



ARTICLE

# Gone bust?

## The crisis in Britain's energy supply market

The energy supply market in Great Britain was thrown into turmoil in 2021, with a large number of suppliers ceasing trading and others falling into financial difficulties. The issues, caused by unprecedented increases in natural gas and electricity prices, have put the spotlight on aspects of the regulatory oversight as well as on the sustainability of suppliers' business models and their wholesale procurement strategies.

### What has happened so far?

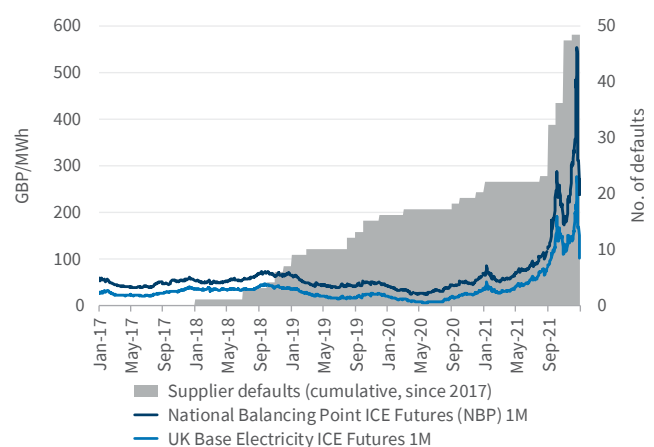
2021 was a tumultuous year for British energy suppliers. In total, 28 suppliers serving circa 4.4 million customers have collapsed during the year, with further suppliers at risk should current market conditions continue.<sup>1</sup>

Customers of all but one of the collapsed suppliers were moved to another supplier through the 'Supplier of Last Resort' process by the energy market regulator, Ofgem. The largest of the collapsed suppliers, Bulb Energy, was placed in a special administration regime.<sup>2</sup> Electricity and gas supply to affected customers remained uninterrupted.

The main reasons for the collapse are: wholesale electricity and gas prices, alongside other commodities, have risen steeply during 2021, leading to significantly higher costs for suppliers. At the same time, structural issues in the regulatory oversight of the energy retail market were highlighted. For example, Ofgem's Default Tariff Cap, a cap on some residential energy supply tariffs designed to protect customers, meant that suppliers were unable to fully pass these increased costs to their

customers. This effectively forced them to sell at a loss to at least part of their customer base. In addition, some suppliers have left themselves exposed to wholesale markets by not hedging fully.

**FIGURE 1: NUMBER OF ENERGY SUPPLIER DEFAULTS AND NATURAL GAS PRICES (SINCE 2017)**



Sources: Bloomberg, Forbes.

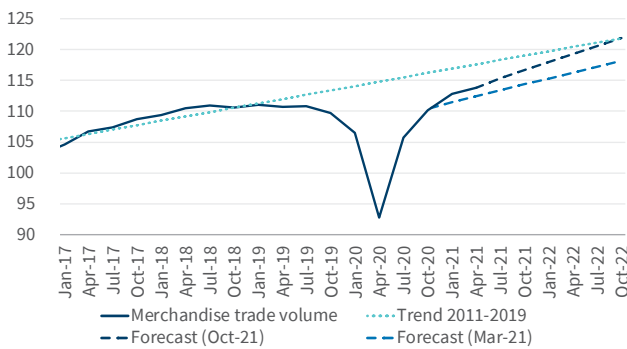
1. Forbes Advisor UK, Which UK energy suppliers have gone bust, 1 December 2021.  
 2. BBC News, Energy firm Bulb set to go into administration, 22 November 2021.

In this article, we discuss the recent wholesale market events, which have led to the crisis, explain the issues faced by suppliers and point to potential solutions to reform the market in which they operate.

### The state of global commodity markets

The Covid-19 pandemic has led to a significant contraction of economic activity around the globe; the easing of lockdowns has led to a rebound in economic activity. For example, global GDP contracted by 3.1% year-on-year in 2020 and is estimated to have increased by 5.9% in 2021.<sup>3</sup> Similarly, global trade volumes were significantly affected by the pandemic, but recovered more quickly than anticipated, as can be seen in Figure 2.<sup>4</sup>

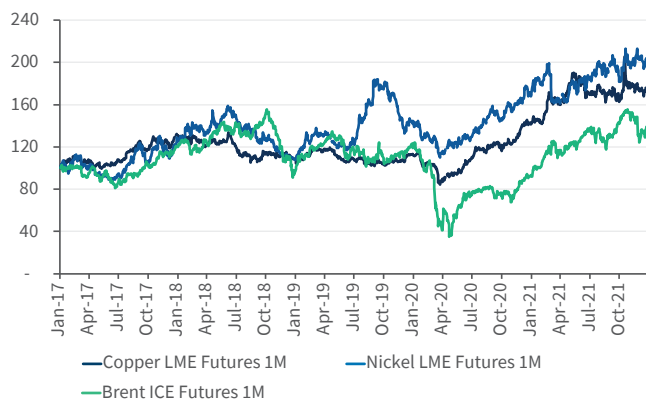
FIGURE 2: WORLD MERCHANDISE TRADE VOLUME



Note: Index, 2015=100.  
Sources: World Trade Organisation (WTO), UNCTAD.

The renewed economic activity led to an increase in demand for many commodity and energy products, which in turn drove up prices of multiple commodities. Examples are shown in Figure 3.

