Bord Gáis Energy Index

Understanding energy

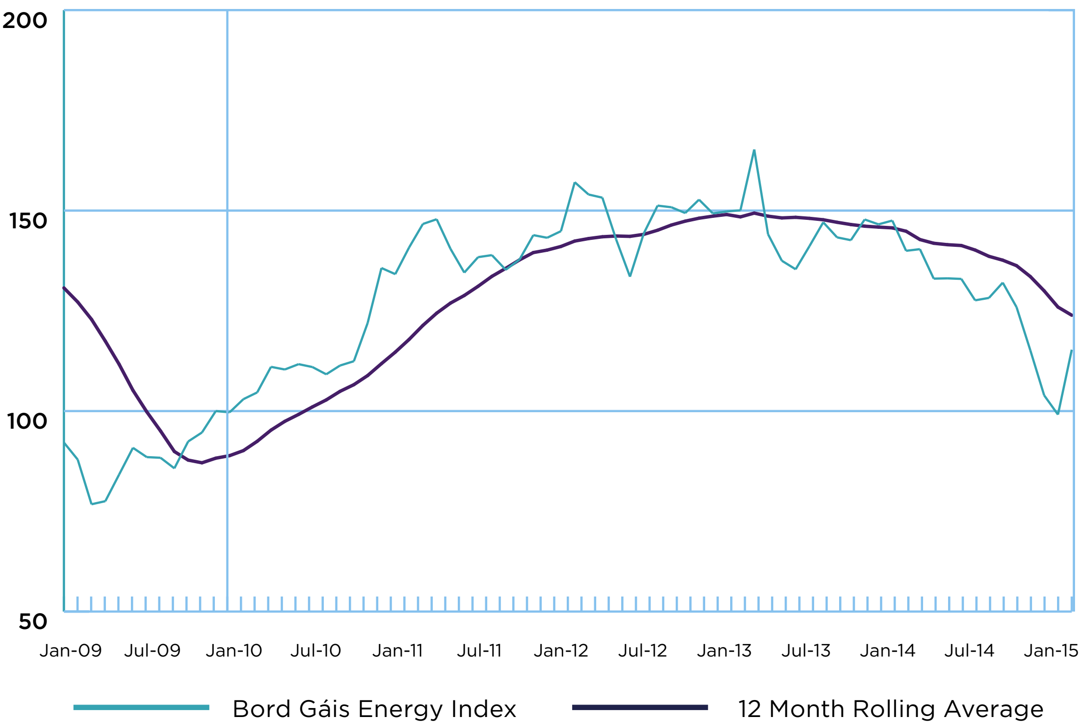
FEBRUARY 2015

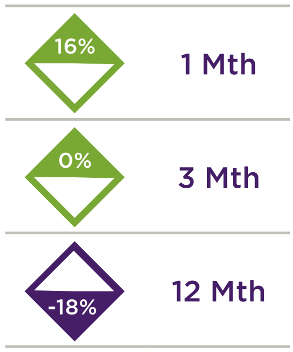
BGE/EI/UE/0315

Bord Gáis Energy Index

Commentary

Bord Gáis Energy Index (Dec 31st 2009 = 100)





Summary

The February Bord Gáis Energy Index rose by 16% month-on-month as the wholesale price of all of the commodities covered in the index (oil, gas, coal, electricity) recorded gains. This is the first monthly gain in the index since September 2014 and it reflects rising Brent crude oil prices. In February 2015 the Index stood at 115.

The main driver for the month-on-month rise in the index was higher oil prices. Month-on-month the price of a barrel of oil has risen nearly US$10 as the market responded to a falling US rig count number. Since the peak of over 1,000 active rigs exploiting the four main shale plays in the US, the numbers have dropped nearly 40% to just over 600 rigs in response to lower oil prices by the end of February. This reduction will restrict the growth in US oil production in 2015 and the prospect of fewer barrels being produced in the US drove prices higher. With the market now being strongly influenced by the number of active rigs in the US, it emphasises the significance of US shale oil production on global prices and the emergence of the US as the globe's swing producer, a role that was historically occupied by Saudi Arabia. The prospect of supply restrictions in both gas to the UK and coal from Colombia pushed wholesale UK gas and European coal prices higher month-on-month. A weakening euro amplified the month-on-month increase for euro buyers of oil and coal which are priced in dollars and gas which is priced in sterling.

