



Future Energy Associates

**Warm**

**This**

**Winter**

***Tariff***

***Watch***

**Authors:**

Samira Kelly, Data Scientist, Future Energy Associates

Dylan Turk Johnson, Director, Future Energy Associates

Clement Attwood, Director, Future Energy Associates

# Executive summary

## State of the market

- This quarter the retail market showed signs of opening up again with **two new suppliers** (Fuse & Tomato Energy) entering the market and an increase in the number of fixed tariffs available. As of the beginning of July, **ten fixed tariffs** were available on the market, more than double what was available in April. The number of variable tariffs also increased from 87 in early April to 99 at the beginning of July.
- East Midlands had the cheapest gas costs at £1,005/year (SC: 33.8 p/day, Unit: 7.34 p/day) and Swalec (South Wales) is the most expensive at £1,048/year (SC: 32.9 p/day, Unit: 7.73 p/kWh), a range of £43 between them. Gas standing charges do not vary significantly by region.

## Prices

- The growth of tariff options was **enabled by falling wholesale prices** feeding through to retail prices. The electricity import unit rates dropped in all regions from April to July 2023 on average dropping from 38.1 p/kwh (pence per kilowatt hour) to 32.1 p/kwh. Whilst unit rates dropped, overall electricity **standing charges (SC) remained unchanged** from April to July. There is evidence of some early moves from the likes of Fuse Energy to compete on electrical standing charges, but others such as Outfox the Market raised standing charges.
- Likewise, **gas unit rates dropped significantly** falling by an average of 27.7% since April. Whilst this may seem positive, this will be less significant as seasonal demand for gas is lowest over the summer months. **Gas standing charges** increased between April and July from 29.11 p/day (pence per day) to 33.5 p/day, putting these charges at a record high.
- The **most expensive region for electricity was Manweb**, which covers Merseyside, North Wales and parts of Cheshire, at £84 a year more expensive than East Midlands which was the cheapest region for electricity. This was largely driven by higher standing charges, with Manweb being highest at 65.8 p/day. In comparison, London had the cheapest average electrical standing charges, at 41.9 p/day. Seeboard (South East) had the highest unit rate at 33.2 p/kWh and Yorkshire had the lowest at 31.1 p/kWh.

## When to fix/switch?

- Our current forecasts suggest that anything **below £1,946** in annual cost and which has an exit fee of less than £80 is worth fixing to. The current best variable deal would be with two different suppliers: Home Energy for Gas and Fuse Energy for Electricity. This may indicate a shift in the market towards single fuel deals and those households not hyper-aware of the energy market may be left behind.

## Supplier profits

- Although suppliers have been making clear that they are under financial pressure, profits were higher than ever in the last year. Under the current cap regime the allowance for supplier profit margin (Earnings Before Interest and Taxes [EBIT] and the Headroom Allowance Percentage [HAP]) is set as a fixed percentage of wholesale costs (1.9% for EBIT and 1.5% for HAP). This has meant that supplier profits have increased significantly over the last year. In Q1 2023, this was up to £130 annually for the average household electric bill, versus £27 in Q2 2017. These profits have now started to decline and were at £60 at the start of Q3 2023.
- With energy bills predicted to remain at similar levels and 29 million households currently on the standard variable tariff, the combined profit energy firms could make in the next 12 months is **£1.74 billion**.



# Table of contents

<b>Executive summary</b>	<b>2</b>
<b>Table of contents</b>	<b>3</b>
<b>Introduction</b>	<b>4</b>
Background into the retail market:	4
Objective, Purpose and Scope of the Report:	5
<b>Market and Policy Overview</b>	<b>6</b>
The Current state of the market:	6
Policy updates - How recent regulation is impacting energy tariffs:	7
<b>Price Analysis</b>	<b>9</b>
Falling Prices: Moving Towards the End of the Energy Cost Crisis	9
Breakdown of Price trends	10
Analysis of current prices as of July	11
Price variation by Payment type	11
Price variation by region	12
Overall	13
Electricity	13
Understanding the Electricity Breakdown	15
Gas	15
Understanding the Gas Breakdown	16
Economy 7: Which households does it make sense for?	17
<b>Tariff Tracker</b>	<b>18</b>
What are the cheapest tariffs on the market?	18
When should households consider fixing their tariff?	19
<b>Profit Tracker - Cap breakdown</b>	<b>20</b>
<b>References:</b>	<b>23</b>
Appendices	24
Appendix 1: Ofgem EBIT allowance proposed change impact by consumer group	24
Appendix 2: Data Analysis details and Assumptions	25
Appendix 3: Breakdown costs over time	26

# Introduction

## Background into the retail market:

In August 2022, wholesale energy prices reached a peak, resulting in costs that were approximately ten times higher than those in the summer of 2019 [1]. This surge was attributed to a myriad of interconnected factors, including the Russia-Ukraine conflict and the consequential decision by Western European and UK governments to cease their reliance on Russian gas supplies, coupled with French nuclear reactors going offline, which in turn heightened their gas consumption.

Both gas and electricity prices are intrinsically linked; gas still largely powers electricity generation, and gas-powered electricity sets the marginal price in pay-as-clear wholesale markets.

Electricity Prices: Day Ahead Baseload Contracts - Monthly Average (GB)

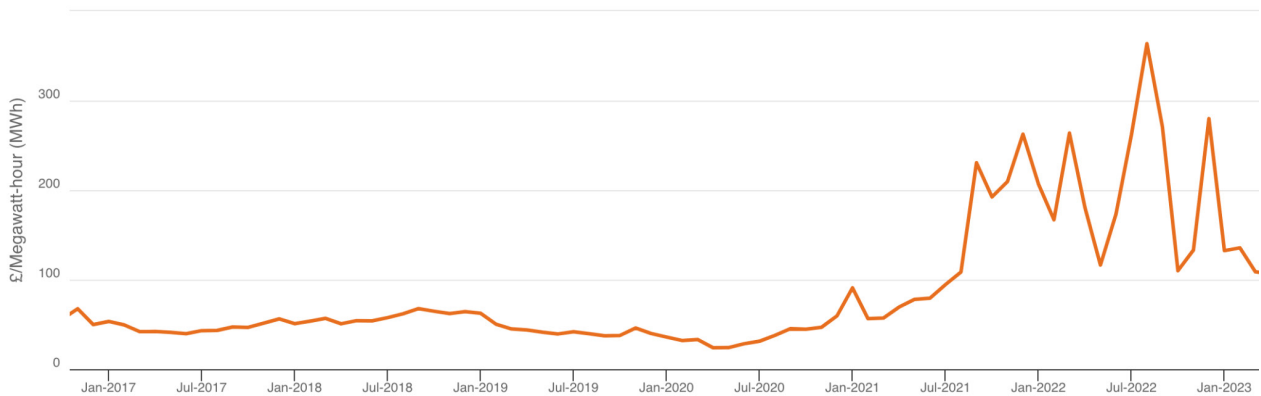


Figure 1: Electricity wholesale prices.



Rising wholesale prices, the prices at which suppliers purchase energy from the grid, inevitably translated into increased retail prices for consumers, albeit with a time lag. Consequently, the winter of 2022-23 saw retail energy prices peak, requiring the government to intervene and fix direct debit dual fuel prices below an average of £2,500. However, when combined with underinvestment in energy efficiency measures over recent years, which results in higher energy consumption, the government support was insufficient for many. The result was that millions of people spent the winter in cold damp homes [2]. In 2023, the Department for Energy Security and Net Zero (DESNZ) projected that 14.4% of households would experience fuel poverty, a rise from 13.1% in 2021 [3]. Prices for consumers remain high. While an environment with stability and low risk for energy suppliers is desirable, this must be balanced with fair and transparent prices for consumers.

Since peaking in August 2022, both electricity and gas wholesale prices have seen a decline of over 50%. This shift has begun to be felt in the retail energy market, with the Ofgem price cap decreasing for the second consecutive quarter as of July 1st. Although this is certainly good news for households, the reintroduction of a competitive retail energy market presents its own set of challenges. Households now face the difficult task of navigating numerous suppliers and tariffs to find the best fit for their needs.



This raises several pertinent questions: are falling wholesale prices being passed on to the retail market swiftly enough? Are energy suppliers unjustly taking excess profits while attributing the delay in price reduction to a 'natural lag'? With a significant number of households grappling with energy stress, how should vulnerable households navigate the retail market over the next 3-6 months? How can we ensure suppliers maintain transparency, enabling households to achieve energy security without being subjected to exorbitant energy prices?

This report aims to address these critical questions. To do this, this report will leverage Future Energy Associates' retail tariff database which has comprehensive coverage of all tariffs in England, Scotland and Wales.

### **Objective, Purpose and Scope of the Report:**

This report is commissioned by the Warm This Winter campaign to shine a spotlight on the retail energy market in the UK, evaluating how retail energy prices are reacting to the significant shifts in the wholesale energy market. The data employed for this report is correct as of 20 July 2023.

