

A woman with dark, curly hair is sitting at a desk in a home office. She is wearing a blue and white striped button-down shirt and is looking down at a document she is holding. A laptop is open on the desk in front of her, and a black mug is also visible. In the background, there is a wooden bookshelf with various items on it, and a round mirror on the wall.

25 WAYS TO SAVE MONEY AND CREATE A GREENER HOME

WHY WE HAVE COMPILED THIS INFORMATION PACK

Since the start of the coronavirus pandemic and the implementation of local and national lockdowns, many of us are now working from home for the majority of the time. Responses to the recent AECOM UK and Ireland in-house workplace readiness survey show that many of us are happy to continue working remotely.

The shift to remote-working has led to reductions in energy consumption and carbon emissions from office spaces and commuting. On the other hand, household energy consumption and emissions are on the rise¹. According to the Committee on Climate Change (CCC) however, household emissions need to decrease by 24 per cent by 2030 (against a 1990 baseline) if we are to meet targets set out in the Paris Agreement.

As the first US-based engineering and construction firm to have its emissions reduction targets approved by the globally-recognised Science Based Targets initiative (SBTi), AECOM is fully committed to mitigating the impacts of climate change in line with the Paris Agreement. We recognise that business change requires behavioural change, from providing tools and processes that we can all adopt to changes we can make in our own homes as we continue to work remotely.

¹ www.iea.org/commentaries/working-from-home-can-save-energy-and-reduce-emissions-but-how-much

There are many ways to reduce personal and household carbon emissions as well as locking in some of the environmental benefits we experienced during the initial coronavirus lockdown. There is a perception that being 'greener' costs more money but that's not always the case. For example, energy produced from renewable sources is now estimated to be 30 to 50 per cent cheaper than from gas-fired electricity, according to the UK government.

This information pack contains lots of easy-to-implement changes that households can make to reduce their carbon footprint and save money at the same time — up to £2,400 per year.

We have chosen 25 simple swaps to make across three areas of day-to-day life: energy and water, food and drink, and shopping. They range from knowing the difference between 'use by' and 'best before end' dates to help reduce food waste to getting paid when recycling old printer cartridges.

CO₂
24%

Household emissions need to decrease by 24 per cent by 2030



Actions are split into three areas of home life:



ENERGY AND WATER

(e.g. switching to a renewable energy supplier)



FOOD AND DRINK

(e.g. understanding 'Use by' versus 'Best before' dates)



SHOPPING

(e.g. combining online purchases)

**£2,400
SAVING**

The measures suggested in the pack could save your household up to £2,400 per year

SWITCHING TO A RENEWABLE ENERGY PROVIDER

The cost of renewable energy has fallen dramatically in recent years. Electricity generated from wind and solar is 30 to 50 per cent cheaper than gas-fired electricity, according to a report published recently by the UK government².

Green energy companies, which use renewable energy from wind, solar and other sources, offer competitive deals and many mainstream companies now offer green tariffs.

A family in a semi-detached home could save £289 a year with green energy company Octopus, or £282 per year with green energy company Pure Planet, compared to a standard variable tariff with a 'Big Six' energy company.

Switching is simple, especially if you use a platform such as uswitch.com (see right for instructions).

30-50%

UK government says wind and solar are cheaper than gas-fired electricity by 30-50 per cent

² www.carbonbrief.org/wind-and-solar-are-30-50-cheaper-than-thought-admits-uk-government



SWAP

Dual-fuel standard variable tariff with Big Six energy supplier: annual energy cost around £1,367.



REPLACE WITH

Dual-fuel deal with renewable tariff or green energy supplier: annual energy cost around £1,078.



Yearly saving on energy bills

How to switch to a 100 per cent renewable energy and gas tariff

1. Go to www.uswitch.com/.
2. Click 'Start my energy comparison'.
3. Follow the instructions — enter your postcode and email address (optional).
4. Select your address from the options presented.
5. Answer the 'yes' or 'no' questions that follow.
6. Continue answering the questions that follow, including choosing your current gas and electricity provider, payment frequency, your plan name (it's okay if you don't know this) and property size.
7. Once you've completed the questions, uswitch will present various plans available to you.
8. Make sure to filter for 'Green plans'.
9. Have a browse and choose a 100 per cent renewable plan that works for you.
10. Follow the instructions for filling in your contact information, payment details, etc.
11. Sit back and await to be switched!