During February the front month Brent crude oil price finished the month at US$62.58 per barrel having recovered from a closing low of US$46.59 per barrel in January. Despite this US$15.99 swing, the price of a barrel of oil is significantly below the US$100 - US$120 price range in which it was almost constantly trading in between January 2011 and August 2014. During this period of historically high prices, supply growth averaged 550,000 barrels per day above demand growth. This has resulted in crude and product stocks reaching historical highs. For prices to rise significantly from where they are trading now, it is estimated that demand growth would have to be approximately 3.7 million barrels per day in 2015 to soak up the excess that has been building since 2011. Demand only grew at close to these levels back in 2004 (3.3 million barrels per day) when Chinese GPD was at 10.1% and again in 2010 (2.7 million barrels per day) when the global economic recovery began after the financial shock. The consistent driver of large scale changes to demand growth has always been economic development. Given that Chinese economic growth is slowing (the Chinese officialdom's latest economic slogan: the "new normal" of slower growth and faster reform. Most importantly, the official growth target was 7.5% in recent years, it was cut to 7%, signaling less emphasis on GDP), the European economy potentially faces years of stagnation and central banks across the globe are cutting interest rates to stimulate growth, it is unlikely that oil global demand will increase by 3.7 million barrels per day this year. For the past three years, China alone has accounted for about 30% of total global demand growth. Today China and most of non-OECD Asia will not be able to provide the same impetus to growth. Compared to a requirement of a demand growth of 3.7 million barrels per day to mop up the surplus oil, China's demand growth is only expected to be over 300,000 barrels per day in 2015. Lower prices could stimulate demand but price elasticities of crude oil demand are inelastic as consumers do not dramatically change spending habits over the course of several months. Taking all the factors into consideration, it is expected that demand growth in 2015 will be circa 1 million barrels per day and far short of the 3.7 million required to balance the market and apply significant upward price pressure. An intervention by OPEC or geopolitical tensions that restrict supplies from the Middle East are the only possible factors that could push oil prices up significantly.

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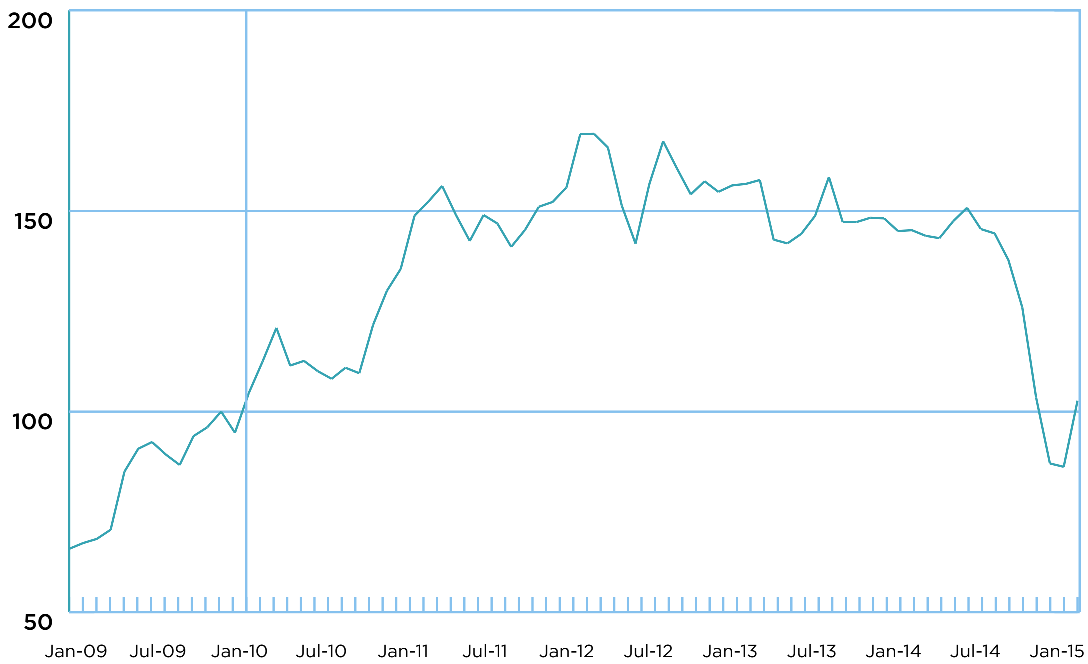
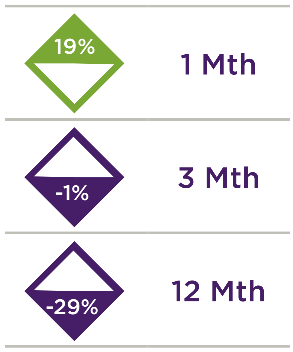
Oil Index





