

Bord Gáis Energy Index

UNDERSTANDING ENERGY

May 2013

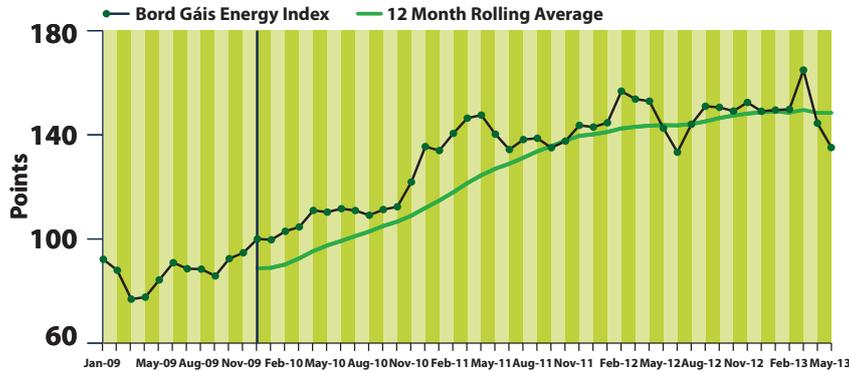


think beyond



THE BORD GÁIS ENERGY INDEX DOWN AS WHOLESALE PRICES FALL FROM RECORD HIGHS IN PREVIOUS MONTHS

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



1 Mth **-5%** 3 Mth **-8%** 12 Mth **-4%**

Summary:

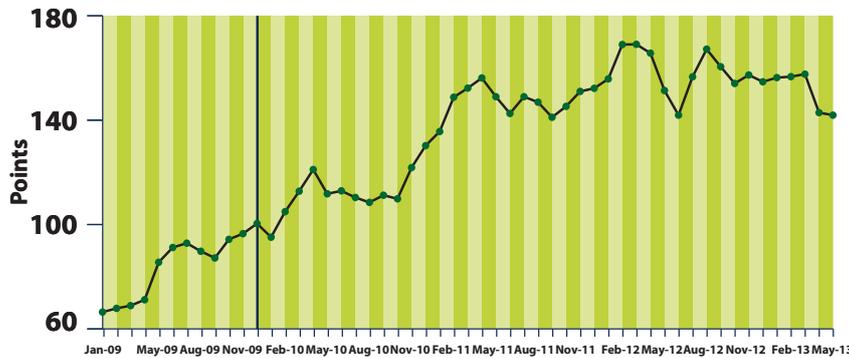
The Bord Gáis Energy Index fell 5% in May and recorded its lowest reading in 2013 following record highs earlier this year. As a result the index now stands at 138, a decrease of 4% compared to May 2012.

Irish wholesale electricity prices recorded an 11% decline in May as wholesale UK gas prices continued to soften from the record highs seen in previous months. In addition, the full availability of Ireland's new sub-sea power cable, which connects the Irish and British power grids, suppressed Irish wholesale electricity prices as Ireland benefited from increased power imports from the UK.

Brent crude prices fell as traders continued to digest the potential impact of North American shale oil production on the global oil market coupled with weaker Asian demand as China's economy slows.

European energy policy was a main theme at the EU leader's summit in Brussels in May. Given the fundamental shifts in the world's energy landscape in recent years, specifically the shale oil and gas production revolution in the US, the European Union is facing up to a future where it struggles to compete with the rest of the world largely because of the disparity in energy costs. According to the EU President Herman van Rompuy, unlike the US "we have no major game-changer on the horizon". To compete the EU and EC Presidents suggest that Europe needs to boost efficiency, complete its internal electricity and gas market, exploit its energy sources to the full, build a smarter energy infrastructure and develop new external supply sources. With energy being described as the "oxygen of the economy", affordable energy is key for jobs, growth and citizens. With China potentially experiencing the same shale revolution, Europe's competitiveness is under threat. According to the European Commission President Jose Barroso, the EU's energy-intensive industry is most exposed with energy costs accounting for around 13% of total production costs for German's basic iron and steel sector in 2010. Barroso went on to say that "the energy landscape is changing, and not in Europe's favour". The EU already imports 406bn euro worth of oil, gas and coal annually, 3.2% of total EU economic output.