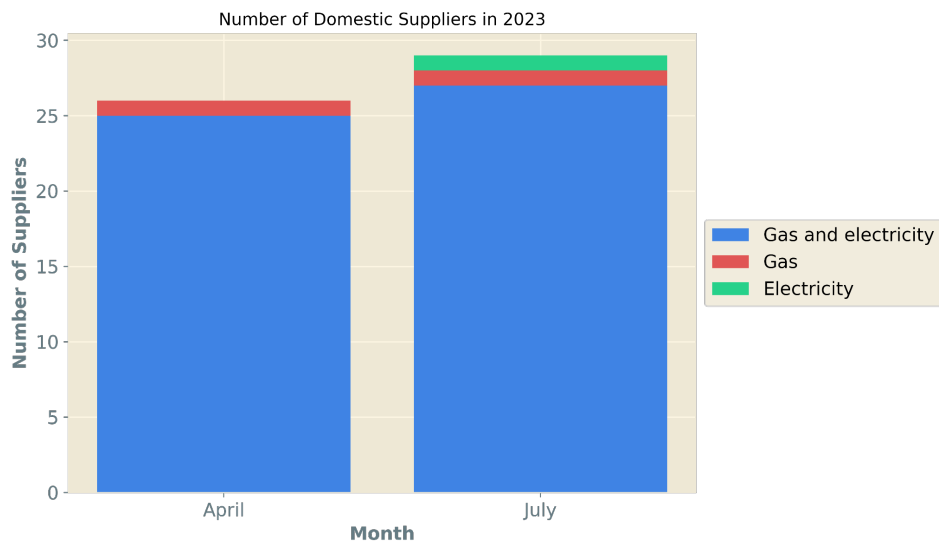
The objective of this report is to analyse the response of retail energy prices to the decreasing wholesale prices and scrutinise the roles of the UK Government, energy regulator Ofgem, and energy suppliers in facilitating this transition. The purpose of this assessment is twofold: firstly, to determine if the aforementioned entities are taking the necessary measures to ensure that households benefit from the falling wholesale prices, and secondly, to highlight any areas that may require further action or improvement.

Future Energy Associates aims to offer an evidence-based analysis to foster dialogue, decision-making, and action. We hope that the insights provided in this report will help shape more effective strategies to ensure that decreases in wholesale prices lead to proportionate reductions in retail prices, providing financial relief to households across the UK.

# Market and Policy Overview:

## The Current state of the market:

The retail energy market has begun to recover from the energy crisis. Since April, the number of suppliers on the GB market has increased by 3 from 26 to 29, representing an increase of 11.5%. The introduction of new competitors (Tomato Energy, Rebel Energy and Fuse Energy) suggests that we are entering market conditions in which suppliers can offer profitable tariffs and acquire customers. Looking forward, we are expecting this trend to continue and for additional energy challengers to enter the domestic market which include early indications from Tesla and Jellyfish Energy. However, at the same time Shell Energy has hinted at exiting the UK domestic market which will be significant as approximately 1.4 million households are with Shell Energy.



**Figure 2:** Number of domestic energy suppliers.

In terms of tariffs, the number of variable tariffs on the market has increased from 87 to 99 between April and July, an increase of 13.8%. Fixed tariffs are making a resurgence; in the whole of the last quarter, there were 5 fixed tariffs available to small sections of the market, and so far in July there are 10. While this growth of the number of tariffs available is a positive for the households, there are two key features to highlight. Firstly, while there is a large growth in the number of tariffs, those that offer significant household savings are exclusive to small sections of consumers and secondly that given how high prices currently are at the moment there is significant risk in fixing a tariff above future price caps.

**Policy Updates - How recent regulation is impacting energy tariffs:**

Short Term:

**1. Convergence of prepayment meter (PPM) and direct debit prices:** Support in the form of Energy Price Guarantee (EPG) payments that ensure that those on prepayment meter tariffs are capped at the same rate as Direct Debit customers is welcomed. However, it is paramount that this is continued in the long run and implemented accordingly in the Ofgem Price Cap, rather than a one off support payment. We argue this should be considered in the Ofgem Price Cap and not just the EPG because of the following reasons:

- a. With the continued roll-out of smart-meters the argument that PPMs should be priced higher (due to higher payment, metering and installation costs) become increasingly irrelevant.
- b. The control of debt offered by PPMs should lower the costs of supplying PPM households. Reducing all PPM standing charges to the direct debit level or below would provide consumers with a means of controlling their debt that did not penalise them financially. It would also eliminate a lot of consumer resistance to both PPMs and smart metres.

**2. Review of wholesale energy allowances in the price cap:** Ofgem is reviewing wholesale energy allowances in the price cap. This means that Ofgem is assessing whether allowances in

the price cap are fairly reflective of actual costs incurred by suppliers, as market conditions continue to stabilise. Additionally, the review will look at whether the recovery period for backwardation costs in the cap should be extended. This report supports Ofgem’s Review as suppliers should not be over-rewarded when a fall in wholesale prices may lead to benefits to them.

**3. Consultation on Earnings Before Interest and Tax (EBIT) allowance [11]:** The consultation ran from May to June 2023 and sought views on a new method for the EBIT allowance, a component of the energy price cap introduced in January 2019. The EBIT allowance determines the profit margin for efficient suppliers supplying default tariffs to customers. The goal is to strike a balance that ensures suppliers remain financially stable while keeping costs reasonable for consumers. The proposed EBIT allowance is based on capital employed and the cost of capital, leading to an indicative allowance of £47 per customer for the upcoming cap period, compared to the current approach of £37. The proposed changes create a new fixed element and reduce the variable element, overall indicating an increase in cost of £12 per household in the year following October 2023 compared to the current formulation. The table below summarises the key proposed changes:

	January 2019 - September 2023	October 2023 - October 2024
EBIT Fixed (£ per customer)	0.0	19.2
EBIT Variable (Percentage of DTC minus EBIT, Headroom and VAT)	1.9368%	1.4126%

Long Term:

**1. Delay in market-wide half hourly settlement (MHHS):** On June 12, 2023, Ofgem announced a year's delay in the implementation of the MHHS reforms, now rescheduled to 2026. The postponement of MHHS confines us to an outdated analogue system where we are unable to leverage cheaper periods of electricity at different times of the day. Currently, existing tariffs try to emulate these services but are loss leaders (i.e. Octopus Agile) as they lack direct connection to the wholesale market. As the absence of MHHS hinders the large-scale existence of flexibility and demand response tariffs, this means households cannot actively participate and manage their energy bills by leveraging energy usage during cheaper periods and avoiding

expensive times. Additionally, Ofgem states that MHHS will enhance billing accuracy, increase network efficiency, lower costs and reduce carbon emissions. The total potential benefits are estimated for households at up to £4.5 billion by 2045. **The market stabilisation charge (MSC) extension:** The MSC requires all domestic suppliers acquiring a domestic customer to pay a charge to the losing supplier, when wholesale prices fall considerably below the relevant wholesale price cap index. The MSC punishes any suppliers looking to undercut the cap right now and charge lower rates. This report supports the removal of the MSC as we believe that lower rates would provide more opportunities for competition and lower retail prices.







## Price Analysis

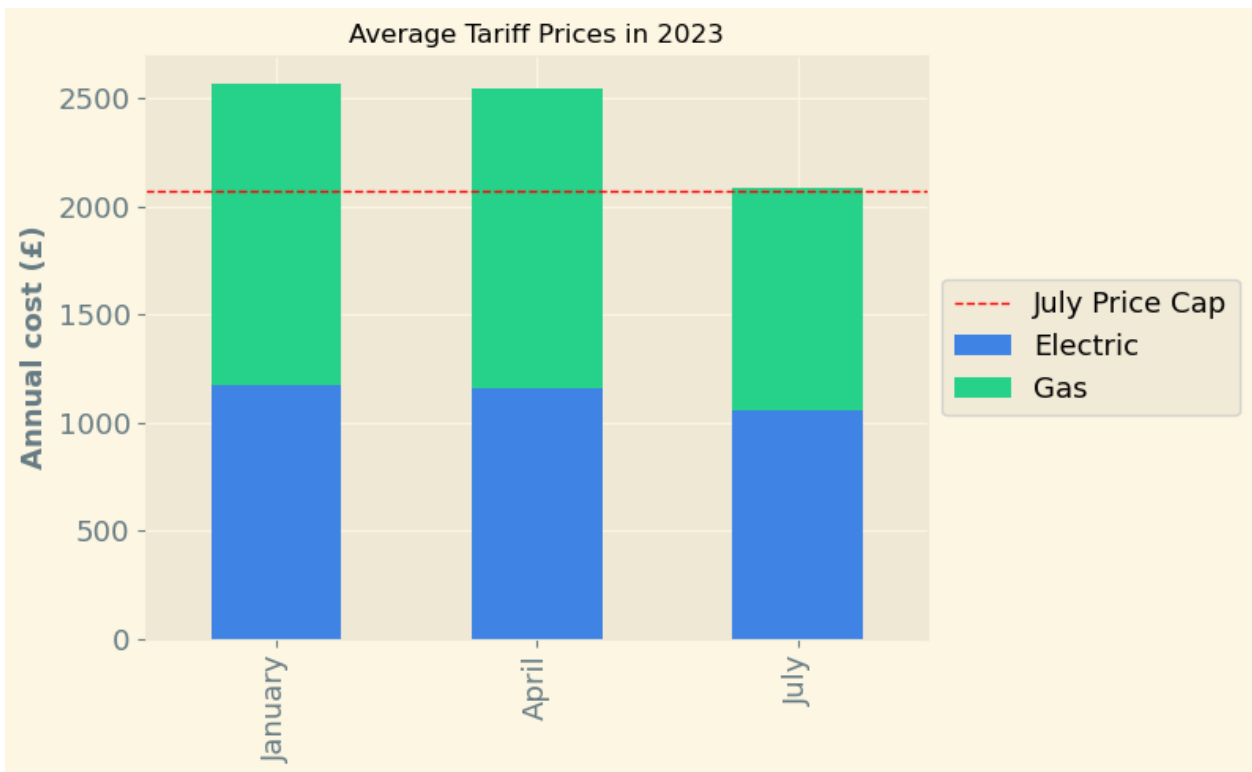
The Price Cap is enforced by Ofgem, the energy regulator for Great Britain, and sets the maximum amount that energy suppliers can charge households for their energy. The cap applies to unit rates and standing charge, however is typically expressed as an annual value. For example, the current July price cap is set at £2,074 per year for dual fuel tariffs, paying by direct debit, and consumes the 'typical medium' amount of energy, as defined by Ofgem. This includes 2,900 kWh/year of electricity and 12,000 kWh/year of gas [4]. Consequently, households that consume more energy than this will have annual costs which exceed the price cap.

