

Bord Gáis Energy Index

UNDERSTANDING ENERGY

June 2013

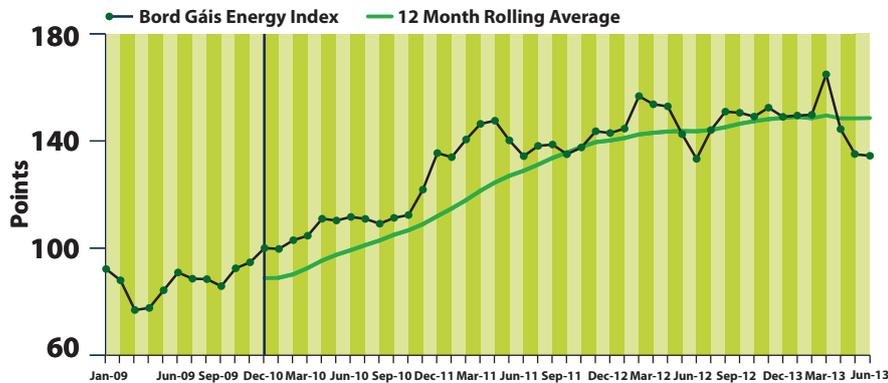


think beyond



BORD GÁIS ENERGY INDEX STABLE DESPITE RISING OIL PRICES

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



1 Mth **-1%** 3 Mth **-18%** 12 Mth **2%**

Summary:

The Bord Gáis Energy Index fell 1% month-on-month with falls seen in the wholesale price of electricity, gas and coal. Oil was the only one of the four energy commodities tracked in the index that recorded an increase.

The wholesale UK Day-ahead gas price continues to recede from the record highs seen earlier in the year and in June it appears to have settled back into a normal trading range of between 55p - 65p a therm. A falling UK Day-ahead gas price pushed Irish wholesale electricity prices lower as UK gas prices have a significant impact on the cost of producing electricity in Ireland. Wholesale coal prices continue to tumble amid ample supplies of Colombian coal to Europe.

At 136 the Index is at a low point for the year which is not surprising given that oil prices are stable and energy commodities soften as we enter a period of reduced demand in the summer months.

In June oil prices continued to be pushed and pulled by the same two conflicting forces that have dominated the market in recent months. On the one hand, prices are being dragged lower as the markets anticipate reduced US Central Bank support for the world's economy, slower growth in China and the continuing expansion of the US shale oil revolution that has the potential to transform the world's oil supplies. On the other, traders continue to fear the ongoing instability in the Middle East and North Africa and the potential it has to disrupt oil supplies. As a consequence of these conflicting forces, the front month Brent crude oil price appears stuck at or around US\$100 a barrel as the market lacked the confidence to move decisively in any direction during the month. Oil price uncertainty reflects economic uncertainties as mixed messages abound. Falling gold prices, tapering talk from the US Federal Reserve and rising bond yields suggest that parts of the world's economy are moving slowly toward a more normal state. However, a credit crunch, a slowdown in China and 'violent' moves in emerging market currencies and bond yields suggest that there are still significant dangers facing global economic growth.