Oil Index



*Index adjusted for currency movements.
Data Source: ICE

1 Mth **-1%** 3 Mth **-9%** 12 Mth **-6%**

Oil

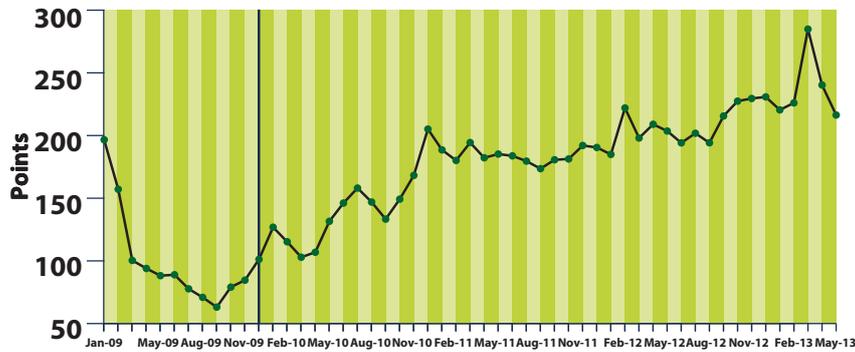
Month-on-month Brent crude prices fell USD\$2 to close at the key USD\$100 level. As the USD\$100 price point appears to have the approval of almost everyone in the OPEC export group of nations, it is likely to hover around this level unless a significant event occurs. OPEC's decision to keep the 30 million b/d production ceiling in place demonstrates the group's satisfaction with the current state of the globe's oil market. However, in euro terms oil prices fell only marginally as the euro weakened versus the US Dollar.

The general tone in Brent crude prices was one of weakness in May. During the month the International Energy Agency (IEA) released its much anticipated Medium-Term Oil Market Report that emphasised that a 'supply shock from North American oil is rippling through global markets'. The influential organisation is of the opinion that the advances in North American oil production will

be as transformative to the market over the next five years as was the rise of Chinese demand over the last 15 years. According to the IEA the good news for consumers is that this 'supply shock' is helping to ease a market that was tight as oil supply growth is expected to outstrip demand and OPEC's spare capacity rises. The idea that North American supply 'will cascade through the global oil market' weighed on traders' minds and oil prices. Real time evidence of the North American new found prowess in oil production was clear at the end of the month as US crude oil inventories hit all time record levels. News that the China manufacturing index for May released by HSBC showed the first contraction in seven months and a downward revision to the OECD's forecast of China's 2013 economic growth to 7.8% from 8.5% pared back estimates of key Asian oil demand growth due to rising expectations of softer emerging market activity. Other factors that weighed on prices included; a stronger US Dollar, the on-going economic weakness in the euro zone, healthy North Sea crude supplies, and high levels of regional refiner maintenance.

Despite the month-on-month weakness in Brent crude prices, there are a number of factors that are supportive of oil prices beyond OPEC's satisfaction of the USD\$100 benchmark crude oil price. Firstly, the apparent evolution of a popular upheaval in Syria degenerating into a bitter regional war amid a broader strategic struggle for influence in the region as a whole continues to stoke prices. Secondly, financially motivated trade and rising equity indices continued to support oil prices despite the fundamentals of oil supply and demand.

Natural Gas Index



1 Mth **-9%** 3 Mth **-3%** 12 Mth **8%** *Index adjusted for currency movements. Data Source: Spectron Group

the market's tightness were 'shaky' Norwegian supplies even before the planned maintenance occurred and at one point supplies to the UK hit their lowest levels in 12 months. Factors that applied some downward pressure on prices included an increase in LNG deliveries to the UK and reduced demand for gas to produce electricity. The proportion of UK electricity generated from gas continues to be displaced as cheaper coal prices spurs generation into coal-fired power, which in 2012 captured its greatest share of the electricity mix since 1996.

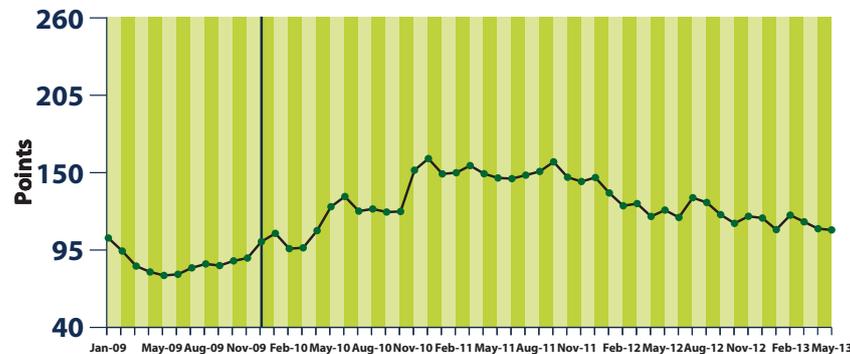
Looking ahead, further aggressive buying to replenish stocks for winter 13/14 is expected to provide on-going support to wholesale UK prices. Despite having benefited from a sharp pick-up in cargoes in recent weeks, some analysts expect European LNG imports to fall again in the coming months, due to the diversion to more lucrative destinations in Asia and Latin America. With South Korea facing potentially unprecedented electricity shortages this summer following the recent forced closure of two nuclear power plants, Asia's appetite for LNG could increase further as it seeks to meet demand with increased operation of plants fired by gas and oil.