In this report, we consider domestic tariffs, and all the annual costs reflect the energy usage of a typical medium household as specified above. For households on Economy 7 tariffs, we assume the same energy consumption level, with 42% of electricity usage occurring during night rate hours [Appendix 2]. These tariffs apply specifically to electricity and have different unit rates during the day and at night. The night rates are cheaper to encourage off peak electricity use, when overall electricity demand is lower. Therefore, the day rates can exceed the price cap as long as these are balanced out by lower night rates.

### ***Falling Prices: Moving Towards the End of the Energy Cost Crisis***

In 2022, there was an unprecedented increase in wholesale prices, resulting in a substantial rise in household energy tariff prices. To protect households from these extreme increases, the UK Government introduced the Energy Price Guarantee (EPG) in October 2022, which capped the standing charges and unit rates that a household could pay for energy. The EPG subsidised energy bills over the winter, paying the difference between the EPG and the tariff price to the suppliers.

For the first time since October 2022, the July price cap is now lower than the EPG. Figure 1 illustrates the downward trend in prices, showing the beginning of a decrease in mean tariff prices since January 2023. The average annual costs for UK households decreased from £2,569 in January to £2,087 in July, representing a decrease of 19.2%. This reduction is largely due to a 27% decrease in household gas costs.



**Figure 3:** Average annual cost for a medium-use household in January, April, and July, considering all active tariffs.

**Breakdown of Price trends**

The price of a standard energy bill consists of two components: the standing charge and the unit rate. The standing cost is designed to represent the daily cost to connect to the electricity or gas grid, and the unit rate is the cost per unit of electricity or gas consumed. The price cap sets limits on both the standing and unit charge, which can vary by region, payment type, and is different between electricity and gas.

Between January and July, the standing charge of both electricity and gas increased, by 10% for electricity and by 13% for gas. If the July and January median standing charges for both electricity and gas are accumulated over a year and compared, the July tariff is more expensive by £32 annually.

The main cost reductions have come from decreasing unit charges. Electricity's day unit charge has decreased by 7.2 p/kWh since January, resulting in a potential annual saving of £209 per year for a household using the typical medium

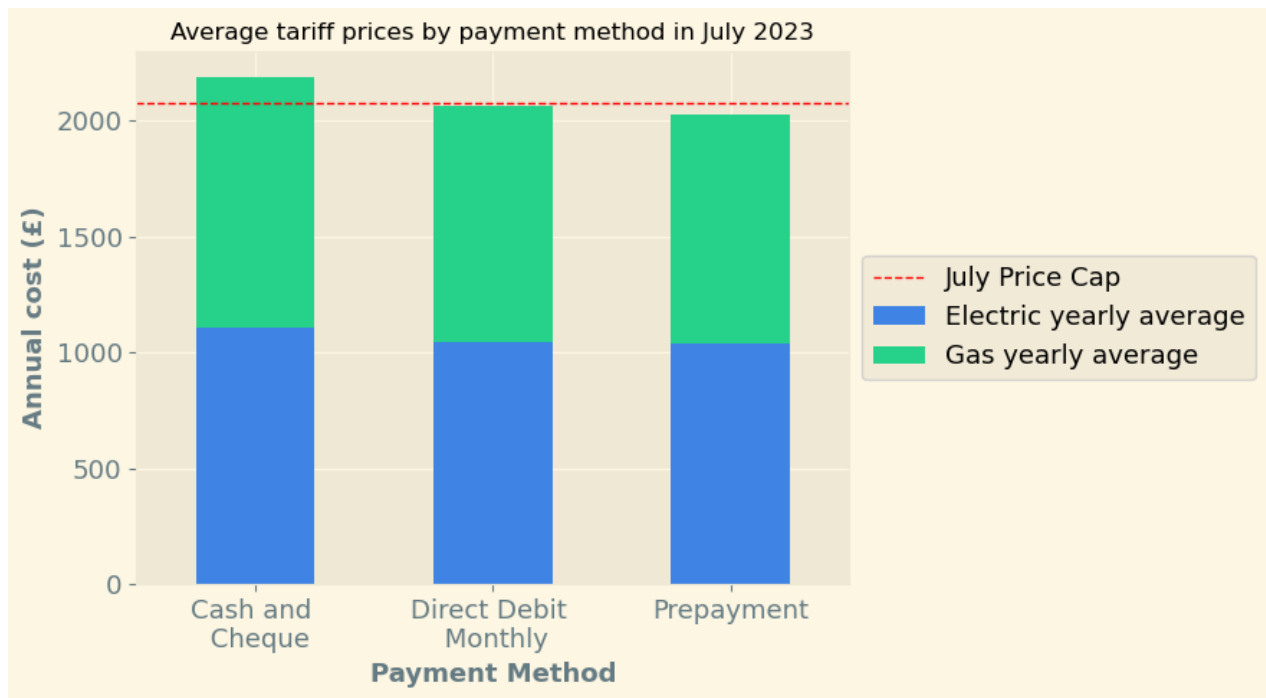
amount of electricity [4]. Gas's unit charge median has decreased by 3.11p/kWh since January, or a saving of £373 per year for a household using a medium amount of gas. However, given that the July quarter covers the summer months, this decrease in unit costs is not as impactful as those figures suggest. Less energy overall is used in the summer, as lighting and heating is used less. The savings from the unit charges scale with the amount used, and so the real savings during Q3 will be much less than a quarter of the savings calculated above.

Moreover, the increase in standing charges becomes more relevant when energy use decreases, especially when considering that these standing charges were already high. As a result, the recent increase in standing charges indicates that the quoted annual value of falling price caps may not be as impactful on households' summer bills as initially expected.

For more in-depth data, please refer to appendix 3.

### Analysis of current prices as of July

Price variation by Payment type

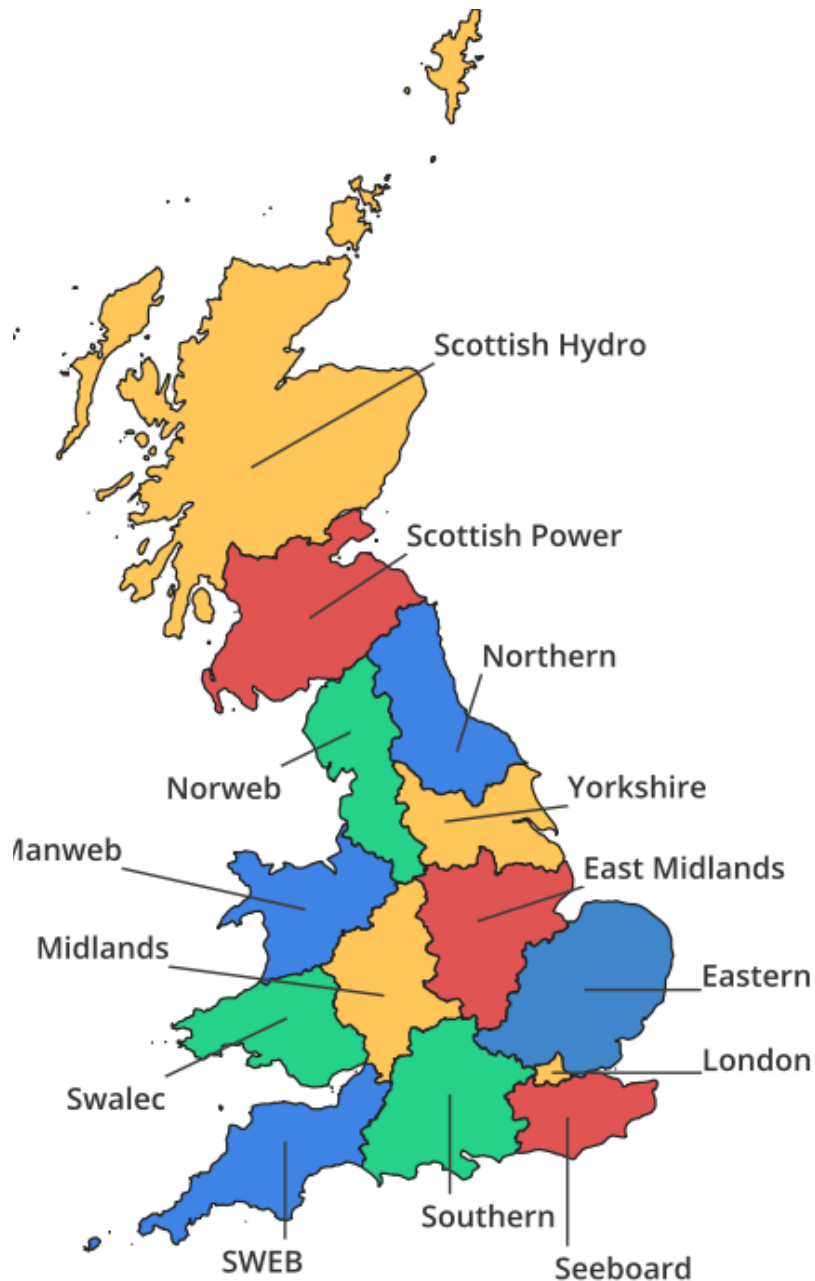


**Figure 4:** Mean tariff prices, split by payment type, for a medium use household.

Figure 2 illustrates the disparity in average tariff costs based on different payment methods. On average, a medium use customer using Cash and Cheque payment methods face an annual cost of £2,188 per year. Meanwhile, customers using a Direct Debit Monthly payment method pay on average £2,064 per year, 6% cheaper than Cash and Cheque, resulting in a £124 saving. Prepayment customers pay an average cost of £2,024 per year, which is 7% cheaper than Cash and Cheque, resulting in a £164 saving.

