

Bord Gáis
Energy Index
Understanding energy

JUNE 2015

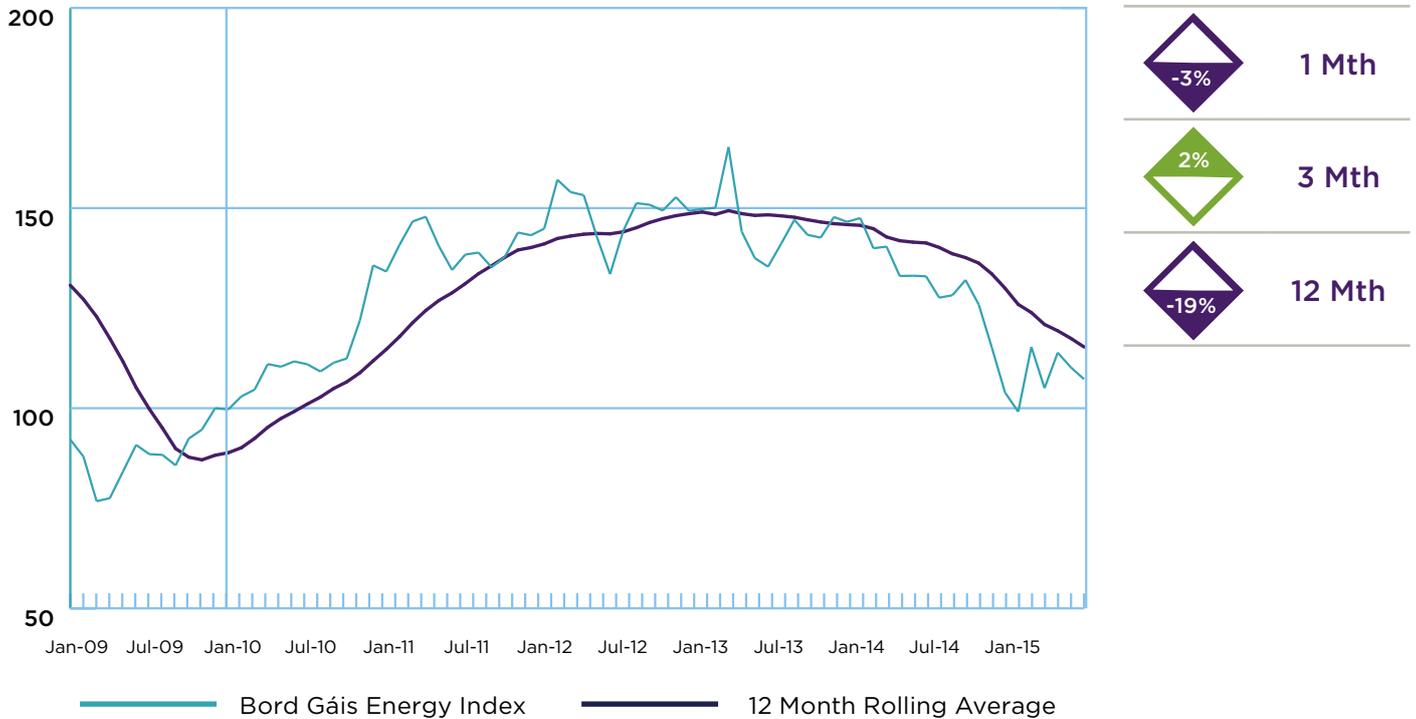
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Bord Gáis Energy Index

Commentary

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



Summary

The June 15 Bord Gáis Energy Index fell by 3% month-on-month due to weaker oil prices.

The price of oil slumped toward the end of June, falling to a low of US\$61.35 a barrel, as the intensifying economic crisis in Greece and subsequent dampening of the dollar weakened sentiment. The oil glut is still evident with the oil market's supply-demand differential rising to almost 3 million barrels a day.

In June 2015 the Index stood at 107.