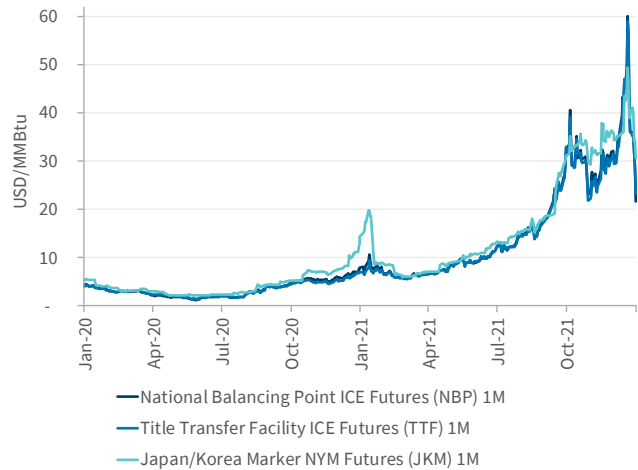
FIGURE 3: COMMODITY MARKET DEVELOPMENT



Note: Index, 2017=100.  
Source: Bloomberg.

Natural gas prices in Europe (e.g. NBP and TTF) and Asia (e.g. JKM), in particular, were subject to steep increases, as shown in Figure 4.

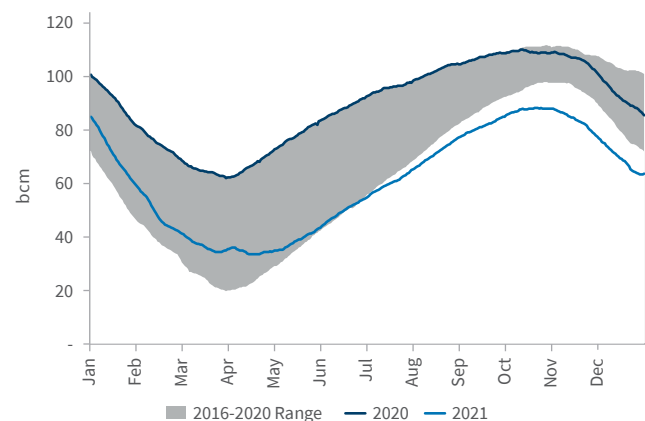
FIGURE 4: NATURAL GAS MARKET DEVELOPMENT



Source: Bloomberg.

Earlier in the year, demand in Asia increased significantly, which led to diversions of liquefied natural gas (LNG) cargos from Europe. For example, China's demand for natural gas was 307 billion cubic metres (bcm) in 2019, and was expected to reach 368 bcm in 2021, an increase of c.20%.<sup>5,6</sup> In Europe, a cold and extended winter in early 2021 increased gas demand and depleted gas storages.<sup>7</sup> Gas storage facilities in Europe were not refilled over the summer of 2021, as they usually would have been, due to less supply and higher prices than anticipated.<sup>8</sup>

FIGURE 5: EUROPEAN GAS STORAGE INVENTORY



Note: Data includes gas storage information of 20 European countries (including the UK).  
Source: AGSI+ database.

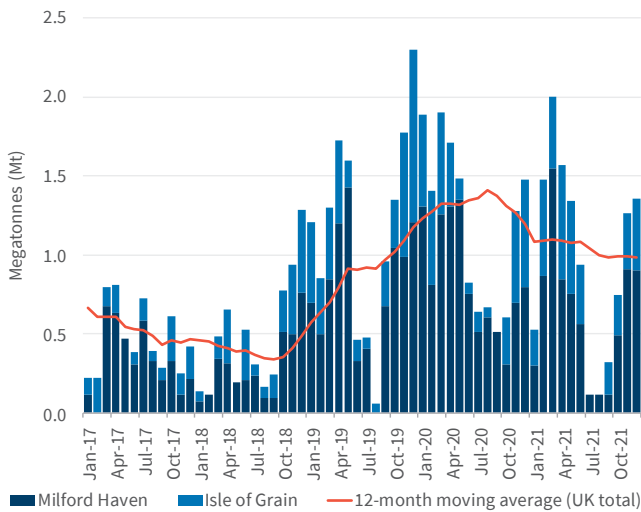
3. IMF, World Economic Outlook, October 2021.  
4. WTO, Press Release 889, 4 October 2021.  
5. IEA, Gas market report, 2021Q4, page 94.  
6. The demand forecast figures were revised upwards from 359 bcm in the 2021Q3 market report to 368 bcm in the 2021Q4 report.  
7. IEA, Global Energy Review 2021, April 2021; IEA, Gas market report, 2021Q3.  
8. IEA, Gas market report, 2021Q3.

### Market situation in Great Britain

Spot prices at the National Balancing Point (NBP), Britain's virtual gas trading hub, rose from around 60 GBp/therm in the beginning of 2021 to 455 GBp/therm at the peak on 21 December 2021.<sup>9</sup>

Due to the diversion of LNG cargos from Europe, LNG imports to Britain totalled approximately 11.8 Megatonnes (Mt) in 2021, the lowest level since 2018. This compares to 14.1 Mt and 14.4 Mt in 2019 and 2020, respectively.<sup>10</sup>

FIGURE 6: LNG BERTH IMPORTS TO BRITAIN

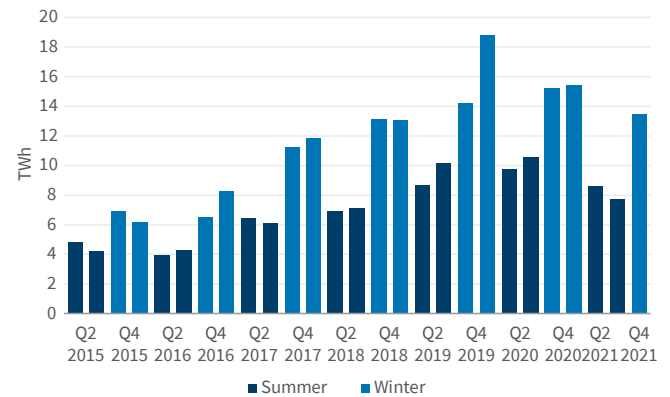


Source: Bloomberg, AHQY screen.