Source:

www.thisismoney.co.uk/money/news/article-6952181/Save-planet-cash-20-little-changes-2-500-extra-year.html
www.uswitch.com

INSULATE YOUR LOFT

Loft insulation helps to keep our homes warm by stopping heat from escaping through the roof. The Energy Savings Trust estimates that a quarter of heat generated in our homes can be lost if there's no insulation³.

Installing insulation is an effective way of cutting down on energy use and carbon emissions. For example, insulating a detached house to a recommended depth of 270mm

saves 990kg of carbon dioxide per year — roughly the equivalent of a return flight from London to New York. In a semi-detached or terraced house, carbon dioxide savings could total 580kg per year.

Installation costs vary but subsequent savings to bills can be significant — up to £395 per year in a detached house. Loft insulation should last for decades and will pay for itself many times over.



990KG

CO₂ saving per year by insulating a detached house to 270mm



+580KG

CO₂ saving per year by insulating a semi-detached or terraced house to 270mm



SWAP

Uninsulated roof/loft space.



REPLACE WITH

DIY option: Rolls of insulation typically cost around £15–25 (depth 200mm and with coverage of 5.5m²). Professional option: Installation typically costs around £300 for a semi-detached house.



Yearly saving on energy bills

³ <https://energysavingtrust.org.uk/home-insulation/roof-and-loft>



TURN DOWN THE ROOM THERMOSTAT

Simply turning your room thermostat down by as little as one degree can have an impact on carbon emissions and heating bills.

Doing this can save £75 and 320kg of carbon dioxide a year for an average three-bedroom semi-detached home, according to the Energy Saving Trust.

The Trust also recommends setting your thermostat temperature to the lowest comfortable temperature, typically between 18°C and 21°C.

If you are going away, activate 'holiday mode' (if your boiler has one) to make sure that your heating stays off while you are out of the house.

Source: <https://energysavingtrust.org.uk/home-energy-efficiency/thermostats-and-controls>



SWAP

Heating your home at 20°C.



REPLACE WITH

Setting the thermostat to 19°C.



320KG

CO₂ saving per year by turning down your thermostat by just one degree



Yearly saving on energy bills

CHANGE HOT WATER TANK TIMER SETTINGS

If you have a hot water tank a timer may allow you to set specific 'on' or 'off' periods for hot water production and maintaining the hot water temperature. It is worth checking as the timer may be set to constant, in which case it can be adjusted to save energy and lower heating bills.

Source: www.networx.com/article/waterheater-timers-are-they-worth-it



SWAP

Hot water tank timer set to constant.



REPLACE WITH

Adjusted settings that are short enough to provide enough hot water for household needs (e.g. 30–60 minutes in morning and evening). It's best to avoid peak time of 7–9am if possible.



Yearly saving — reduction to energy bills from lower storage heat loss dependent on tank size and timer settings used



CHOOSE LEDs

Typically, lighting accounts for around 15 per cent of a household's electricity bill so is an area where savings can easily be made.

There are two main types of energy-efficient lightbulbs in the UK — Compact Fluorescent Lamps (CFL) and Light Emitting Diodes (LED), which are the more efficient.

Switching to LED lightbulbs from traditional filament types reduces energy use and saves money. Although they are more expensive, they last two to three times longer.

15%

Lighting accounts for around 15 per cent of a household's electricity bill



SWAP

Old filament light bulbs.



REPLACE WITH

7W LED bulbs which emit the same light as a 60W traditional bulb, for around £3 each.



Yearly saving (based on replacing ten light bulbs)

Source: www.thisismoney.co.uk/money/news/article-6952181/Save-planet-cash-20-little-changes-2-500-extra-year.html

DRAUGHT-PROOF YOUR HOME

Banish draughts and stop the heat escaping by sealing windows, putting up curtains or placing draught excluders across the bottom of doors. Even a letter box flap or brush on external doors will help.

