A Guide to Saving Energy in the Home

You may have heard the quote, "In this world nothing can be certain, except death and taxes." This is all very true but now it seems another item can be added to the shortlist of life's certainties. The ever increasing cost of UK energy bills. The cost of gas and electricity has risen steadily year on year for the past decade, with the average dual fuel bill for a 3-4 bedroom household hovering around £1,200 a year. A figure that is certain to increase dramatically over the coming years.

Typical household energy bills have now more than doubled since 2004 with no sign of any slowing down, anytime soon. Even cheaper energy production from renewable sources, known as 'Green Energy' is proving to have no positive impact whatsoever on household bills, although the environment is obviously getting a little cleaner. So, what can be done to effectively save energy in the home?

Find a cheaper energy supplier

It looks like high energy costs are here to stay but that doesn't mean you have to keep paying high prices for your essential supplies. There are more than 65 energy supply companies in the UK, most of which are increasingly willing to offer a discount on your existing tariff, in order to secure your future custom. The energy comparison websites list them all and changing supplier might be a lot quicker and easier than you think.

According to *Ofgem*, many consumers could save as much as £300 a year on their dual gas and electricity bill by switching supplier. Generally, all you need to provide in order to switch, is your post code and a recent energy bill or simply answer a few questions about your home and lifestyle. You can also arrange to switch supplier by phone if you prefer. You might also want to consider group switching, which involves joining with others to leverage a better deal.

Saving on Gas & Electricity Bills

If you have finally decided to start saving money on your gas and electricity bills then the first place to start is the energy comparison websites. There seems little benefit in checking out every comparison website, as the deals offered by the various energy suppliers appear to be the same. However, based on the information you provide, you might find a supplier who can provide cheaper electricity and a different supplier who can provide cheaper gas so don't assume that a dual energy deal is always going to be the best deal, although it very often is.

It's a good idea to check and compare the various tariffs for gas, electricity and then for both. Ideally, you might want to use the same supplier for both fuels as it keeps the process simple, which is fine so long as the price is notably cheaper. Some energy companies offer incentives for paying by direct debit, so this might be worth checking out also.

Heating, hot water and insulation

Once you know you have secured the best possible deal with your energy supplier, take a closer look at how you are using your energy. Heating and hot water accounts for more than 60% of your total annual energy spend so ensure your boiler is well maintained. The most energy efficient 'A' rated condensing boilers use less fuel and can save on average 20% on your bill, compared to older non-condensing boilers, so perhaps an upgrade should be considered if your boiler is getting on a bit.

Also, check that you have sufficient loft insulation of at least 250mm, and consider cavity wall insulation and whether that's a possibility for your property. Around 25% of heat loss is through the roof and around 35% is lost through the walls, which represents a massive waste in costly energy. Double glazing with 'A' rated glass will also save on heat loss. Fit draught excluders to doors and windows if necessary, to retain more heat during the winter months.

Reducing energy consumption

The most obvious way to save on your energy bills is to simply cut down on the amount you use. Turning your boiler thermostat down by just one degree could save you 10% on your bill. Turn off lights when not in use and turn off electrical appliances at the socket when not being used. Use energy efficient light bulbs and only boil as much water in your kettle as you need. When using the washing machine, full loads will obviously save more over time than twice as many half loads.

Set the wash cycle to a quick wash and a lower temperature (30°C), and only use the dishwasher if absolutely necessary. Consider installing a smart thermostat in conjunction with smart radiator valves to ensure only those areas of your home that you actually use are being heated. Individually, these small changes may only save small amounts but it all adds up considerably over a year.

Consider free energy

Another possible consideration, depending on the position of your house is solar panels. Solar panels convert sunlight into energy and it doesn't have to be bright sunlight either. Electricity can be generated on even the cloudiest of days. Sunlight is free so after you have paid for the initial installation your electricity bills will tumble.

Now here's the real incentive. Under the *Feed-In Tariff* scheme, the government will pay you for the electricity you generate even if you use it. The same scheme will ensure you also get paid for any electricity you sell back to the national grid. Sounds too good to be true, but it is.

Here is a summary list of ways to save on your energy bills:

Quick energy saving checklist

- Switch to a cheaper supplier
- Ensure adequate loft and cavity wall insulation
- Double glazing with 'A' rated glass can prevent heat loss

- Fit draught excluders to doors and windows
- An energy efficient condensing boiler can save around 20% on bills
- Fit energy saving light bulbs in every room
- Use the washing machine and dishwasher more effectively
- Switch off electrical appliances at source when not is use
- Boil only as much water in your kettle as needed
- Install a smart thermostat and smart radiator valves
- Consider group switching options
- Consider installing solar panels if possible

Be more aware about saving energy, incorporate a few lifestyle changes, embrace new technology and you could slash your energy bills by as much as 50%. For more help and advice about saving energy, get a free home energy check form the *Energy Saving Trust*.

Saving on Broadband Bills

There was a time when broadband was considered a luxury with faster than dial-up downloads, depending on where you lived, and premium prices to match. Nowadays, everyone demands a faster Internet connection for everything from personal gaming to business needs. The government too has recognised the need for superfast broadband for business and is committed to ensuring at least 95% of the commercial sector are fully connected by 2021.

However, where does that leave the typical household with their myriad of PCs, laptops, tablets and smartphones? Most landline and mobile phone providers will also provide broadband services but as any user will know, there are many confusing levels of minimum speeds and price deals.

The need for speed

Saving money on your broadband services begins with a comparison. What you need to first determine however, is how much speed you need? Will you be downloading or uploading videos? Will you be watching Internet TV? Or do you just need the Internet for sending and receiving emails and generally searching the web for information? What can also add to any existing confusion over broadband services, is some providers might for example, claim broadband speeds of up to 76 Mbps (Megabits per second) yet only deliver a very small percentage of that at perhaps 3-5 Mbps.