Higher natural gas prices translated to higher electricity prices, as around 40% of Britain's power needs was generated in combined-cycle gas plants (CCGTs) in 2021.<sup>11</sup>

In addition, output from wind farms has been low since the second quarter of 2021 due to the combination of low wind speed conditions and major maintenance operations. Quarterly output from onshore wind generation was down between 13% and 38% in the last three quarters of 2021 when compared to the corresponding quarters of 2020 with offshore wind generation down between 15% and 24%.<sup>12</sup>

FIGURE 7: GB WIND GENERATION BY QUARTER



Source: Elexon.

### Energy tariff caps in Britain

Caps on energy supply tariffs were first introduced in the GB market for a single segment of customers – those who pay for their electricity and gas using prepayment meters.

Customers on prepayment tariffs are some of the most vulnerable in the country and often have a poor credit history. However, this customer segment faced tariffs that were generally more expensive and found it harder to switch suppliers to access cheaper tariffs. Furthermore, customers on prepayment meters face the risk of their power and gas supply being switched off if they cannot afford to top up their meter. For these reasons, following an investigation by the Competition and Market Authority (CMA) of the GB energy market in 2017, the Prepayment Meter Price Cap was established to protect customers on prepayment meter tariffs.<sup>13</sup>

A further tariff cap – the Default Tariff Cap – aimed at customers who buy their energy on standard variable tariffs (SVTs) was established in 2019.<sup>14</sup> This customer segment – around 11 million households<sup>15</sup> – was often disengaged with the market and did not switch suppliers to seek cheaper tariffs.

These programmes were combined into the Default Tariff Cap in January 2021.<sup>16</sup>

9. Bloomberg, last price, PEGAS NBP spot day-ahead (PEGANBDA Index).

10. Bloomberg, AHQY tool, United Kingdom imports to Milford Haven and Isle of Grain.

11. FTI Analysis, Elexon data.

12. Department for Business, Energy & Industrial Strategy, Energy Trends, UK, June, September and December publications.

13. Ofgem, Prepayment price cap or 'safeguard tariff'.

14. Standard variable tariffs are default tariffs that customers get put on unless they make an active choice to buy their energy at a different tariff.

15. Ofgem, Decision – Default tariff cap – Overview document, 6 november 2018. Ofgem estimate [WWW] [https://www.ofgem.gov.uk/sites/default/files/docs/2018/11/decision\\_-\\_default\\_tariff\\_cap\\_-\\_overview\\_document\\_0.pdf](https://www.ofgem.gov.uk/sites/default/files/docs/2018/11/decision_-_default_tariff_cap_-_overview_document_0.pdf)

16. Ofgem, The default tariff cap [WWW] <https://www.ofgem.gov.uk/energy-policy-and-regulation/policy-and-regulatory-programmes/default-tariff-cap>

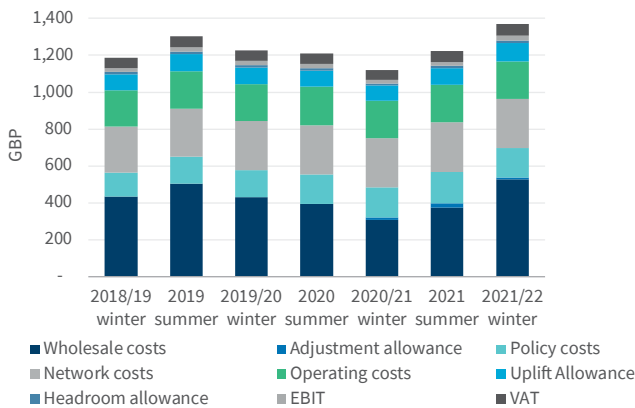
### Construction of the Default Tariff Cap

The Default Tariff Cap is calculated by Ofgem twice every year, so that a different cap level applies to the summer period (April to September) as does to the winter period (October to March).

The Default Tariff Cap is not a direct limit to customers' energy bills, as these depend on usage. Instead, Ofgem calculates what energy costs should be capped at for a "typical" user, thus effectively limiting the amount a supplier can charge per unit of energy.<sup>17</sup>

The cap is calculated through a bottom-up assessment of the underlying costs to supply energy and consists of allowances for: wholesale costs, adjustment allowance, network costs, policy costs, operating and smart-metering costs, an allowance for payment methods uplift, headroom allowance, and profit (EBIT); the VAT tax is then added on top.<sup>18,19</sup> The relative contribution of each component to the overall tariff cap is shown in Figure 8.

FIGURE 8: COMPONENTS OF THE DEFAULT TARIFF CAP



Note: Dual-fuel, standard credit customer with typical consumption  
Source: Ofgem data portal, default tariff cap.

As shown in Figure 8, the wholesale costs component is the most significant element of the cap calculation, and is the most volatile as it is directly influenced by wholesale electricity and gas prices. We focus on this component from here on.