Oil Index



1 Mth **2%** 3 Mth **-9%** 12 Mth **2%**

*Index adjusted for currency movements. Data Source: ICE

Oil

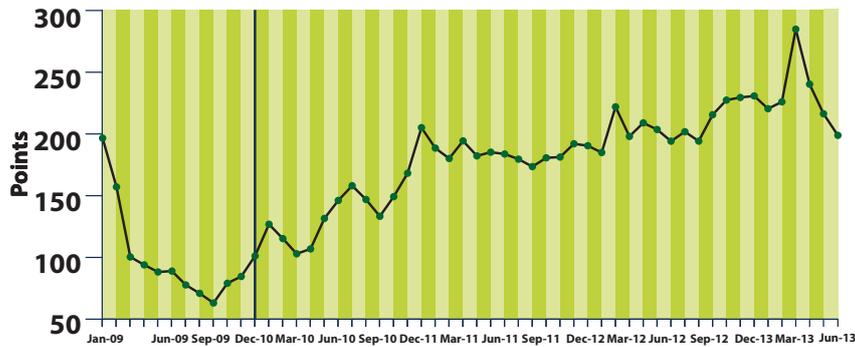
Month-on-month the front month Brent crude price rose 2% in euro terms. Despite the tepid month-on-month change in the price of oil, price movements during the month were more dramatic as they responded to a series of events that drove prices as high as US\$107 and as low as US\$99.

Once again, geopolitical developments applied upward pressure to the price of oil. The most significant event was the announcement from the US that it intends to supply direct military aid to the rebels in Syria after concluding that forces loyal to the Assad regime had engaged in the use of chemical weapons. Closely following this announcement was news that the UK and France had succeeded in getting the EU to lift its ban on supplying arms to Syria. These developments raised fears that the conflict would escalate and traders began to consider the scenario where they wake up to a situation where the war in Syria had spun

out of control and that global oil supplies have been severely restricted. Protest at Libyan export terminals and oil fields also supported Brent crude oil prices as crude production, much of which is destined for the European market, was reduced in June. Tension between government forces and regional militias has been growing in the two years after a Western-backed uprising toppled Gaddafi and the stability of Libya's oil production is being questioned. Unplanned outages at the Oseburg oil-field in the Norwegian North Sea and the Buzzard oil-field off the coast of Aberdeen also support Brent crude prices during the month. Better than expected economic releases from the US on the service sector, job creation, consumer & business sentiment, retail sales and property prices added further support to oil prices. Markets also reacted to a report from the influential International Energy Agency (IEA) that predicted a potential oil supply crunch in the coming months as a raft of new and re-started refining capacity boosts demand for crude.

Despite the overall modest upward trend in oil prices, there were dramatic price dips as markets reacted to the possibility of the US Federal Reserve (the Fed) exiting its programme of quantitative easing. The markets fear that a reversal in the Fed's bond buying programme will result in higher interest rates and borrowing costs in the US and have a negative impact on US and global economic growth. Confidence in China's growth is being tested on news of a contracting manufacturing sector, falling exports, plunging stock markets and credit restrictions. Weaker Chinese oil demand contributed to the IEA lowering its 2013 global oil demand to 90.56 mb/d.

Natural Gas Index



1 Mth -9% **3 Mth** -30% **12 Mth** 3% *Index adjusted for currency movements. Data Source: Spectron Group

Natural gas

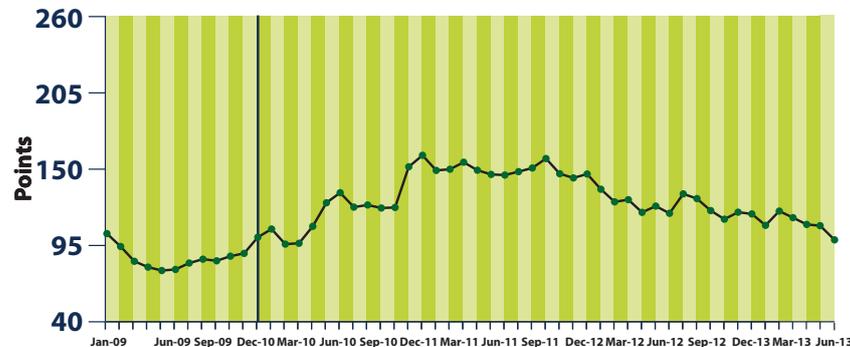
In June the monthly UK average Day-ahead wholesale gas price continued to recede from the record levels recorded over the last few months. In March of this year the Day-ahead gas price hit record levels due to a prolonged cold snap and supply concerns. Warmer summer weather and reduced demand for gas are now starting to apply downward pressure on Day-ahead prices and at 60p a therm the monthly average Day-ahead wholesale gas price has fallen back to within a normal price range of between 55p - 65p a therm.

