CATALYST ENERGY SOLUTIONS

Energy Element / November 2019

Seasonal contracts fall amid record LNG imports

The majority of power and gas contracts declined in October, with a comfortable supply outlook, despite some near-term contracts rising as we head into winter.

Day-ahead gas prices rose 4.0% to average 26.4p/th in October. Prices recovered from a 10-year low in September as colder weather saw increased demand. However, price gains were capped by continued strong LNG-send-out, which reached an eight-year high of over 110mcm/d on 31 October. November 19 gas inched up 0.1% to average 44.7p/th, despite LNG floating storage near maximum levels. Seasonal gas contracts continued to decline, dropping 3.3% on average. The steady decline of seasonal gas contracts can be attributed to the forecast of high LNG send-out, with European LNG storage at maximum levels and an absence of sufficient demand in the market.

Day-ahead power gained 1.3% to average £37.8/MWh in October. This was despite the contract falling mid-month as high wind speeds saw a jump in wind generation. November 19 power fell 7.0% to average £48.5/MWh, dropping to a low at the end of the October of £44.6/MWh. Seasonal power contracts moved down 2.7% on average, with summer 20 power declining 3.4% to £46.9/MWh. The summer 20 power contract hit a near six-month low of £45.5/MWh on 31 October.

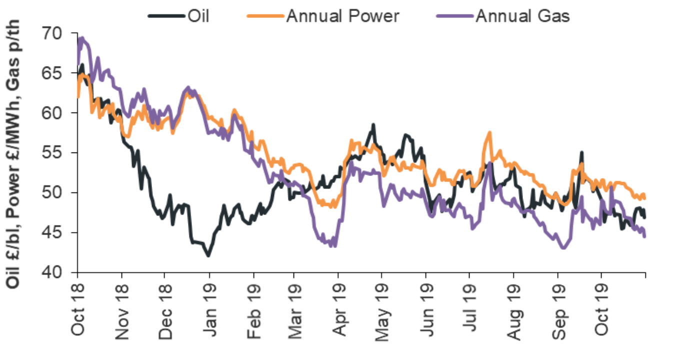
Oil falls on quick recovery after drone strikes, election sees uncertainty for carbon

Brent crude oil fell 4.5% to average $59.5/bl in September. Prices dropped to $57.5/bl on 3 October as Saudi Arabian oil production recovered faster than expected following drone strikes on production facilities. Oil prices were also influenced by the wavering optimism over US-China trade talks, with some progress reported at the end of October, and high US crude inventory levels. Some price support was seen from the possibility of deeper cuts to be made by OPEC.

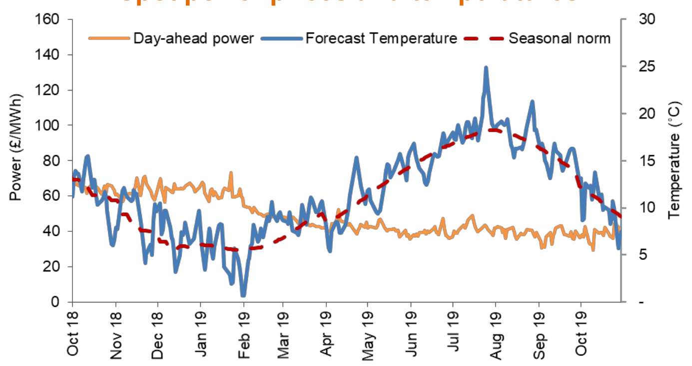
EU ETS carbon prices fell 4.7% to average €24.6/t in October, as prices dropped to a six-month low of €22.4/t early in the month with fears of a no-deal Brexit. Prices recovered later in the month, reaching a high of €26.0/t as a Brexit deal was agreed between the EU and UK; however, news of a general election continued to cause uncertainty.

API 2 coal prices dropped in October, slipping 0.6% to average $66.9/t, with news of possible closures to South Korean coal-fired plants over the winter. This was despite several Indian coal mines closing for monsoon season. The Trump administration also announced late in October that they were to undo President Obama's regulations on the limits on the number of toxins from coal-fired plants.