### The wholesale cost allowance

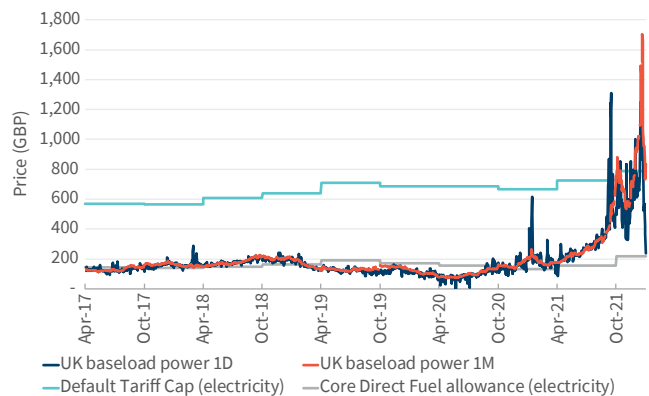
The wholesale costs allowance is set in three parts:

1. a **core direct fuel allowance**,
2. an **additional direct fuel allowance**; and
3. an **allowance for Capacity Market payments**.<sup>20</sup>

The **core direct fuel allowance** is constructed to represent the majority of hedging costs in wholesale markets. It is calculated as the weighted average price of forward energy contracts over a six month observation period, which ends two months before the relevant cap period and includes forward contracts delivering over the 12 months starting from the beginning of the cap period (the "6-2-12 hedge").<sup>21</sup>

This means that the applicable core direct fuel allowance can differ significantly from short-term market prices, as is the case currently. To illustrate, we compare two market price benchmarks, day-ahead and month-ahead contracts, to the core direct fuel allowance for electricity (Figure 9) and natural gas (Figure 10).

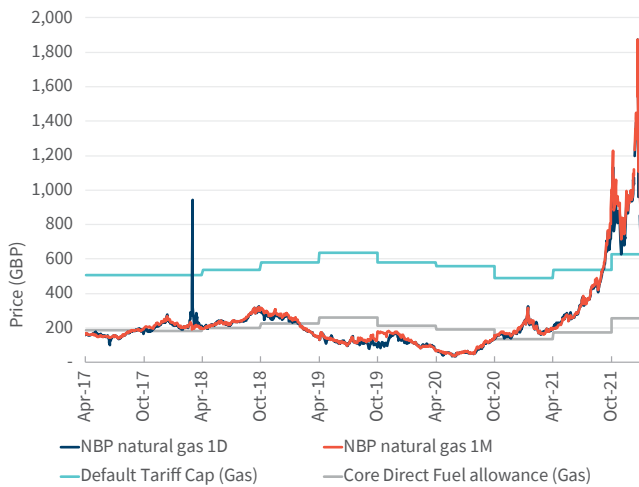
FIGURE 9: SHORT-TERM POWER PRICES VS ELECTRICITY PRICE CAP



Note: Figure 9 shows the Default Tariff Cap for electricity and the core direct fuel allowance, compared against day ahead and month ahead baseload electricity prices. Cap assumes GB average, standard credit, single meter arrangement, typical consumption 3100kWh. Electricity prices have been multiplied by 3100kWh and expressed as a GBP per annum figure for comparability with the cap.

17. Ofgem defines and periodically updates the high/medium/low Typical Domestic Consumption Values (TDCVs) for gas and electricity by calculating the lower quartile, median and upper quartile of household consumption using the two most recent years of available data and then taking the average.  
18. Ofgem, The default tariff cap [WWW] <https://www.ofgem.gov.uk/energy-policy-and-regulation/policy-and-regulatory-programmes/default-tariff-cap>  
19. Currently the cap also includes an initial period adjustment following a High Court ruling on the wholesale allowance component in the initial period after the Default Tariff Cap was established [WWW] <https://www.ofgem.gov.uk/publications/decision-reassessing-wholesale-allowance-first-default-tariff-cap-period>  
20. Ofgem, Default tariff cap: decision, Appendix 4 - Wholesale costs, 6 November 2018 [WWW] [https://www.ofgem.gov.uk/sites/default/files/docs/2018/11/appendix\\_4\\_-\\_wholesale\\_costs.pdf](https://www.ofgem.gov.uk/sites/default/files/docs/2018/11/appendix_4_-_wholesale_costs.pdf)  
21. The forward contracts are for delivery over the next 12 months (i.e. two cap periods), even though the calculation only applies to the next cap period.

**FIGURE 10: SHORT-TERM GAS PRICES VS GAS PRICE CAP**



Note: Figure 10 shows the Default Tariff Cap for natural gas and the core direct fuel allowance, compared against day ahead and month ahead natural gas prices (NBP). Cap assumes GB average, standard credit, typical consumption 12,000kWh. Gas prices have been multiplied by 12,000kWh and expressed as a GBP per annum figure for comparability with the cap.  
Sources: Bloomberg, Ofgem.

The **additional direct fuel allowance** is a fixed percentage uplift applied to the core direct fuel allowance to account for expected costs of managing complex risks. These are:

- *shaping, forecast error and imbalance costs* (see highlighted boxes);
- *transaction costs*, such as broker fees and bid/offer spreads;
- *losses and UIG* (unidentified gas), for example, physical losses during transmission and distribution; and
- *additional risk and uncertainty* allowance to help suppliers manage additional exposure to volatility and risk not already accounted for.

