and energy use, possible pollution, etc. – and ask yourself if you really need it. Think how much money you could save by making better use of the clothes you already have instead of regularly buying new ones.

Or why not buy second-hand? Many nearly-new items are available for a bargain on Internet auction sites. If you have unwanted items, get together with friends for a swap party and have fun exchanging garments. Or donate your items via freecycle or to charity. A recent UK study found that we could spend just 10% of the money we spend buying new clothes on hiring high-end items, such as suits and dresses, and so save 1.7 million tonnes of carbon dioxide each year. Why not consider this option next time you an invitation to a special event?





Do you know the story behind the sparkle?

When buying a piece of jewellery it's easy to forget that making it may have come at a serious cost to people and to the planet. The trade has done much in recent years to address concerns that the extraction of gold, silver and gemstones harms the environment and exploits local workforces and indigenous peoples. But it still has a big environmental and social impact. Cyanide, mercury and sulphuric acid are just a few of the chemicals used to extract precious metals, leaving large areas of land and water severely contaminated. Extracting gold requires huge amounts of water, for example. As demand for precious metals rises so will the pressure on resources and ecosystems. Some jewellery is even still made from threatened species. How can you help? Avoid items that contain coral, ivory, tortoiseshell or Brazilian rosewood. If you buy objects made with animal products, like crocodile-skin bags, make sure they have a CITES permit to show no harm has been caused to biodiversity. And why not buy second-hand or recycled jewellery? Upcycled vintage jewellery has a lovely old-meets-new style.



Green Economy

The 'green' – or 'circular' – economy is about how we produce, buy and consume. The aim is to eliminate waste and get the most out of the precious raw materials that we extract. Instead of using short-lived items that get thrown away when we no longer need them, or when they break, a green economy will favour products that can be easily repaired, reused, dismantled, recycled or composted, keeping waste to a minimum and treating limited natural resources with respect.



Saving resources will help keep piggy fed

You'll soon see savings once you make a shift away from buying single use consumer goods and throwaway fashion, and in favour of reusing and recycling, shopping with awareness, and reducing your water and energy use. With the money you save, why not invest in long-lasting quality items that you will cherisfor years to come?



Do you weigh up the environmental impact of the products you buy?

If you don't do it already, start looking at whether your buying decisions are sustainable. Do you need new or could you buy used or reconditioned? Do you need to own a product or could you hire or share it instead, saving maintenance and running costs. Car-sharing, tool and equipment hire, household goods rental and formal dress hire are all more sustainable than buying your own. Also, if you have a baby in the house, have you considered washable nappies and wipes? They'll save you money over the long term, they come in cute designs, and they have resale value too. Alternatively, see if there are companies that clean, collect and deliver reusables in your area. Depending on where you live, if you avoid disposables, you might also prevent tonnes of needless waste going to landfill and creating harmful methane emissions. Get informed about the circular economy and discuss the issues with your friends and family.





Are you wasting money needlessly?

Taking steps to avoid wasting food, energy and water will help you save money to spend on doing what you really love. If we all take these steps, it will also help preserve our beautiful natural environments and avoid the clean-up costs associated with waste and damaged ecosystems.



Will 'throw-away' consumption ever become extinct?

In a green – or circular – economy, we will become users rather than consumers, products will be made to last and then be reused and remade, using biological materials than can be safely returned to nature, and with renewable energy. Nothing is lost, everything is transformed, and waste is reduced to zero. Get informed about the circular economy. It's an exciting and dynamic model that respects the constraints of our planet's natural resources. It will also demand new skills and new ideas across all industrial sectors. Be part of the future, not the past.