*Index adjusted for currency movements.

Data Source: ICE

Oil

The US rig count has dropped in recent months in response to falling oil prices. This has started a rally in prices during February as the prospect of slowing US oil production growth supported prices. The price of a barrel of Brent crude oil closed at US$49.13 in January but the rally brought the price to US$62.58 by the end of February. With news of US rig counts impacting price movements, it reinforces the view that US production is now the most significant determinant of global oil prices and this in turn re-enforces the view that the US is now the world's swing producer. Despite a significant drop in the rig count at the US' largest shale plays, according to Goldman Sachs, the current directional, horizontal and vertical rig count across the Permian, Eagle Ford, Bakken and Niobrara imply that US oil production growth will still record a year-on-year growth number of circa 400,000 year-on-year by the end of 2015. Since the peak rig count of 1,016 for these 4 plays, the number has fallen to 624 at the end of February. So despite a significantly falling rig count, the price falls seen have not been enough to achieve the required slowdown in US production growth that would rebalance an oversupplied market. This over production is appearing in US national crude stockpiles which added 52 million barrels or 14% since early January while inventories in Cushing have jumped by 52% or 16.5 million barrels over the same period. In February the IEA said that global oil supplies so far remain abundant and it will take time for investment cuts to make more than a relatively small dent in output.

Separately, OPEC expects production growth outside the group to reduce by a third due to a slowdown in the US shale boom and lower oil investments globally. It said that non-OPEC supply would rise by only 850,000 barrels per day this year, down 420,000 from its previous forecast. Significantly, despite lower prices, oil production from Saudi Arabia continues to rise and has reached 10 million barrel per day according to energy consultants PIRA.

Other factors that contributed to rising oil prices include the continued ability of the US economy to create jobs, the extension of Greece's bailout, continued restrictions on Libya's ability to export oil and lower than planned export volumes from OPEC's second largest producer Iraq. All these factors plus the a falling US rig count number contributed to money managers raising their long crude oil positions to the highest levels since August.