Crude oil and annual wholesale gas and power prices



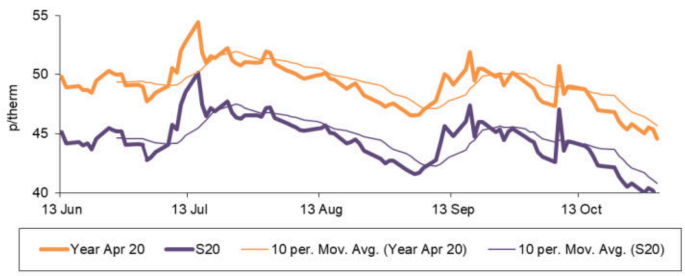
Spot power prices and temperatures



The month-ahead: Cooler temperatures but comfortable supplies

Following forecasts of below seasonal normal level temperatures in November, gas prices will likely be supported in the month-ahead. However, any gains will be capped as 11 LNG tankers are scheduled to arrive in the first two weeks of November, adding to the already oversupplied system. Oil prices are expected to increase with the expected incoming OPEC cuts to production to reduce global supply. Power prices should follow gas prices higher though could be limited amid rising levels of renewables generation.

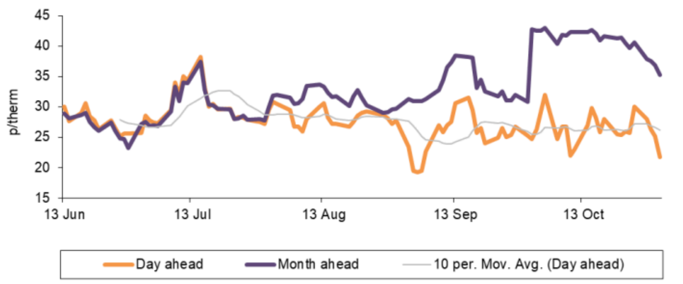
Annual gas prices



All seasonal gas contracts fell in September, down 3.3% on average, continuing the fall of the previous month. Summer 20 gas was 4.2% lower, averaging 42.5p/th. Winter 20 gas was 3.2% lower to finish the month at 52.0p/th.

The annual April 20 gas contract dropped 3.7% to average 47.1p/th, 19.5% lower than in October 2018 when it averaged 58.7p/th.

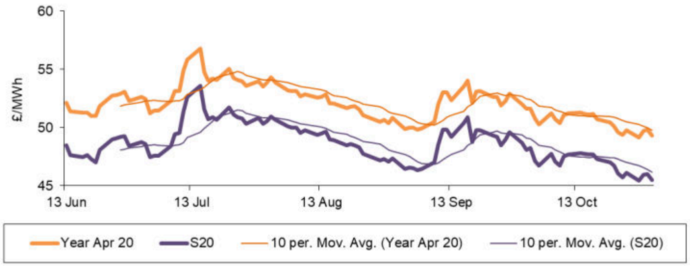
Spot gas prices



Day-ahead gas prices rose 4.0% to average 26.4p/th in October. The contract dropped to a near two-month low of 21.8p/th on 31 October. However, the November 19 gas increased, rising 0.1% to average 44.7p/th.

Prices recovered from a 10-year low in September as colder weather saw increased demand. However, continued strong LNG-send-out capped price gains, which reached an eight-year high of over 110mcm/d on 31 October. LNG send-out was tested by high spot-charter rates in Asia, but near-maximum LNG storage capacity in Europe could see prices fall.

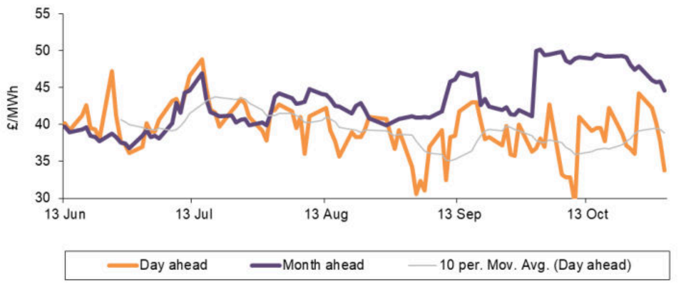
Annual power prices



Seasonal power contracts moved down 2.7% on average, with summer 20 power declining 3.4% to £46.9/MWh. The summer 20 power contract hit a near six-month low of £45.5/MWh on 31 October.

The annual April 20 power contract continued to fall, decreasing 2.8% to average £50.5/MWh. This was 8.4% below October 2018 when the contract was at £55.2/MWh.