The Energy Saving Trust estimates draught-proofing could save £20 a year from heating bills in the average semi-detached home.

Source: www.thisismoney.co.uk/money/news/article-6952181/Save-planet-cash-20-little-changes-2-500-extra-year.html



SWAP

No draught proofing.



REPLACE WITH

Draught-proof foam, metal or plastic sealing strips for windows. Curtains or draught excluders. If you have sash windows, filling the gaps with Exiseal — a plastic tape costing from £1.50 per metre, which can be cut to size to fit between the sashes — can help seal windows to keep heat in over the winter months.



Yearly saving on average on energy bills

Eco Cycle

- 11  Cottons
- 12  Synthetics
- 13  Fast Wash

USE THE ECO CYCLE OPTION

Washing machines that run on the 'eco' cycle will use lower wash and rinse temperatures, so less energy is required for heating. Generally speaking, the eco mode has been finely tuned to work as effectively as possible with that particular device so can be used as the default setting for normal loads.

You may even find that clothes wash just as well in a cold wash, reducing energy use still further. However, it's wise to run a hot wash occasionally to kill bacteria that may be building up within the machine.

According to green energy supplier OVO, washing at 20°C or 30°C can save around £10 per year.

For further savings, use the eco cycle on dishwashers too.



SWAP
Washing at 40°C.



REPLACE WITH
Use the eco cycle.



Yearly savings on energy bills

Source: www.thisismoney.co.uk/money/news/article-6952181/Save-planet-cash-20-little-changes-2-500-extra-year.html

PROLONG THE LIFE OF YOUR BOILER

Newer gas condensing boilers are extremely efficient because they reclaim heat that would otherwise have been lost out of the flue. In order to do this efficiently however, the tap water and heating controls need to be set at the right temperatures.

Boilers are designed to be run at lower heating temperatures to allow flue gases to condense before being exhausted to the atmosphere and energy to be recovered — this cannot occur at higher temperatures.

Check to see if your boiler's temperature settings are too high. Lowering the temperatures to around 70°C for heating and 60°C will help your boiler work more efficiently and prolong its life.

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Source: www.trustedreviews.com/news/whats-best-temperature-condensing-boiler-set-3649148



Running a boiler at lower temperatures means the boiler will have to be replaced less frequently.



SWAP

The existing settings may be pre set to maximum temperature.



REPLACE WITH

The radiator control can be reduced to a setting lower than maximum in the winter and a further drop in spring and autumn when the weather is warmer.



Running the boiler at lower temperatures means the boiler will have to be replaced less frequently and will also reduce annual energy costs. (Replacement boiler costs £500–£1,000)

ONLY USE RADIATORS YOU NEED

Radiators require energy to heat your home when in use.



SWAP

Having all radiators in the house on all the time.



REPLACE WITH

Turn thermostatic radiator valves down to the frost protection level in any rooms which are not being used. Also some rooms may still be comfortable at a lower temperature than the rest of the house so here you could apply a lower valve setting.



Yearly saving — reduction to energy bills dependent on property size

SAVE WATER IN THE SHOWER



A water-efficient showerhead reduces water consumption by up to half while maintaining the same pressure.

Water-efficient showerheads are designed to produce water flows that feel far higher than they actually are. When fitted to a mains water or power shower they can help save water, energy and money.

Water-efficient showerheads typically cost around £20–£30. However, the Energy Saving Trust estimates that a family of four can save approximately £70 a year on energy, plus £115 per year on water bills, more than making up for the initial outlay.

Some water companies offer water saving devices such as showerheads to customers for free, so check this with your provider.

Do take care before fitting one to an electric shower as it could cause the unit to overheat. Check the manual first.

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Source: www.thisismoney.co.uk/money/news/article-6952181/Save-planet-cash-20-little-changes-2-500-extra-year.html



SWAP

Normal showerhead.



REPLACE WITH

Water-efficient showerhead.



Yearly saving on energy and water bills

ONLY USE THE HOT TAP WHEN NECESSARY

Every time the hot water tap is turned on, the boiler uses energy to heat the water up. Ask yourself, do I really need hot water for this task? Or, will cold water work just as well?