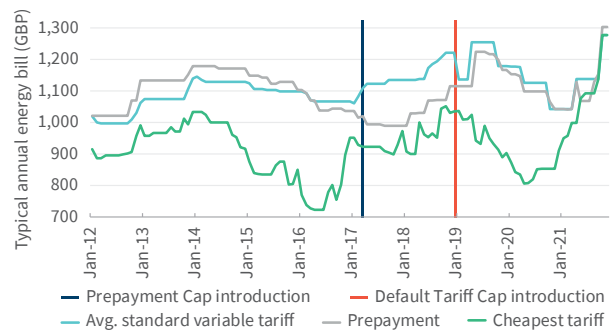
The allowance for Capacity Market (CM) payments are reflective of suppliers' obligation to make payments to fund the CM scheme, a scheme designed to provide security of electricity supply.<sup>22</sup>

**The impact of tariff caps**

Historically, fixed tariffs, that is tariffs that held the per-unit cost of energy fixed for a certain time period (e.g. a year), were significantly cheaper than SVTs, as shown in Figure 11.

For example, in September 2018, shortly before the introduction of the Default Tariff Cap, a typical SVT customer could save around 13-19% off their annual energy bill by switching to a fixed tariff.<sup>23</sup>

**FIGURE 11: AVERAGE SVT AND PREPAYMENT TARIFF COMPARED TO THE CHEAPEST TARIFF**



Note: Figure 11 compares the average of the SVT and the cheapest of the prepayment tariffs offered by large legacy suppliers, against the cheapest tariffs offered by the same suppliers. Large legacy suppliers are suppliers who have held a market share of at least 5% in either fuel since privatisation of the electricity and gas sectors. This includes British Gas, OVO Energy, E. ON, EDF, Npower, Scottish Power.  
Source: Ofgem data portal

**Shaping:** Shaping refers to a supplier's need to replicate customers' usage profiles over time through hedges in the market. Shaping costs arise when suppliers "roll" their hedges as they get closer to the delivery of the commodity. Rolling contracts means selling out of less granular contracts, such as contracts that deliver a constant stream of energy over a season or quarter, and buying into more granular contracts, such as weekly or daily contracts.

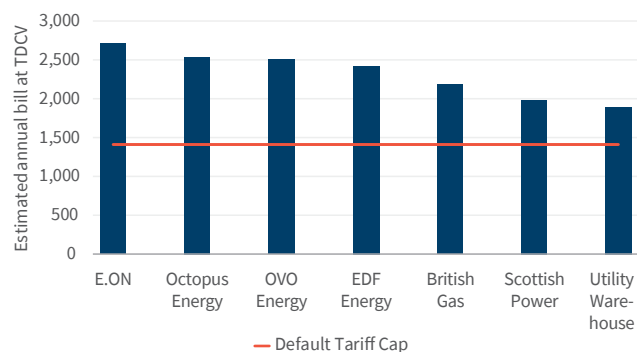
**Forecast error:** The difference between long-term forecasted demand and demand expectation shortly before delivery, for example, due to unseasonal temperature. These typically lead to the gas or power already purchased under the hedges needing to be changed as more information becomes available to inform forecasted demand.

**Imbalance:** Very short term volumetric forecasting errors. When nominated volumes do not match consumed volumes, suppliers face costs in the imbalance market.

22. Ofgem, capacity market. <https://www.gov.uk/government/collections/electricity-market-reform-capacity-market>  
23. Ofgem, Default tariff cap: decision – overview, 6 November 2018.

However, this changed in summer 2021.<sup>24</sup> Given the surge in wholesale energy prices, fixed tariffs are now significantly higher than SVTs, which are capped by the Default Tariff Cap.

FIGURE 12: FIXED TARIFF VS DEFAULT TARIFF CAP



Note: Assuming typical consumption of 12,000kWh of gas, and 3100kWh of electricity per annum. Dual fuel, Ofgem medium user, standard credit payment, GB average.

Sources: EnergyLinx, Energyhelpline, Ofgem, company websites.

## Risks faced by suppliers

Energy suppliers need to mirror the electricity and gas they supply to their customers to ensure they continuously balance their customers' consumption. In order to manage this risk exposure, many suppliers hedge, at least partially. They typically either purchase contracts, such as forwards, in wholesale markets or agree direct offtake agreements with producers (e.g. power purchase agreements (PPAs)).

The exact hedging strategies applied by suppliers are not public knowledge and will differ between suppliers, though several themes apply:

1. The strategy will depend on the type of tariff, e.g. fixed tariffs need to be hedged differently to variable tariffs as they expose suppliers to different risks. For example, suppliers may want to hedge volumes sold to fixed-price customers at the point of sale as the supplier carries the full risk of adverse market price movements;
2. Hedging behaviour will depend on a supplier's market position. A challenger supplier, trying to gain market share, will have a different appetite for risk than a large legacy supplier. For example, challenger suppliers might be willing to leave more volume unhedged for longer to allow them to react more swiftly to beneficial market developments; potentially leaving them at risk in adverse market events; and
3. A supplier's ability to hedge is a function of their ability to (i) access liquidity and credit, and (ii) have

access to a sophisticated trading team. For example, larger suppliers may have a better liquidity and credit position to carry the costs of hedging and can therefore undertake hedging more easily particularly for longer maturity forward contracts, which typically require higher margins and management of shaping costs.

However, no matter which hedging strategy is applied by a supplier, it is required to manage two main – and interrelated – types of risks: these are (i) volume risk and (ii) price risk.

## Bulb (Energy Limited)

Bulb Energy was by far the largest supplier to collapse in 2021 - it was different to some, especially other large competitors.