Natural gas

With an 18% fall in the average monthly demand for gas month-on-month, the UK average Day-ahead wholesale gas price fell 9%. However, despite a softening in the price, at 66p a therm, the gas price in the UK was at an all-time high for the month of May. Planned and unplanned Norwegian field maintenance, unseasonably cold weather and an aggressive push to refill storage stocks combined to create a record average monthly May price for Day-ahead contracts.

Norwegian field maintenance is usual this time of the year and traders are generally comfortable with reduced gas flows to the UK during the summer period as falling demand accommodates reduced supplies. However, conditions in May 2013 were not typical given the colder-than-normal conditions in Britain that lifted demand for gas. Demand was further elevated by the aggressive purchasing of gas to replenish stocks which were run to all-time lows following the coldest March in more than 50 years. At the start of the month, total UK gas storage levels were only 16% full but reached 30% by month end. Despite the increase, stock levels are still 20% lower than they were 12 months ago. Adding to

Coal Index



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

South Africa between unions and coal producers led to a disruption in the supplies of coal. Furthermore, with US gas prices heading north of \$4/MMBtu, coal fired generation has taken market share in the US from natural gas and if gas prices head toward \$4.50/MMBtu, coal could dominate power generation in most regions which could reduce US coal exports to Europe. However, there are reports that at spot prices close to USD\$80/mt, the only coal being sold into Europe was Colombian in origin, as Russian and US producers already struggle to make a profit.

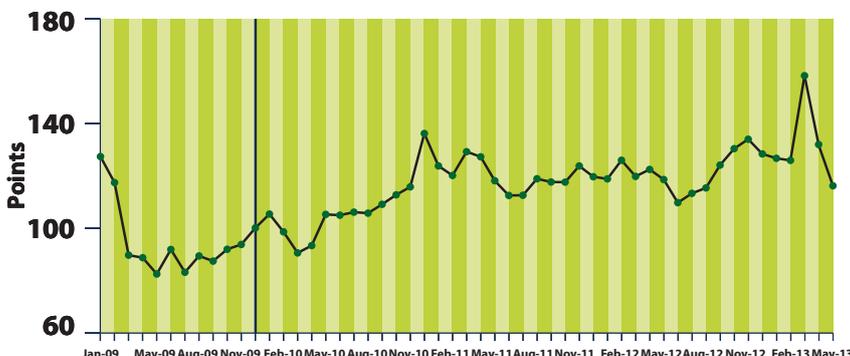
In Asia, China has created an uncertainty around seaborne market by proposing to ban low quality imported thermal coal, and coal with a sulphur and ash content of more than 1% and 25% respectively. Officially, the move is designed to address the pressing issue of poor air quality in Chinese cities from burning fossil fuels. This has the potential to devastate a large portion of the Indonesian coal industry in particular and to back-out millions of tonnes of low-quality seaborne coal which will have to be sold elsewhere. In 2012, China imported between 55 and 65 million tonnes of low-grade coal. Anything that China buys or not has a significant bearing on coal prices so the proposed ban has a potential to place a premium of high-quality coal globally.

Coal

During May the Atlantic coal market appeared to stabilise but a bearish tone prevailed during the month. At USD\$90.25/mt at the end of May, the benchmark European contract price is unlikely to fall much further as it may trigger cuts to more expensive supply which could not sustain production at prices below USD\$90/mt.

With adequate stocks at Amsterdam-Rotterdam-Antwerp (ARA) ports, European coal prices remained weak during May with cargoes continuing to arrive - particularly from Colombia. Prices also suffered amid warmer weather, shrinking power demand and increased European hydro power capacity. Confirmation of the on-going euro zone recession during Q1 2013 and OECD forecasts that the euro zone will continue to shrink this year added to a general weakness in the coal price. Economic growth and industrial production are important factors that influence commodity prices such as coal. Despite falling power demand across Europe, electricity generation from coal in Germany and the UK is increasing due to its cost relative to gas. Looking ahead, European coal prices could receive some support if wage negotiations in Colombia and

Electricity Index



1 Mth **-11%** 3 Mth **-7%** 12 Mth **-2%** Data Source: SEMO

produced by gas plants in Ireland were backed-out by cheaper UK imports and this displacement and consistent flow of power meant that only the most efficient plants in Ireland were required to produce power and sparks fell. Spark is the theoretical gross margin of a gas-fired power plant from selling a unit of electricity. With the benefits of greater interconnection in terms of lower wholesale prices and potentially export opportunities, it was announced that French and Irish power grid operators have signed a memorandum of understanding to commission feasibility studies into a possible electricity interconnector by 2025. The TSOs are reportedly investigating a connection linking the south of Ireland and the north west coast of France through a subsea cable, in what would be Ireland's first direct power link to mainland Continental Europe. At a potential capacity of 700MW, it could power 450,000 households.

