

Greening Homes & Businesses in South Ribble



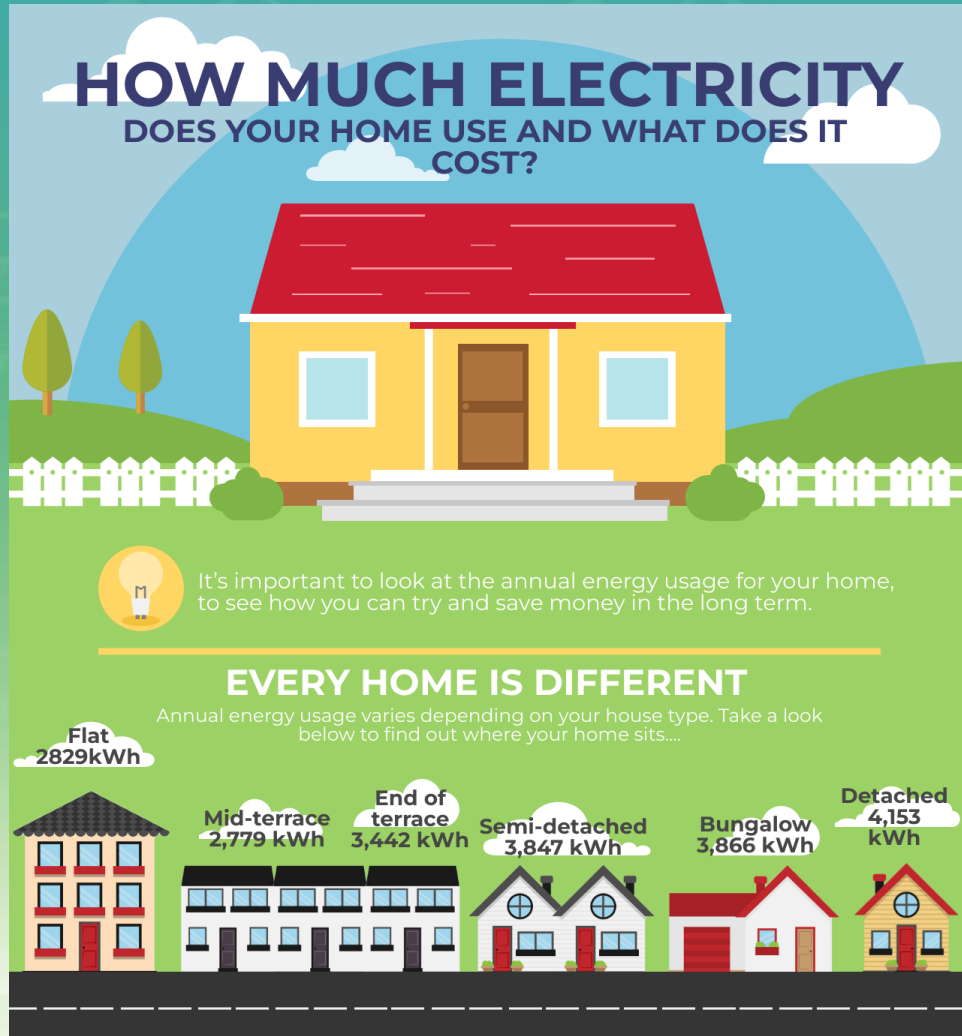
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South
Ribble
Borough Council



