



# How to **insulate** yourself from energy bills

The UK energy crisis has left households and businesses facing rising gas and electricity bills. Here, we share low-cost and effective ways to save energy and **cut costs at home**.

Where possible, we have categorised them by room, so you can easily identify your biggest areas of impact. Initiatives are also divided into low-cost and no-cost, so you can see the level of investment needed for the larger projects.

Energy reduction tips



# Reducing energy **in all rooms**

Loft insulation is cheap and very easy to install, so it's worth telling your landlord this if you are renting. **Fit it to a depth of 270 mm.** It'll pay for itself in just over a year through lower energy bills (or 2-3 years if you pay someone else to install it).

## No-cost

Action	Annual saving	3-year saving
Reduce time on timeclocks by 30 minutes in morning and evening	£180 (up to)	£540
Switch off cable box at socket at night	£40	£120
Switch all office equipment off at sockets at night - laptop, monitor and printer	£50	£150
Move furniture and obstructions away from radiators	£200 (up to)	£600 (up to)
Bleed radiators at start of heating season	£80	£240

## Low-cost

Action	Cost	1-year saving	3-year saving
Install PIR sensor solar lighting to garden and front door	£30	£30	£90
Plug all A/V kit into smart sockets (Hive) to switch off overnight and when away	£35	£80	£240
Add insulating tape and gap fillers to all windows	£45	£45	£135
Use radiator foil behind each radiator to direct heat to room	£75	£45	£135
Install smart thermostats (Hive) for app control of heat and hot water	£125	£240	£720
Change all lightening to LED (roof and lamps)	£80-100	£75	£225
Install radiator thermostats to main use areas	£15-45	£85	£225
Insulate the loft	£530	£360	£1,080

It's more energy efficient to do larger loads of laundry, but an overfilled washing machine or dryer may not wash or dry your clothes properly. A handy tip to ensure that your machine is at optimal efficiency is to **check if you can still touch the top of the drum** after filling a washing machine or dryer with laundry.

