Contents

Macro Economics ........................................................................................................................................2
Oil Market: Brent $49.04/bbl, WTI $45.94/bbl .......................................................................................3
European Gas Market NBP Price: 1.262 pence/kWh .............................................................................4
UK Electricity Market Average Buy Price: £39.55/MW ............................................................................5
Coal Buy Price: £27.71/tonne .....................................................................................................................6
Carbon Buy Price: €8.57/tonne ...................................................................................................................7
News .........................................................................................................................................................7
  National Grid gets back-up power supply ...............................................................................................7
  Energy minister expects UK to miss renewables target ...........................................................................8
Macro Economics

<table>
<thead>
<tr>
<th>Currency</th>
<th>Closing Rate</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUR</td>
<td>1.4063</td>
<td>4.07%</td>
</tr>
<tr>
<td>USD</td>
<td>1.5340</td>
<td>1.57%</td>
</tr>
</tbody>
</table>

United States Dollar

The dollar has given up some of its post FOMC gains and opens lower vs. both GBP and EUR. GBP/USD trades at 1.5340. It fell to a low of 1.5245 yesterday following the release of US Prelim GDP data. The data wasn’t that far off of market expectations with Q3 GDP coming in at 1.5% vs. 1.6%, and so the reaction in the FX market was fairly muted. Pending Home Sales, released a bit later in the month, were weaker than expected. In other news the Bank of Japan announced that they’ll be leaving monetary policy on hold. Governor Kuroda said in his press conference that there was no proposal to ease further either. It’s seen USD/JPY drop back a bit but FX ranges generally have remained quite steady.

Blizzard anticipates a range of 1.5280 to 1.5390

Euro

EUR/USD dropped to 1.0925 in the early New York session but it’s pushed slowly higher since and opens in London at 1.10. It did however get some support from stronger regional inflation data from Germany and has continued to press higher vs. a weakening dollar. Early data out from Europe hasn’t been all that impressive though with German Retail Sales printing flat vs. forecasts for 0.4% and French Consumer Spending and Spanish Flash GDP both printing below expectations. GBP/EUR has held steady in the meantime and trades at 1.3930.

Blizzard anticipates a range of 1.3880 to 1.4000
Close to close at $49.59/bbl for Brent ICE (This morning at $49.04/bbl)

Why?
Crude prices are still in the move of their rebound with Brent now trading above $49.5/b and WTI back to $46.3/b. The Bakker Hughes rig count supported prices Friday afternoon before Chinese indicators fueled concerns on demand over the weekend. Crude prices are in the upper part of the trading range but still lack direction.

Main events:
The weekly rig count by Baker Hughes showed American oil drillers cut active rigs by -16, the worst in 6 weeks, bringing the total down to 578, a new multi-years low (lowest since June 2010, during the rise of shale). This further decline in the US oil rig count could indicate that domestic crude production could drop in coming months and it could temper the current respite in US output fall.

At the opposite, Chinese indicators released over the weekend showed activity in the manufacturing sector contracted in October for a third straight month: the Caixin/Market China Manufacturing Purchasing Managers' Index (PMI) edged up to 48.3 in October from 47.2 in September (see daily eco for details). The real health of the Chinese economy remains the main concerns for demand and continues to weigh on crude markets, capping any gains. Other indicators for leading Asian economies were mixed with South Korea and Taiwan figures pointing to further slowdown, although data improved from Japan.

According to the national Iranian news agency Shana, Iran will officially notify producer group OPEC in December of its plans to raise its crude oil output by +500 kbd as soon as the sanctions are lifted. The oil minister Zaganeh added that he wants the cartel to respect the 30 Mbd ceiling which they have
agreed. It seems talks will be very friendly in Vienna on Dec-4 with hawkish members seeking prices support by output cuts and Gulf monarchies with no desire to do so and change their strategy… Iran aims to raise oil output by +500 kbd as soon as sanctions are lifted in early 2016 and by 1 Mbd in March 2016.

