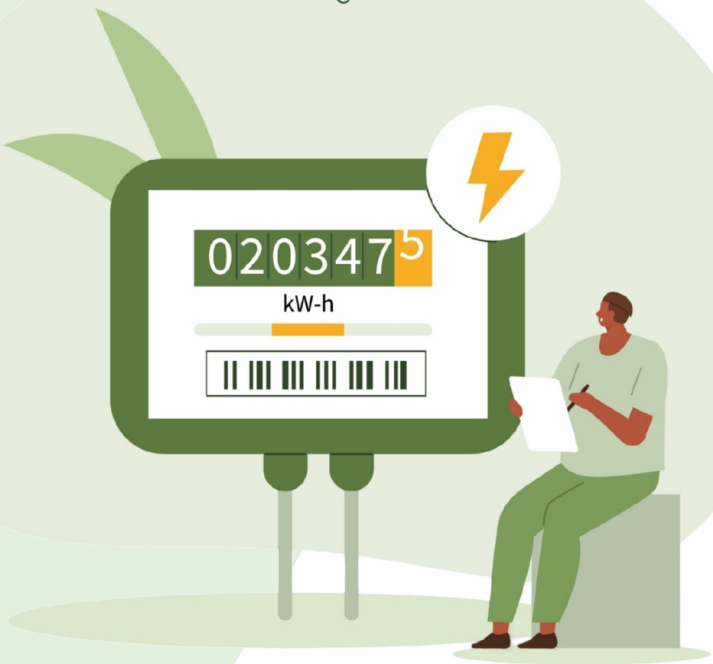
HOW MUCH DO YOUR ELECTRICAL ITEMS COST TO RUN?

National Energy Action is the national charity, helping you with your energy bills. This leaflet helps you work out how much electrical items like washing machines cost to use.



Understanding which items in your home use the most electricity could help you save money. The amount it costs to run electrical appliances depends on three things:

1. **The amount of power they need** (power rating)
2. **The price you are charged per unit of electricity** (kWh)
3. **How long the appliance is on** (use)

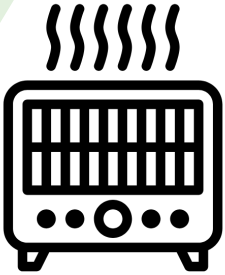
This leaflet is a rough guide on comparing costs for appliances over one hour, helping you to see the ones that use the most electricity so you may be able to adjust how you use them. If you are still struggling call National Energy Action's **Energy Advice and Support Service on 0800 304 7159** or go to **www.nea.org.uk/get-help**.

Accessibility & Language

WE CAN HELP

You can **translate** National Energy Action's website and leaflets into over 160 languages - and get **text-to-speech** in over 100. You can also **adapt text for neurodiversities** including ADHD and dyslexia, and visual impairments.
Use our Recite Me button on www.nea.org.uk.

KILO WHAT?



So what is a kilowatt? The power rating for electrical appliances is measured in **watts (W)** or **kilowatts (kW)**.
A kilowatt is **1000 watts.**
If a **1 kW appliance** (like this fan heater) runs for **1 hour** it will use **1 kWh** (kilowatt hour) of electricity.
Units of electricity are measured in **kWh** and counted through our electricity meters.
The price for a unit of electricity is shown in **pence per kWh** and that's what energy suppliers use to bill us.
On a prepayment meter (PPM/top-up meter) **your credit will run down with each kWh used**.

CHARITY REGISTRATION NO. 290511

ENERGY PRICE CAP

The energy price cap ISN'T a cap on how much you'll pay for the energy you use. It's a cap on the maximum suppliers can charge us per unit of energy.

It's changed every three months by Ofgem, the energy industry regulator.

You can find your current electricity unit price on your energy bill or by contacting your supplier. By law they must provide you with this information.

If you have a prepayment meter (PPM) you won't get an energy bill often, so contact your supplier or use websites such as Ofgem, MSE or Citizens Advice energy comparison for up-to-date info. An energy advice agency may also be able to help with this.

WORK OUT THE RUNNING COSTS OF YOUR APPLIANCES

By understanding the power rating, the electricity unit rate of your supplier and using the following simple formula, you can see how much your appliances cost to run.

Running cost (pence per hour) = **Power rating** (Watts) **X** **Electricity unit rate** (pence per kilowatt hour) ÷ **1000**

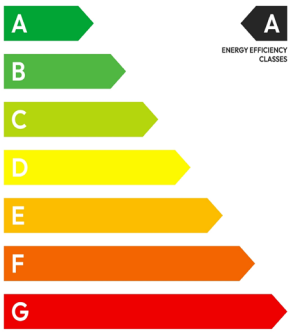
If you want to work out the cost per minute, just divide the result by 60!

It can be hard to give exact costs. The **price cap** changes regularly and there are differences between makes and models and the age of appliances. Also, heaters, cookers, washing machines and tumble dryers use different amounts of energy while they run.

THINK SMART

Smart meters have an in-home display, which can help you keep track of how much energy your appliances us. See our leaflet or go to www.nea.org.uk/get-help.

Choosing **energy efficient** electrical items can also help. A is the most efficient (see right).



This table shows average costs of using appliances. It uses the price cap from 1 April 2025. See where you could make savings.

Appliance	Rating (watts)*	Cost per hour
Electric shower	7,000 – 10,500	£1.89 to £2.83
Immersion heater (single rate tariff)	3,000	82p
Supplementary heating (e.g. fan heater)	1,000 – 3,000	27p to 82p
Kettle	2,500 – 3,000	68p to 82p
Oven*	2,000 – 2,400	24p to 56p
Hob (per ring)*	1,000 – 2,000	14p to 54p
Iron	1,000 – 3,000	27p to 82p
Microwave	700 – 1,400	19p to 38p
Vacuum cleaner	600 – 900	16p to 25p
Slow cooker	150 – 300	3p to 8p
Air fryer	1,400 – 1,800	16p to 32p
Fridge-freezer	100 – 300	Up to 1p
Games console	100 – 200	3p to 5p
LCD TV	25 – 175	1p to 5p
LED GLS bulb	6 – 10	Less than 1/2p
Broadband router	5 – 15	Less than 1/2p
Extractor fan	5 – 10	Less than 1/4p
Phone / tablet (charging)	2 – 15	Less than 1/2p

Washing machines and tumble dryers typically use different amounts of energy throughout the cycle. The washing cycle uses more electricity than the spin cycle.
While ECO settings may take longer to wash a load, they usually use cooler water. So you save money on heating it up.

*Thermostat allows average energy use to be calculated per hour

Appliance	Rating (watts)*	Cost per cycle
Washing Machine	1,000 – 2,400	5p to 35p
Tumble Dryer	1,500 – 2,500	38p to £1.46