

HOW MUCH DO YOUR ELECTRICAL ITEMS COST TO RUN?

National Energy Action is the national charity, helping you with your energy bills. This leaflet covers how much electrical items like washing machines and ovens 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. For more help, please visit the Consumer Council: www.consumerCouncil.org.uk/consumers/help-consumers/electricity-oil-and-gas/appliance-cost-checker-tool.

KEYPAD ELECTRIC METER

Your keypad meter could help you understand your electricity usage.

- Press **#** to see the amount of credit left
- Press **1** to see the credit time left in days
- Press **2** for the cost of the previous day's, week's and month's use
- Press **3** to see the unit rates and number of units left
- Press **6** for the electricity being used presently in kilowatts – this will reduce when you switch appliances off
- Press **8** to see the highest consumption in any half-hour in the last 24 hours and when it occurred

KILO WHAT?

So what is a kilowatt? The power rating for electrical appliances is measured in **watts (W)** or **kilowatts (kW)**.

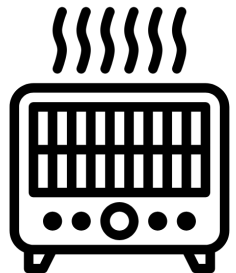
A kilowatt is **1000 watts**.

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.**



ENERGY UNIT PRICE

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 the Consumer Council energy comparison for up-to-date information:

www.consumercouncil.org.uk/consumers/help-consumers/electricity-oil-and-gas/electricity-price-comparison-tool.

CALCULATING THE RUNNING COSTS OF MY APPLIANCES

By understanding the power rating, the electricity unit rate of your supplier and using the following simple formula it is possible to work out the running costs of your appliances:

$$\begin{array}{c} \text{Running} \\ \text{cost} \\ \text{(pence} \\ \text{per hour)} \end{array} = \begin{array}{c} \text{Power rating} \\ \text{(Watts)} \\ \times \\ \text{Electricity unit rate} \\ \text{(pence per kilowatt hour)} \end{array} \div 1000$$

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

Of course, some items will only be on for a few minutes and some several hours so the actual costs will vary.

Due to the price of energy changing regularly and variances between makes and models, the age of appliances and because things like

heaters, cookers, washing machines and tumble dryers use different amounts of energy while they run, it can be a challenge to give exact costs.

The table on the next page shows average costs of using appliances, so you can see where you might be able to make savings.

Choosing energy efficient electrical items can also help. A is the most efficient and will be cheaper to run than appliances with a lower efficiency rating. Look out for ratings labels like this.



Appliance	Rating (watts)*	Cost per hour
Electric shower	7,000 – 10,500	£2.16 to £3.25
Immersion heater (single rate tariff)	3,000	93p
Supplementary heating (e.g. fan heater)	1,000 – 3,000	31p to 93p
Kettle	2,500 – 3,000	77p to 93p
Grill/oven	2,000 – 2,400	62p to 74p
Airfryer	1,000 – 2,000	31p to 62p
Microwave	700 – 1,400	22p to 43p
Slow cooker	150 – 300	5p to 9p
Fridge-freezer	100 – 300	3p to 9p
Games console	100 – 200	3p to 6p
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

Common medical device running costs over a month

The table below from Marie Curie's report, *One charge too many*, shows the potential monthly cost of using at-home medical equipment. It is based on average usage assumptions and reflects typical NI energy prices in early 2025.

Medical device	Consumption per day (kWh)	Monthly energy cost
Ventilator Run for 24 hours a day for most patients.	3.6	£33.38
Oxygen concentrator Long-term oxygen therapy of 15 days or more improves the prognosis for people with COPD.	6.6	£61.20
Haemodialysis machine Performed six or seven days a week for about two hours each time.	2.76	£25.59
Nebuliser Dose is given as a single administration, or as two 1mg doses separated by 30 minutes. Repeated every 12 hours for a maximum of 36 hours or until clinical improvement.	1	£9.27