For example, many people automatically turn on the hot tap when washing their hands. In practice however, they will have turned the tap off before the water has had time to properly warm up.

Organisations such as the NHS and the Centers for Disease Control and Prevention in the US both advise washing hands with soap in either cold or warm water for around 30 seconds to protect against coronavirus.



SWAP

Always using the hot tap.



REPLACE WITH

Using the cold tap and soap for hand washing unless you are willing to wait more than 15 seconds for the water to warm up. This has the added benefit of not wasting water in the wait for the hot tap to warm up.



Yearly saving on energy and water bills

FLUSH LESS WATER DOWN THE TOILET

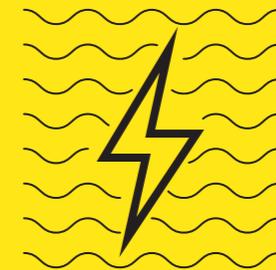
Toilet flushing accounts for about a third of household water usage. Fortunately, there are easy ways to reduce this amount, saving money at the same time:

- Install a cistern displacement device (CDD) in the cistern of an older toilet to reduce the amount of water used for each flush, typically by one or two litres (common brands include Hippo-water Saver and Save-a-Flush). They are available for free from many water companies. Alternatively, fill up a plastic bottle and place it in the cistern.
- Fit a variable flushing device to existing higher flush toilets to give a choice of flush volumes.
- Choose a water-saving, low-flush or dual-flush version when buying a new toilet. Low or dual-flush toilets typically use four-six litres of water per flush compared to nine or more litres for other toilets.
- If possible, turn down settings of dual flush toilets to reduce both volumes of water.

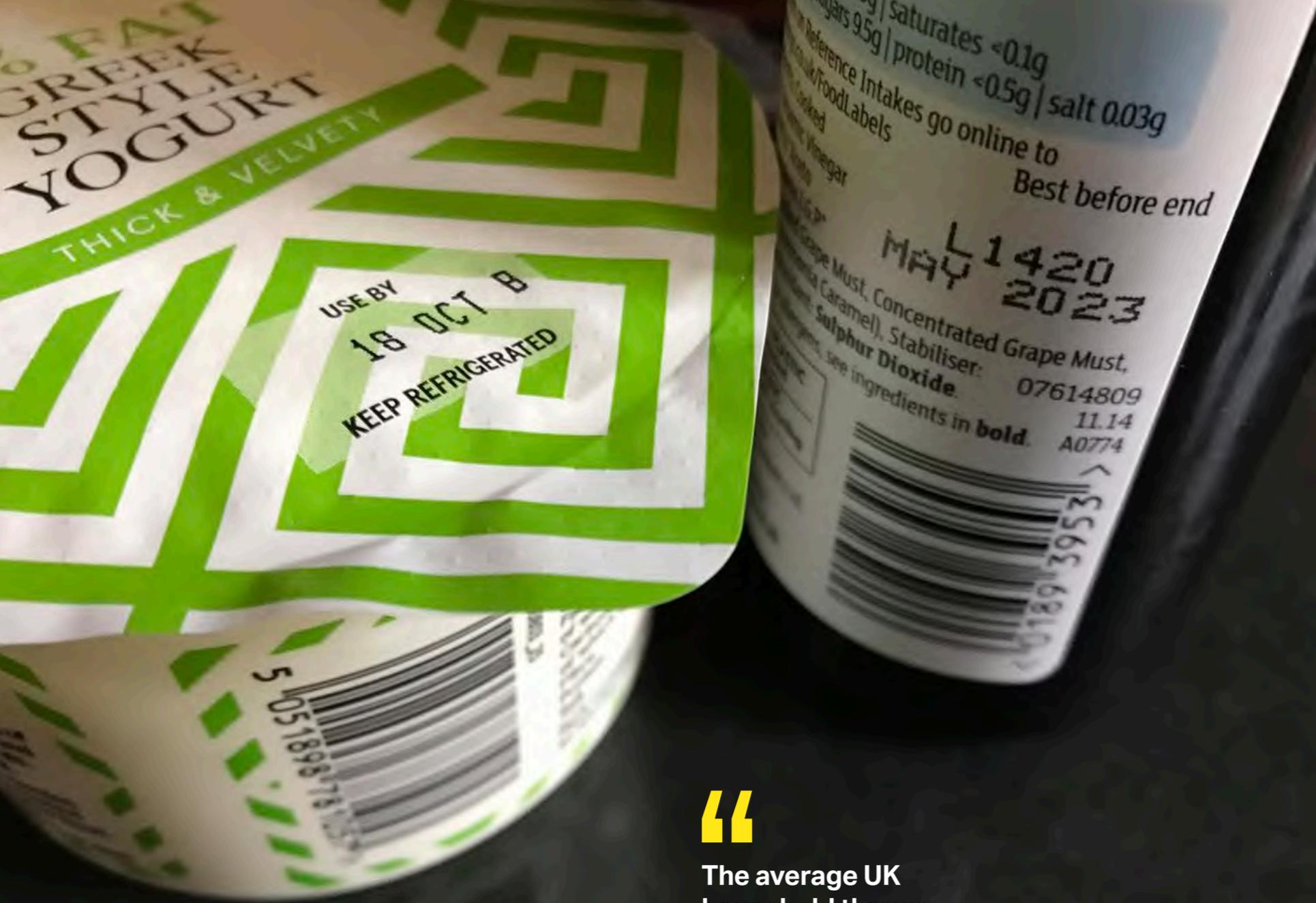
Source:
waterwise.org.uk/save-water
nidirect.gov.uk/articles/saving-water-home