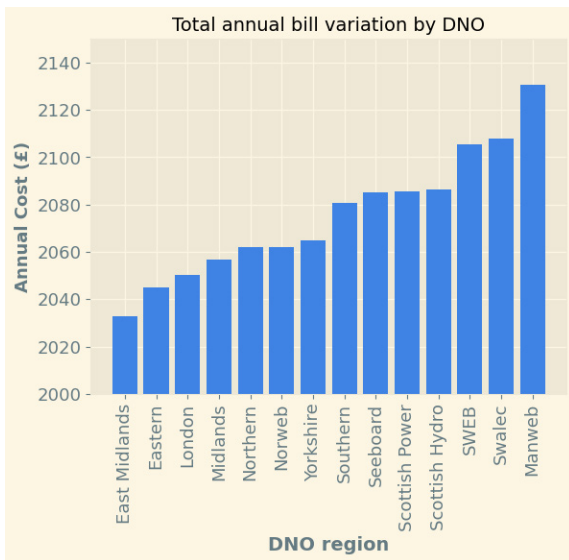
**Price variation by region**

Electricity is distributed at a local level by distribution network operators (DNOs). Gas is distributed across eight different regional areas, but is accounted for by Ofgem across these same DNO areas. There are 14 geographical areas run by different DNOs which are known as DNO regions, and these can be seen in figure 3. Differences in the way power needs to be distributed within these regions, for example because of the length of connections to properties, as well as differences in the way DNOs operate, leads to differences in costs passed onto suppliers. In addition, electrical losses vary by region because of the makeup of the network, meaning more power has to be bought by the supplier for the same amount of energy end-use.



**Figure 5:** A breakdown of the different DNO regions. Data from [5].

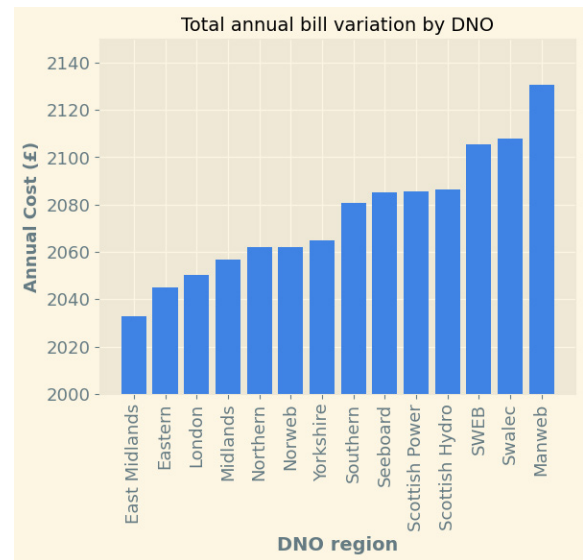
**Overall**



**Figure 6:** Annual cost for a medium use dual fuel household, varied by DNO. Annual costs for any economy 7 tariffs are calculated assuming 42% of electricity is spent using the night rate.

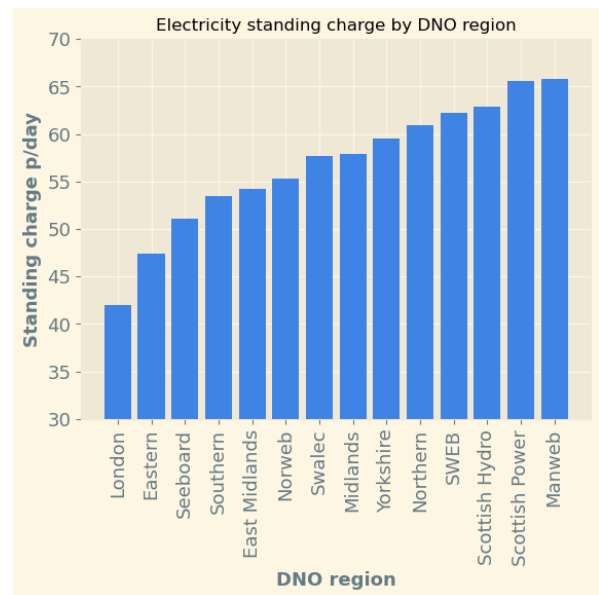
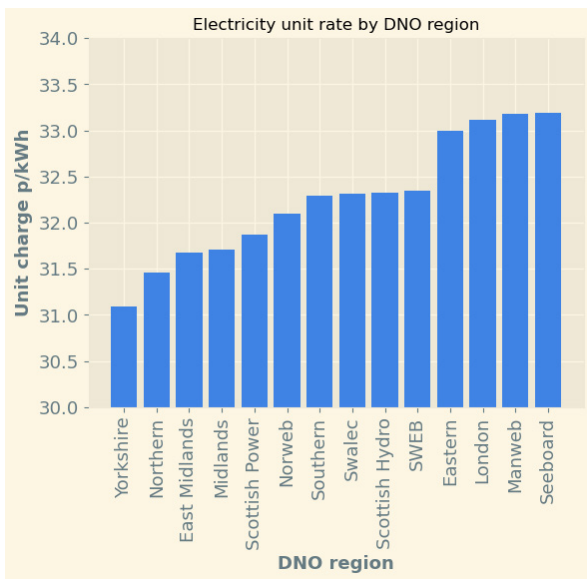
Figure 6 depicts the range of total mean annual energy costs for medium-use households across different DNO regions. Manweb, which covers Merseyside, North Wales and parts of Cheshire, is the most expensive region, amounting to £2,131 per year, while East Midlands is the cheapest at £2,032 per year. This represents a regional range of £99 in energy costs, or 4.7% of the average annual cost of £2,087 per year across tariffs in the Future Energy Associates dataset. Notably, Manweb stands significantly higher in cost compared to the next most expensive region, Swalec (South Wales), with a difference of £22 between the two regions. In this section, mean costs are used, which may lead to a discrepancy between these values and the median values in the section analysing standing and unit charges over time.

**Electricity**



**Figure 7:** Annual average electricity costs by DNO region, for a medium-use household.

Examining figure 7, it becomes apparent that a significant factor contributing to Manweb’s high annual overall energy prices, seen in figure 6, is its electricity costs. Manweb is the most expensive region for electricity by far, costing £1,112 per year, whereas the cheapest region is East Midlands, which costs £1,028 annually. This range of £84 is 8% of the average annual electricity cost across all GB tariffs of £1,059. As figure 7 shows, Manweb’s electricity costs are significantly higher than the next most expensive electricity region, Scottish Hydro. If Manweb is not included, the total range is only £48, or 4.5% of the mean.



**Figure 8:** Electricity Prices: Left: Variation in electrical unit rate by DNO region. Note that in the case of Economy 7 tariffs these figures only take into consideration the day rates. Right: Variation in standing charge by region.

In figure 8a, Seaboard (South East) is the most expensive region in terms of unit rate, which is on average 33.2p/kWh, followed closely by Manweb. Some of the cheapest standing charge regions are some of the most expensive for unit charge, such as London, Eastern and Seaboard. Yorkshire is the most affordable region in this category, with an average rate of 31.1 p/kWh. Although this difference of 2.1p/kWh may seem small, it amounts to a variation of £61 per year for a medium-use household. From Figure 8b, Manweb is again the most expensive area in terms of standing charge - what the supplier charges for delivering power - amounting to 65.8p/day. The cheapest region, London, costs 41.9p/day. This difference of 26.6p/day contributes to a difference of £97 per year between the most and least expensive regions.