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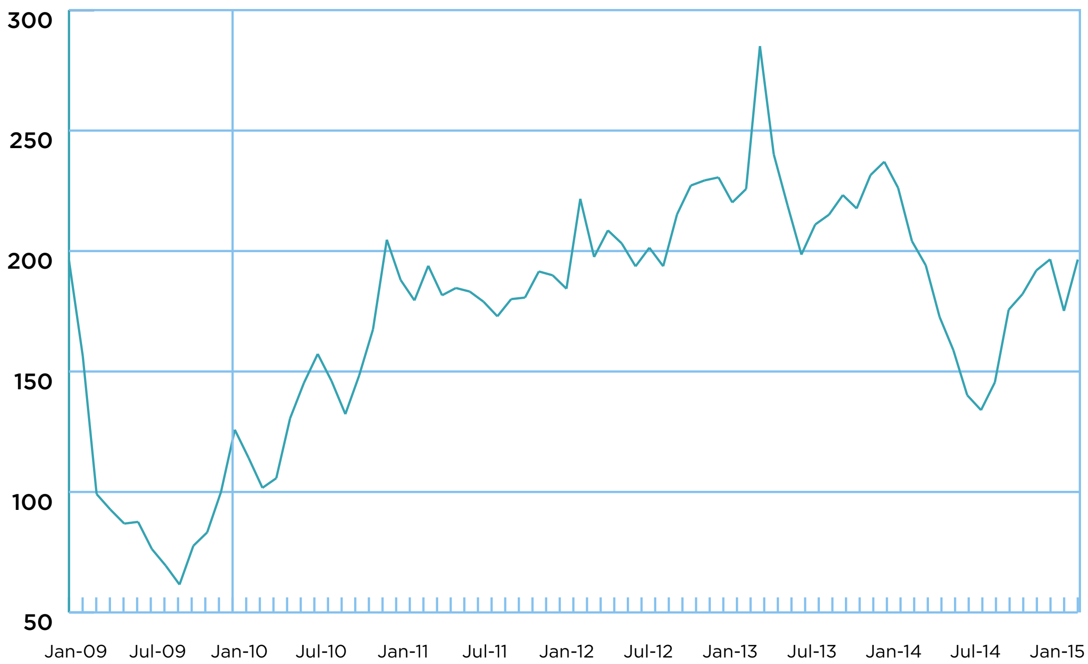
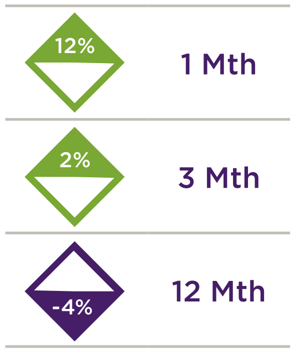
Natural Gas Index





*Index adjusted for currency movements.

Data Source: Spectron Group

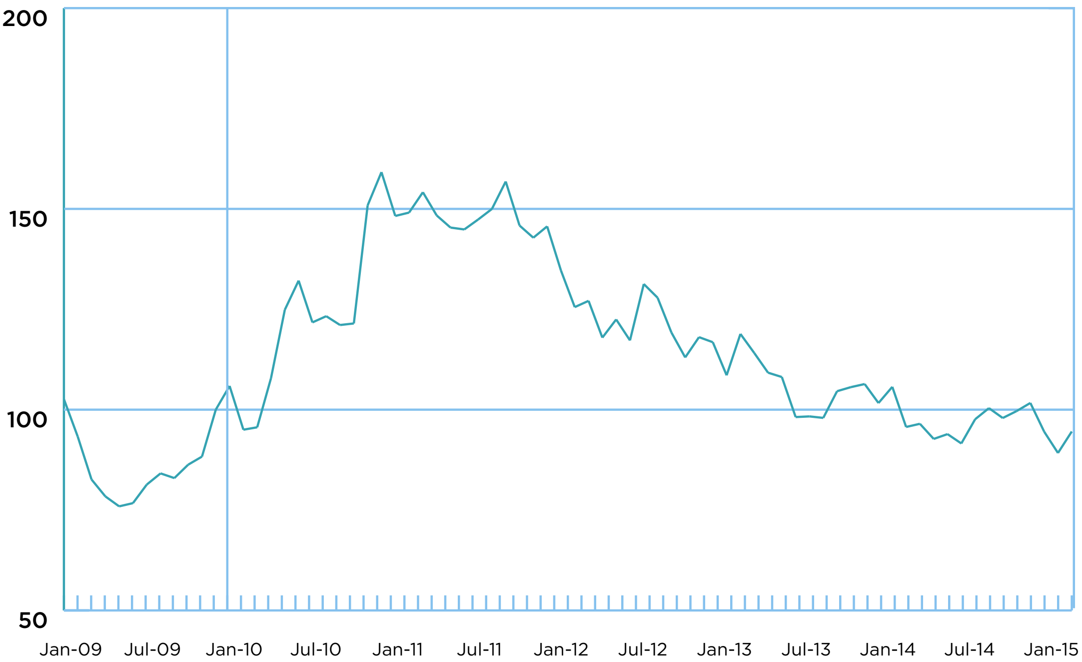
Natural Gas

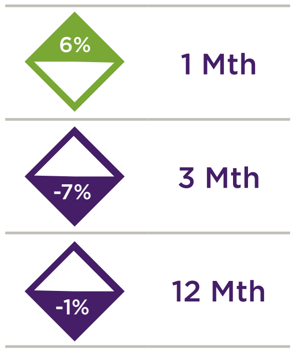
The average Day-ahead gas price for February was 50.15 pence per therm (p/th), an increase on the January average price of 46.20p/th.