Non-commercial actors decreased their net long position on NYMEX once again for the fifth straight week, down to 275 Mb, its end of August level.

**Outlook:**
Brent prices are currently on an upward trend within their $47-50/b trading range but they have almost reached the resistance (Brent just 50 cents below $50/b): we see no reason they break this level as we see no fundamentals to support them. Prices could keep on rising but should then drop when arriving to $50/b. So we have stable to bearish views for next month.

**European Gas Market NBP Price: 1.262 pence/kWh**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Day Ahead (p/therm)</td>
<td>37.00</td>
<td>↓</td>
</tr>
<tr>
<td>December 2015 (p/therm)</td>
<td>39.45</td>
<td>↓</td>
</tr>
<tr>
<td>Summer 2016 (p/therm)</td>
<td>36.03</td>
<td>↓</td>
</tr>
</tbody>
</table>

**UK IPE GAS PRICE**

Close to close at 17.93EUR /MWh for TTF CAL 16 (This morning at 17.78EUR /MWh)

**Why?**
Expectations of a flurry of LNG deliveries over the next few days in the UK and warm weather forecasts dragged NBP spot prices to new record lows. Indeed, four LNG tankers are currently scheduled to berth in British terminals between 1to6 November compared to only one a year ago at the same period. UK residential demand dropped to a two-week low at 119 mm cm, 26 mm cm below seasonal norms on Friday. Consequently, NBP day-ahead prices shed almost 1.3 p/therm at the close (-3.3%), just above 37 p/therm at the close which was their lowest level since August. On the near-curve, NBP ICE December 2015 prices, the new front-month contract, were also down at the close: - 0.66 p/therm (-1.65%), to 39.45 p/therm

**Main Events:-**
Continental prices followed the bearish trend at the NBP despite a drop in Norwegian supply due to an unplanned outage at the Asgard field. An increase in storage withdrawals helped to balance continental systems which remained well-supplied. Russian gas imports were steady at 320 mm cm/day. Above-average temperature forecasts and a comfortable LNG delivery schedule in France (four LNG deliveries at Montoir and Fos expected between 2-6 November) exerted bearish pressure on spot and curve contracts. TTF ICE December 2015 prices lost 26 euro cents at the close (-1.43%), to €18.25/MWh. Further out on the curve, TTF ICE Cal 2016 prices dropped to a new all-time low at the close, resisting an upward move in the oil market: -18 euro cents (-1%), to €17.928/MWh.

**Outlook:-**
Temperature forecasts were revised upwards once again over the weekend. Hence, gas demand is expected to gradually decrease throughout despite the earlier peak. This is likely to weigh on spot and near-curve contracts. Moreover, net storage injections increased as temperatures were very mild across Europe, which could pressure near-curve maturities. On the supply side, Norwegian production is up and free of constraint. Far-curve contracts could follow the bearish trend at the front and hit new lows as oil prices should not be supportive.

**UK Electricity Market Average Buy Price: £39.55/MW**

<table>
<thead>
<tr>
<th></th>
<th>Avg Buy Price (p/kWh)</th>
<th>Trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day Ahead</td>
<td>3.955</td>
<td>↓</td>
</tr>
<tr>
<td>December 15</td>
<td>3.955</td>
<td>↓</td>
</tr>
<tr>
<td>Q1 2016</td>
<td>4.040</td>
<td>↓</td>
</tr>
<tr>
<td>Summer 2016</td>
<td>3.810</td>
<td>↓</td>
</tr>
<tr>
<td>Winter 2016</td>
<td>4.195</td>
<td>↓</td>
</tr>
<tr>
<td>Summer 2017</td>
<td>3.710</td>
<td>↓</td>
</tr>
<tr>
<td>Winter 2017</td>
<td>4.120</td>
<td>↓</td>
</tr>
<tr>
<td>Summer 2018</td>
<td>3.760</td>
<td>↓</td>
</tr>
</tbody>
</table>
Close to close at £39.55/MWh for CAL 16

Why?
After a week of tensions and increased price pressure to the upside last week, we may be ahead of a downward correction. On the prompt, markets welcome a forecasts showing wind generation should finally pick up by the end of this week and be more ample and more in line with seasonal averages.