CLIMATE
EMERGENCY



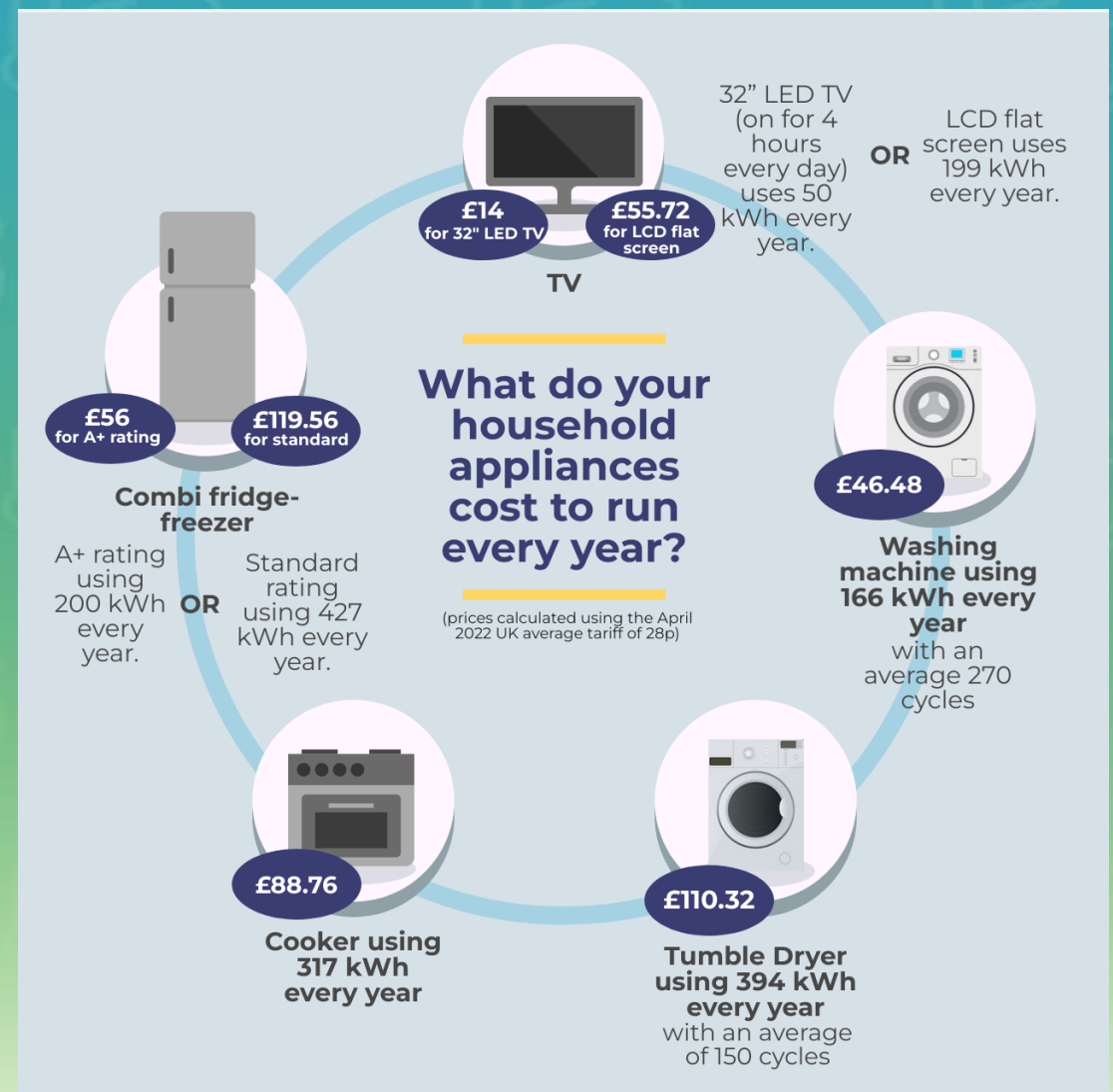
Heating your home efficiently

You may have heard that it's cheaper to leave the heating on all day. That's a myth. According to the Energy Saving Trust, the best way is to only have the heating on when you need it.

When you use your boiler timer and room thermostat along with radiator temperature controls (TRVs), you'll have the most energy-efficient approach to heating your home. (British Gas- 2023)