February was a particularly volatile trading month on the back of a couple of unexpected supply events. We entered the month with the Day-ahead contract trading around 48p/th. The Dutch government announced on February 9 that it would restrict production from the Groningen gas field to 16.5bcm for the first half of 2015. The announcement saw prices rise as high as 55p/th. Production from the field was expected to be 39bcm for 2015. The announcement has introduced an element of uncertainty regarding the production from Groningen in the second half of the year. Groningen is Europe's largest gas field and since its discovery, in 1959, it has been a reliable source of gas for Northern Europe. However, half a century of extraction appears to have taken its toll and in recent years seismic shifts have resulted in frequent earthquakes in the Groningen region. Though most of the tremors are small, the intensity of the earthquakes is reportedly increasing. The UK system imports gas from the Netherlands via the BBL pipeline, which averaged 32mcm per day in February last year. The market was concerned that the production cap would threaten these supplies. However, BBL flows, while reduced, have remained around the 20mcm level since the announcement. This coupled with warmer weather forecasts and the prospect of increased LNG flows into Europe saw prices drop back to 49p/th in the week following the announcement.

In the last week of February prices rallied once more as the ongoing gas dispute between Russia and Ukraine came back into sharp focus. On February 24, following a dispute regarding gas deliveries into eastern regions under separatist control, Gazprom warned that gas deliveries to Ukraine could be halted as it had not received pre-payments for the supply to continue. However, gas supplies appear to be secure up until the end of March provided that pre-payments are received.

Coal Index





*Index adjusted for currency movements.

Data Source: ICE

Coal

At US$61.80/mt, the ICE Rotterdam Monthly Coal Futures contract closed the month US$3 higher month-on-month.

European coal prices received a boost in February from rising oil prices, bouts of short-covering and supply concerns over the Fenco (a rail firm in Colombia) night-time coal railings ban in Colombia. The ban that was strongly rumoured to be imminent early in the month would affect coal exports from the country's three main thermal coal miners Glencore-owned Prodeco, Drummond and Goldman Sachs unit Colombian Natural Resources. The ban was issued by a regional environmental authority in an effort to reduce noise on February 8 and Fenco confirmed that it would abide by and respect the restrictions introduced. Despite the threat to European supplies (Colombia is the world's fourth-largest coal exporter and according to a government source the transport restrictions will cut Colombia's exports by 23 million m/t per year), the potential negative impact is seen as limited as the restrictions would come at a time when European coal demand would be quite low for the time of year and there are sufficient coal stocks in ARA to last until the summer. In addition, it is being reported that the Fenco line only uses up 44 million m/t of its 61 million m/t annual capacity in 2014 and exactly how much a ban would curtail shipments is not clear. Despite the limited impact, the potential restriction on Colombian export thermal coal supply supported European coal prices. However, the rally seen throughout the month eventually dissipated as a bearish tone re-emerged given the healthy supply situation. However, prices recorded a second rally at the end of the month on the news from Glencore that it would cut coal production in Australia by 15 million m/t this year, on top of 5 million m/t a year cut on its South African Optimum mines already announced in December. This led to a rise in Australian thermal coal prices, which fed into sentiment for the Atlantic market.