(Continued overleaf)

Bord Gáis Energy Index (continued)

HOT TOPICS

During the month the IIEA published a book called **Britain and Europe: The Endgame** which builds on over 20 years of study in the Institute of International and European Affairs. The book examines the potential economic implications of a UK exit from the EU which would leave Ireland particularly exposed. Interestingly, Edgar Morgenroth examined the impact on energy markets specifically in one chapter. We are reminded that Ireland and the UK are closely linked in terms of energy markets and Ireland imports 89% of its oil products and 93% of its gas from the UK. The fact that there is a single All-Island Electricity Market (SEM), which functions via North-South electricity interconnection, would make a UK exit more complex.

Furthermore, the Irish electricity grid is linked to the British grid since 2001 via the Moyle Interconnector to Scotland and since 2012 via the East-West Interconnector. The gas grids are also linked via an interconnector to Scotland, and the bulk of the gas consumed in Ireland is supplied via that interconnector. Morgenroth's view is that Interconnection improves security of supply and, given the differences in wholesale prices between Great Britain and Ireland, reduces energy prices in Ireland because British wholesale electricity prices are lower than those in Ireland. This is true historically but looking forward Morgenroth claims that the difference in prices is expected to narrow in the future because the current wholesale price in the UK is not high enough to make investment in electricity generation profitable, which has led to significant underinvestment. According to Morgenroth, a UK exit from the EU could impinge on the SEM and would impact significantly on the potential and cost of integrating with the IEM {EU policy aims at even closer linkage and integration with the completion of a wider Internal Energy Market (IEM)} in the EU, encompassing electricity and gas networks. If the UK were outside the IEM, Morgenroth claims that more expensive interconnection with France might be required. Not being subject to EU targets for green house gas (GHG) emission reductions, the UK may also be less interested in further interconnection in order to import wind-generated electricity from Ireland.

According to Morgenroth, security of energy supply is often taken for granted but is far less certain given the increased frequency of severe weather events and geopolitical frictions. Interconnection significantly improves security of supply and indeed Ireland is heavily dependent on gas supplies via the interconnector with Scotland. These gas supplies are particularly important as gas plays a central role in electricity generation in Ireland. While the interconnector comprises three offshore pipes, a section of the onshore pipe in Scotland comprises a single pipe, which poses some vulnerability.

