

How much electricity am I using?

We'll help you find out what uses the most energy in your home, and how to make savings ...

Some electrical appliances use a lot of electricity. Others don't. As a rule, those with moving parts or which produce heat use much more than those that produce light or sound. So if you want to save electricity, there's no point worrying about a digital clock or an electric razor since these use so little power you would hardly notice the difference. The big savings lie elsewhere – electric showers, immersion heaters and tumble driers, for example.

Every appliance has a power rating, usually given in watts (W) or kilowatts (kW) (1000W = 1kW). This is the amount of electricity it needs in order to work. Of course, the amount of electricity it uses depends on how long it's on for. An item like a fridge has a low wattage, but because it's on all the time it'll use a lot of electricity. And although an iron is only used now and again, it uses a lot of electricity so the quicker you do your ironing the better.

Electricity is sold by the kilowatt-hour (kWh) – usually referred to as 'units' on your electricity bill. You can work out how much an appliance costs to run by multiplying its wattage by the amount of time it's on and then by the cost of electricity. So let's say you have a 500W (0.5 kW) dehumidifier and you run it for a whole day (24 hours). It will use 12kWh of electricity (e.g. half a kilowatt every hour). If electricity costs 26p per unit, you multiply 12kWh



The largest proportion of most household's electricity bill comes from running appliances like washing machines, dishwashers and electric showers.

by 26p and you get a grand total of 312p, or £3.12. This is what it costs to run the dehumidifier all day.

The table on the following page shows what it costs to use a range of common appliances. **These are based on a unit price for electricity of 26p per kWh (the price cap after July 2026).**

Bear in mind that sometimes a higher-wattage appliance will actually use less power overall than a lower-wattage one because it's well designed and does its job quicker. An energy efficient dish washer, for example, may have a power rating of 2kW – the same (or higher) as a non-energy efficient one. But it completes its cycle quicker, so while it may use the same (or more) electricity per hour, it's working for less time so uses less energy overall. In other words, don't judge the energy efficiency of a

Electric shower
£2.34/hour



Tumble drier
65p/hour



Hair drier
9p for ten minutes



Oil-fired radiator
From 52p/hour



Electric mower
From 26p/hour



Vacuum cleaner
From 23p/hour



Phone charger
Almost nothing at all!





Costs of running a range of common appliances

Based on a unit price for electricity of 26p per kWh (average price in July 2026)

Appliance (with typical power rating*)	Cost per hour**	Cost per 10 mins
Electric shower (9000 W)	£2.34	39p
Immersion heater (3000 W)	78p	-
Kettle (3000 W)	-	13p
Tumble Dryer (2500 W)	65p	11p
Electric heaters (2500 W)	65p	11p
Oven (2100 W)***	55p	-
Washing machine (2100 W)	55p	-
Oil-filled radiator (2000 W)	52p	9p
Hairdryer (2000 W)	-	9p
Hob (2000 W)	52p	9p
Grill (1500 W)	39p	7p
Iron (1500 W)	39p	7p
Toaster (1000 W)	-	4p
Microwave (1000 W)	26p	4p
Electric mower (1000 W)	26p	4p
Vacuum cleaner (900 W)	23p	4p
Dehumidifier (500 W)	13p	-
Towel rail (450 W)	12p	-
Plasma TV (350 W)	9p	2p
Fridge-freezer (300 W)***	8p	-

Appliance (with typical power rating*)	Cost per hour**	Cost per 10 mins
Freezer (150 W)***	4p	-
Fridge (150 W)***	4p	-
Heated blanket (150 W)	4p	1p
Desktop computer (140 W)	4p	1p
Games console (120 W)	3p	1p
LCD TV (120 W)	3p	1p
Laptop (50 W)	1p	-
TV box (40 W)	1p	-
DVD player (40 W)	1p	-
Extractor fan (20 W)	1p	-
Broadband router (10 W)	<1p	-

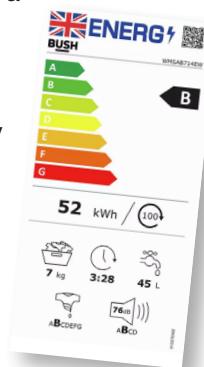
* We've taken an average power rating for each appliance; the actual power rating will depend on the size and specifications of the appliance. So the cost of running, say, your microwave, could be less than the figure given, or more.

** For some appliances, we've only listed the cost for either an hour (column 2) or 10 minutes (column 3).

*** Appliances like ovens, fridges and freezers turn themselves off when they reach the required temperature, so for some of the time that they're in use they won't be using much or any electricity. So the daily cost of running a fridge or freezer is not 24 x the hourly cost.

device only by its given power rating, particularly if it's controlled with thermostat or operates on a timed cycle.

Instead, if you're buying a new appliance, the best way to judge its energy efficiency is the label. Those rated A are the most efficient for their size. To compare between differently sized appliances, energy labels also print suggested kWh usage per annum for each appliance.



Energy monitors

These are wireless devices that tell you how much electricity is being used at that moment, as well as how much was used last week or last month. Your energy supplier will give you an energy monitor (also called in-home display) if you have a smart meter, but they are also available to buy.



St James Court
St James Parade
Bristol BS1 3LH

0117 934 1400
cse.org.uk
info@cse.org.uk

We're a charity (298740) supporting people and organisations across the UK to tackle the climate emergency and end the suffering caused by cold homes.

Our Home Energy Team offers free advice on domestic energy use to people in central southern and southwest England.

Contact us:

PHONE 0800 082 2234

EMAIL home.energy@cse.org.uk

See all our energy advice pages at www.cse.org.uk/advice