

The truth about the energy market

Is it true that energy companies don't make much money?

Are prices soaring because of wholesale prices or profits?

Where does our gas and electricity actually come from?

When will the lights go out?

60
SECOND
GUIDE

84%

think that energy companies increasing their profits are to blame for price rises*

77%

of the past 91 price changes were increases

£1,420

average annual electricity and gas bill

137%

increase in domestic gas prices since 2001

£3.7bn

profits made by the six major energy suppliers last year

31%

trust energy companies to charge a fair price for their energy*

*2,210 UK adults were interviewed by telephone between 24 November and 2 December 2012.

Gas and electricity bills have risen dramatically over the years, often well above inflation. As many people struggle to pay their bills, we ask if these price hikes are justified and dispel some of the myths around the energy market

The average household gas and electricity bill is now £1,420 a year – that's £118 a month. Since 2001 gas prices have risen by 137% and electricity prices by 66%, both well above inflation. Energy suppliers largely blame the increase on a rise in wholesale costs and government policies. But consumers don't believe that – a survey for Which? shows that 84% blame price rises on energy companies increasing their profits.

So who should you believe, and what is the state of the UK energy market in 2013? Is it truly competitive and working in favour of consumers? Where does our energy actually come from now and is there a real risk of it running out?

Over the next pages we bring you the answers to these questions, based on our energy experts' research and analysis.

MYTH Energy companies don't make much money

Energy companies often blame rising wholesale prices and the increasing cost of government environmental policies when they announce price rises, and they also claim they don't make much profit from supplying consumers with energy.

Since 2008, there have been 91 price changes, of which 77% were increases. Were these driven by a thirst for more profit? Or a reluctant step in the face of rising costs for the companies concerned? The answer lays partly in the relationship between the company that sends you your bills and the one it buys 'wholesale' energy from in the first place. In the case of the big six companies (British Gas, EDF Energy, Eon, Npower, Scottish Power and

SSE), the retail and wholesale operations are linked by a single parent company. These 'vertically integrated' companies can sell electricity to themselves. However, this is carried out behind closed doors and the price the supply arm of the company pays to the generation arm isn't made public.

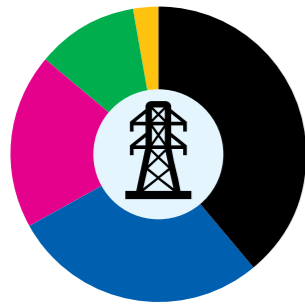
The companies often claim they buy and sell their energy on the wholesale markets, but their own accounts show they sell internally. And most of the trading they do externally just isn't transparent – there are no details of how much electricity is sold or what prices were paid. It's nearly impossible to find out how much your company paid for the energy it sells, and therefore impossible to work out if you're paying a fair price as an end user.

According to our analysis of the companies' financial information, the major suppliers'

retail arms make average profits of about 2% to 4%. But the generation arms of these companies made average profits of about 20% in 2012. Between them, the big six made about £3.7bn profits last year from their electricity generation, gas supply and electricity supply.

MYTH There is genuine competition in the energy market

When the British energy market was opened up to competition in the 90s, the idea was that the advent of different energy companies competing for your custom would keep prices down. But the result has been an energy 'market' made up of an oligopoly of six large, vertically-integrated suppliers that do not appear to provide competition for the vast majority of their customers. >