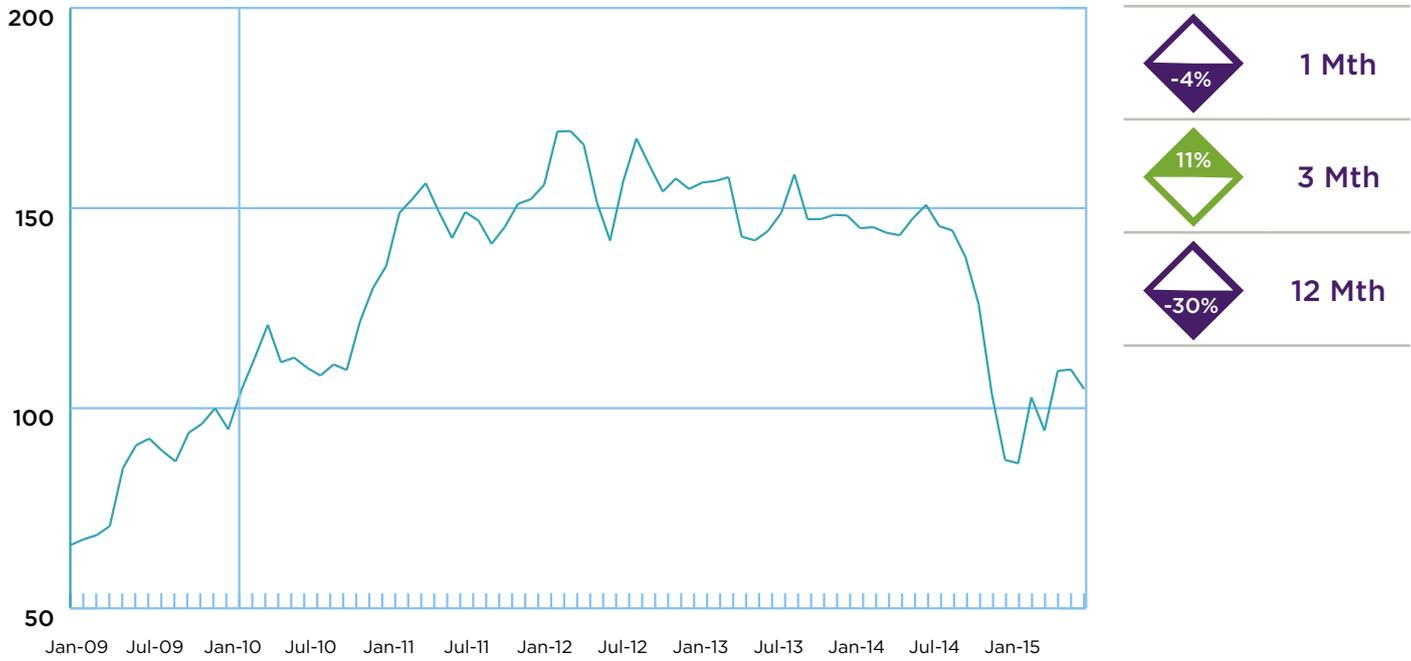
Morgenroth highlights the economic cost of energy outages and in relation to gas supplies he states that it has been estimated that, depending on the day in the week and the season, losing gas supply for electricity generation would cost between €0.1 billion and €1 billion per day. If, in addition, gas supplies for heating were to be lost, the cost would be even higher. Under current EU rules, if there is a shortage of gas, Member States must ensure that the available supply is shared equitably and they are not allowed to hoard their own supply at a neighbour's expense. This improves security of supply inside the EU. If the UK were outside the EU this protection would no longer be automatic but would instead be negotiated, possibly at a price, between the UK and Ireland.

Overall, a UK exit from the EU could impact negatively on security of energy supplies and might increase the cost of connecting to the IEM. A UK exit from the EU would have a negative impact on energy security in Ireland, which can be mitigated through additional investment, for example in gas storage facilities or interconnection with France, which come at a significant cost. However, a UK exit would also make Ireland more remote from the IEM in the EU, connection to which is expected to raise energy costs in Ireland.

Bord Gáis Energy Index

Commentary

Oil Index



*Index adjusted for currency movements.

