

# Economy 7

## For heating and hot water

Economy 7 is an electricity tariff in which the cost of the electricity you use is different, depending on the time of day.

The hours of cheap electricity are normally from 12 midnight until 07.00 in winter, and from 01.00 to 08.00 in summer, though this can vary between suppliers. Sometimes people talk about 'day-rate' and 'night-rate', but we prefer to call this 'on-peak' and 'off-peak'.

The cheap, off-peak rate is about a third of the price of the on-peak electricity. This is because demand is lower and energy companies are happy to sell their electricity for less.

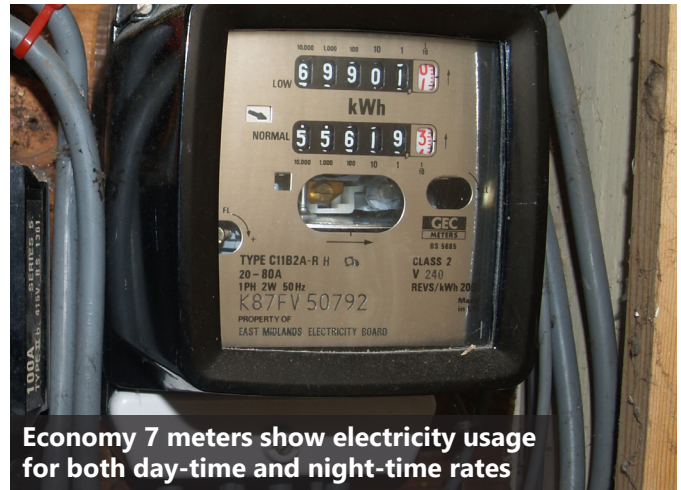
Economy 7 tariffs need a different kind of electricity meter. Unlike a standard meter, it measures the electricity you use during the day and at night separately. It might have two sets of dials or displays, as on the image above.

### Is Economy 7 right for me?

While Economy 7 gives you seven hours of cheap off-peak electricity, the downside is that for the other 17 hours the electricity costs more than normal – higher than a single-rate tariff. This suits some customers, but not others. If you're paying more for your peak-rate electricity, you should think about running appliances like your washing machine during your off-peak hours, but *only when you are up and about*. There is a fire risk if you run these appliances when you're asleep.

As a rule of thumb, Economy 7 will be cost-effective if you use electricity for your heating and hot water (not gas, which is a much cheaper heating fuel) and if you use more than 40% of your electricity at night. For this to be the case, you're almost certainly using electric night storage heaters for heating and have an electric hot water tank. This is because both storage heaters and hot water tanks can be timed to use cheap, night-time electricity and store this as heat until needed during the day.

If you heat your home with electricity, but don't have storage heaters or a hot water tank, Economy 7 probably



**Economy 7 meters show electricity usage for both day-time and night-time rates**

won't be cost effective for you, but your electricity supplier can confirm this.

If you are on an Economy 7 tariff, both your electricity meter and electricity bill will show a day-rate and night-rate. If you are in any doubt whether or not you are on Economy 7, call your electricity supplier.

If you're on Economy 7, your meter will show your electricity usage for both day-time and night-time rates

### Wiring circuits

A home using Economy 7 should have two wiring circuits. The main wiring circuit is the same as in any home, connecting to the plug sockets, lights etc. Anything using this circuit will turn on at any time, but if turned on at night you will be charged the cheaper rate.

There will also be a second wiring circuit that is connected to just the night storage heaters and (usually) the hot water tank – and this circuit will only activate when the electricity meter switches to off-peak mode.

Next to your heaters and hot water tank there will often be 1-2 socket switches – but which ones connect to the on-peak or off-peak circuit will depend on your individual home set-up. Any off-peak switches can be left 'on' as they will not actually be heating during the day. Any on-peak switches should only be turned on for a short period of time, if you need to boost the heating or hot water.

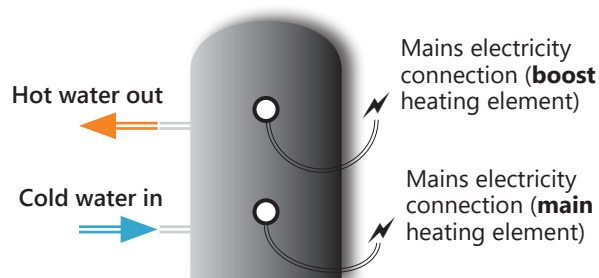
If you ever move off Economy 7 and onto a single-rate tariff you need to make sure an electrician checks the wiring in the home, as there is a risk the old Economy 7 wiring circuit will be always active and your heaters and tank are heating continuously.

And if you have a new heating system put in – for example you go from night storage heaters to an air source heat pump – you should consider moving from Economy 7 to a single-rate tariff which would probably be cheaper for you.

## Hot water tank

An Economy 7 hot water tank will have a slightly different set up than a standard immersion tank, in order to take advantage of cheaper off-peak rates. (See our separate factsheet on tank insulation and water temperature).

On the front of the tank you should see two circular disks, with wires connecting into the wall. These are the two heating elements (illustration below).



The lower heating element is the main one. It should be turning on automatically during off-peak hours, and will heat the whole tank. In some homes you may have additional controls, such as being able to turn it off at the wall or set a timer so the tank does not heat for the full 7 hours.

The top heating element is a boost. It is intended to heat the top section of the tank and provide extra hot water if you run out during the day. It should always have a control or switch that allows you to turn it on and off.

This is because the boost can use on-peak electricity. Only turn it on for 1-2 hours when needed, as it can be extremely expensive if left on for a long period of time (when on continuously it can add several hundred pounds to your annual bill).

### Here are two common controls for tanks that are not wired into the off-peak wiring circuit.



Make sure the 24 hour clock is correct against the winter-summer line (based on the time of year), otherwise it may heat up during on-peak hours. For extra hot water during the day turn the boost dial, and the immersion will switch off after the selected period of time.



Set the correct time against the arrow. Push the tappets out for any time you want the water tank to heat (several hours during off-peak times). The switch should be left in the middle (timed), rather than 1 (heating constantly) or 0 (off constantly).

### Tips for saving money on Economy 7

- Use appliances like dishwashers, washing machines and tumble dryers at night when electricity is cheaper, but **only** if you're up and about. Don't run these appliances when you're asleep as they are a potential fire hazard.
- If possible, set the timer on your hot water tank so that the immersion heater comes on during the night, even if you use the hot water during the day.
- Consider investing in a plug-in slow cooker - they use a fraction of the electricity that an oven will use.
- Microwave instead of using the electric hob where possible.
- Fit energy-saving light bulbs where possible.



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