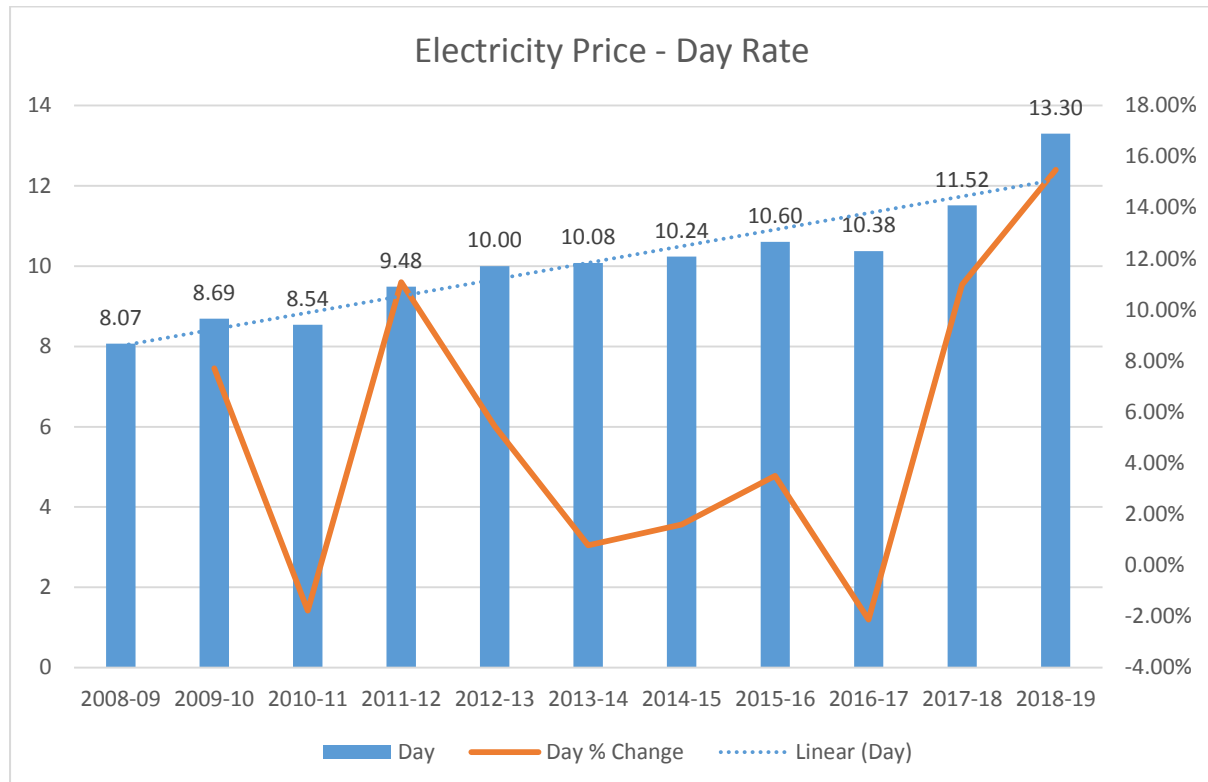


Background Information

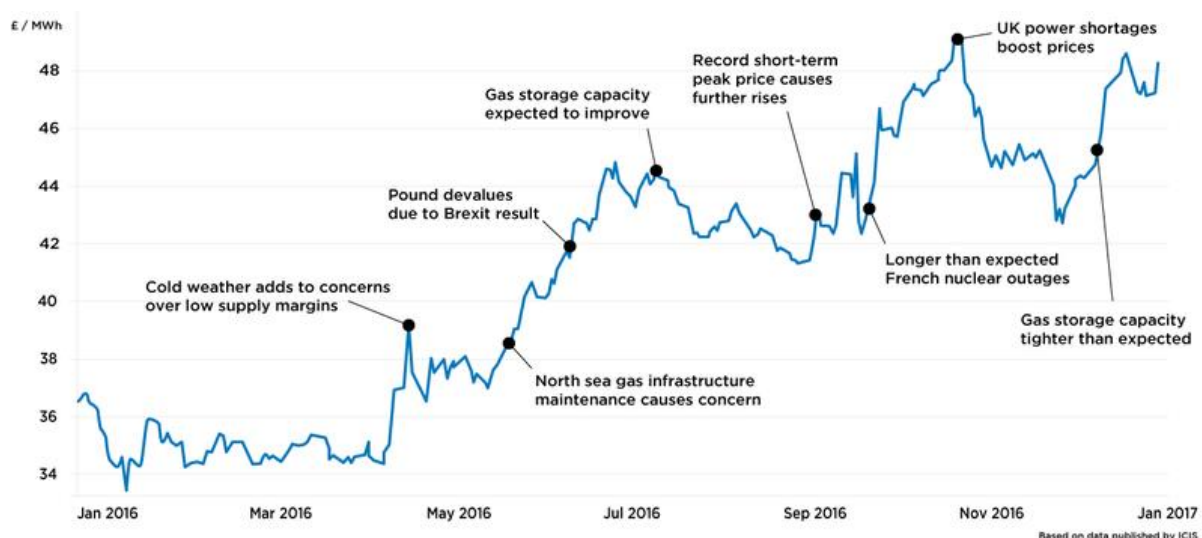
Recent trends in the UK have severely affected the wholesale price of electricity, as close as Jan 2016 the price per MWh was £34, the current price is £56, this along with increased charges by the Distribution Network Operator (DNO) for using the supply grid network, has seen the unit price for electricity that the end user pays rise considerably.

Unit Price

The following table tracks the change in unit rate that Nottingham City Council has paid over the last 10 years



The market since 2016 has seen the wholesale price rise by 64% as at today, and over the last 6 months the price has risen by 21%, the following illustration shows the rise in wholesale electricity price since January 2016



Source: <https://octopus.energy/blog/state-wholesale-energy-prices-2017-and-what-it-means-for-bills/>

Aligned to this has also seen an increase in baseload rates (Baseload power refers to the minimum amount of electric power needed to be supplied to the electrical grid at any given time. Day to day trends of power usage need to be met by power plants, however it is not optimal for power plants to produce the maximum needed power at all times.) since the commencement of our current contract in October 2016

	Rise since 24/5/19
1/10/16	39%
2/10/17	28.5%

Reasons for the increase

The increase during this time was down to the uncertainty following the EU referendum, and the volatility in the market after the US presidential elections in Nov 2016.

In addition, political situations in Russia, Ukraine, Iraq, and Syria over recent years have threatened the gas pipelines to the UK, which in turn has increased the wholesale price of gas, which due to the closure of UK coal fired power stations, gas is now the major feedstock for power generation.