Outlook:-
The bearishness is not only seen on power-related fundamentals but also on fuels. Gas TTF year-ahead contracts lost €0.1/MWh this morning and are being traded at €17.85/MWh. Mild weather and very healthy LNG supplies probably weigh down on prices.

Coal Buy Price: £27.71/tonne
Carbon Buy Price: €8.57/tonne

News

National Grid gets back-up power supply

The UK power industry has provided more electricity generation after a request from the National Grid.

There had not been a risk of electricity supplies being disrupted, it said.

National Grid earlier issued a Notification of Inadequate System Margin (NISM) as a result of multiple energy plant breakdowns.

"The market duly responded to this signal," the company said.

The National Grid described the NISM as "one of the routine tools that we use to indicate to the market that we would like more generation to come forward for the evening peak demand period".

An additional 500 megawatts had been requested between 16.30 and 18.30 on Wednesday.

The company last issued a NISM in February 2012, and before that in 2009.

When a notification is issued, generators with spare capacity can respond quickly, ramping up supply within the system.

The National Grid said that if this failed to happen it had standby contracts with some gas-fired stations.
It also has "demand side management" contracts with businesses, which allow the grid to ask them to reduce energy consumption at specified times.

"More generation came forward and about 40 MW of demand side balancing reserve was ordered so the NISM has been withdrawn," National Grid said.

The National Grid plans to increase significantly its use of demand side management to keep the system in balance.

**Lower supplies**

Last month, the National Grid said gas supplies for the winter months were "comfortable", while electricity supplies were "manageable".

It said the supply of electricity exceeded demand by 5.1%, but only after additional supplies had been secured, such as paying plants to remain on standby.

This is the lowest rate in seven years.

There have been some concerns expressed that the UK could suffer from blackouts as a result of short supplies, brought about in large part from the closure of a number of power stations that have come to the end of their working lives.

Brian Strutton from the GMB union said: "The UK government and National Grid are far too complacent about the risks of widespread power blackouts."

However, the National Grid and many experts have dismissed these concerns.

There has been one generation-related electricity outage in the past 10 years, according to a study commissioned by the Energy and Climate Intelligence Unit.

**Energy minister expects UK to miss renewables target**

Letter from Amber Rudd revealing UK is forecast to fall 3.5 percentage points short of target exposes ‘dark side of government energy policy’, says Greenpeace.

The energy secretary, Amber Rudd, has been accused of misleading the public after a leaked letter revealed that the UK is predicted to fall short of its European Union obligations to get 15% of its energy from renewables by 2020.

The letter from Rudd, which was obtained by the Ecologist magazine, discloses that the department’s internal forecasts say the UK will only manage to get about 11.5% of energy from renewables by that point, but adds that “publicly we are clear that the UK continues to make progress to meet the target”.

The disclosure is particularly explosive because the government has been cutting subsidies for solar and wind energy, while maintaining that it is on course to meet its international targets.

In June, Rudd said in the House of Commons that the UK “will still be meeting our targets” and was “committed to ensuring that we deliver on our decarbonisation targets”, as she spoke about ending new subsidies for onshore wind power.

But the letter, dated 29 October and circulated to four other ministers, says: “The trajectory … currently leads to a shortfall against the target in 2020 of around 50 TWh (with a range of 32-67TWh)
or 3.5% points (with a range of 2.1-4.5% points) in our internal central forecasts (which are not public). Publically we are clear that the UK continues to make progress to meet the target.”

It also warns that the UK could be liable for fines if it misses the EU target and a judicial review if it does not have a credible plan to meet its obligations.

To address the predicted shortfall, in the letter Rudd suggests a range of measures, including a last resort of paying for renewable projects in other EU countries as a way of offsetting the UK’s failure to increase its own generation, speeding up a planned undersea electricity cable to Norway and attempting to engage with EU member states to make the target more “flexible”.