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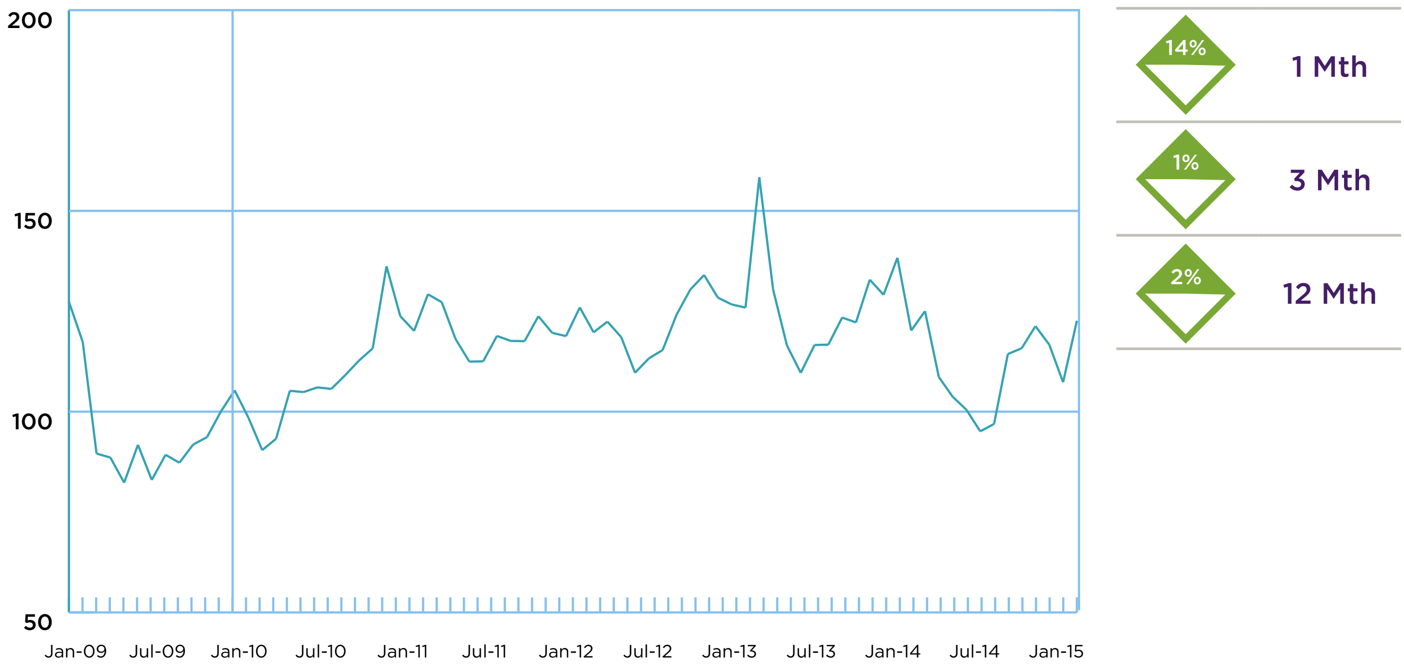
Electricity Index