Understanding your electricity bill: “always on” appliances

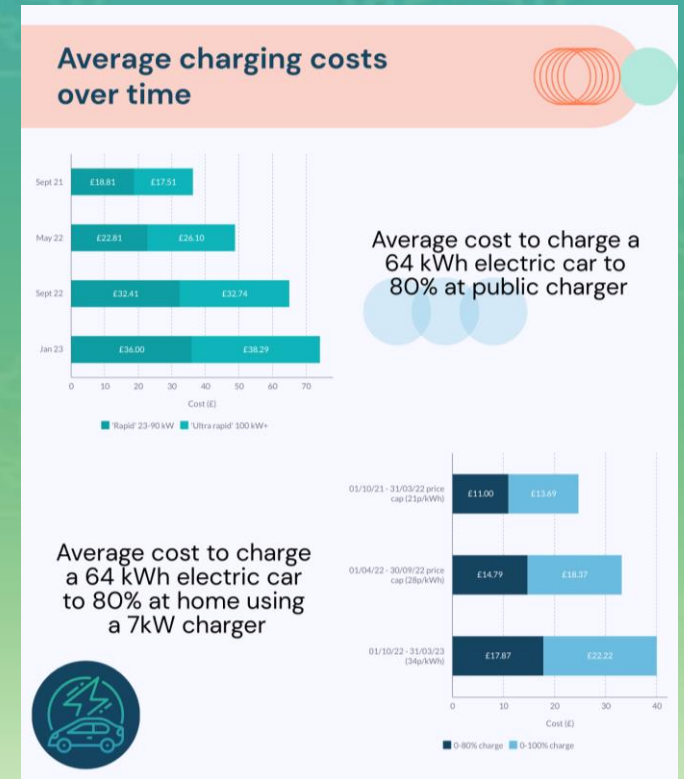
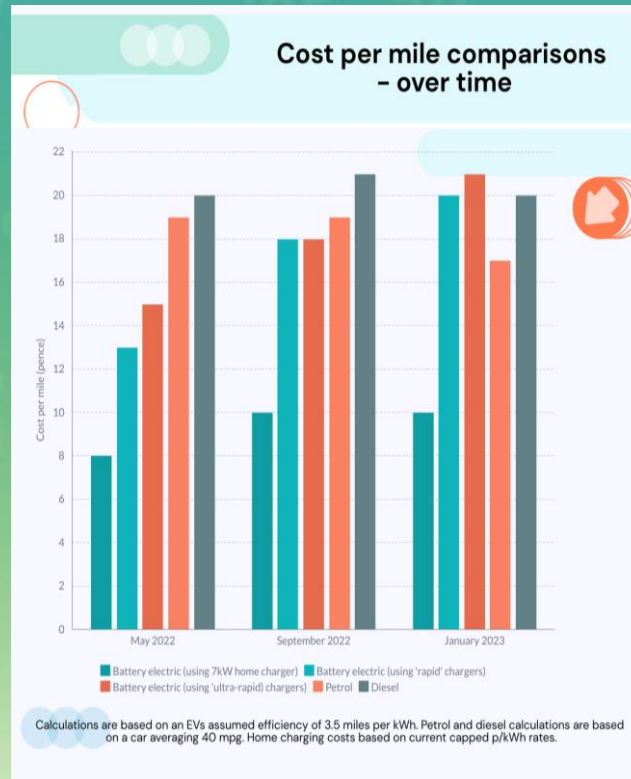
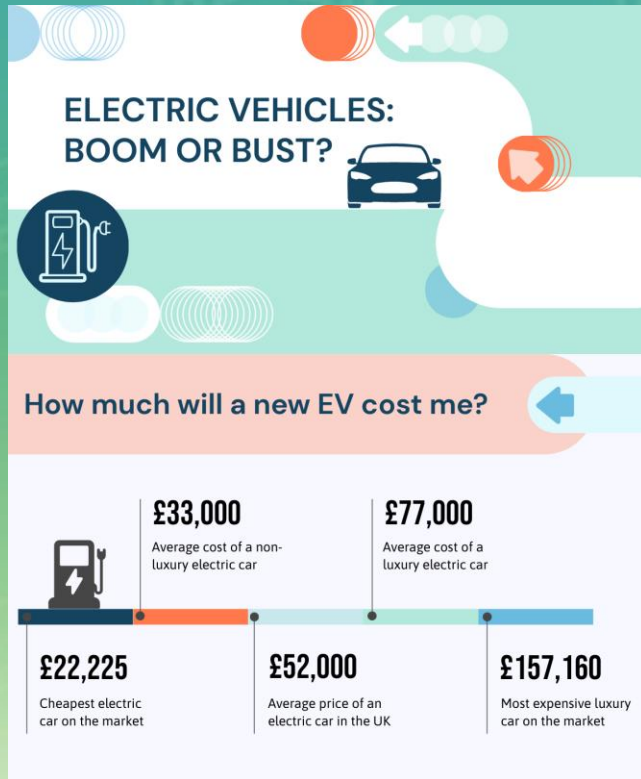
These are designed to be left switched on all the time, so there’s not much you can do to save on their energy costs. However, once they reach the end of their lifespan, it’s a good idea to compare energy ratings to make sure you buy an energy-efficient replacement. (British gas 2023)



Common appliances and running times:	Approximate usage in units	Approximate running cost [1]
Washing machine (40 degrees for an hour)	2	£0.62
Tumble dryer (an hour)	3	£0.94
Electric cooker/oven (30 minutes)	1.5	£0.47
Dishwasher (an hour)	Up to 1.8	Up to £0.56
Kettle (5 minutes)	0.1	£0.03
Toaster (5 minutes)	0.1	£0.03
Electric shower (15 minutes)	2.5	£0.78
Electric hob (15 minutes)	Up to 0.4	Up to £0.12
TV (an hour)	0.2	£0.06
Games console (an hour)	0.2	£0.06
PC/laptop (plugged in, one hour)	0.2	£0.06

Image from - <https://electriciancourses4u.co.uk/useful-resources/how-much-electricity-does-your-home-use/>
 Text from - <https://www.britishgas.co.uk/energy/energy-saving/energy-saving-tips.html>
 Chart - <https://www.britishgas.co.uk/energy/energy-saving/energy-saving-tips.html#appliances>

Thinking of an Electric Vehicle?