Spot power prices



Day-ahead power gained 1.3% to average £37.8/MWh in October. The contract reached a high of £44.3/MWh on 25 October as forecasts showed an expected drop in temperatures. November 19 power fell 7.0% to average £48.5/MWh, dropping to a low at the end of the October of £44.6/MWh.

Day-ahead prices rose on average due to an increase in gas prices, despite the contract falling mid-month as high wind speeds saw a jump in wind generation.

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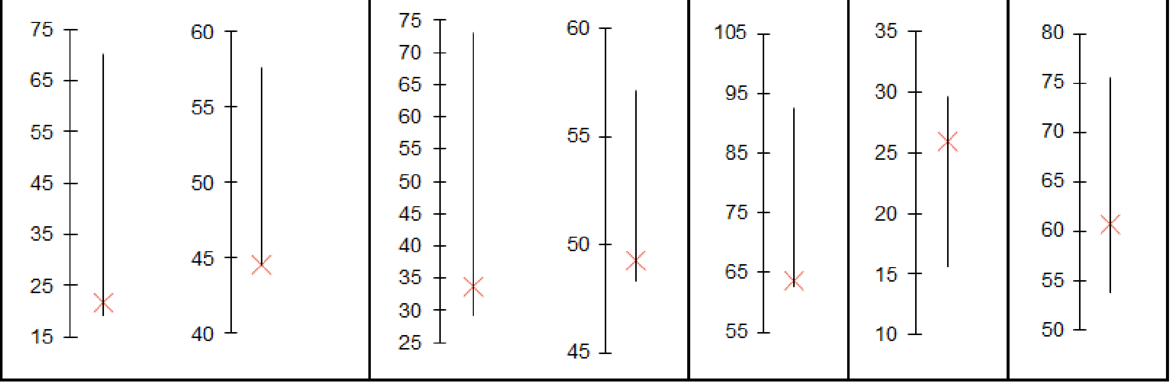
Key market indicators: 31/10/2019

		Gas (p/th)		Electricity (£/MWh)		Coal	Carbon	Brent crude
		Day-ahead	Year-ahead	Day-ahead	Year-ahead	($/t)	(€/t)	($/bl)
This month	31 Oct 19	21.75	44.56	33.75	49.31	63.60	25.97	60.69
Last month	30 Sep 19	25.30	49.38	36.30	52.02	66.75	25.19	61.05
Last year	1 Nov 18	61.50	56.11	60.50	53.56	92.50	15.60	74.49
Year-on-year % change		(65%)	(21%)	(44%)	(8%)	(31%)	66%	(19%)
Year high		70.00	57.63	73.00	57.14	92.50	29.66	75.54
Year low		19.30	44.56	29.25	48.38	62.75	15.60	53.82

This table shows the price at the end of this month compared with prices from the previous month and year. The graphs show the position of this month's prices with a red X and the range of prices over the year is represented by the black line.



Commodities

Carbon: EU Emissions Trading Scheme carbon is quoted as over-the-counter (OTC) latest opening prices. All carbon prices are in euros per tonne (€/EUA).

Coal: Coal is quoted as OTC latest opening prices. All coal prices are in US dollars per tonne ($/t).

Electricity: UK power base-load and peak-load are quoted as OTC latest opening prices. All UK electricity prices are in pounds per megawatt hour (£/MWh).

Gas: UK National Balancing Point (NBP) gas is quoted as OTC latest opening prices. All UK gas prices are in pence per therm (p/th).

Oil: Brent crude oil is quoted as OTC latest opening prices. All Brent crude oil prices are in US dollars per barrel ($/bl).

Language/ terms

Bearish: A bearish market shows a general decline in prices over a period of time.

Bullish: A bullish market shows a general increase in prices over a period of time.

Curve: A graph of forward prices over a future time period.

Margin: The indicated UK imbalance of a given settlement period. It is the difference between the sum of the indicated generation available, and the national demand forecast made by National Grid.

Over-the-counter (OTC): The trade of a commodity directly between two parties, often on standardised terms.

Spark/ Dark spread: The theoretical net income of a gas/ coal-fired power plant from selling electricity having purchased the necessary fuel. The clean spark/ dark spread is this net income adjusted for the cost of carbon.