Data Source: ICE

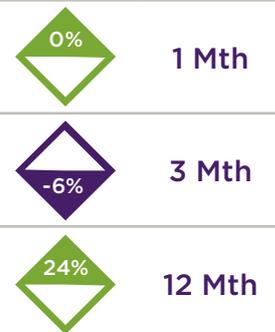
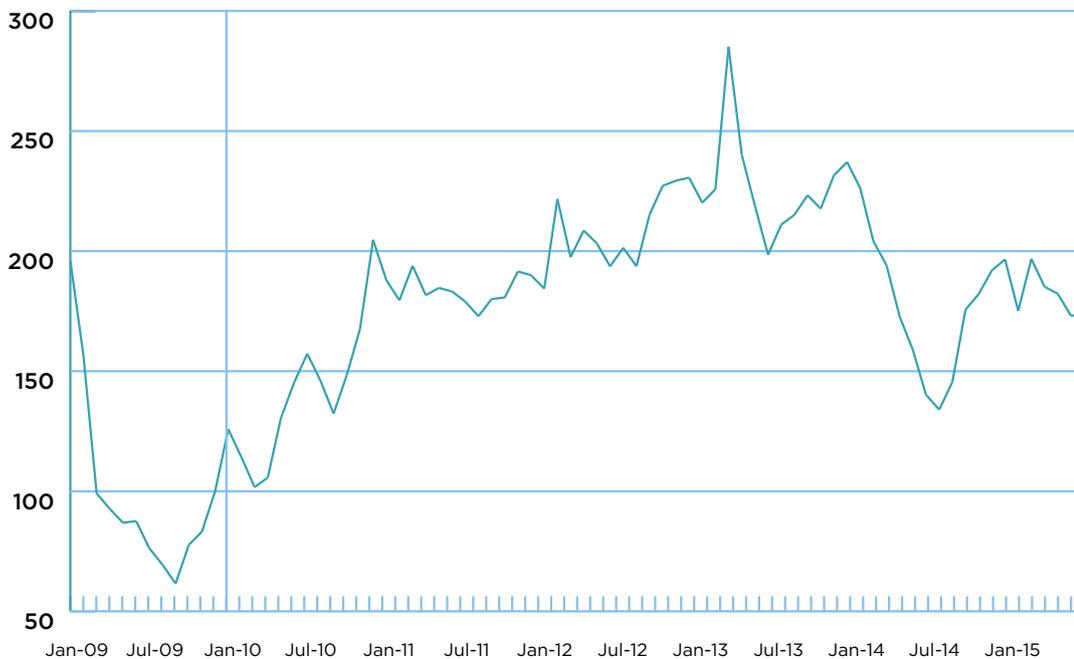
Oil

Oil priced traded in a narrow range during June, hitting a low of US\$60.94 a barrel on 5 June when it was confirmed that OPEC would keep production targets unchanged. However, oil markets rebounded sharply (hitting a June high of US\$66.36 a barrel) as traders reacted to positive US employment numbers. Persistent crude inventory withdrawals in the US helped support a recovery in prices during this period. The price of oil slumped toward the end of June, falling to a low of US\$61.35 a barrel, as the intensifying economic crisis in Greece and subsequent dampening of the dollar eroded investor's sentiment. The oil glut is still evident with the oil market's supply-demand differential rising to almost 3 million barrels a day in May, according to the EIA Short-term Energy outlook. Oil supply declined by 100,000 barrels a day month-on-month during May, but still remains more than 3 million barrels a day higher compared to the same time last year. With Saudi Arabia and Iraq expected to test record production levels in June, OPEC production will remain strong. Outside of OPEC, US production rebounded during June. Crude output currently stands at approximately 9.5million barrels a day, compared to 9.2million barrels in May. This suggests that despite the halving of onshore drilling rigs in the US, efficiency gains could be generating tangible results.

Bord Gáis Energy Index

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Natural Gas Index



*Index adjusted for currency movements.

Data Source: Spectron Group

Natural Gas

The average day-ahead price for June was 43.31 pence per therm (p/th), marginally weaker than the previous month's average price of 43.78p/th. By way of comparison, the June outturn in recent years was 39.48p/th in 2014, 59.74p/th in 2013 and 54.95p/th in 2012. UK demand in June averaged 178mcm, 16mcm above expected demand levels for the month as calculated by the National Grid.

Forward prices were weaker despite some bullish news flow with winter 15 & summer 16 contracts trading lower by .65p and .34p respectively. The Dutch government announced that production from the Groningen gas field, the largest in Europe, would be capped at 30bcm from 39bcm following heightened seismic activity in the region. The market had been expecting a reduction to 33bcm-35bcm. The UK system imports gas from the Netherlands via the BBL pipeline and there has been a reduction in BBL flows as the Dutch market held gas to compensate for reduced Groningen production.