Firstly, Bulb's product offering differed from that of its competitors:<sup>25</sup>

*"To mitigate the risk of wholesale price movements, the Company operates a variable tariff model and, unlike most other energy suppliers, does not offer multiple different tariffs including fixed price tariffs (...)"*

Secondly, this difference in product offering also appears to have been mirrored in a difference in hedging strategy, when compared to its competitors. For example, Ofgem, during a consultation in August 2020, remarked:<sup>26</sup>

*"(...) Bulb unlike the other large suppliers, (...) did not attempt to align its hedging strategy with the observation window in the wholesale allowance, nor did it attempt to manage its hedging strategy in a similar way to the six large suppliers before we introduced the cap"*

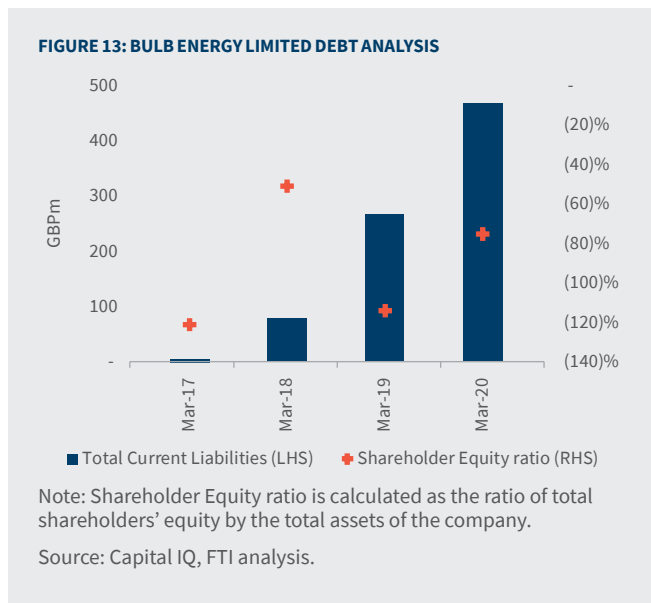
Lastly, Bulb was under financial strain prior to the market events of 2021. Whilst this is not uncommon for rapidly growing companies, it could have impacted its ability to weather the storm. Since March 2018, its total current liabilities increased from c. GBPm 79 to GBPm 466 in March 2020, while in the same period the amount of its total common equity collapsed from negative GBPm (26) to negative GBPm (223).<sup>27</sup>

24. Ofgem, Reviewing the potential impact of increased wholesale volatility on the default tariff cap: November 2021 policy consultation, 19 November 2021.

25. Bulb Energy Limited, Strategic Report for the year ended 31 March 2020.

26. Ofgem, Reassessing the wholesale allowance in the first default cap period: August 2020 decision, 5 August 2020.

27. Capital IQ.



**Volume risk**

The volume risk faced by suppliers can be broken down into three steps: (i) uncertainty in customer numbers, (ii) uncertainty in consumption volume per customer and (iii) uncertainty in the shape of the consumption. We will address these in turn.

**Uncertainty in customer numbers**

Customers are generally free to switch energy supplier with little notice, though they might incur a penalty charge if locked into a fixed tariff. To forecast future customer numbers, suppliers rely on historical switching behaviour together with other information, such as differences in tariffs currently offered by different suppliers.

It is particularly challenging for new, relatively small suppliers to forecast their customer numbers as they tend to have high growth rates and do not have sufficient historical data to draw trends.

In the current market environment switching behaviour has changed significantly, making forecasting of future customer numbers even more complex.

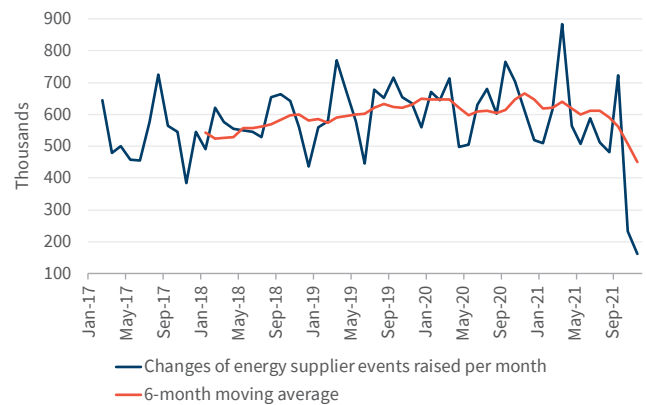
As previously mentioned, historically, fixed price tariffs were significantly cheaper than SVTs. This meant that customers, at least those who were engaged with their energy costs, would take out another fixed price contract at the end of their fixed price period – either with the same

supplier or another supplier. Other customers, who were less engaged, would automatically roll onto the SVT and buy their energy at higher prices.

Starting in summer 2021, the relationship between fixed tariffs and SVTs inverted, which is why today customers have a strong incentive to stay on the SVT and not take out a new fixed price contract.<sup>28</sup> This means that suppliers had likely assumed that a larger proportion of their customers would be on fixed-price tariffs than actually is the case.

This behavioural incentive can clearly be seen in switching numbers. November 2021 shows the historically lowest ever level, as shown in Figure 14.<sup>29</sup>

**FIGURE 14: NUMBER OF SWITCHES RAISED PER MONTH**



Source: ElectraLink Switchtrack, GB Monthly Switching figure.

**Uncertainty in consumption volume per customer**

Consumption behaviour can vary over time, for example, when appliances are upgraded, or LED lighting is introduced. Shorter-term changes also occur and can be significant, for example, when gas consumption is suddenly increased in response to a cold snap.

As suppliers need to forecast such consumption, they rely on various data sources to inform their view, including historical data, weather forecasts, and developments in energy-consuming technology.

One of the difficulties faced by suppliers recently is that consumption patterns have changed significantly in the last two years, limiting the usefulness of historical data. For example, remote working has significantly increased due to the Covid-19 pandemic, meaning that households consume more energy during the day.