Disclaimer

Ofgem publishes state of the market report

On 3 October Ofgem released its state of the market report for 2019, which provides a comprehensive overview of the retail and wholesale energy markets.

Overall the retail market has seen concentration continue to fall despite several supplier failures. According to the report 12 active suppliers left the market between June 2018 and June 2019, with nine through Ofgem's Supplier of Last Resort process. In addition to acquiring customers via switching, medium suppliers have absorbed the majority of the customers from the suppliers that ceased to trade. This has resulted in the market becoming less concentrated as medium suppliers grow and exert more competitive pressure on the large suppliers. Large supplier profit margins fell to a nine-year low of 3% on average in 2018.

Ofgem expressed concerns over the "big increases" in the number of Ombudsman cases relating to small suppliers. In Q119, the Energy Ombudsman accepted more than 100 cases per 100,000 small supplier customer accounts, compared to around 20 cases in Q117. The reliability and speed of switching was also a concern, despite the record high achieved in April 2019. It found that average switching times remain around 15 days or more.

In the non-domestic retail market, Ofgem found that microbusinesses on average pay much more per unit of energy than other businesses. In Q119, very small businesses paid on average nearly twice as much for gas and 30% higher for electricity. Ofgem is currently working on its *Microbusiness Review Action Plan*, due to be published in the winter – this evaluation of the market matches up with the regulator's argument for an intervention. The smallest microbusinesses, which account for around 40% of meter points, also continue to have the lowest proportion of customers on negotiated contracts – 65% in gas and 62% in electricity in Q119 – a slight increase compared to 2018. However, the proportion of customers on negotiated contracts was between 76% and 87% for microbusinesses with higher consumption levels.

Ofgem concluded that wholesale price changes, have been largely as a result of global factors with British wholesale electricity and gas markets working "reasonably well". Electricity wholesale prices fell in 2019 and the number of generators increased, reducing the opportunity for any generator to exert market power or make excessive profits. But wholesale electricity markets are still moderately concentrated compared to the wholesale gas market with a large number of gas producers enabling greater competition in the market.

Ofgem

Government halts fracking in England

The government announced on 2 November that it has halted fracking in England. The decision was based on the conclusion reached by the Oil and Gas Authority's report that it is not possible with current technology to accurately predict the probability of tremors associated with fracking. This, as well as the disturbance caused to residents living near Cuadrilla's Preston New Road site in Lancashire, convinced the government to announce a moratorium on fracking until compelling new evidence is provided.

Business and Energy Secretary Andrea Leadsom said: "Whilst acknowledging the huge potential of UK shale gas to provide a bridge to a zero carbon future, I've also always been clear that shale gas exploration must be carried out safely. In the UK, we have been led by the best available scientific evidence, and closely regulated by the Oil and Gas Authority, one of the best regulators in the world." She continued: "After reviewing the OGA's report into recent seismic activity at Preston New Road, it is clear that we cannot rule out future unacceptable impacts on the local community."

Business, Energy and Clean Growth Minister Kwasi Kwarteng said: "The Committee on Climate Change's advice is clear that natural gas will continue to have a key role to play as we eliminate our contribution to climate change by 2050, including for the production of hydrogen. However, following our action today, that gas will need to come from sources other than domestic fracking."

In response to the government's written ministerial statement, Cuadrilla will continue to work with the OGA to provide further detailed data (including data from the PNR2 well) to address concerns so that the moratorium can be lifted and the highly prospective Bowland gas resource further appraised and developed. The company also added that it is in agreement with government in that natural gas will play an important role in providing energy to the UK.

Government   Cuadrilla

Capacity Market reinstated

The European Commission (EC) announced on 24 October its decision to approve the GB Capacity Market (CM) scheme, following a several-month-long investigation. The EC "did not find any evidence that the scheme would put demand response operators or any other capacity providers at a disadvantage with respect to their participation in the scheme."