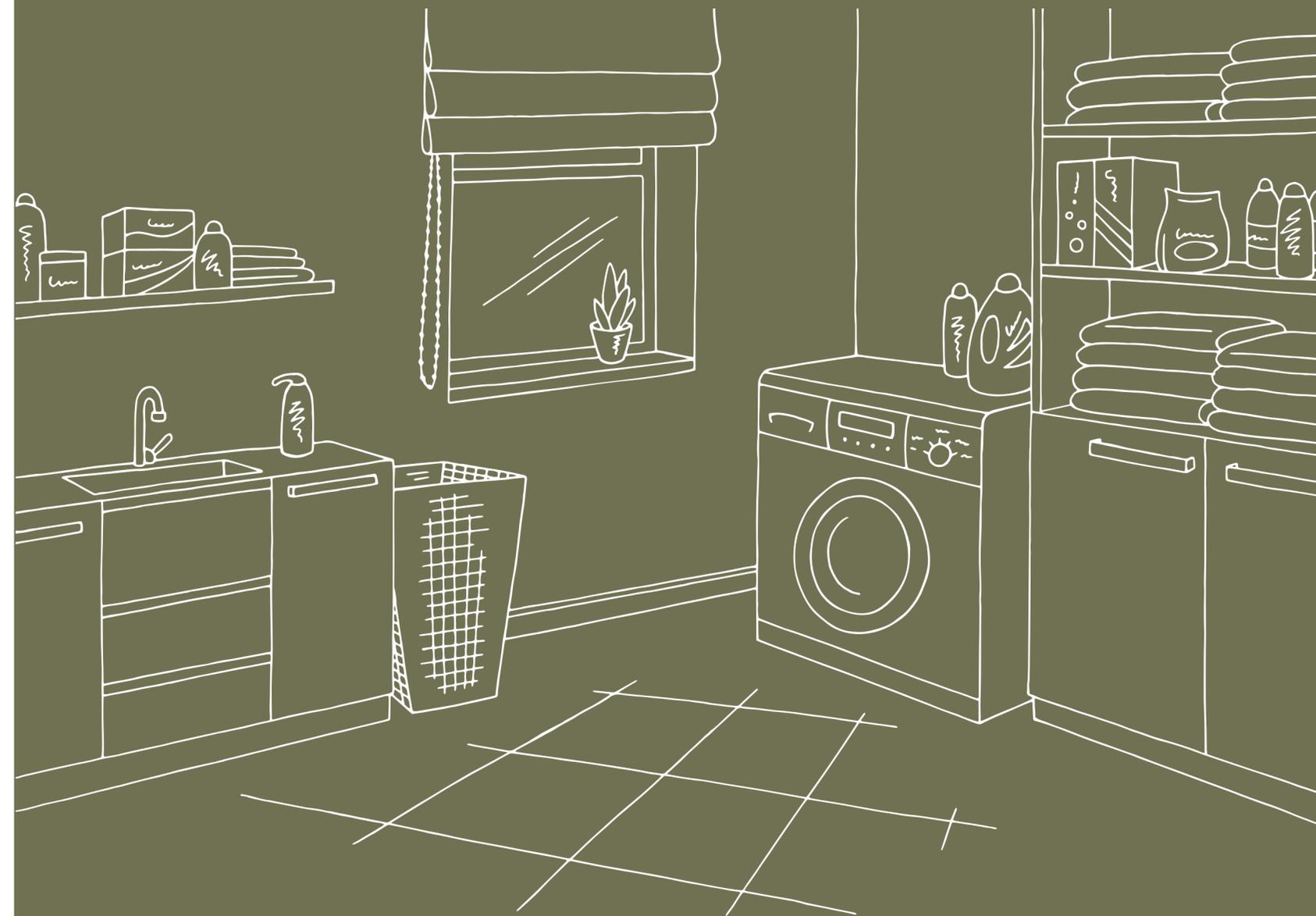
### No-cost

Action	Annual saving	3-year saving
Reduce thermostat by 1°C	£120	£360
Use cooler washes (20°C - 30°C) maximum 3x a week	£90	£270
Descale washing machine 2x per year	£40	£120
Use "Eco" Mode on appliances where possible	-	-
Use full loads to save on number of washes	-	-
Use your tumble dryer sparingly and opt for the washing line / clothes horse	-	-