Yearly saving on water bills
dependent on property size



APPROX. £800 ENERGY AND WATER RELATED ANNUAL SAVINGS



KNOW THE DIFFERENCE BETWEEN 'USE BY' AND 'BEST BEFORE' DATES

According to campaign group Love Food, Hate Waste, UK households waste 4.5 million tonnes of edible food every year, enough to fill 38 million wheelie bins. The group also estimates that the average UK household throws away about £700 of food every year, equivalent to £15 a week.

A lot of food gets binned because we don't use it in time, which is why knowing the difference between 'best before end' and 'use by' dates can help reduce waste.

'Best before' dates tell when food is at its optimal quality. Once the date is passed, it is still safe to eat but may not be at its best. Experts recommend doing a simple taste test to see whether it is good enough to eat.

On the other hand, we should adhere to 'use by' dates on food such as dairy, meat and fish for safety reasons even if the food smells and looks OK.



The average UK household throws away around £700 of food every year.



Yearly saving

Source: www.lovefoodhatewaste.com/article/use-or-not-use-question

BUY FRUIT AND VEGETABLES FROM A LOCAL MARKET OR GREENGROCER

Fruit and vegetables bought from a local market or greengrocer can often be cheaper than the supermarket equivalents. This is especially true of seasonal produce as a plentiful supply means prices go down. Ask your greengrocer for help on what's best to buy, as well as what items will keep well in the fridge and which ones should be eaten straight away.

It's also easier to specify quantities so you only buy what you need, cutting down on packaging and food waste. By shopping local, you are also supporting small businesses.

To find your local market, go to: <https://farmretail.co.uk/find-a-farm-retailer>



SWAP

Supermarket-bought fruit and vegetables costing around £8.50 per week.



REPLACE WITH

Local market-bought produce costing around £5.80 per week.



Yearly saving

BRING YOUR OWN CUP

The UK gets through 2.5 billion paper coffee cups a year. Even though some are compostable, the government estimates that only one in 400 single-use coffee cups end up being recycled.

The answer is to bring your own reusable cup. Brands such as KeepCup are perfect for those who want to drink on the spot, while insulated versions keep your drink hot for longer. There are even collapsible cups if you don't want to carry their cup around all day.

Most national chains and independents offer discounts to customers who bring in their own (as long as it fits the machine).

Pret A Manger offers the most generous discount at 50p compared to Costa (25p) and Greggs (20p). At Starbucks, you get 25p off plus you avoid the 5p disposable cup charge, saving 30p in total.



SWAP

Pret A Manger regular Americano costing £1.75.



REPLACE WITH

Pret A Manger regular Americano in a reusable cup costing £1.25.