28. Ofgem, Reviewing the potential impact of increased wholesale volatility on the default tariff cap: November 2021 policy consultation, 19 November 2021.  
29. ElectraLink, Switching requests plummet in October following supplier market exits, 16 November 2021.

### **Uncertainty in the shape of consumption**

Most residential customers are not price-sensitive, meaning they choose to consume energy when they want, no matter the current short-term wholesale market or imbalance prices. There is no price incentive for the majority of residential customers to shift consumption to times when the overall energy load is lower. Therefore, residential customers tend to have a well defined shape based on their typical usage. However, technological changes, such as electric cars or smart appliances can change the shape of customer demand.

Suppliers need to match their customers' energy demand at all time, not just on average. To manage this "shape risk", a supplier needs to forecast the customers' consumption pattern and hedge it as closely as possible in the market (e.g. by rolling into more granular forward contracts as they become available).

### **Price risk**

At a high level, the price risk suppliers face stems from their need to match their costs (i.e. the price at which they purchase from the market) to their income (i.e. the price at which they sell to their customers).

To manage this price risk, suppliers tend to hedge in wholesale markets. As the risk faced by suppliers depends on the pricing structure provided to customers, so must their hedging strategy. In other words, the hedging strategy depends on the structure of customers' tariffs and the forecasted proportion of customers on these tariffs. For example:

**Fixed tariffs** often "lock in" customers for a period of time, say 12 or 24 months. Suppliers might choose to hedge longer term for this customer segment as they cannot change the unit price of energy agreed with customers. Of course, whether a supplier chooses to do this in practice depends on their strategy, risk appetite and ability to fund hedges over long time periods (e.g. to meet collateral requirements).<sup>30</sup>

Conversely, suppliers are incentivised to hedge **SVTs**, which are protected by the Default Tariff Cap, along the theoretical hedge path assumed in the cap, i.e. the 6-2-12 hedge. Similar to the above, some suppliers might choose

to apply more complex hedging strategies (e.g. to optimise profits around the hedge path), depending on the level of sophistication of the hedging desks and risk appetite.

### **Conclusion**

As indicated above, volume and price risks are not independent of one another, which makes suppliers' risk management more complex. For example, during a cold snap, as demand increases, all suppliers may need to buy additional gas, thus driving up market prices.

Managing these risks requires access to sophisticated trading and modelling teams as well as good liquidity and credit. Larger suppliers often have an advantage in this regard when compared to smaller competitors. Smaller suppliers mitigate this by accessing third party's trading desks, arrange alternative commercial hedges (e.g. PPAs) or restrict their product offering.

### **Review of the cap's construction**

The difficulties faced by Britain's energy supply industry over recent months – especially the collapse of such a large number of suppliers – have called into question the construction of the Default Tariff Cap, and in particular whether suppliers are appropriately compensated for the risks they are facing. Ofgem has acknowledged this:

*The additional costs and uncertainties facing suppliers are likely to be beyond what is accounted for in the cap in the existing methodology.<sup>31</sup>*

Ofgem has issued a consultation on a short-term adjustment to the Default Tariff Cap on 19 November 2021 and a "call for input" document aiming at a wider adaptation of the cap's calculation methodology on 15 December 2021.

The November consultation is limited to an adjustment of the current methodology, of which one dimension is an assessment of whether recent developments in wholesale markets are worth introducing an adjustment to the cap. The call for input document discusses wider changes to the calculation methodology. We comment on these in turn.

30. For example, Ofgem comment in their May 2020 consultation that Bulb Energy's hedging strategy was not aligned with those of large legacy suppliers. Source: Ofgem, Reassessing the wholesale allowance in the first cap period – August 2020 decision.

31. Ofgem, Reviewing the potential impact of increased wholesale volatility on the default tariff cap: November 2021 policy consultation, 19 November 2021 and Ofgem, Adapting the Price Cap Methodology for Resilience in Volatile Markets, 15 December 2021.



### November Consultation - What are the adjustments?

As discussed in this paper already, wholesale costs are reflected in the cap in two ways: the core direct fuel allowance and the additional direct fuel allowance. It is only the latter, which is under consultation.

The additional direct fuel allowance is set as a fixed percentage of the core direct fuel allowance and was calibrated against historical data from 2014 to 2018, at the time the Default Tariff Cap was introduced. As it is a percentage figure, it uplifts proportionally with wholesale price levels.

Ofgem focuses on two key areas where the additional direct fuel allowance no longer reflects the risks faced by suppliers: (1) shaping and imbalance risks and (2) unexpected customer numbers on SVTs.

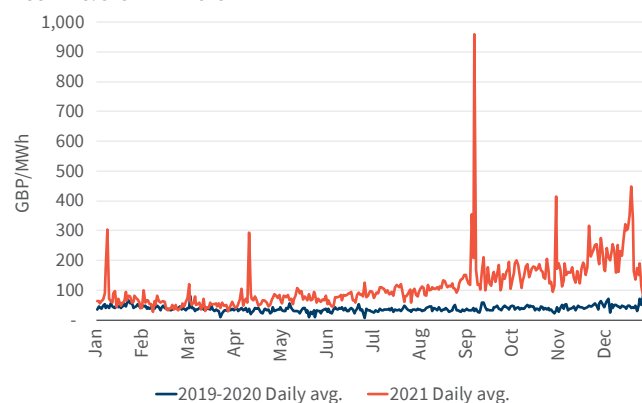
#### Shaping and imbalance risks

These risks, previously described in this article, are harder to manage in extreme and highly volatile markets, such as the GB gas and electricity markets.