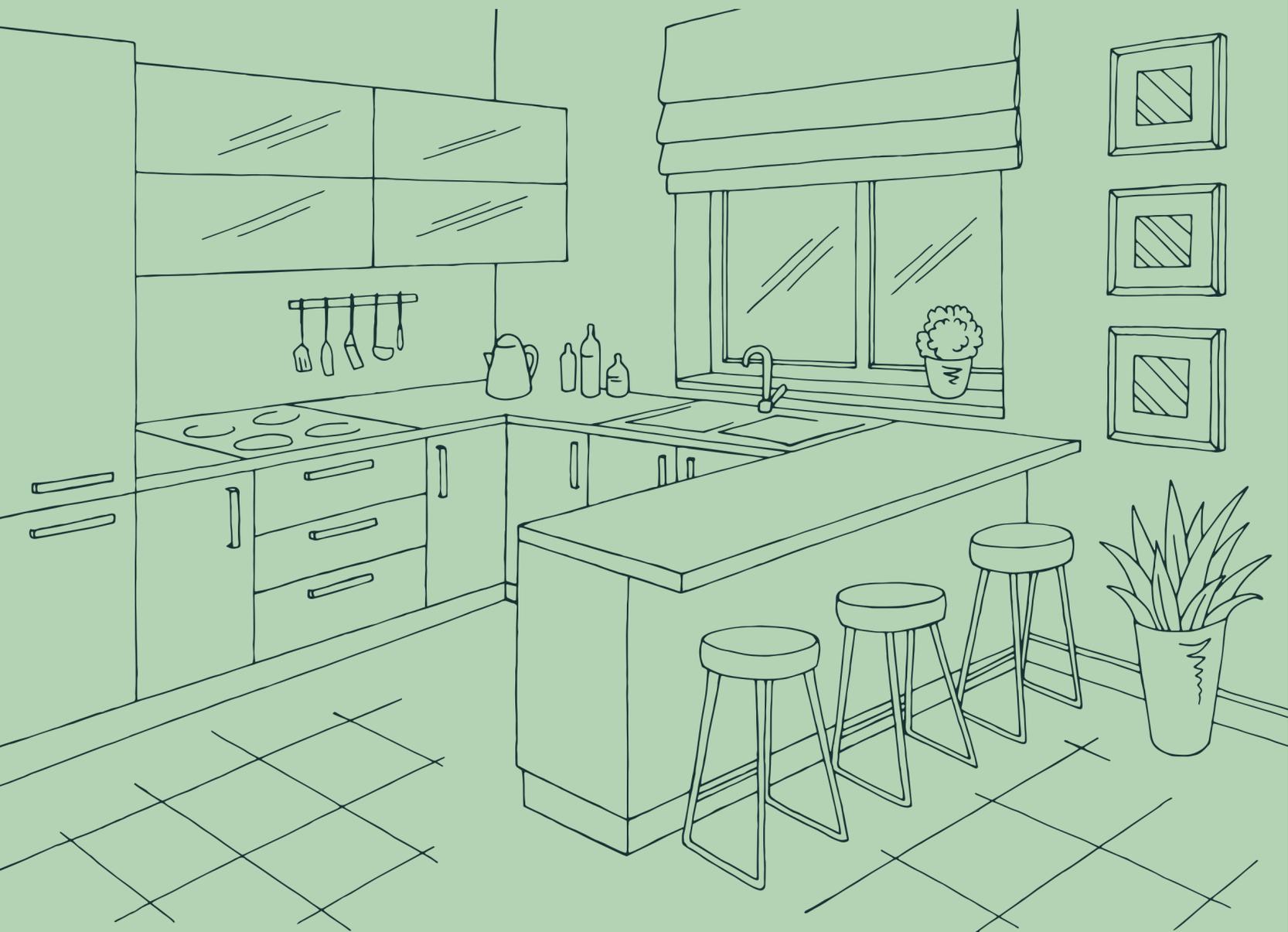
### Low-cost

Action	Cost	1-year saving	3-year saving
Install insulating boiler jacket	£20-60	£90	£270
Service your boiler every autumn to ensure its running efficiently	£90+	£100+	£300+
Insulating tape to front and back doors	£15	£35	£105
Use laundrette facilities to dry large items (duvet covers, towels, throws etc) as their dryers are larger meaning your items will dry quicker and you can fit more in a single load	-	-	-

# Reducing energy utilities



# Reducing energy kitchen



For optimal energy efficiency, aim to keep your **fridge and freezer at least 75% full**. You could always fill them with bottles of water to take up space. But don't overfill - fridges and freezers work by circulating air. If overfilled, the air won't be able to circulate.

## No-cost

Action	Annual saving	3-year saving
Defrost freezer twice a year to keep efficient	£60	£180
Regulate fridge temperature to 4°C - 5°C (Not 1°C - 2°C)	£60	£180
Stop pre-heating oven - use energy to cook	£60	£180
Switch off microwave at socket when not in use	£45	£135
Use microwave rather than oven to cook things like baked potatoes	£40	£120
Switch off oven at socket when not in use	£30	£90
Descalc kettle 2x per year	£15	£45
Use full loads on dishwasher to save on number of washes	-	-
Use lids on pots - this speeds up cooking and reduces heat loss	-	-

## Low-cost

Action	Cost	1-year saving	3-year saving
Tap aerator (Reduce flow from 12L/min to 8L/min)	£0.50- £1 per tap	£10 - £20 per tap	£30 - £60 per tap
Thermal lined curtains to double patio doors	£90	£45	£135

The best part about reducing energy in the bathroom is it **doesn't need to cost a bomb** to see a massive return. And any spend on energy-conserving devices is recouped in a short time.