**Understanding the Electricity Breakdown**

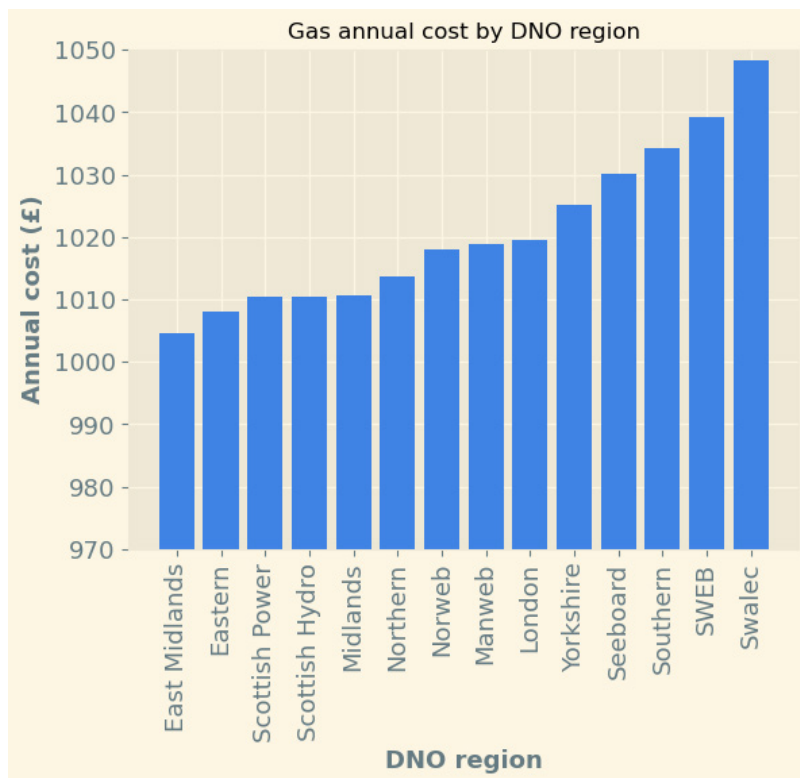
Figure 7 highlights the overall annual electricity costs and reveals an offsetting effect between unit rates and standing charges on annual electricity costs. This means that with the exception of Manweb, the most and least expensive regions are not the same between standing charge and unit rates, and these differences tend to offset each other to some degree. This can also be seen in the reduction in total range between the most and least expensive regions; for standing charge, this is £97 per year, for unit charge this is £61 per year.

Manweb stands out for its high costs across both metrics, a substantial £53 above the average and £36 more than the second most expensive regions - Scottish Hydro and Scottish Power. These disparities, driven by high electricity distribution charges in North Scotland, Merseyside, North Wales, and the South-West of England, exacerbate

regional inequality and fuel poverty. This is especially significant in the Manweb region as it includes some of the worst areas impacted by fuel poverty [6].

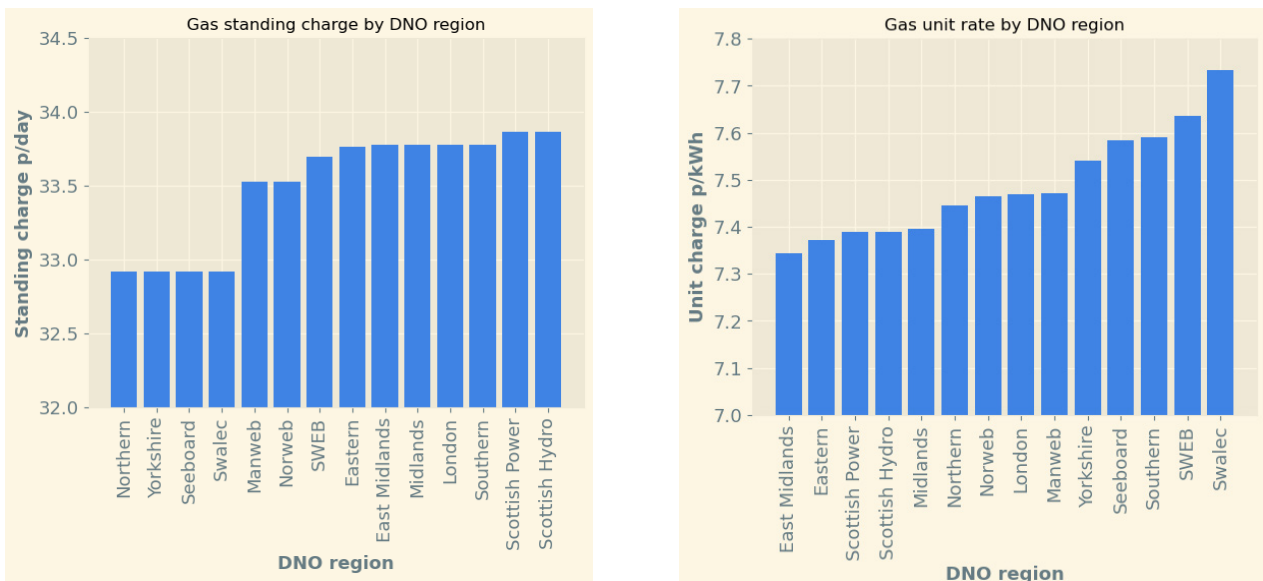
With standing charges averaging at 56.85 p/day (equivalent to £207.5/year per household), financially strapped households face an inherent and regressive burden. These charges hit less well-off households harder, limiting their options. Currently only two alternatives exist to paying these high electrical standing charges. Firstly, a new electrical-only supplier Fuse Energy is offering substantially lower electrical standing charges, however this offer is only available to Direct Debit customers. Secondly, Utilita instead has two-tiers of unit rates that change at a low consumption threshold.

**Gas**



**Figure 9:** Annual Gas cost per DNO region for average consumption households

Figure 9 displays the difference across regions in overall average gas price, which has a total range of £43 per year on average. It is important to note that the differences are exaggerated by the scale: the overall variation between regions is only 4.2% of the GB annual average, which is £1,030. East Midlands is the cheapest region for gas, with an annual cost of £1,005, and Swalec is the most expensive region with an annual average cost of £1,048.



**Figure 10:** Left: Standing charge. Right: unit rate variation

It is evident in figure 10a) that the standing charge does not vary significantly between regions. Northern, Yorkshire, Seeboard and Swalec share the lowest standing charge of 32.9p/day (£120/year), and Scottish Power and Scottish Hydro share the highest at 33.9p/day (£124/year). This results in a minimal difference of only £3.65 per year across regions due to standing charge. The standing charges have increased by 10% (£11/year) since January (appendix 3). Figure 10b), gas unit rate varies more and reflects almost the same pricing order as the overall gas price, other than Manweb and London switching places. East Midlands is the cheapest gas region, with 7.34p/kWh, and Swalec is the most expensive with 7.73p/kWh. For a medium use household, this leads to a variation in price of £47 per year.

**Understanding the Gas Breakdown**

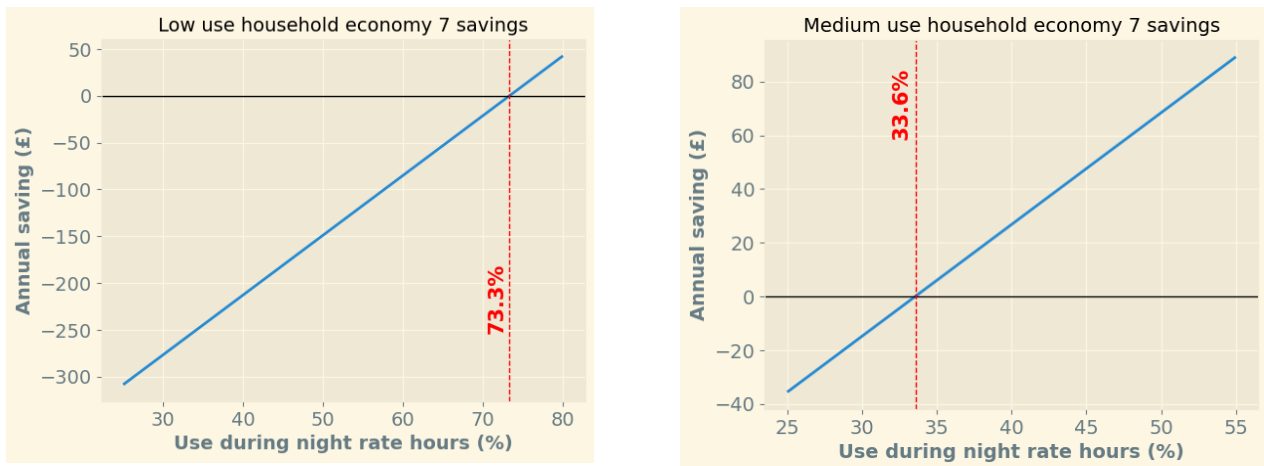
The gas unit charge has shown the most significant decrease of all aspects of an energy bill, reducing by 29% between January and July. However, during the summer months, gas consumption is especially low. Although it might be assumed that the regional variation of gas bills due to unit charge over the July quarter in 2023 would be £11.75, the reality will be much smaller as households are using less heating than in other quarters. Meanwhile, the standing charges have increased. These will total on average £30 this quarter, versus £26 in Q1 2023.





**Economy 7: Which households does it make sense for?**

Economy 7 tariffs can provide savings if enough of the household electricity use is consumed during off-peak hours (typically 00:00 - 07:00 am). Two factors drive potential Economy 7 savings; total electrical consumption, and the proportion of day/night consumption.



**Figure 11:** The figure illustrates the annual savings achieved by customers on Economy 7 tariffs, focusing on the percentage of electricity consumed during off-peak hours throughout the year. It highlights the threshold at which customers start to save money. These savings were computed by calculating the disparity between the average cost of Economy 7 rates across various proportions of night use and the average annual cost of tariffs at a given electricity consumption level. **Left:** the amount of savings a low-use household would make, (1800 kWh of electricity per year). **Right:** the amount of savings a medium-use household would make (2900 kWh of electricity per year). Usage from [4].

Figure 11 highlights that savings on Economy 7 tariffs for medium-use households only become apparent when at least 33.6% of electricity consumption is at night. This is quite a substantial threshold. Furthermore, for low-use households, an unrealistic 73.3% of electricity usage would need to be during the off-peak night hours. Unless a household has a very specific lifestyle, achieving this proportion is impractical. Therefore, Economy 7 tariffs are not recommended for lower use households.