Where your electricity comes from

Fuel mix for UK electricity in 2012



Where your gas comes from

53%
Gas produced in the UK

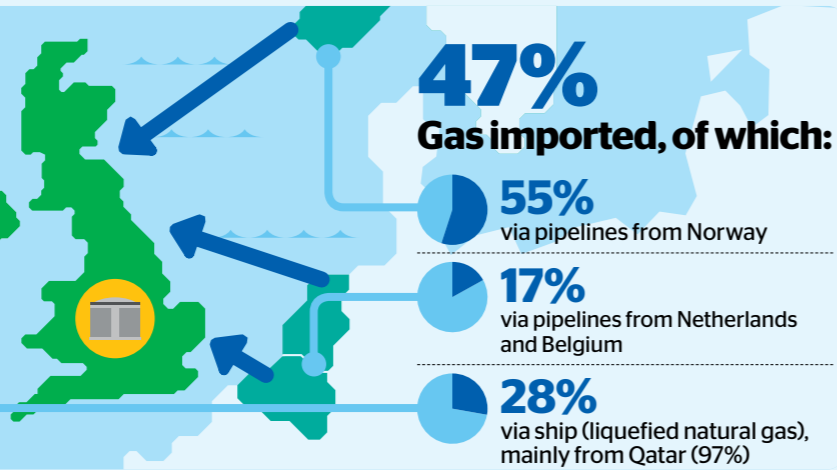


ILLUSTRATION BY: ROBERT SAMUEL HANSON

EXPERT VIEW

An inside line on pricing

Jonathan Smith | Head of pricing and risk management, First Utility



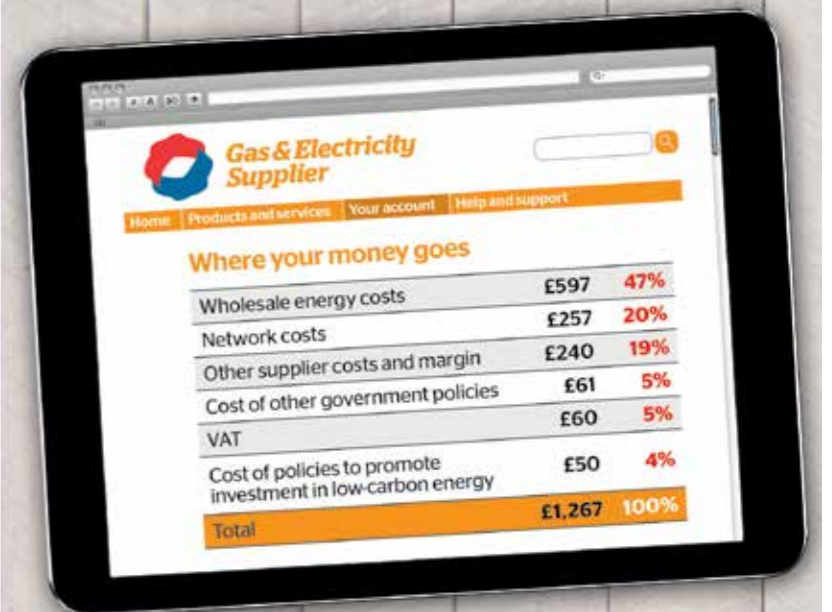
At First Utility we have almost 200,000 domestic customers and, unlike the major six providers, we are not vertically integrated, so we buy our electricity on the wholesale market. But this is more easily said than done. Very little electricity is actually traded on the wholesale market (because the big six energy companies sell most of it to themselves), and when we want to buy there are often times when the products we need are not for sale.

Vertical integration of companies, which sell electricity from their generation businesses to their supply businesses, is a barrier to competition from independent suppliers. This is bad for consumers. Based on our analysis, the lack of energy traded on the wholesale market can add up to £50 annually to consumers' bills.

I think the UK wholesale electricity market today works against independent suppliers: it stifles competition, damages transparency and erodes consumer trust. The industry needs to urgently solve this problem if consumers are to truly benefit from competition.

Estimated breakdown of the average household energy bill

Annual gas and electricity bill (£1,267) estimated for 2013



Estimates for an average household consumption of 14,800 kWh of gas and 3,800 kWh of electricity a year (source: Which? calculations based on DECC's figures and modelling). Figures may not add up due to rounding. Total differs from the Ofgem figure of £1,420 for an average bill as based on different consumption and more up-to-date tariff data.

While market-leading deals are sometimes offered by smaller independent energy suppliers, the vast majority of consumers (98%) stick with the main six companies, and 62% have never switched.

The bigger companies don't even seem to care about losing customers as a result of price rises. For example, in 2006 British Gas' parent company Centrica increased its prices by a staggering 28.6%. This resulted in it losing 868,000 customers and sales volumes dropping by 8%. But its revenue from gas sales still increased by 15%. So it appears that weak competition in the energy market means it can really pay for companies to increase prices.