Volatility in both electricity and gas forwards has increased from around 29% and 34% respectively during the calibration period of the additional direct fuel allowance to current levels of approximately 58% and 74%, respectively.<sup>32</sup>

Similarly, volatility in imbalance markets has also significantly increased, as can be seen in Figure 15.

FIGURE 15: SYSTEM PRICES



Note: Daily averages of half-hourly data.  
Source: Elexon, FTI analysis.

Such increased volatility in the market, combined with difficulties in forecasting customer consumption previously discussed in this article, have made it difficult for suppliers to manage shape and imbalance risks.

The Ofgem consultation seeks to identify if and by how much the allowance for these risks needs to be increased to be more reflective of suppliers' risks.

### Unexpected customer numbers on SVTs

As explained in the previous section on supplier's risk management, fixed price tariffs are hedged differently from SVTs. Therefore, the ability to estimate customer numbers on each tariff type is crucial for effective risk management. If more than expected customers move from fixed tariffs to SVTs, suppliers' hedges are no longer effective.

While suppliers might have been able to adjust their forecasts to a point when the inversion of fixed tariffs and SVTs happened this summer, suppliers would have already started to hedge for future consumption at this stage. In other words, they would no longer be able to fully adjust their hedges. Furthermore, it is likely difficult for suppliers to estimate how many customers would stay on SVTs and how long the inversion of fixed tariffs and SVTs would last.

### December Call for Input

Ofgem followed up on the November consultation with a Call For Input on 15 December 2021. Ofgem recognised that while the price cap has driven cost-cutting among suppliers and protected consumers from the full force of the sharply rising energy prices, the scale of the recent surge in energy prices forced poorly hedged suppliers out of the market and hit even well-hedged suppliers with hard to manage risks. To tackle the issue, Ofgem proposed three main options for bringing changes to the price cap methodology:<sup>32</sup>

**Option 1 – Status quo with re-opener** would retain existing methodology but give Ofgem enhanced ability (re-opener) to adjust the price cap in extreme circumstances outside the current six monthly cycle; a stronger version would define specific criteria in advance that would trigger a change in the price cap level (circuit breaker).

**Option 2 – Quarterly cap** would update the wholesale cost component every three months instead of six, using the existing methodology, except that instead of the current 6-month observation window, a 3-month observation window would be used.

**Option 3 – Fixed-term default tariff**, would introduce 6-month default SVT contracts. Customers on these new default contracts would pay an exit fee if they were to switch, except during a switch window when the contract renews. The wholesale cost component would be the observed prices of the 6-month hedges during the month preceding the start of the contract. The price of the contract would be fixed for six months, but a new price would be set each month for customers newly joining the tariff that month.

32. Volatility is calibrated from the month ahead contract prices of UK baseload electricity and NBP natural gas. Volatilities quoted refers to the average 90 day volatility in the 2014-2018 period and full year 2021, respectively.

33. Ofgem, Adapting the Price Cap Methodology for Resilience in Volatile markets, 15 December 2021.

Ofgem recognises tackling the risks associated with price volatility and volume risk involves significant trade-offs, in that these risks can only be reduced for suppliers by increasing the frequency of changing the price caps (i.e. Option 2) or by limiting consumer's ability to switch freely between tariffs (i.e. Option 3).

Ofgem also commented on a few other options, including monthly direct pass-through, relative price cap across the market, and relative price cap within suppliers. However, Ofgem believes that these measures would either not effectively tackle the issue or expose consumers to excessive price volatilities.

### **Concluding remarks**

The extreme increase in wholesale prices over the last few months has put a significant strain on energy suppliers, with many being forced to exit the market.

This calls attention to the likely need for a wider reform of the energy supply market in Britain. In addition to the adjustments or amendments to the Default Tariff Cap calculation methodology, increased regulatory oversight and other tools that could strengthen suppliers' businesses should be considered.

For example, the need to subject energy suppliers to capital requirements, stress testing or minimum liquidity thresholds is being discussed in the market. These tools are currently being applied to banks, especially those that are systemically relevant, to ensure that the events of the Global Financial Crisis are not repeated.

While such tools work to ensure that companies have sufficiently strong balance sheets and are sufficiently hedged to weather adverse market events, they can also impact competition as new market entry could be made more difficult.

The redesign of the British energy supply market will need to be carefully thought through to ensure that customers are protected, whilst forcing energy companies to implement robust risk management and hedging processes. Furthermore, this redesign should sustain competition and allow energy suppliers to earn a fair reward for the risks they are managing. Lessons can be learned from regulatory interventions in other sectors – such as financial services – to design policy tools that address the core issue whilst minimising unintended effects.

### How FTI Capital Market Services can help

We cumulate decades of experience in trading, investment management, valuation, risk management and capital and regulatory requirements covering a wide range of complex financial instruments and derivatives across all financial and energy asset classes.

Our team is composed of industry experts, who – having worked for global and leading financial institutions and energy companies – bring quantitative expertise in developing models and risk analytics in complex trading environments.

Having been involved in many precedents market turmoil, FTI has a long track record at providing

independent opinions in special situations, such as restructurings and transactions advisory, regulatory investigations and testimonies in the context of disputes, litigations and arbitrations.

We continue to work with our clients to create tailored and unique solutions which allow us to bring in our multidisciplinary experience.

We have over the years developed methodologies and tools to analyse complex issues and stand ready to support clients. FTI will continue to monitor market developments in order to best assist its clients when the need arises.

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