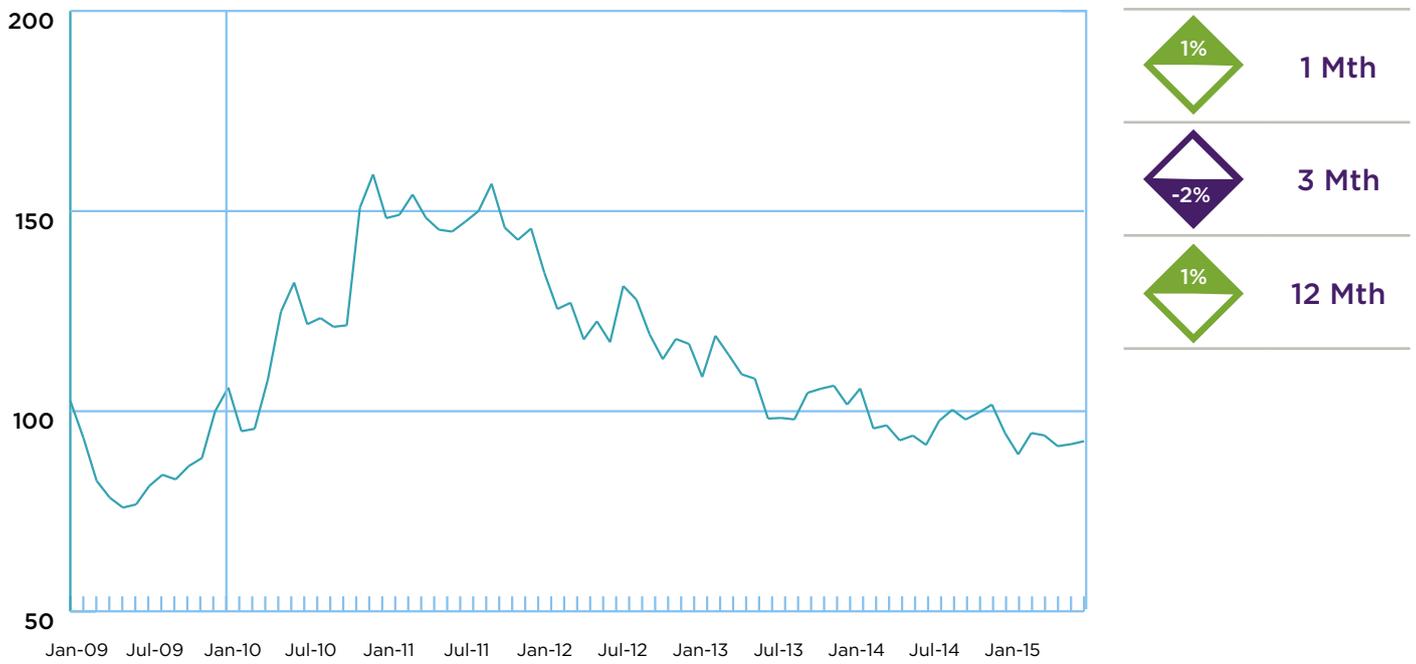
As the month came to a close, Naftogaz, the national gas company in Ukraine, announced that it would suspend imports of Russian gas after failing to agree a new gas deal for supplies in the third quarter. Russia supplies about one third of European gas demand, much of it via pipelines that transit the Ukraine. The EU and the two sides had engaged in an effort to agree gas supplies ahead of the coming winter season. The failure to reach agreement increased concerns that Russian gas supplies to Europe could be threatened in the coming winter season. Naftogaz assured the market that transportation of gas through Ukraine to Europe will continue regardless of a deal being concluded. However, Ukraine will look to Europe, in particular Hungary and Slovakia, for additional gas supply to replace the lost Russian imports.

Concerns around a Greek exit from the euro brought the euro sterling exchange rate into sharp focus, as a weakening of the euro would increase the relative cost of UK gas for euro buyers. Oil prices continued to weaken over the month with Brent closing the month 3% lower in dollar terms. Given oil indexation remains a feature of many European contracts; the falling oil price has been an additional drag on gas curve contracts.

Bord Gáis Energy Index

Commentary

Coal Index



*Index adjusted for currency movements.