MYTH Wind farms are having a big impact on bills

About £53 (including VAT) of the average annual energy bill goes towards policies to promote investment in low-carbon energy. This makes up about 4% of an average household energy bill in 2013. It is predicted to grow to £118 by 2020. However, the bulk of our bills will continue to be made up of wholesale

costs, network costs and suppliers' costs. The illustration on p31 shows the breakdown of an average household energy bill for 2013.

To hit the UK's legally binding carbon emission targets, we need to generate more of our energy from low-carbon and renewable sources. The government estimates that about a fifth of our existing generating capacity will be lost by the end of this decade, meaning around £75bn will need to be invested by 2020 in new generating capacity. Consumers are expected to foot the bill for the government's policies to promote this investment and this is paid for via their electricity bills.

People using electric heating will be disproportionately affected. Electrically heated homes – around 9% of total households in Britain – will typically see a bigger impact from these policy costs on their energy bills because they use more electricity. Our analysis shows that those households are already paying about £122 a year towards low-carbon policies and this could rise to more than £300 by 2020. With 26% of electrically heated households already classed as 'fuel poor' in England

(37% in Scotland and 40% in Wales), this is very worrying.

Which? doesn't oppose moves to clean up the UK's energy generation, but we think that it should be subject to the same levels of scrutiny as spending that comes directly from taxation. People need to be reassured that costs are being kept in check and passed on fairly. And fuel-poor households with electric heating should receive help to manage the increasing impact of government policy on their bills.

MYTH Much of our electricity comes from nuclear and wind farms

The electricity used in UK homes is mainly produced from fossil fuels – 67% is generated from coal and gas. Perhaps surprisingly, coal overtook gas in 2012 as the primary fuel for electricity generation, due to high gas prices. Meanwhile, the amount of electricity generated using renewable resources is small but growing – 11.3% in 2012, up from 9.4% in 2011. The illustration above shows the mix of electricity generation in 2012.

MYTH We rely on Russia for our gas

We do not have a direct supply of natural gas coming into the UK from Russia. If any enters the country it would most likely come in via pipelines connecting us to the continent from Belgium and the Netherlands.

It's difficult to track back each molecule of gas to find out where it initially came from, but if any has arrived at the UK's National Transmission System, the government believes gas from Russia is likely to make up less than 1% of imports.

In 2012, 47% of our natural gas supply was imported, with most of it reaching our shores through pipelines. The main source was Norway, which accounted for 55% of imports, followed by the Netherlands and Belgium (17%). Some 28% was imported as liquefied natural gas, mainly by ships, with 97% of it coming from Qatar.

The government doesn't expect reliance on imports to grow over the next decade – instead it is predicting an increase in domestically produced gas.

MYTH The lights will go out in Britain

There has been plenty of spare electricity capacity in Britain over the last six years, but this is likely to change over the next decade. Around a fifth of our generation capacity will close by the end of the decade and all but one of the UK's existing nine nuclear power stations are expected to be retired by 2023. All of this means that there could be less capacity for generating electricity in the future. The government is working on plans to help make sure we have enough spare capacity in the future through a system called the capacity mechanism. This will involve paying power station owners just to be available, even when they are not generating any power, so they're ready if we do need them.

At the moment, the system doesn't work like this: generators are only paid for the electricity they actually deliver, and electricity generators that use fossil fuels have argued

there's not enough incentive to build new power stations. The new capacity mechanism, coming in for winter 2018/19, will be paid for through consumers' bills. The government estimates it could add an extra £16 onto the average annual bill.

WHICH? SAYS

After successive winters of price hikes, people will be anxious about further increases this year. With many people struggling to pay their bills, the government must do much more to make sure the energy market delivers fair prices. We believe this means making energy prices simple to help people find the cheapest deals, separating large companies' supply and generation businesses to increase price transparency and competition, and rigorously scrutinising whether policies to promote new electricity generation are delivered at the lowest possible cost to consumers.



GO ONLINE To read our full set of recommendations for a better energy market, download the Which? energy policy report series 'The Imbalance of Power' at www.which.co.uk/energypolicy