The letter also suggests a continued commitment to renewable heat, which has been named as a possible area for cuts in the Treasury’s spending review due on 25 November.

Sources in the Department of Energy and Climate Change (Decc) insisted Rudd had not misled parliament because she only specifically said that the UK was “on course” to meet a sub-target for 30% of all electricity to come from renewables.

But Labour, the Green party and environmental campaigners called on the energy secretary to explain why her department had not been transparent about its internal forecasts that suggest, on the current trajectory, that the UK is likely to fall short.

Rudd is likely to face questions about the issue from the Commons energy committee on Tuesday, when she appears to talk about the department’s annual report and accounts.

Daisy Sands, head of energy at Greenpeace, said it showed “the dark side of the government’s incoherent energy policy in full technicolour”.

“For the first time, we learn that the government is expecting to miss the EU’s legally binding renewables target,” she said. “This is hugely shocking. But more deplorably, it is wilfully hiding this from public scrutiny. The government is planning on cutting support for the solar and wind subsidies in the name of affordability.”

The Green MEP Molly Scott Cato also said Rudd had “serious questions to answer about why she has reported something to parliament which appears inconsistent with what she has been telling other ministers”.

“The UK’s energy policy is bound by European law which Rudd appears to be flouting,” she added. “I have already raised with the European commission my concerns about the fact that the government’s changes to energy policy make it unlikely we will meet our renewables target. The evidence in this letter shows the secretary of state is aware of this serious situation and I will now be following this up with further questions as a matter of urgency.”

A spokesman for Decc said: “We do not comment on leaked documents. As the secretary of state has set out clearly in the House, renewables made up almost 20% of our electricity generation in 2014 and there is a strong pipeline to deliver our ambition of reaching 30% by 2020. We continue to make progress to meet our overall renewable energy target.”

**Terminology**
- All oil prices: in US dollar
- Oil product: Brent crude or West Texas Intermediary (WTI)
- Mb/d - Million Barrels per day.
- Freight rates: US dollar per tonne.
- Natural gas prices quoted as pence per therm.
- Power prices quoted as Pounds Sterling per MWh.
- CO2 market: EURO

**Information & Data Sources**

1. Total Gas & Power
2. GdF Suez
3. Haven Power
4. Coal spot.com
5. FT
6. ICIS
7. BBC
8. Guardian

**Disclaimer**

This material is intended for information purposes only. It does not constitute an independent investment research, a personal recommendation or other general recommendation relating to transactions in financial instruments or an investment advice.

This material is intended for general distribution, it does not take into account any specific investment objectives, financial situation or particular needs of any recipient. It cannot be transmitted to any other person without the prior written consent of Blizzard Utilities Limited.

The information contained herein, including any expression of opinion, is not intended to constitute an offer or a solicitation to buy or sell any financial instruments, products or services, an investment research or an investment recommendation or other financial, investment, legal, tax or accounting advice or any other advice.

Further, all information contained herein has been obtained from and/or is based upon sources believed to be reliable is deemed to be clear, fair and not misleading but cannot be guaranteed as to accuracy or completeness. The views and opinions, forecasts, assumptions, estimates and target prices reflected in this material are as of the date indicated and are subject to change at any time without prior notice. The figures that may refer to past performance herein are in no instance an indication of future valuations or future performance. Blizzard Utilities Limited is under no obligation to disclose or to take account of this document when advising or dealing with or for its customers. Blizzard Utilities Limited nor any of its affiliates, directors, employees, agents or advisers nor any other person accept any liability to anyone for any direct, indirect, special, incidental, consequential, punitive or exemplary damages (including, but not limited to, lost profits) arising from the use and dissemination of this material or the information contained herein.
Blizzard Utilities Limited
Exchange House
1 Selden Hill
Hemel Hempstead
Hertfordshire
HP2 4TN

Contact us:
T: 0845 873 7948
E: martin.rawlings@blizzardutilities.com