In June the supply and demand tensions which have so far defined the UK gas market in 2013 continued to ease. Softening Day-ahead gas prices occurred as supplies to the UK were at times ample during the month. Flows of gas from Norway were strong, particularly in the first half of the month. These Norwegian supplies were bolstered by the maintenance of Norpipe (a gas pipeline system in the North Sea which supplies Norwegian gas to Germany) which blocked the normal flow of Norwegian gas to the Continent to the UK's advantage. Furthermore, planned maintenance of the UK-

Belgium interconnector meant that ample Norwegian gas supplies to the UK could not be released to the Continent via an indirect route. Amid this supply swell prompt gas prices fell. An unplanned outage at the Rough natural gas storage facility added to the price pressures as demand for gas eroded as some participants who wanted to buy gas and place it in storage were excluded from the market. As these particularly beneficial series of maintenances were complete, the benefits started to wane and prompt prices started to rise modestly toward the end of the month.

Looking ahead, a number of negative maintenance announcements did create some anxiety about future supplies in the coming winter. In particular, Gassco (the Norwegian state owned company that operates the natural gas pipes) announced that it will be taking 34 million cu m/day of gas out of the system over the winter. As UK gas supplies last winter were at times uncomfortably tight, any reduction over this sensitive season is a concern. Following this announcement, the winter 13/14 price spiked over 2p a therm.

Coal Index



1 Mth -9% **3 Mth** -14% **12 Mth** -16% *Index adjusted for currency movements. Data Source: ICE

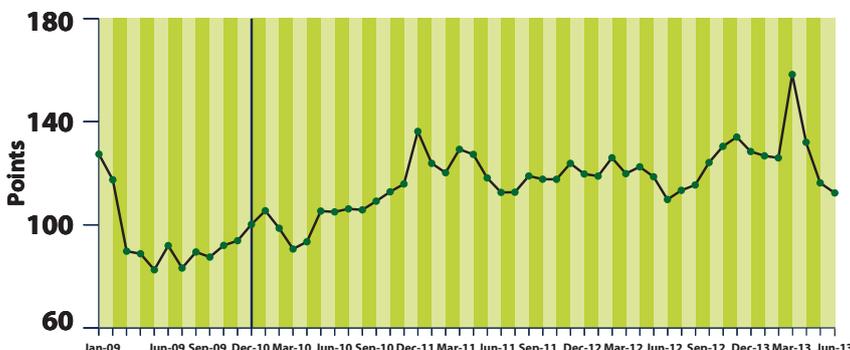
Coal

European coal prices continued to slide in June and at US\$74.55 the ICE Rotterdam Monthly Coal Futures contract closed at a 44 month low. Weak European coal prices were attributed to warm weather across the Continent, a lack of demand and healthy supplies.

Europe continues to benefit from Colombian supplies which are still attracted to the European market despite the historically low prices. At current prices, virtually every other exporter to the European market has now been excluded. As Colombian suppliers can reportedly still make a profit provided prices remain above US\$70, supplies are expected to remain steady despite what has been described as a saturated market. Furthermore, coal producers may be hesitant to rationalize production for fear of losing market share. In an unusual development there have been reports that Colombian and US coal supplies have started to compete in the Asian and Pacific thermal coal spot markets as a result of the low European price. The only factor on the horizon that could push prices higher are the on going wage talks between Colombian mine workers and the country's second-largest thermal coal producer Drummond. These talks have been extended until the 7th of July and if agreement is not reached by then, the union must vote on whether to go on strike or go to arbitration. However, a 32-day strike earlier in the year failed to bolster spot prices in any significant way. With historically low coal prices, the cost of electricity production across Europe has fallen, particularly in countries with coal plants.