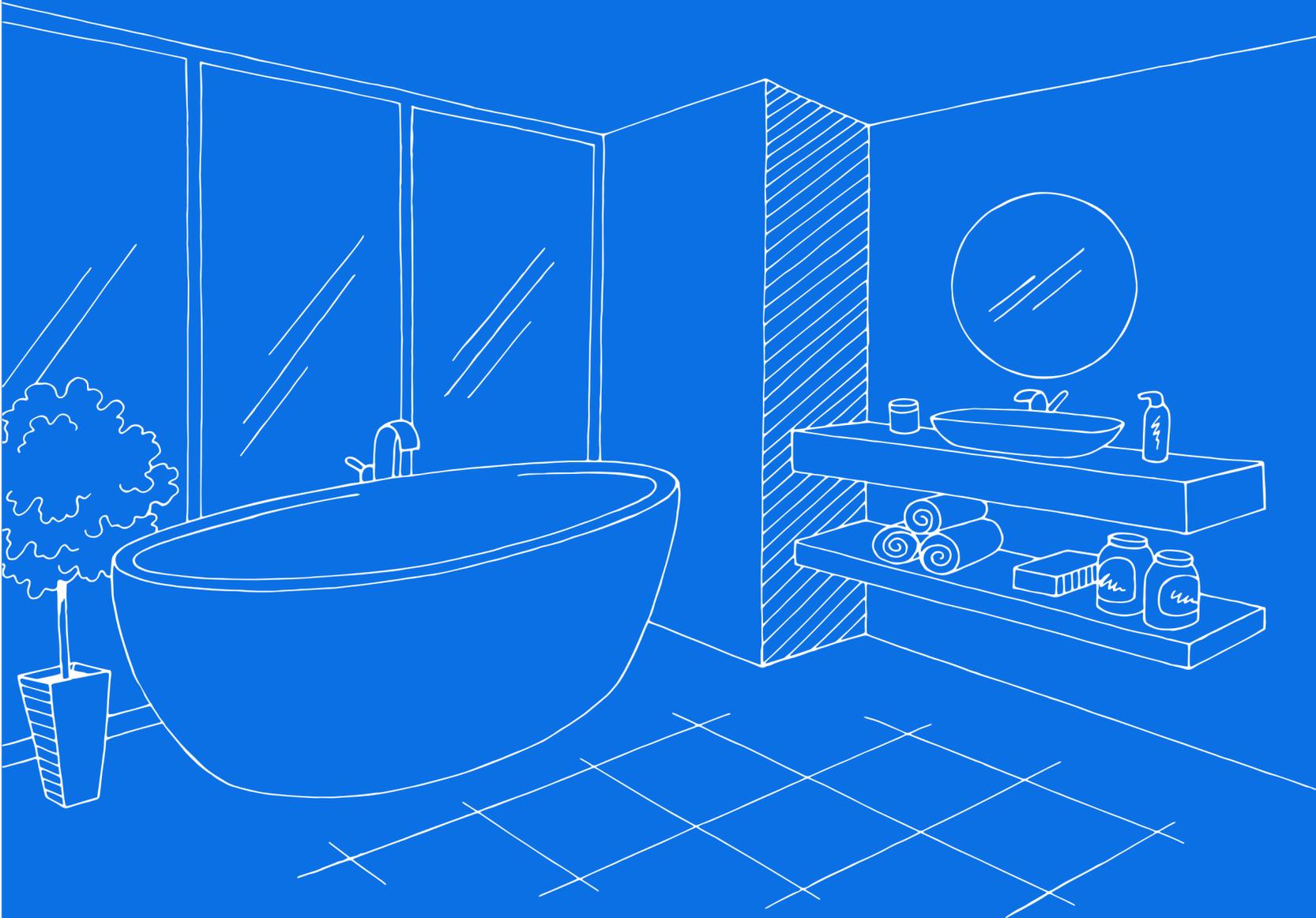
**No-cost**

Action	Annual saving	3-year saving
Spend 1 minute less in the shower	£55	£165
Limit showering time to 4 minutes (song challenge!)	-	-