The EC also found that, considering recent market and regulatory developments (including the new EU Electricity Regulation), and other issues identified during the UK's July five-year review of the CM, the UK government is committed to improving the scheme for the future. These improvements concern:

- The lowering of the minimum capacity threshold for participating in the auctions
- The direct participation of foreign capacity
- The participation rules for new types of capacity
- The access to long-term contracts
- The volume in the year-ahead auction
- The compliance with the new Electricity Regulation

Business Secretary Andrea Leadsom published a written ministerial statement, welcoming the decision. She said that the government awaited the EC's full decision, but expects that its decision means the government will be able to:

- Restart the mechanism for making payments to capacity providers, including the c.£1bn of deferred payments that have been suspended because of the standstill period as well as future capacity payments. Most of the back-payments will reach capacity providers in January 2020.
- Invoice suppliers for the supplier charge relating to the standstill period which will be used to fund the deferred capacity payments. The government has been engaging with suppliers during the standstill period to ensure they have been setting aside funding to meet this "substantial post-standstill invoice".
- Confirm that the conditional capacity agreements awarded in the replacement T-1 auction, held in July 2019, have become full capacity agreements. This will ensure we have in place all the capacity needed to ensure security of supply this winter.
- Confirm the three capacity auctions scheduled for early 2020 will take place. Leadsom said that these will secure most of GB's capacity needs out to 2023-24.

Additionally, Leadsom said that BEIS would shortly consult on arrangements to implement the CM improvements highlighted by the EC.

EC   Parliament

Prime Minister to chair new Climate Change Committee

Prime Minister Boris Johnson announced on 17 October that he will chair a new climate cabinet committee, which will look to drive further action across government to protect the environment, reduce emissions and improve air quality.

The committee will bring together ministers responsible for domestic and international climate change policy and provide a forum to hold departments to account for their actions to combat climate change. The Committee will also oversee the UK's preparations to host the UN's major climate summit COP26, in November 2020, and include representation from the departments responsible for taking the agenda forward.

Shadow Business Secretary Rebecca Long-Bailey criticised the decision: "There is possibly no one more ill-suited to this role than a Prime Minister with a history of climate denial, from a Tory government that has dismantled the UK's solar and onshore wind industries, overseen a collapse in household energy savings measures and stalled the UK's progress cutting emissions." The Renewable Energy Agency (REA) welcomed the announcement, adding: "We will be writing to request a joint meeting between No 10, the Cabinet Office and BEIS to discuss the cabinet committee on climate change.

Government   Labour   REA

Labour proposes new decarbonisation plan for 2030

On 24 October, Labour published its plans for decarbonising the UK by 2030 in a new report. Labour's main goals are to improve energy efficiency, decarbonise heat and electricity, all while balancing supply and demand.

Labour's would look to reduce heat demand by 20% and electricity demand by 11%. A zero-carbon homes standard would be launched for all new buildings from 2020. It would retrofit homes to EPC level A or B by 2030, making EPC C level the minimum. The party would also ensure all existing public buildings reach EPC A or B by the mid-2020s, with EPC C required as a minimum energy-efficiency standard. Additionally, Labour would ensure all existing commercial and industrial buildings reach EPC A or B by the mid-2020s, requiring EPC C as a minimum standard.

Labour would also set a target of 50% renewable and low-carbon heating by 2030. The party would aim to heat all new buildings by renewable or low-carbon energy from 2020. For existing buildings, Labour would deploy "quick-win heating solutions," including: the removal of coal and oil heating; biomethane injection into the gas grid; solar hot water; and the use of waste heat via district heating. Labour would also convert all existing buildings using electric heating to renewable or low-carbon electric heating. Labour would also convert buildings using natural gas for heating to use heat pumps and hybrid heat pumps. To decarbonise electricity, Labour would set a target of at least 90% of direct (non-transport) electricity demand being met from renewable and low-carbon sources by 2030. This would require an expansion of renewable generation:

- Two and a half times today's onshore wind capacity by 2030, or 30GW
- Nearly a seven-fold rise in the offshore wind capacity by 2030 (52GW)
- Almost triple solar PV capacity, to 35GW
- Trial and expand tidal energy to around 3GW of capacity

Labour would remove current barriers to onshore wind development. For solar, the party would allow it into the Contracts for Difference auctions, reduce barriers for the use of energy storage and expand solar power purchase agreement by removing the Climate Change Levy.