Data Source: ICE

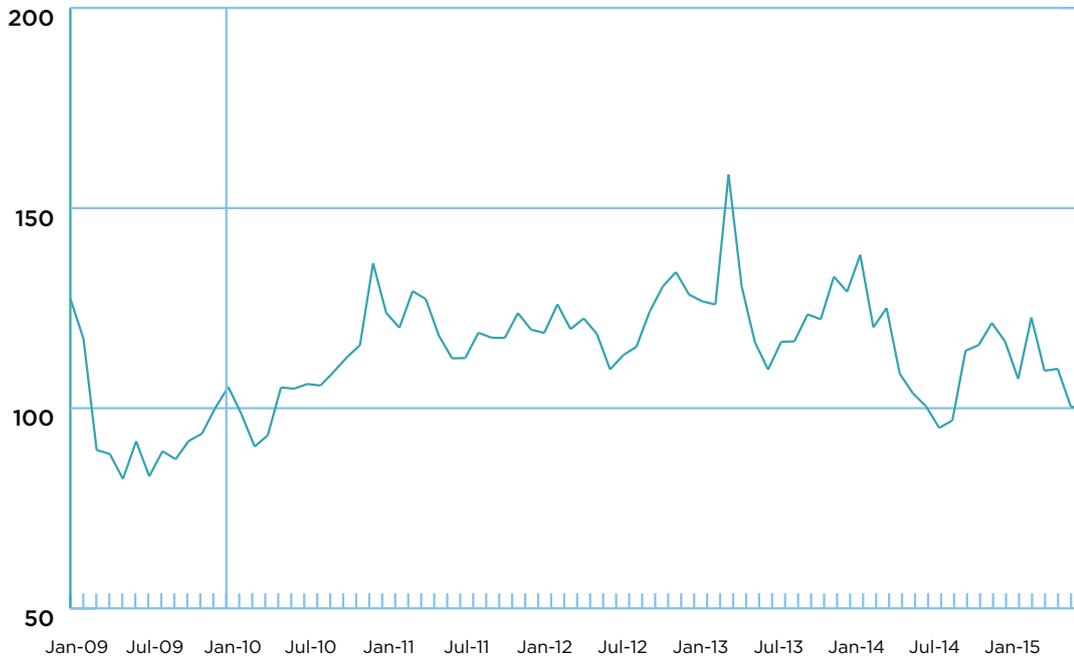
Coal

The ICE Rotterdam Monthly Coal Futures Contract recovered marginally in June, rising by US\$1.35/mt month-on-month to close at US\$60.20/mt on 30 June. The coal futures price recorded a modest recovery during the month having closed at US\$56.75/mt on 9 June, a level not seen since March 2009. At the time, the weakness in the spot physical market was reportedly due to a combination of a lack of buying interest due to the low coal burn in Europe and a lot of supply still on offer, particularly from Colombia. On 30 June Europe-delivered CIF ARA Cal-16 thermal coal derivatives jumped above US\$60/mt to an almost four-month high reportedly due to strong utility bids. The rise in the price came as a surprise with it being reported that there was no clear supply-demand fundamental or macroeconomic reason to trigger such an uptick. However, market participants said that there could be an additional incentive for utilities to go on the buy-side due to a recent rise in the German clean dark spreads – the profits accrued from coal fired power generation taking into account carbon emissions. German power prices had been given a boost recently, particularly in the front of the curve, due to a heatwave with temperatures forecast to peak at 39 degrees Celsius. At the time, the front-quarter Q3-15 German clean dark spread was at €2.67/MWh, its highest level since 8 April.

