What uses watt?
How much electricity am I using?

If you want to save electricity (and why wouldn't you?) it helps to focus on the things that use the most, and so cost you most money.
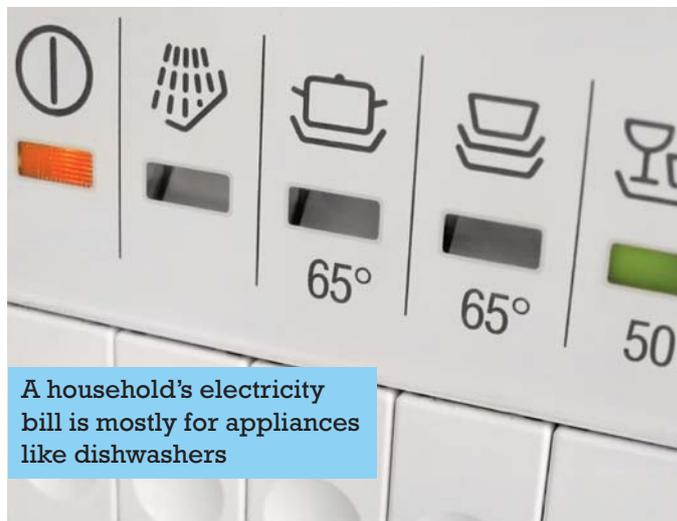
Some electrical items use a lot of electricity. Others don't. As a rule, those with moving parts or which produce heat use much more than those producing light or sound. So if you want to save electricity and money, there's no point worrying about a digital clock or an electric razor since these use so little power you would hardly notice the difference. The big savings lie elsewhere.

Every electrical appliance has a power rating which tells you how much electricity it needs to work. This is usually given in watts (W) or kilowatts (kW). Of course, the **amount** of electricity it uses depends on how long it's on for, and this is measured in kilowatt-hours (kWh).

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.
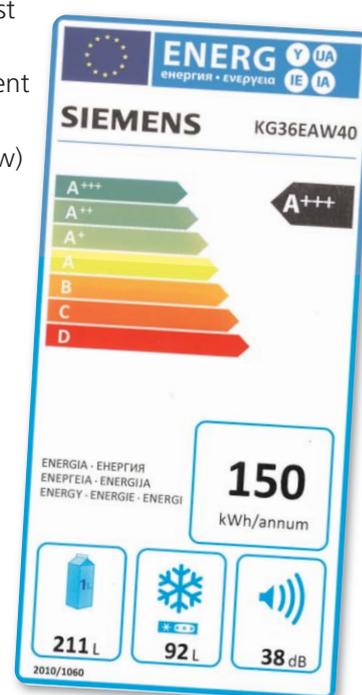

A household's electricity bill is mostly for appliances like dishwashers

Electricity is sold by the kilowatt-hour (kWh) – usually referred to as 'units' on your electricity bill. If you're feeling mathematical you can work out how much a particular appliance costs to run by multiplying its wattage by the amount of time it's on and then by the cost of electricity per kWh.

For example, let's say you have a 1200W oven (i.e. 1.2kW) and you use this to cook a roast dinner in three hours. The electricity used is 1.2 (kW) x 3 (hours) = 3.6kWh. If your electricity costs 14p per kWh (and of course it can vary enormously) then this will cost you **3.6 x 14 = 50.4p.** This shows you why energy-efficient goods – those rated 'A' or above on energy labels (below) – save you money.

Common appliances and an **average** power rating (the **actual** power rating can vary a lot depending on size and model)

Appliance	Power	Appliance	Power
Immersion heater	3000W	Oven	2000-2200W
Electric fire	2000-3000W	Grill/hob	1000-2000W
Oil-filled radiator	2500W	Fridge	40-120W
Electric shower	7000-10500W	Fridge-freezer	200-400W
Dishwasher	1050-1500W	Freezer	150W
Washing machine	1200-3000W	Electric mower	500-1500W
Tumble dryer	2000-4000W	Electric drill	900-1000W
Iron	1000-1800W	Hairdryer	1000W
Vacuum cleaner	500-1200W	Heating blanket	130-200W
Towel rail	250W	Plasma TV	280-450W
Deep fryer	1200W	LCD TV	125-200W
Toaster	800-1500W	Video, DVD or CD	20-60W
Kettle	2200-3000W	TV box	30-40W
Microwave	600-1500W	Games console	45-190W
		Laptop	20-50W
		Desktop computer	80-150W
		Broadband router	7-10W

This is one of the new-style European energy labels which go up to A+++

Energy monitors

Many homes now have energy monitors that show how much electricity is being used at the present time, as well as how much was used last week or last month. They are wireless devices that can tell you useful things like what your current energy use is costing you. Basic models can be bought for around £30, although you may find that your local library can lend you one to try out.

Energy monitors like this tell you how much electricity you're using, and what it's costing you

Photos: (other side) dishwasher, iStock.com/Ruta Saulyte-Laurinaviciene; toaster, iStock.com/pixhook; (this side) energy monitor, 2SaveEnergy; light, iStock.com/Antagain

Lighting

Although a single light doesn't use much electricity (60-100W for a typical old-fashioned bulb), our homes can have dozens of them, so it adds up to quite a lot – around a fifth of an average home's electricity bill. As we move to low-energy lightbulbs the amount we spend on lighting will go down, but it is still worth checking that you're not leaving lights on unnecessarily.

For more on your home electricity use see our factsheets on Economy 7, Getting the best deal from your energy supplier, Lighting, Reading your gas or electricity meter, Room heaters, Understanding your electricity bill.

All at **www.cse.org.uk/loveyourhome**

This leaflet is one of a series that covers a range of energy efficiency and renewable energy topics, produced by the **Sustainable Energy Across the Common Space** (SEACS) project, for you to view online or download to share in your community.

SEACS brought together three UK and two French local authorities – Devon County Council, Dorset County Council, Wiltshire Council, le Conseil Général des Côtes d'Armor and Lannion-Trégor Agglomération – to tackle the energy challenge that is faced on both sides of the channel.

The aim was to create opportunities for individuals, households, communities, schools and local authority buildings in both UK and France to reduce their energy consumption, implement energy efficiency measures and use clean/renewable energy where possible. The project has raised awareness of climate and energy issues and encouraged long term behavioural change towards energy use. Cooperation was the ethos of the project and participants had the opportunity to exchange and learn from each other.

For further information about SEACS project, to get ideas and view case studies to help you and your community save energy, and to find out which schools and community groups in your area have been involved, visit the SEACS website or the energy pages of your local authority's website.

www.seacs.info

www.wiltshire.gov.uk/sustainability

www.dorsetforyou.com/climatechange

www.devon.gov.uk/energy

CSE's **Home Energy Team** offers free advice on domestic energy use to householders in Bristol and Somerset (including the unitary authorities of North Somerset and Bath & North East Somerset).

Call: **0800 082 2234** or **0117 934 1957**
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