The service provider has to only guarantee that a minimum of 10% of its customers will receive the highest quoted speed, which means you might not be one of them. Available Internet speeds will also depend on your location, taking into account whether fibre optic cables are installed in your area. Broadband speeds can also reduce significantly during peak times. Still confused?

What is the typical household average speed?

So, to get the best deal for your money, decide first on the level of speed you need. As a guide, most households can manage all their needs adequately with a fixed line download speed average of around 36 Mbps and with uploads at about 3.5Mbps. With these speeds in mind, visit several broadband price comparison websites and check out the offers. Unlike the main energy suppliers, some broadband providers offer different deals on different comparison websites.

You can also check your current broadband speed by visiting any one of the dozens of broadband speed check websites but do bear in mind the time of day. A more accurate calculation can be had by checking speeds at several different times of the day, so that you can get an overall picture of the average service level being provided.

Assuming you are an average household user, here is a summary list of things to consider about your broadband:

Quick broadband checklist

- To be able to get faster broadband, check whether you have cable in your area
- Determine what speed you need and what you will use the Internet for
- Check out the comparison websites for available speeds and prices

• Compare packages based on home phone (if required), broadband speed, price and length of contract

Saving on Mobile Phone Bills

Most of us couldn't live without our mobile phones, which are now much more than simply a 'phone'. Making calls, sending texts, accessing the Internet, taking and sharing photos, playing games and reading books are all part of what we do on our mobiles every day. However, with some monthly contract prices running at just under £50 a month, for the iphone X for example, is it time to consider your deal?

Mobile phone contracts are anything but straight-forward and so you have to consider several aspects including the phone model, length of contract, any upfront costs, data allowance, 3G or 4G service and network or perhaps a SIM only deal. If you already own your mobile phone then the best option is a SIM only deal. However, if you want the very latest iphone model included in your monthly contract then you can expect to pay around £600 a year over 2 years.

Contract with phone

Choosing your model phone is your personal choice and with over 20 networks clamouring for your contract, you're in the driving seat. You just need to be sure that the phone and contract you select is going to be right for you. So, if you want a new phone, decide on which one. Then decide on whether you want 3G or 4G. The 'G' stands for generation. So 4G is the fourth generation, which means it will offer a faster internet connection and a better all-round network accessibility.

Next, decide if you can, how much data allowance and call minutes you will need. That one can be a little tricky but bear in mind how much time you might spend browsing the Internet and how many emails you will send and receive each day. Also, how much time you spend on social media websites like Facebook and how much music streaming you are likely to do. Then consider how many apps you use plus videos and films you download.

If you already know how much data you are likely to use each month and how many calls you are likely to make each day then you're ready to go to the next stage. If you're completely unsure then start at 1GB for data and 500 minutes for calls with unlimited texts. You can always upgrade later if you find you need more. It's better to start with the minimum service to ensure you are not paying for what you don't need or use.

Once you have decided on your ideal phone and data usage take a look at the offers on all the price comparison websites. All that remains then is to determine how much you want to pay per month. Remember, virtually all phone deals are based on a 24 month contract. If you want to save money on your monthly mobile phone bills then simply use less data. Easier said than done.

SIM only deals

If you own your own phone and are not too bothered about having the very latest model then some very good SIM only offers await. These can be no contract, which are Pay As You Go offers, one month contract or 12 month contract. They can cost as little as £5 a month, for up to 500MB of data, up to around £20 a month for 6GB of data plus unlimited calls. All deals will usually include unlimited texts. The actual SIM cards are free. Again the comparison websites will reveal the very best offers from all the participating networks.

Smart Meters – The Pros & Cons

Smart meters... what are they and should you have one? Understandably, the energy companies want everyone to have a smart meter so that they can cut down on the number of manual meter readings. Every home in the UK is being offered a smart meter installed for free but nobody has to actually have one as they are not yet mandatory. However, it is expected that around 26 million homes will have them installed by 2020. By 2030, it is estimated that a smart meter will save the average household around £30 a year in energy bills. So what are the pros and cons?

The Pros

Aside from the obvious advantages to the energy companies, having a smart meter installed in your home allows you to keep a close eye on how much energy you are using. This is also the line being promoted by the government who are in favour of smart meters as a method for increasing energy efficiency. You get a separate smart meter for electricity and one for gas. The readings are sent automatically to the energy supply company so there's no more fumbling around in that tiny cupboard under the stairs or fighting your way through the piles of junk in your garage in order to read your meter.

Your energy bills will show only the amount of energy you have used, which they say is exactly what you pay for. So there should be no more wild and worrying estimates.

With energy usage shown in real time you can easily manage your energy use and keep your costs under control. All sounds very good.

The Cons

So, why have so many people not yet taken up this free offer of a smart meter? Basically, mistrust is one factor and there are many other concerns too. Although the energy companies say there are no upfront fees for installing a smart meter they will collect the costs through normal monthly bills, so in effect the meters are not really free. One concern is the security of information that the smart meter sends to the energy supplier and how this information might be used. For example, could the energy company share this data with other associated companies or could they use the information for marketing purposes?

Also, having a smart meter might make it difficult to switch supplier as there appears to be compatibility issues with communication networks. On top of that, if there is a poor signal in your area then your smart meter may not actually work as intended. There is little evidence to suggest that smart meters will actually save money and the display units are difficult to understand. Not so good.

It appears the smart meter is a smart gadget with a smart concept but they have some way to go before convincing everyone that it's a smart idea to have one.