Labour

Government consults on minimum energy efficiency standards

The government is seeking views on the proposed targets for the minimum energy efficiency standard for privately rented non-domestic buildings by 2030. It launched a consultation on 15 October and looks to provide certainty to non-domestic landlords, businesses and the energy efficiency market. Business and Industry are responsible for over a quarter of UK emissions, a proportion of which are created through businesses' demand for energy. The majority of that energy is used to heat the buildings occupied: of the total energy consumed by UK businesses in 2014-15, 52% was used in maintaining the non-domestic building stock. Additionally, landlords and tenants "often do not have aligned incentives to improve the performance of the building." Providing a decade lead-in time for landlords to improve their property will minimise disruption, alongside strengthened PRS regulations which will encourage the energy efficiency market to innovate. The closing date for all feedback is 7 January 2020.

Government

Businesses were fined up to 2.8bn for environmental offenses in 2018

The Environment Agency (EA) has released its annual report regarding the environmental performance of regulated businesses in England. Published on 25 October, *Regulating for People, Environment and Growth 2018* shows the majority of England's regulated businesses are working to protect the environment. In 2018, 533 serious pollution incidents were recorded, 14% less than in 2008 but 27% more than in 2017. Less than half of the incidents were caused by industries that the EA regulates. The report notes that the majority of British businesses operating with environmental licenses are exploring ways to reduce emissions. Emissions from industry have been cut in half in the last 10 years and compliance rates of energy efficiency and emissions trading schemes are above 98%. 92% of operators also demonstrated good compliance. Nonetheless, the report found that in 2018, courts fined businesses and individuals almost £2.8mn for environmental offences, with 52 enforcement undertakings completed.

Environment Agency

EDF Renewables sign three corporate PPAs

EDF Renewables has signed three corporate power purchase agreements (PPAs) with Tesco. Announced on 28 October, the three contracts will enable 60MW of renewable power to be supplied from 17 roof-mounted solar installations and two Scottish onshore wind farms. The new projects also contribute to the EDF Group's Cap 2030 strategy, which aims to double its renewable capacity globally between 2015 and 2030, increasing to 50GW net.

EDF Renewables UK will install 15,000 roof-mounted solar PV panels on 17 Tesco stores across England, totalling 5MW of installed capacity. Construction is underway and is due for completion by the end of 2020. To support these PPAs, EDF Renewables will also build two wind projects: the Burnfoot East wind farm project, which will have three turbines with a total installed capacity of 10.8MW, as well as a further wind farm in Scotland with a capacity of around 43MW will be built in Scotland.

EDF Energy

Government response: energy efficiency building to net zero

The government has responded to the Commons BEIS Committee's Energy efficiency: building towards net zero: Twenty-first Report of Session 2017–19 report. The report made 25 recommendations and drew the conclusion that a major upgrade of the energy performance of the UK's building stock will be a fundamental pillar of any credible strategy to reach net zero, address fuel poverty and to cut energy bills. The report also concluded that government is presiding over failed policy which needs to be revived to meet energy efficiency targets.

The government response, published on 30 October, highlighted several actions it has taken/will takeTo build on existing programmes and policies that incentivise energy efficiency such as the Climate Change Agreements scheme and the Energy Savings Opportunity Scheme.

- Introduced a new Streamlined Energy and Carbon Reporting framework under the Companies Act from April 2019 to make it easier for businesses to identify where they can save energy and reduce emissions and disclose action taken.
- Launched the £18mn Industrial Heat Recovery Support programme to raise industry confidence in investing in opportunities for recovering and reusing waste heat from industrial processes and increase the deployment of recoverable heat technologies.
- Announced a £315mn Industrial Energy Transformation Fund to support businesses with high energy use to cut their bills and emissions through increased energy efficiency and help them transition to a low carbon future.
- Committed £6mn to the current Boosting Access for SMEs to Energy Efficiency (BASEE) competition to develop new business models or solutions to reduce costs, simplify processes and encourage the take-up of energy efficiency by SMEs.

There are also plans to consult on tightening non-domestic minimum energy efficiency standards and to continue work to develop an energy efficiency scheme for SMEs.

Parliament

CBI: Labour's nationalisation plan

Labour's nationalisation plans would cost £196bn, according to new analysis by the CBI published on 14 October. The report calculated the figure by defining nationalisation as the acquisition by the government of the following:

- The regional water and sewage companies and all seven of the water only companies
- The national grid, transmission networks, distribution network operators and gas distribution networks
- The rail rolling stock
- The Royal Mail

CBI said the confidence of many international investors in the UK would be severely hit should Labour refuse to pay full market value for the industries.

CBI