How much does it cost to run a fan?

Firstly, you need to find the power rating of your appliance in Watts

Then, divide by 1000 to find the kW rating

Multiple by the number of hours in use to find kWh

Multiple the number of kWh by the price per kWh

Now you have your final cost

£££



30W

$30W/1000 = 0.03 \text{ kW}$

$0.03 \text{ kW} \times 5 \text{ hrs} = 0.15\text{kWh}$

$0.15\text{kWh} \times 33.21\text{p}^*$

£0.05

The price of a fan can vary dramatically depending on where you are looking. Remember if you are buying from an online retailer do not always believe the reviews as these are easy to influence, if the price seems too good to be true, then it probably is!

The cost to run a fan will very much vary depending on your fan's Watt rating, the price you pay per kWh and how long you intend to run the fan for so once you have all these figures use the simple equation below to find out how much your fan will cost you! (electriciancourses4u.co.uk, 2023)

The UK Government has committed to investing in renewable energy technology to eliminate emissions and tackle climate change, with a focus on moving from fossil fuels to home-grown, clean energy. As part of their Energy Security Plan and efforts to achieve net zero carbon emissions by 2050, the Government has introduced a number of incentives to encourage homeowners to upgrade to low-carbon or renewable energy technologies.

(<https://electriciancourses4u.co.uk/blog/renewable-energy-incentives-update-2023/>)



The Government Boiler Upgrade Scheme

A heat pump is an energy-efficient device that takes heat from an existing source and uses it to increase the internal temperature of a building. As well as having a much lower carbon footprint, they are much more efficient than fossil fuel systems. The Government's Boiler Upgrade Scheme (BUS). This grant can be used to cover some or all of the costs associated with replacing a fossil fuel heating system with a heat pump or biomass boiler.

The BUS allows eligible households to apply for:

- £5,000 towards an air source heat pump
- £6,000 towards a ground source heat pump
- £5,000 towards a biomass boiler

The Boiler Upgrade Scheme



Department for
Business, Energy
& Industrial Strategy

Smart Export Guarantee

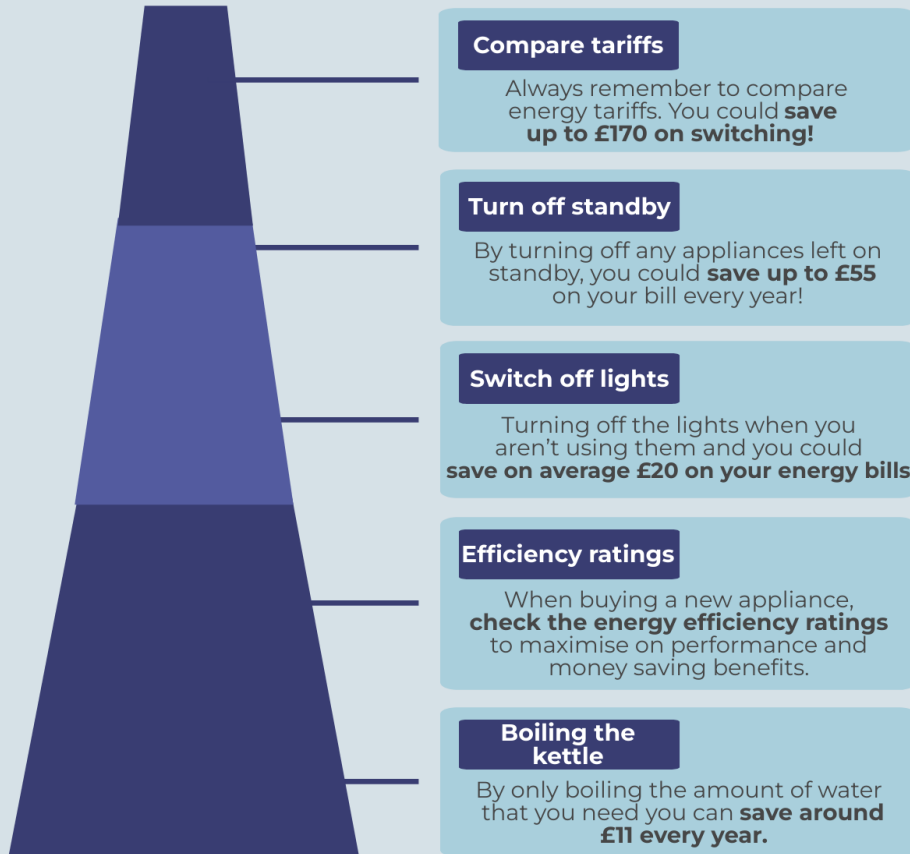


The Smart Export Guarantee (SEG) is a government-backed initiative launched on January 1st 2020. The SEG requires some electricity suppliers to purchase low-carbon electricity from small-scale generators, providing certain criteria are met. The energy is then exported back to the National Grid.