The current malaise of government policy on energy has also seen suppliers of power nervous of the future, which also leads to a volatile market.

The European energy system is also recovering from the Winter of early 2018. One of the worst February to April on record, emptied all of the European gas storage, which is now constantly injecting to re-fill, and has tested market supplies at peak, which in turn increases the forward market risk premium

The global oil market is also being squeezed by Opec, made worse by situations in Venezuela and Iran, oil has been up to a 4 year high at \$80 last week. It has a link to European gas prices through oil indexed contracts, as well as general trader sentiment

Furthermore, prices have increased due to the DNO increasing the non-commodity costs for the distribution of electricity on the network, this particularly effected street lighting unit rates, which saw an increase of 44% between 2016 and 2017.

Recent Rises

As referred to earlier recent increases in the UK wholesale costs of Electricity have risen from £46.00 per MWh in October 2017 to currently £56.00, which represents a 21% increase since the start of our 12 month fixed price since.

The following illustration shows the recent rises in the market



Source: <https://www.apolloenergy.co.uk/news/energy-market-analysis-24-05-2018>

Work of Energy Services

Energy Services has driven down the consumption profile of the NCC operational estate, and since 2014-15, consumption has fallen by 10%, which based on the current average unit rate represents a reduction of £532,000 over BAU on the budgets that Energy Services control.

Year	Reduction
2014-15	10%
2015-16	6%
2016-17	4%

The increase in the wholesale cost of electricity has seen a budget pressure of over £800,000 across energy services budgets, this despite the reduction in electricity consumption across our estate