This is significant for two reasons. Firstly, it demonstrates that total consumption does matter and therefore those low consumption households should consider whether these tariffs are right for them. Secondly, this analysis questions whether it may be optimal for Economy 7 households to switch tariff to a regular electricity tariff after the heating season. This is because it is unlikely that a household could maintain the necessary day/night breakdown through the summer months when electrifying heating is not needed.

# Tariff Tracker

## What are the cheapest tariffs on the market?

In this section, we consider what the cheapest tariff on the market is for households with average consumption, with a standard meter, and paying by direct-debit.



### Cheapest Variable Tariffs

A combination of two different variable tariffs with Fuse Energy (electricity) and Home Energy (gas) can save £93 totalling at £1,978 when compared to the Ofgem Price Cap for direct debit customers.



### Cheapest Fixed Tariffs

Utility Warehouse offers the best deal of more than 5% savings, however it requires signing up to additional services (broadband, insurance, mobile). The best normal fixed tariff available to new and existing customers is the So Energy So Juniper 12-month fix at 1% less than the cap with £150 in exit fees.

## Key Insights:



**A shift away from Dual Fuel Tariffs:** Shifting market dynamics suggest that there may be cost saving benefits to vertically integrated electricity suppliers, especially when backed by renewable generation. If this trend does continue, we may see the rise in electricity-only energy suppliers which may be further accelerated as heating and mobility become electrified. On the one hand it means that households could have better control of their energy and not be at the mercy of one supplier, on the other hand it could add considerable friction for households as it would involve setting up additional payments for different suppliers.



**The Catch in Bundled Tariffs:** These tariffs often boast of substantial savings. However, it's important to remember that they can require customers to commit to lengthy contract periods, sometimes to the extent of feeling 'locked in'.



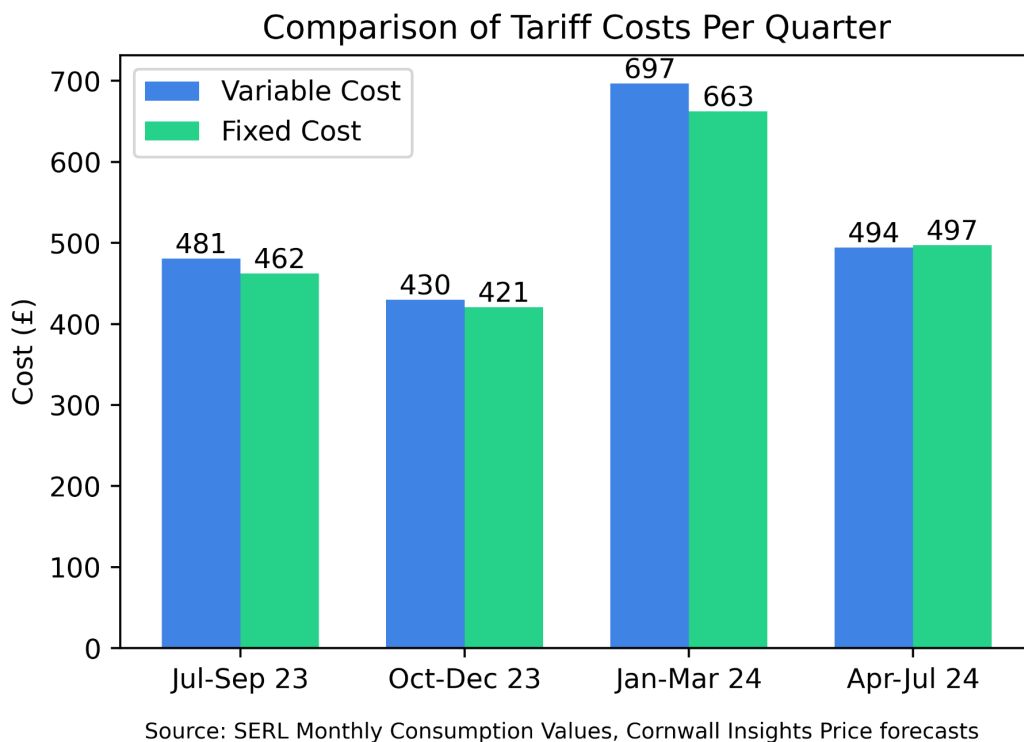
**Market Transparency Concerns:** An emerging trend shows many energy providers offering their cheapest fixed tariffs exclusively to existing customers, keeping them off-market. This tactic reduces market transparency and enables suppliers to lure households with seemingly 'individualised' tariffs.

### When should households consider fixing their tariff?

For this report Future Energy Associates have created a fixed tariff tracking tool that determines when those households seeking stability should fix. For the month of July households that want price stability should consider fixing their tariff given the following conditions. If the offered tariff has a lower standing and unit rates than the following:

- **Gas:** unit rate: 6.5 p/kwh, standing charge: 29 p/day
- **Electricity:** unit rate: 30p/kwh, standing charge: 52p/day
- **Annual Cost:** £1,946
- **Exit Fee\*:** £80

\*The scenario above gives rates at the stated exit fee. As exit fees vary this will change the rates quoted above. See methodology note below for more details.

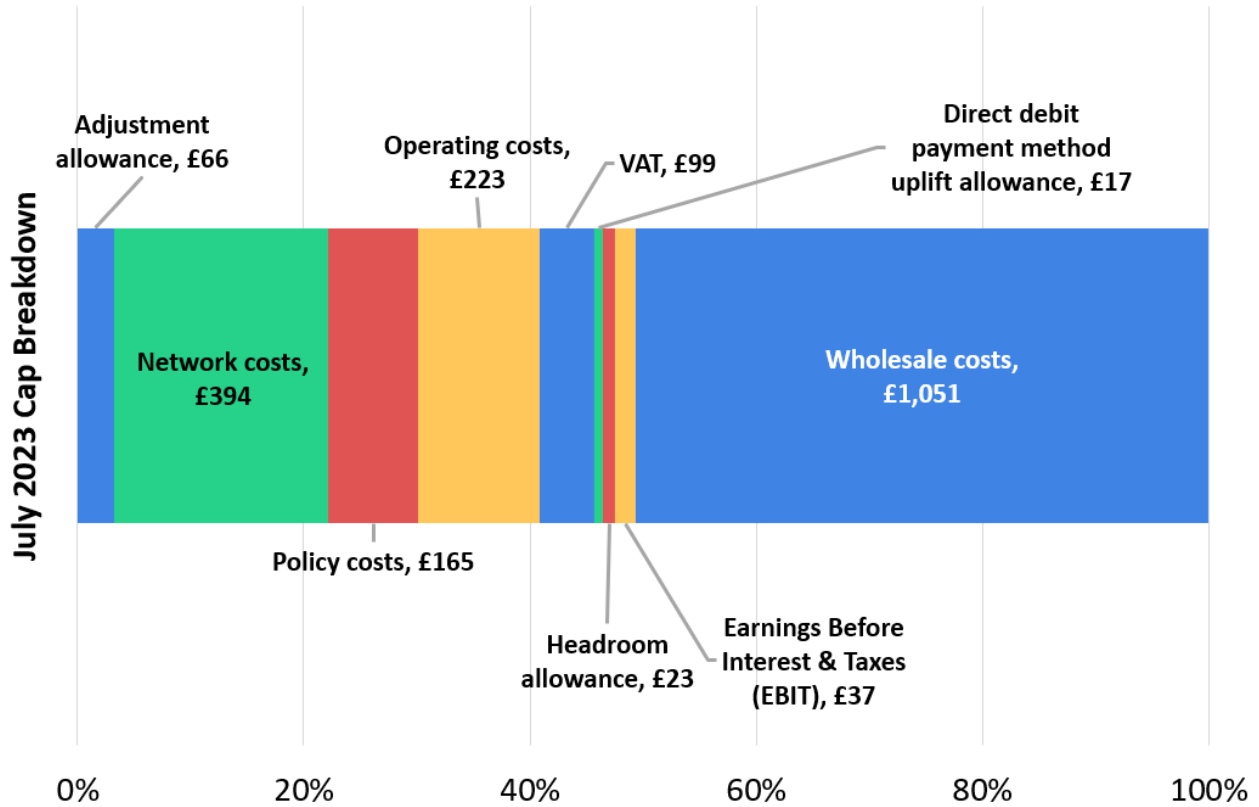


**Figure 12:** Fixed tariff cost saver example of a fixed tariff at the fixing price point.

We calculate this rate through taking average monthly consumption values and applying those consumption values for both gas and electricity for each quarter. Through this we can obtain a true ‘annual cost’ for those households on a variable tariff that follows the Ofgem Price Cap which we find to be **£2,107**. This price is significantly higher than all the Ofgem Price Cap forecasts for two key reasons. Firstly, standing charges remain high during months of low consumption. Secondly, gas unit rates are expected to rise substantially during the winter months which aligns with when gas consumption is greatest.

From knowing the true annual cost value of variable tariffs following the Ofgem Price Cap, we find unit rate and standing charge combinations that save at least £80 (our error threshold) annually according to Smart Energy Research Lab (SERL) monthly consumption values [7].