Internationally, global coal prices are suffering under a supply glut which has seen Indonesia, Australia and Russia all increase exports in recent years. China dominates the demand side of the equation as it now consumes over half of the world's coal. With China's demand for internationally traded coal waning recently, global prices have suffered and international coal prices are weak. China's reduced appetite is as a result of sizeable stock piles at power stations, overproduction by Chinese producers resulting in cheap domestic supplies, reduced access to credit, peak hydro-electricity generation and a slowdown in economic growth. With Asia-Pacific now consuming nearly 70% of the world's coal, future economic and social developments in that region will drive global coal prices.

Electricity Index



1 Mth -4% **3 Mth** -30% **12 Mth** 2% Data Source: SEMO

Electricity

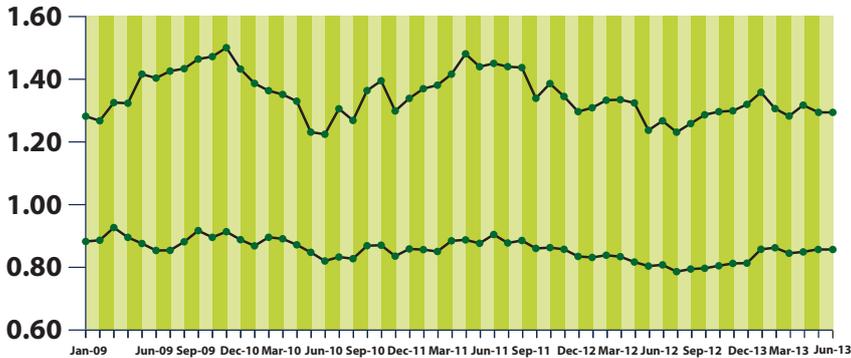
In June Irish wholesale electricity prices fell 4% as the UK average Day-ahead wholesale gas price fell 9% month-on-month. As the wholesale Irish electricity price tends to be determined by the cost of producing power at a gas powered plant, falling Day-ahead UK gas prices had a significant impact and pushed Irish electricity prices lower.

Despite falling gas prices, the rising cost of carbon emission allowances and 'sparks' applied some upward pressure on prices, but their impact was overshadowed by lower gas prices. The rising cost to abate carbon emissions that arise in the process of producing electricity by burning fossil fuels such as gas and coal applied some upward pressure to prices. The price of carbon allowances received a much needed boost in June as the European Parliament's environmental committee voted to support 'backloading' or delaying 900 million EU Emissions Trading System carbon allowances to auction later this decade. The committee will send its amended proposal to the full European Parliament in July asking for a mandate to start negotiations with the EU Council on the common text

needed for the changes to become binding. In early July the European Parliament approved the amended proposal. The committee was forced to vote a second time after the full parliament rejected its first request for a mandate to support 'backloading' in April. This rejection caused EU carbon emission prices to hit all-time lows. Lower emission prices apply downward pressure on wholesale electricity prices across Europe but there are concerns that it does not encourage Europe to decarbonise its economy and encourages the burning of fossil fuels, particularly coal.

Some additional upward price pressure was applied as the volume of electricity produced by wind fell month-on-month. This meant that expensive fossil fuel plants were called upon to produce power and the system had to incur these extra costs which fed through to prices.

FX Rates



1 Mth 0% 3 Mth 1% 12 Mth 3% EURUSD

1 Mth 0% 3 Mth 1% 12 Mth 6% EURGBP

be tapering its bond buying programme in the autumn and possibly ending the programme by mid-2014 did see the euro sink by over 3% versus the US Dollar intra-month.

According to Bloomberg, the euro is one of this year's best performing major currencies but this reveals that the ECB is falling behind other Central Banks in what has been described as 'the foreign-exchange wars'. While the euro's strength reveals that investors are confident that enough is being done to hold the euro region together, a strong currency does threaten the ability of member states to export their way out of recession. Looking ahead, the US Dollar is expected to gain against other developed market currencies where the Central Banks are either in easing mode or are not expected to tighten policy any time soon. The US Dollar's strength is also attributed to the economy's strength and the euro could suffer with the economic weakness in many euro zone economies.