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Commentary

Electricity Index



1 Mth



3 Mth



12 Mth

Data Source: SEMO

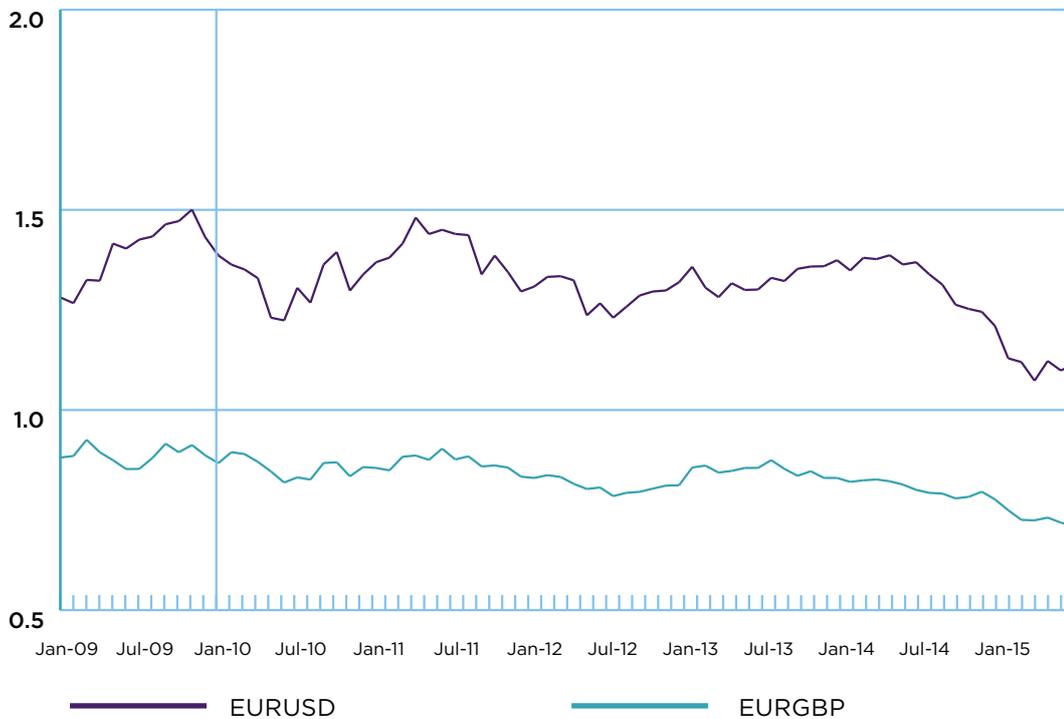
Electricity

Excluding capacity payments, the monthly average wholesale price of electricity continued to drop month-on-month. At €49.93/MWh, the average monthly wholesale electricity price was the lowest recorded in 2015. Falling demand over the summer period had a significant influence as fewer thermal plants were required to meet eroding demand. In addition, the cost of a unit of electricity was lower due to a softening in the clean spark. In general, the wholesale price of electricity can be assessed by examining three components: the UK wholesale cost of gas, the European wide price of emitting one tonne of carbon and spark. At a monthly average of approximately €5.75/MWh, it was the second lowest spark recorded in 2015 and the third lowest since 2008. During the month, relatively steady running of thermal plants, falling demand and periods of low volatility in wind output contributed to a low spark as it limited the number of plant starts and price events. The costs associated with scheduling additional plant feed through to the wholesale cost of power and fewer plant starts in June reduced the number of price events. However, lower sparks due to the growing influence of wind output does distort investment signals, making the economic case for essential gas powered thermal plants less attractive. These trends place significant financial pressure on those who have invested in efficient gas fired generation assets for the Irish grid in recent years. With reduced demand, the impact of wind volatility on the system can be even more extreme when gas units need to be remunerated for shorter and shorter periods of output.

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FX Rates



EURUSD



EURGBP



FX Rates

Versus the euro, the US dollar weakened slightly during the month, as positive manufacturing data outside of North America supported risk sentiment in non-dollar assets according to Thomson Reuters. The Fed also struck a dovish tone at its last meeting, citing a “cyclically weak” labour market as a risk to the wider economy. That together with inflation, which continues to undershoot the Fed’s target of 2%, suggested the central bank would be more inclined to raise rates just once this year. Some economists are now pencilling in an interest rate hike in December instead of September. According to Thomson Reuters, in light of moderating expectations for US monetary policy tightening, global risk assets such as crude oil should be supported in the near-term. However, an economic event such as one involving Greece could again lead to a flight to safe-haven USD assets. Amid the Greek crisis, sterling gained throughout the month versus the euro.