Yearly saving (based on one coffee per working day and cup already owned)

EAT MORE VEGGIE MEALS

The benefits to the environment and to health of eating less meat have become widely known in recent years. This is in thanks in part to efforts of groups such as Meat Free Monday, a campaign that encourages people to eat more healthily and save natural resources by sticking to vegetarian food one day a week, as well as Veganuary — where people go vegan for the month of January.

Simply choosing one vegetarian meal per week can save you money on your weekly shop. Figures from Office for National Statistics show that meat costs families an average of £12.80 per week, while vegetables cost £4.30.

Source: www.thisismoney.co.uk/money/news/article-6952181/Save-planet-cash-20-little-changes-2-500-extra-year.html



SWAP

One meat-based meal per week, around £1.83.



REPLACE WITH

One vegetable-based meal per week, around 61p.



Yearly saving (more vegetarian meals means more savings)

GROW YOUR OWN HERBS AND SALAD

Reduce your reliance on shop-bought bags of plastic-wrapped herbs by growing your own — the same goes for salad leaves as well.

Starter kits cost between £10–£20 and are a great introduction as they come with pots, compost and a range of seeds. Otherwise, just buy a packet of seeds and grow!



SWAP

Shop-bought cut herbs (£1.50 for 100g).



REPLACE WITH

Herb starter kits (£10–£20).



Yearly saving (based on buying cut herbs once a week)



UP TO £1,100 FOOD AND DRINK RELATED ANNUAL SAVINGS

BUY SECOND HAND WHENEVER POSSIBLE

Almost anything can be purchased second hand from clothes to household electrical items. Huge cost savings can be made, and valuable resources reused and saved from going into landfill.

As well as charity shops, check sites such as Ebay, Gumtree, Depop, Freecycle or buy and sell groups (including marketplace) on Facebook. Some items may even be unused and sold at a fraction of the retail price, or free of charge on Freecycle.

It pays to be patient, especially if you are looking for something in particular. Put a message out on local groups too in case someone in your neighbourhood is giving away something you need.

DESIGNER
SECOND
HAND
STORE



SWAP

Automatically buying new clothes and products.



REPLACE WITH

Checking first for second hand bargains.



Savings (often half price or better)

COMBINE YOUR ONLINE PURCHASES

It is more effective to combine purchases and save goods into the basket until there's enough for free or reduced postage, rather than purchasing one item at a time.

Combining purchases also means fewer delivery trips and less packaging.

Source: www.thisismoney.co.uk/money/news/article-6952181/Save-planet-cash-20-little-changes-2-500-extra-year.html



SWAP

Ethical Superstore.com standard delivery, up to £3.95 per item.



REPLACE WITH

Free delivery on orders over £50.



Yearly saving (based on buying a larger >£50 monthly shop instead of smaller <£50 weekly shop)

RECYCLE PRINT CARTRIDGES

Source: www.thisismoney.co.uk/money/news/article-6952181/Save-planet-cash-20-little-changes-2-500-extra-year.html



Did you know that some companies pay for empty printer cartridges?

The printercartridge recycling.co.uk pays around £1.70 for every empty cartridge. Likewise, visit: therecyclingfactory.com/tesco/ to get 125 Tesco Clubcard points per cartridge. Both sites pay for postage.

Alternatively, you can buy refilled recycled cartridges from sites such as stinkyinkshop.co.uk for less than half the cost of an original.



SWAP

HP 301XL black/colour ink cartridge twin pack, £58.32.



REPLACE WITH

Stinky Inks Refilled HP 301XL black/colour ink cartridge twin pack, £19.98.



Yearly saving (buying a twin pack of ink cartridges four times per year)

JOIN YOUR LOCAL LIBRARY

If you like reading, local libraries are a great resource that will save you the expense of buying new books.

They also stock DVDs and CDs, handy if you want to cut back on subscriptions to online film and music services.

Some libraries offer free home delivery for disabled people, too.



Libraries are not just for books. You can also borrow DVDs and CDs, handy if you want to cut back on subscriptions to online film and music services.



SWAP

Buying a new book every month, at around £7.49 each.



REPLACE WITH

A library membership, free.