FX rates

Month-on-month the euro was unchanged versus the US Dollar and British Pound.

The most significant foreign exchange event of the month was the US Dollar's appreciation versus emerging-market currencies. The trigger for the US Dollar's gain was a remark in May by the chairman of the US Federal Reserve, Ben Bernanke, that the Fed's purchases of bonds using central bank money might soon tail off. It has been reported that around US\$4 trillion has washed into emerging markets since 2009 having been attracted by the relatively high yields on offer. With the growing expectation that the Fed will start slowing its quantitative easing programme from this autumn, currency traders reacted to the possibility that capital will be pulled out of emerging economies on fears of growth and the prospect of higher return in the US. The most vulnerable countries to these capital reversals are those that rely on foreign capital to bridge the gap between what they spend and what they earn. Despite a steady foreign exchange relationship between the US Dollar and euro over the month, news that the Fed could

Market Outlook

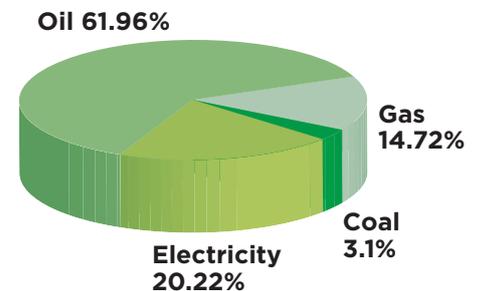
At a June closing price of US\$102, the price of a barrel of Brent crude oil looks high when placed in the context of: uncertain global demand; growing US crude production; a stronger US Dollar; falling equity indices; and the potential of rising global borrowing costs given that the US Federal Reserve Bank has signalled that it will taper its bond buying programme. However, as long as geopolitical concerns stoke trader anxiety, prices seem to be stuck at or around US\$100.

The election of Hassan Rohani as president of Iran has raised hopes that the political game in Iran has changed for the better. The bellicose style and apocalyptic rhetoric of his predecessor, Mahmoud Ahmadinejad, had stoked oil prices in the past and it is now hoped that Rohani's moderate style and reported skills in the diplomatic arts will take some heat out of the market. However, Rohani is faced with the task of reconciling Iran's national priorities with the need to negotiate relief from the punishing sanctions. How Rohani navigates between the two may influence oil prices in the months ahead. As tensions have the potential to ease in Iran, the civil war in Syria and violence in Egypt have the potential to destabilise global oil supplies and push oil prices higher in the short-term. In this context, evidence of the market's concern was seen in early July as Brent crude prices rose with the unrest in Egypt. As Egypt controls the Suez Canal and the Suez-Mediterranean oil pipeline, through which a reported 2-4 million barrels of oil per day is shipped to destinations in Europe and North America, traders are concerned with what has been described as a crisis in Egypt.

Pressure remains on prompt and winter 13/14 gas prices given that storage levels were 40% lower at the end of June 2013 compared to June 2012. Replenishing stocks in the months ahead will bolster UK gas demand. In addition, the announcement by Gassco of field maintenance that will take 34 million cu m/day of gas supply out of the system over the winter spooked the market. After the events of last winter, traders are increasingly concerned that the system could struggle to meet demand over the winter months if gas supplies are restricted by low stock levels, a lack of LNG supply to the UK and maintenance that restricts Norwegian gas supplies. In 2012, Norway provided the UK with approximately 40% of its gas. Traders are also concerned that the global LNG market could be tight in the years ahead given that only one new LNG plant opened in 2012 and Asian economic growth increases the region's demand for energy. Despite playing a diminishing role in the supply of gas to the UK, in a tight market scenario, LNG supplies or the lack of them could be significant in the months ahead.

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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