# Profit Tracker: Cap breakdown.



**Figure 13:** A breakdown of the Q3 2023 Ofgem price cap, for a medium use, dual-fuel household using Direct Debit [8].

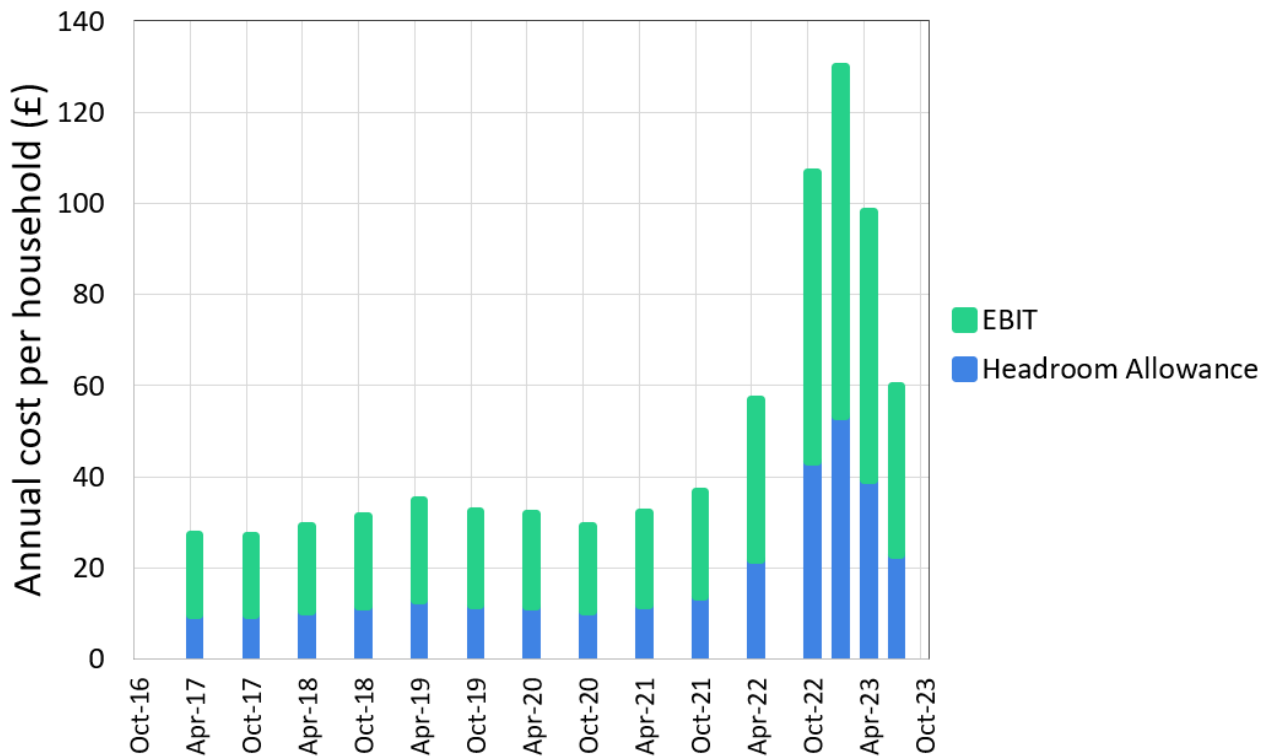
Figure 13 shows a breakdown of the Ofgem price cap, as of this current quarter, for a dual fuel, medium-use household. Wholesale costs account for over 50% of overall costs, which is followed by network, policy and operating costs.

However, largely omitted from public discourse is the amount of profits suppliers can take per household. According to the price cap, profits are accounted for in two ways: the Headroom Allowance and the Earnings before Interest and Taxes (EBIT) (see Figure 13). The EBIT is a general allowance of supplier profit per household, and the Headroom Allowance is to account for unforeseen incidents, but also encompasses additional profits.

Importantly, these are calculated as a percentage of the bill, with EBIT at 1.94% and Headroom Allowance at 1.46% [9].

The fact that these are calculated as percentages of the rest of the bill means that suppliers have benefited from the surge in wholesale prices. As illustrated in figure 14, the total combined profits increased from £27 in Q2 2017 to £130 in Q1 2023. This value is calculated from the quarter's price cap being applied to a medium use, dual fuel household for a year. Households will not have paid the total profits during Q1 2023 due to the Energy Price Guarantee subsidising bills; however profits are still at £60, double what they were in 2017 [9].

### Allowed Supplier Profits in Ofgem Price Cap



**Figure 14:** Headroom and EBIT annual costs for a medium-use, dual-fuel household, projecting the cost of the price cap to one year. [9]

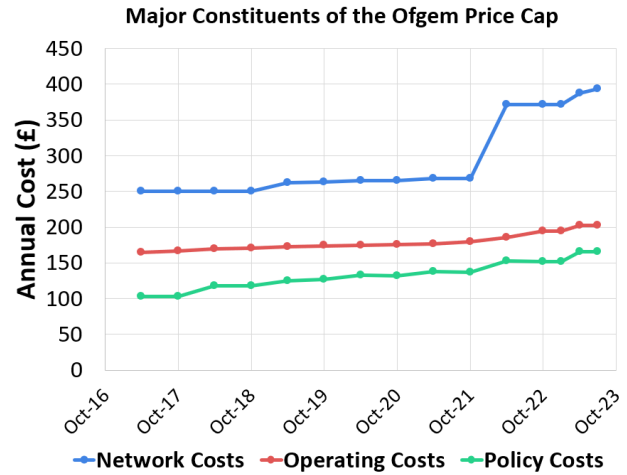
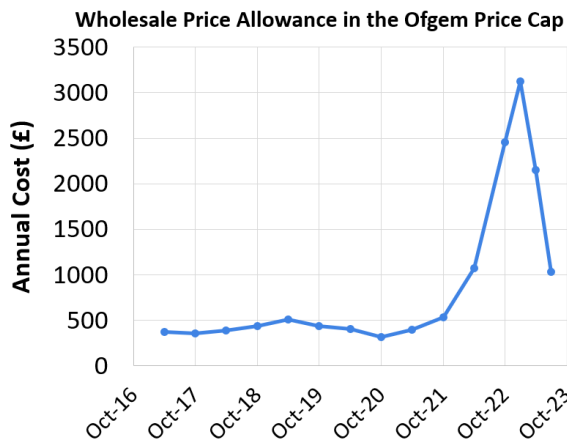
With energy bills predicted to remain at similar levels and 29 million households currently on the standard variable tariff [according to Ofgem](#), the combined profit energy firms could make in the next 12 months is **£1.74 billion**.

This figure is derived from the £60 profit per customer figure being extrapolated across all 29 million households and should be seen as an estimate. Energy firms may make more money than this from fixed term tariffs and recent Ofgem allowances for Covid true up and Ukraine Wholesale Cost Adjustments. Ofgem is currently exploring reforms in the calculation of EBIT, considering a flat component and a percentage component [11]. Although this could be used to protect customers, the EBIT is predicted to increase from 1.9% to 2.4% in Ofgem’s Q4 2023 price cap [12].

The Child Poverty Action Group have estimated that UK households paying over 10% of their net income on fuel went from 19.2% in 2019/20 to 55% in January 2023 [10]. During this time, energy supplier profits increased from £32 to £130 per year. This is an increase of almost £100, and is more than 4 times as high.

The increased costs to suppliers during the energy crisis are covered by increased allowances in specific categories, so allowing more profit on top of that seems to place an unnecessary extra burden on struggling customers. However, suppliers argue that these allowances are necessary to account for greater uncertainty and unforeseen costs during unprecedented times.

Given that these profits are a percentage of the rest of the costs, the spike in profits can partially be attributed to the surge in wholesale prices, as illustrated in figure 15 (left). This also explains a return to lower profits in more recent quarters.



**Figure 15:** Annual price allowances in the Ofgem Price Cap for a medium-use dual-fuel household for each cap. **Left:** Wholesale price allowance. **Right:** Network, Operating, and Policy costs allowance. [5]

However, it is vital to consider the significance of other components of the cap. Figure 15 (right) demonstrates that the other major constituents of the price cap have not decreased in line with the wholesale price allowance. This creates uncertainty

regarding the extent to which profits within the price cap will decrease in the future. As energy prices continue to change, and trend downward, the amount of profits energy suppliers are allowed to make should be scrutinised.

## References:

- [1] Wholesale market indicators (no date) Ofgem. Available at: <https://www.ofgem.gov.uk/energy-data-and-research/data-portal/wholesale-market-indicators> (Accessed: 26 July 2023).
- [2] End Fuel Poverty Coalition (2023) Nine million adults spent Christmas in dickensian conditions, End Fuel Poverty Coalition. Available at: <https://www.endfuelpoverty.org.uk/nine-million-adults-spent-christmas-in-dickensian-conditions/> (Accessed: 26 July 2023).
- [3] Annual Fuel Poverty Statistics in England, (2023). Available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1139133/annual-fuel-poverty-statistics-lilee-report-2023-2022-data.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1139133/annual-fuel-poverty-statistics-lilee-report-2023-2022-data.pdf) (Accessed: 01 July 2023).
- [4] Ofgem (2023). Average gas and electricity use explained. [online] Ofgem. Available at: <https://www.ofgem.gov.uk/information-consumers/energy-advice-households/average-gas-and-electricity-use-explained>.
- [5] data.nationalgrideso.com. (n.d.). ESO Data Portal: GIS Boundaries for GB DNO License Areas - Dataset| National Grid Electricity System Operator. [online] Available at: <https://data.nationalgrideso.com/system/gis-boundaries-for-gb-dno-license-areas> [Accessed 26 Jul. 2023].
- [6] Keung, A. and Bradshaw, J. (2023). Who are the fuel poor? [online] Available at: [https://cpag.org.uk/sites/default/files/files/policypost/Who\\_are\\_the\\_fuel\\_poor.pdf](https://cpag.org.uk/sites/default/files/files/policypost/Who_are_the_fuel_poor.pdf) [Accessed 26 Jul. 2023].
- [7] Smart Energy Research Lab: Aggregated statistics of energy use in GB domestic buildings 2021, Jessica Few, Martin Pullinger, Eoghan McKenna, Simon Elam, Ellen Webborn, Tadj Oreszczyn, Smart Energy Research Lab (SERL) Statistical Datasets, [www.serl.ac.uk](http://www.serl.ac.uk)
- [8] Ofgem. (n.d.). Default Tariff Cap. [online] Available at: <https://www.ofgem.gov.uk/energy-policy-and-regulation/policy-and-regulatory-programmes/default-tariff-cap>.
- [9] Ofgem. (2023). Default tariff cap level: 1 July 2023 to 30 September 2023. [online] Available at: <https://www.ofgem.gov.uk/publications/default-tariff-cap-level-1-july-2023-30-september-2023> [Accessed 26 Jul. 2023].
- [10] CPAG. (2022). Fuel poverty: updated estimates for the UK. [online] Available at: <https://cpag.org.uk/news-blogs/news-listings/fuel-poverty-updated-estimates-uk>.
- [11] Price cap - statutory consultation on amending the methodology for setting the earnings before interest and tax (EBIT) allowance (no date) Ofgem. Available at: <https://www.ofgem.gov.uk/publications/price-cap-statutory-consultation-amending-methodology-setting-earnings-interest-and-tax-ebit-allowance> (Accessed: 26 July 2023).
- [12] Customers to pay less for energy bills from Summer (no date) Ofgem. Available at: <https://www.ofgem.gov.uk/publications/customers-pay-less-energy-bills-summer> (Accessed: 26 July 2023).