**Low-cost**

Action	Cost	1-year saving	3-year saving
Shower head (Reduce flow from 12L/min to 8L/min)	£10+	£60 - £80	£210
Replace washer on dripping taps	£20 - £60	£40 - £60	£150
Install smart thermostats (Hive) for app control of heat and hot water	£125	£240	£720

# Reducing energy bathroom



# Reducing energy bedroom



The windows in your bedroom can **significantly impact how much energy you consume**. Inefficient windows can be one of your home’s biggest energy leaks. Make sure your windows aren’t letting warm air out – or cold air inside.

## No-cost

Action	Annual saving	3-year saving
Open blinds and curtains to south facing windows during the day to increase solar gain and close when dark to reduce heat loss	-	-

## Low-cost

Action	Cost	1-year saving	3-year saving
Use an electric blanket for 20 mins before bed to save on heating the bedroom	£40 (plus 5p/night)	£80	£240
Layer up using thermal vests and use a hot water bottle, this allows you to switch off the heating in your room	£20	£80	£240
Use draft excluders to internal doors to stop heat loss when external doors are opened (kitchen, living room, bedroom)	£10 each	£20 each	£60 each

Replacing all the bulbs in your home with **LED lights** could reduce your emissions by up to 40kg, around the equivalent of driving a car around 140 miles.

Action	kWh (1)	Cost per hour (2)
Tumble dryer (3,000 watts)	3	£1.02
Oven (2,000W)	2	68p
Kettle (1,800W)	1.8	61p
Electric hob (1,700W)	1.7	58p
Vacuum cleaner (1,400W)	1.4	48p
Microwave (1,200W)	1.2	41p
Toaster (1,200W)	1.2	41p
Dishwasher (1,200W)	1.2	41p
Iron (1,100W)	1.1	37p
Air fryer (1,000W)	1	34p
Washer (700W)	0.7	24p
Electric clothes airer (250W)	0.25	8.5p
Slow cooker (225W)	0.225	8p
PlayStation 5 (201W)	0.201	7p
Electric blanket (100W)	0.1	3.4p
Sky Q box (45W)	0.045	1.5p
TV (30W)	0.03	1.02p
Fridge (28W)	0.028	0.95p
BT Hub (12W)	0.012	0.41p

1) kWh (Kilowatt hours) are the units used to measure how much power is used by an appliance. It works out as the watt power of an appliance divided by 1,000 (when used for one hour). (2) Prices based on upcoming 1 October 2022 price guarantee rate of 34p/kWh.

# How much do appliances use?



# How we can help Planet Mark

**There are clear financial benefits from reducing energy consumption in your home, but maximising energy efficiencies can also increase value in your property, offer an enhanced quality of life and help to protect our environment.**

Small energy changes can also boost comfort in your living environment and may come with some health benefits. Properly insulated homes will make your home warmer, drier and better ventilated and can help prevent pollutants.

On top of this, cutting energy means also cutting carbon. Residential properties are responsible for between 17-21% of energy-related carbon emissions globally, and the energy supply sector is the largest contributor to global greenhouse gas emissions.

As part of the **Planet Mark Business Certification**, we help you to reduce the emissions associated with several areas including energy. In response to the current energy crisis, as well as the climate emergency we're facing, Planet Mark is offering a series of [monthly, one-hour webinars](#) for those who wish to learn how to save energy in the workplace and at home.

If you're a business looking for best practice on energy measurement and reduction, you can download our free toolkit [here](#).

Before you get going, it's important you understand your **energy bill**.

The information on a typical energy bill can be unclear but understanding it can go a long way to helping you address your largest impact areas. [This video](#) from **Home Energy Scotland** is a helpful guide.



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The role of data in operational energy management is significant. As we often say at Planet Mark, you can't manage what you don't measure.

The more granular data available the greater control you have on managing your energy usage.



Want to know more?

Get in touch with  
our team



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