Data Source: SEMO

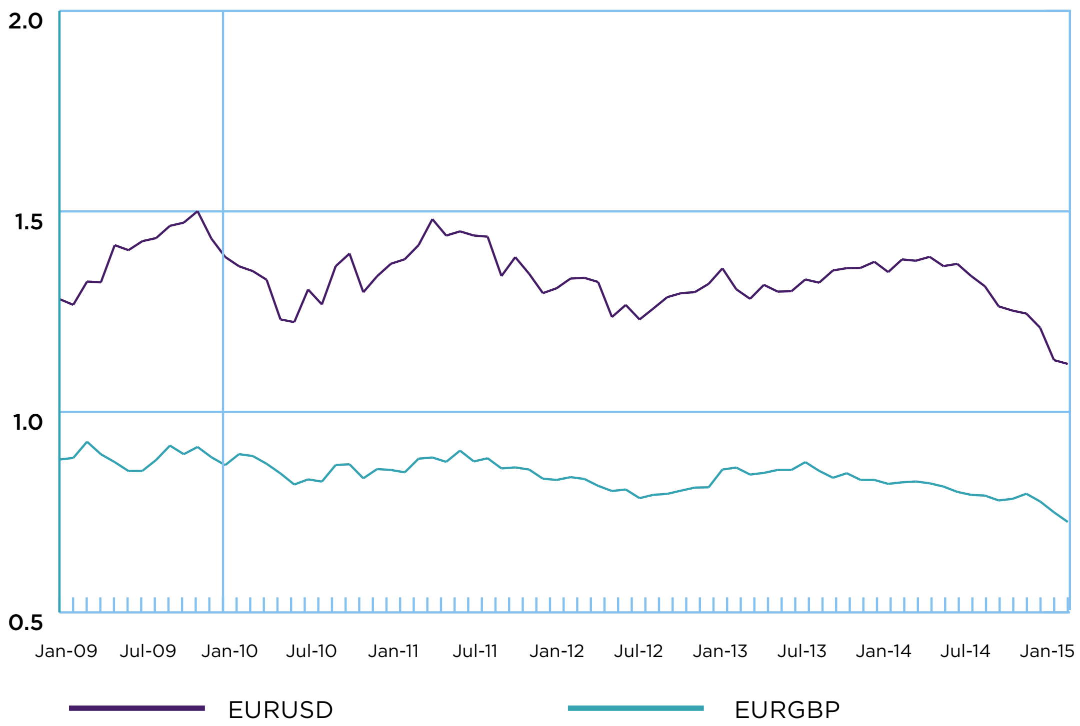
Electricity

Month-on-month the Irish wholesale electricity price rose from an average of €56.65/MWh in January to close to €60/MWh in February. Stronger wholesale UK prompt gas prices in February were a significant factor driving wholesale Irish electricity prices. In general, the wholesale price of electricity is determined by the cost of producing a unit of electricity by a gas powered plant which in the main imports its gas from the UK.

In addition, the average clean spark in February was over €3/MWh higher month-on-month. Due to lower wind, the percentage of the island's electricity met by the island's fleet of wind turbines fell month-on-month and the gap was made up by gas powered plants, some of which had to be turned for short periods of time on to meet system demand. These costs fed through to the wholesale price of electricity. The lack of wind between February 9 and 11 had a significant influence on the average monthly spark and wholesale prices as gas plants were both ramped-up and started as wind turbines collectively produced virtually nothing over this period. Unpredictable wind generation can result in significant changes in the wholesale price for power, and on the other hand when present in large volume it places further financial pressure on the conventional gas generators.

Commentary

FX Rates



EURUSD

-1%	1 Mth
-10%	3 Mth
-19%	12 Mth

EURGBP

-3%	1 Mth
-9%	3 Mth
-12%	12 Mth

FX Rates

Month-on-month the euro weakened versus both the US dollar and sterling with the renewed possibility of the Greek exit shaking confidence in the euro. In contrast to concerns over the stability of the euro zone region, news from the US in February showed that the US economy kicked off the year as it ended the last one by creating plenty of jobs, this time 257,000 in January. Reports from the UK were equally positive with the Monetary Policy Committee's latest inflation report predicting that 2015 would see the strongest growth in real take home pay in a decade and that the economy will grow by 3% this year and next with the help of the British consumer (UK GDP grew by 2.6% in 2014). The contrasting profiles of the euro zone and British economies were also evident in the 2014 growth figures with the euro zone recording just 0.8% growth year-on-year. UK jobs data released in February also impressed with 134,000 full time jobs having been created in the final quarter of 2014 and the employment rate hit a high of 73.2%. Until recently, markets thought that there was very little likelihood that UK rates would rise in 2015 but with real pay beginning to grow again, the chances of a rate rise are now one in three by year-end. With the majority of the Federal Open Market Committee members concerned that raising rates could hamper the US recovery and push inflation further below target, Fed rates are on hold for now. Testifying before Congress in January, Janet Yellen, the Fed's chair, tried to make it clear to financial markets that a rate rise, though being pondered, was not imminent. This position was reinforced with the news that the US slipped into deflation (prices fell 0.7% month-on-month, with gasoline down a significant 18.7%) and it is now expected that a rate rise is months away. However, if other indicators suggest that the US recovery is gaining traction, then the odds of an early rate rise will build and this in turn will support the dollar. In early March the euro slid to the weakest level versus the dollar since 2003 as economic reports again stressed the growing divergence in growth outlooks. This time, the euro area services sector grew less than expected while the dollar advanced on the news that US companies added more than 200,000 jobs for a 13th straight month in February. The case for an earlier rise is that America's economy has been growing strongly and creating lots of jobs.