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Market Outlook

If an agreement is reached between Iran and six world powers and sanctions over Iran's oil exports are lifted, a "standoff" among the cartel's top producers is expected. This could intensify the aggressive pricing strategies being pursued by OPEC members, therefore leading the group of nations to an even larger market share on the back of non-OPEC producers in 2016. So will the global oil glut ease? In the short run this is possible as there is strong demand for refined products and demand for actual crude oil has supported prices (demand accelerated by more than 1million barrels a day in 2015, assisted by low oil prices). Notably reserve additions in China and India have lifted demand levels considerably. However, if additional Iranian supplies appear in 2016, continued rising demand may be insufficient to mop up a growing excess. Despite the significant decline in global prices, US frackers have adapted brilliantly. Reportedly, only five firms out of several hundred have gone bust. The industry has cut costs by a quarter, halved the number of active rigs and still managed to keep production stable. But the pressure is building. Profits have been propped up by temporary gains from derivatives. Exclude that, and almost half of listed shale firms have distressed balance-sheets according to The Economist Magazine. If oil prices do not jump, there will be a wave of defaults and takeovers by the year-end according to The Economist. The impact on US production will be closely assessed.

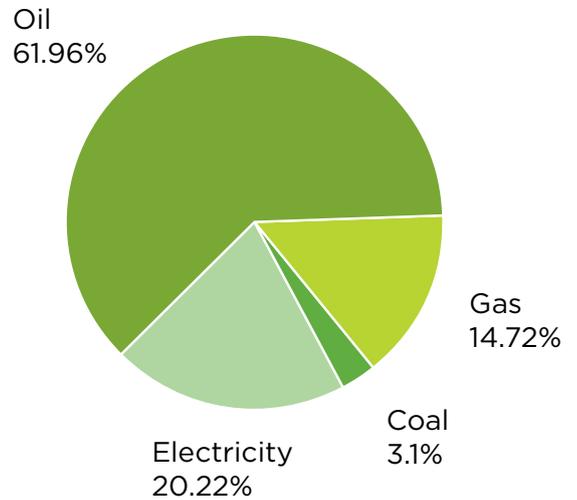
In early June, the International Energy Agency (IEA) warned that oil prices may have further to fall despite stabilising in recent months - and even beginning to rise modestly - because of the "massive" oversupply. The IEA said lower oil prices were likely to last well into 2016. According to the IEA, "the oil market was massively oversupplied in the second quarter of 2015 and remains so today." In addition, "it is equally clear that the market's ability to absorb that oversupply is unlikely to last. Onshore storage space is limited," it said, adding "something has to give". The IEA said OPEC crude oil production rose by 340,000 barrels a day in June to 31.7 million barrels a day, a three-year high, led by record output from Iraq, Saudi Arabia and the United Arab Emirates. The agency added non-OPEC supply growth was expected to grind to a halt in 2016 as lower oil prices and spending cuts take their toll. Another bearish factor is the global economy as highlighted by the IMF. According to the fund, large parts of the world are still struggling with the burden dumped on their shoulders by the financial crisis - even now, eight years after its onset. Risks highlighted by the IMF include the "never-ending crisis in Greece", rising US interest rates (the big concern about the rise when it comes is the potential impact on financial markets, especially in emerging economies. Higher interest rates in the US will encourage investors to move money back there, money that went overseas in the first place because rates were so low), China's slowdown and political events.

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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.



For more information please contact:

Bord Gáis Energy

Pressoffice@bge.ie

or Alan Tyrrell at PSG Plus 086 850 8673

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