Yearly saving



MAKE YOUR OWN CLEANING PRODUCTS

From kitchen cleaner to fabric softener, DIY cleaning products are increasing in popularity. Not only are they cheap to make but they are kinder to the environment than harsher chemical alternatives.

Common ingredients include bicarbonate of soda, white vinegar, lemon and essential oils for adding scents. For recipes, go to: friendsoftheearth.uk or browse the many recipe videos on YouTube.

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Source: www.thisismoney.co.uk/money/news/article-6952181/Save-planet-cash-20-little-changes-2-500-extra-year.html



SWAP

Dettol Power and Fresh spray, £2 per litre.



REPLACE WITH

Homemade all-purpose cleaner using vinegar, bicarbonate of soda and water, 34p per litre.



Yearly saving (based on using 4 litres per year)

DITCH THE LAUNDRY DETERGENT

Ecoballs and laundry eggs are an easy and effective alternative to laundry detergent and fabric conditioner. Filled with mineral pellets, the ecoballs can be used multiple times and refilled when necessary, saving the equivalent of around 40 bottles of laundry detergent and conditioner a year (based on seven washes a week).

They are also ideal for those with sensitive skin as the pellets don't contain any petrochemicals, enzymes, bleaches, phosphates or parabens.

Source: www.thisismoney.co.uk/money/news/article-6952181/Save-planet-cash-20-little-changes-2-500-extra-year.html



Adding a drop or two of essential oils to your wash will give your laundry that clean fresh smell.



SWAP

Persil Non Bio, £7 for 38 washes (18p per wash) and Lenor conditioner, £3 for 54 washes (5p per wash).



REPLACE WITH

Ecoball £19.95 for 1,000 washes (2p per wash).



Yearly saving (based on three washes per week)

WRAP SMART

Wrapping paper made from foil or decorated with glitter can't be recycled. Using brown paper decorated with a ribbon or some string, is a much cheaper and environmentally-friendly alternative.

Old birthday and Christmas cards make perfect gift tags. Just cut them up and use a hole punch to make a hole for the ribbon to go through. Keep and reuse gift bags if they are in good condition.



SWAP

Paperchase 3m gold hearts wrapping paper costing £4.00.



REPLACE WITH

Paperchase recycled 10m brown paper roll costing £5.00.



Yearly saving (based on nine metres per year)

REMEMBER YOUR SHOPPING BAGS

The price in England for single-use plastic bags is set to double from 5p to 10p in April 2021. The current levy has already reduced thin-gauge plastic bag use in major supermarkets by 95 per cent since it was introduced in 2015. However, evidence suggests that shoppers are now using thicker bags for life just once and then throwing them away.

The best way to reduce plastic use and save money is to take your own bags to the supermarket. Either keep a number of reusable bags permanently in the boot of the car or keep a net shopping bag or other folded bag with you at all times in case you need it.



SWAP

Supermarket bags, 10p each.



REPLACE WITH

Bringing your own bags, free.

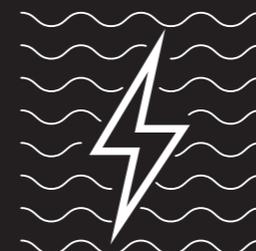


APPROX. £500 SHOPPING RELATED ANNUAL SAVINGS



Yearly saving (based on using five bags per weekly shop)

**APPROXIMATELY £2,400
TOTAL ANNUAL SAVINGS**
ADOPTING ALL OF THE SUGGESTED
MEASURES NOT ONLY SAVES YOU MONEY
BUT SAVES RESOURCES AND REDUCES
OUR INDIVIDUAL CARBON FOOTPRINTS.



ENERGY AND WATER



FOOD AND DRINK



SHOPPING

Further information

These are just some of the many steps you can take to create a more sustainable home and also save money.

More detailed information from the Committee on Climate Change on creating a more sustainable home can be found at the following sources:

 www.theccc.org.uk/wp-content/uploads/2019/02/Infographic.jpg

 www.theccc.org.uk/publication/living-carbon-free-energy-systems-catapult/

Contact

Contact the corporate sustainability team with any queries or feedback:

sustainability.support@aecom

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