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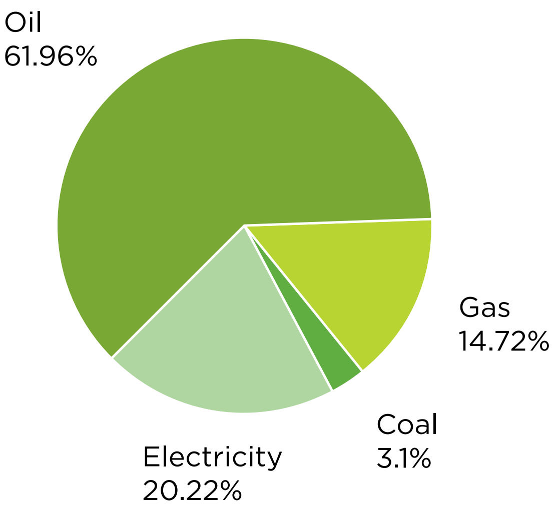
Market Outlook

Despite the plentiful reserves of oil, it is concerning that conventional discoveries continue their downward trend which potentially sets the seeds for higher crude oil prices in the future. According to IHS Energy, the upstream sector counted 5,793 exploration and appraisal (E&A) wells in 2014. These numbers were relatively flat compared to 2013 despite high oil prices for most of the year. Coupled with flat E&A numbers outside of North America, the number of conventional oil and gas technical discoveries peaked in 2008 and the number has been falling since. The current six-year decline is the longest downward trend on record. According to IHS the number of oil fields discovered continued to drop in 2014 and no giant fields were found. On top of falling discoveries, the success rate from drilling has declined in all regions with the Asia Pacific having fallen to below 10%. The equivalent percentage for the European region is close to 15%. Furthermore, successful drills are finding smaller volumes with the average volume per new field for 2014 being 3 million barrels of oil equivalent (a giant field is defined as 500 million barrels). The current low price environment coupled with declining discoveries and falling volumes creates a difficult environment for conventional drilling in 2015 which will encourage companies to engage in unconventional resource plays. High oil prices in recent years has supported deep and ultra-deep water finds which averaged 55% of the conventional oil finds between 2005 and 2014. However, with Brent crude trading around US$60, a continuation of this trend is not certain. In a scenario in which the world requires conventional oil production to satisfy demand more exploration, a higher success rate, higher volumes and most importantly higher prices may be required. BP are predicting in their most recent energy outlook that between 2013 and 2035 renewable energy's share of primary energy production is forecast to grow from 2.6 per cent to only 6.7 per cent and it is expected that the world will remain in the fossil-fuel age in the foreseeable future. In such a world, oil and oil finds will be important.

Re-weighting of Bord Gáis Energy Index

Following the SEAI's 2011 review of energy consumption in Ireland, there was a 6.4% drop in overall energy consumption. Oil continues to be the dominant energy source with most of the oil used in transport and the remainder being used for thermal energy. For the purposes of the Bord Gáis Energy Index, the total final energy consumption in Ireland fell 1,089 ktoe (toe: a tonne of oil equivalent is a unit of energy, roughly equivalent to the energy content of one tonne of crude oil) between 2009 and 2011. This fall was made up of a 1,022 ktoe drop in oil consumption (down 13.5%), a 20 ktoe drop in natural gas (down 12.6%), a 7 ktoe drop in electricity (down 0.3%) and a 40 ktoe drop in coal (down 10.98%). The Bord Gáis Energy Index has been re-weighted in January 2013 to reflect the latest consumption data. The impact has been minimal and has resulted in slight reductions in the share of oil and gas and a slight increase in the weighting of electricity in the overall Index.



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