# Appendices

## Appendix 1: Ofgem EBIT allowance proposed change impact by consumer group

<b>Impact by consumer archetype</b>		<b>Average savings per household (£)</b>
A1	High incomes, owner occupied, working age families, full time employment, low consumption, regular switchers.	-£8.66
A2	High incomes, owner occupied, middle aged adults, full time employment, big houses, very high consumption, solar PV installers, care for the environment.	-£17.07
B3	Average incomes, retired, owner occupied - no mortgage, lapsed switchers, late adopters.	-£12.77
B4	High incomes, owner occupied, part-time employed, high consumers, flexible lifestyles, environmental concerns.	-£13.23
C5	Very low incomes, single female adult pensioners, non-switchers, prepayment meters, disconnected (no internet or smart phones).	-£9.29
D6	Low income, disability, fuel debt, prepayment meter, disengaged, social housing, BME households, single parents.	-£10.91
D7	Middle aged to pensioners, full time work or retired, disability benefits, above average incomes, high consumers.	-£13.25
E8	Low income, younger households, part-time work or unemployed, private or social renters, disengaged non-switchers.	-£10.45
E9	High income, young renters, full time employments, private renters, early adopters, smart phones.	-£9.15
F10	Middle aged to pensioners, full time work or retired, owner occupied, higher incomes, oil heating, rural, RHI installers, late adopters.	-£3.86
G11	Younger couples or single adults, private renters, electric heating, employed, average incomes, early adopters, BME backgrounds, low levels of engagement.	-£3.52
H12	Elderly, single adults, very low income, medium electricity consumers, never-switched, disconnected, fuel debt.	-£2.70
H13	Off gas, low income, high electricity consumption, disability benefits, over 45s, low energy market engagement, late adopters.	-£3.60

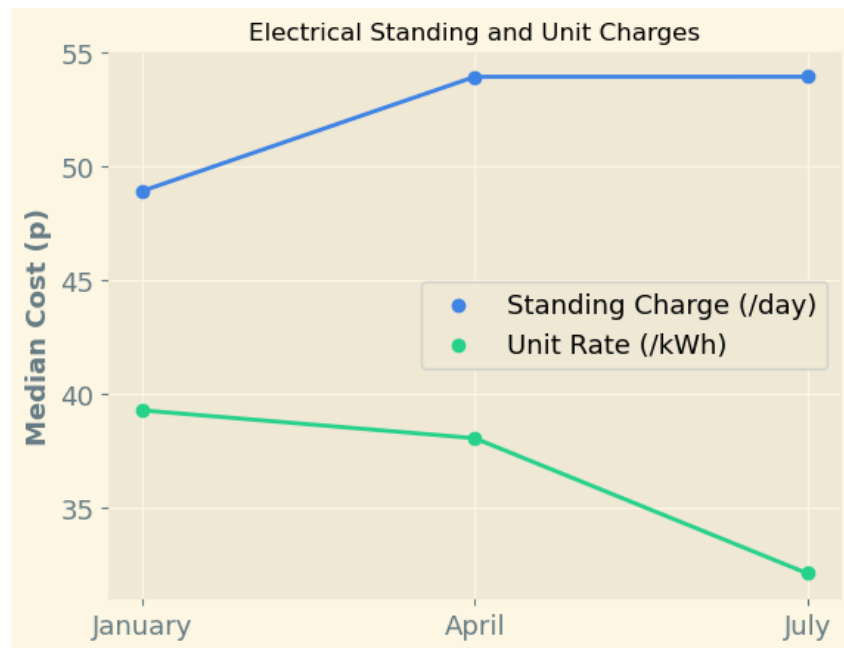
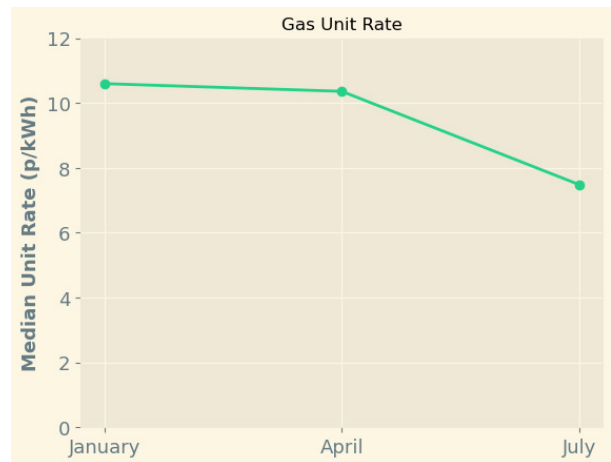
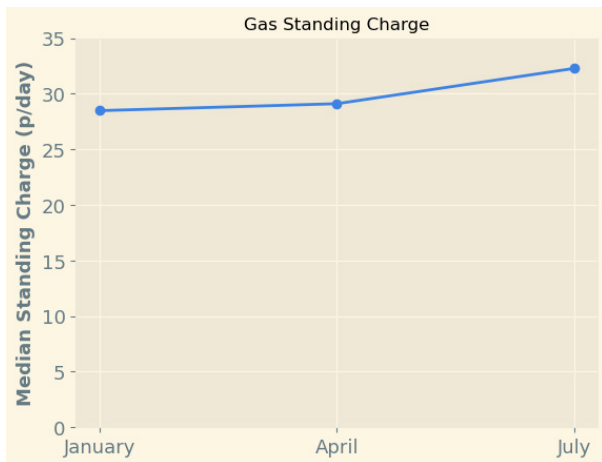


## **Appendix 2: Data Analysis details and Assumptions**

- Months were assumed to consist of 30 days and 1/12th of a year.
- Years were assumed to be 365 days.
- For the price analysis section, fixed and variable tariffs were combined. There were no new fixed tariffs in April, so it was difficult to compare fixed tariffs over time.
- Unless stated otherwise, households were assumed to be Ofgem's definition of medium use: 2900 kWh of electricity per year, and 12,000 kWh of gas per year [3].
  - Usually, households on Economy 7 tariffs are evaluated under different assumptions of what a typical household looks like, as those on Economy 7 typically use more electricity. However, to make the direct comparison between Economy 7 and non-Economy 7 tariffs, it was assumed that all households used the same amount of electricity and gas, as defined above. For Economy 7 tariffs, 42% of electricity was assumed to be used during the night hours [3].
- Only domestic import tariffs were considered.
- Due to discrepancies with how prices are calculated, tariff information from the Supplier "Utilita" was disregarded.
- For tariffs with a dual fuel discount, half the discount was applied to each of the annual costs of gas and electricity.
- For time-stamped data (e.g. July, April), fixed tariffs that became available after the 1st of that month are the only ones considered. This is because fixed tariffs are only open for new households for a small period of time, about a week. Therefore, there may be customers on old fixed tariffs that are paying an amount that is not included in the averages. The call date for each month was the 12th, to allow time for the market in the quarter to exhibit behaviour, but to make sure only the beginning of the quarter was captured.
- Average GB prices are taken from a dataset that is separated into tariffs that have electricity rates and tariffs that have gas rates. This was then grouped by the supplier name, name of the tariff, whether it is fixed or variable, whether it is dual or single fuel, and the payment type. Any tariff which is unique for any of these categories is considered as separate. The average annual prices were then found from these data points. The number of customers on any given tariff is not considered in this data analysis.
- For the DNO region analysis, the separated electricity and gas data was grouped by supplier, tariff name, whether it is fixed or variable, whether it is dual or single fuel, and the DNO region.

### Appendix 3: Breakdown costs over time

Median costs over the three 2023 quarters in the FEA dataset.



Type		January (Q1)	April (Q2)	July (Q3)
Electrical	Standing	48.9	53.9	53.9
	Unit	39.3	38.1	32.1
Gas	Standing	28.5	29.1	32.3
	Unit	10.60	10.36	7.49

56.85 p/day - mean electrical standing charge across DNOs.