While this initiative doesn't provide any financial assistance for the installation of clean energy technologies, it does help to offset the costs by ensuring that households and businesses with small-scale renewable technologies are paid for their excess electricity. The average home is able to make £159 per year through the SEG.

ENERGY SAVING TIPS AND HOW TO SAVE MONEY IN YOUR HOME

Every year, UK homes use on average £3.4 billion worth of electricity. Whether you're a homeowner or a tenant, here are just a few ways you can help save energy and money.



Energy efficiency ratings are important to consider when buying new appliances as a higher rating can mean it will help save you money and electricity. Use the ratings as a guide to get the optimum performance and money saving benefits from your appliance. The energy efficiency guide was put in place to help you choose the right appliance for your home.

RENEWABLE ENERGY

The facts, figures and statistics you need to know about our growing renewable energy sources.



2017 WAS THE GREENEST YEAR ON RECORD



The first day since 1882 that the UK was coal free



Greenest summer ever!

52% of electricity generated came from low carbon sources



19.2 GW

The largest amount of electricity produced from renewable sources (21 March)



40 HOURS 35 MINS

The longest period without coal generation in 2017 (October)

RENEWABLES ACCOUNTED FOR

30%

OF ELECTRICITY GENERATED IN 2017

WIND POWER

60 MINUTES

CHINA INSTALLS one wind turbine every hour



ONE WIND TURBINE can generate enough electricity to power up to 1,400 HOMES

Wind speed needs to be 14mph to convert wind



How do wind turbines work?

Wind turns the long blades on the turbine. The movement of the blades spins a generator and it produces electricity

Wind turbines can generate electricity for 20-25 years



Turbines can run continuously for

120,000 HOURS

(a car has a lifetime of up to 6,000 hours)

The largest wind turbine is in HAWAII

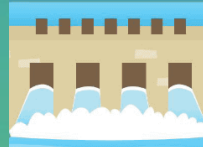


It is 20 stories tall, with blades as long as a football pitch

HYDRO POWER

IN NORWAY 20 hydro power stations produce 99% of the nation's total energy

Hydro power stations have a lifetime of over 100 YEARS



How does hydro power work?

It uses the movement of water to create electricity. For example, it will release the water collected in a dam, as it flows, the water will turn turbines that are connected to a generator, which then generates electricity

The amount of power generated, depends on the amount of rainfall

THE MORE RAIN = THE MORE POWER



There are 838

Hydroelectric power schemes across the UK

over 65%

of hydro power stations in the UK can be found in mountains and hills IN SCOTLAND

WORLD'S LARGEST RENEWABLE SITES



OFFSHORE WIND

London Array in the United Kingdom is the largest offshore wind farm in the world, at 630 MW



ONSHORE WIND

Gansu Wind Farm in China is the largest onshore wind farm at 7,965 MW



SOLAR FARMS

Tengger Desert Solar Park in China is the largest solar farm at 1,547 MW



HYDRO POWER STATIONS

Three Gorges Dam in China has the largest generating capacity at 22,500 MW

HOW DOES THE UK RANK AGAINST CHINA?

UK's largest onshore wind farm is Whitelee Wind Farm in East Renfrewshire in Scotland at 539 MW and 140 turbines

UK's largest solar PV farm is Shotwick Solar Farm in Wales at 72 MW

UK's largest hydro power station is Dinorwig Power Station in Wales with a capacity of 1,800 MW

TRIAL AN E-BIKE

AT THE GREENING HOMES & BUSINESSES EVENT IS SOUTH RIBBLE



SAVE MONEY ON YOUR ENERGY BILLS

AT THE GREENING HOMES & BUSINESSES EVENT



FREE BIKE SERVICING

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RECYCLE YOUR UNWANTED BATTERIES, BIKES AND BRAS

AT THE GREENING HOMES & BUSINESSES EVENT IS SOUTH RIBBLE



SEE THE AMAZING DISPLAY OF EVS

INCLUDING PORSCHE, BMW & MINI



GET SOME TIPS ON HELPING WILDLIFE

AT THE GREENING HOMES & BUSINESSES EVENT