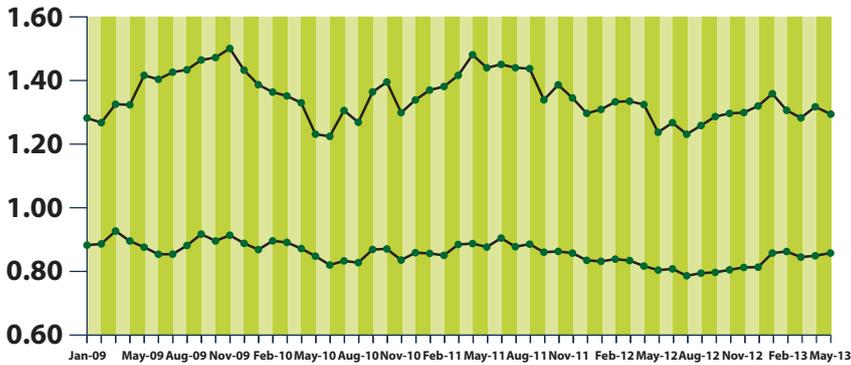
Electricity

In May Irish wholesale electricity prices fell 11% as the main components that make up the price of electricity (UK wholesale gas prices, coal, carbon and 'spark') all lost value for the second month running.

As thermal generation dominates the wholesale price of electricity (approximately 60% of Ireland's wholesale price was determined by either a gas or coal powered plant during the month), falls in UK gas and European coal prices in May weighted on wholesale electricity prices in Ireland. Carbon prices remained weak during May as the market continued to mull the prospects for the 'back loading' plan to pass a vote in the EU Parliament which is expected in early July. Various amendments are expected to be unveiled in the weeks ahead that may provide more clarity on the proposal as EU lawmakers seek a compromise that could create enough support to float the plan.

The 'spark' component of the electricity price also fell in May as the 500MW East-West Interconnector connecting the Irish power grid directly to Britain was fully operational. Power

FX Rates



| | | | | | | |
|-------|-----|-------|-----|--------|----|--------|
| 1 Mth | -1% | 3 Mth | 0% | 12 Mth | 5% | EURUSD |
| 1 Mth | 1% | 3 Mth | -1% | 12 Mth | 7% | EURGBP |

weighed on the currency. The euro's strength was further eroded as the OECD forecast that the euro zone's economy will contract 0.6% this year. The OECD warned that continuing weakness in Europe could evolve into stagnation, with negative implications for the global economy. However, with falling government bond yields the sovereign debt crisis feels less acute.

Despite the euro zone's economic problems, the euro marginally outperformed sterling as influential institutional assessments from the OECD and the IMF point to an economy that will struggle to recover under the shadow of a weak euro zone. Sterling has been the second-worst performer after the yen among the 10 developed-nation currencies tracked by Bloomberg Correlation-Weighted Indexes this year. However, according to the Bank of England 'a recovery is in sight' but the underlining picture remains subdued and the recovery will be weak by historical standards. Low inflation and poor retail sales numbers raised speculation that the Bank of England could increase its monetary stimulus programme and this weighed on the Pound. Despite some weakness in US manufacturing and a lowering of Q1 2013 growth, the US Dollar gained on positive jobs, housing, consumer confidence and business activity data in May. Positive data raises the possibility that the US Federal Reserve could slow its asset-purchase programme which supported the US Dollar. Remarks from the chairman of the Fed to Congress increased speculation in this regard.

FX rates

In May, the euro gained modestly against the British Pound but lost some ground against the US Dollar. Rhetoric from global central banks is now playing a significant role in determining sentiment and foreign exchange rate movements as the markets look for clues about when central banks are likely to cut back on monetary easing programmes or whether these programmes will be extended to support growth.

During the month, the euro suffered as the economic releases showed few signs that the region's economy was recovering. The region's on-going weakness was evident during the month as unemployment reached record highs, the services and manufacturing sectors continued to contract and the economy shrank for the sixth straight quarter in Q1 2013. Worryingly, the economic slowdown appears to have spread to the region's core as Germany's growth was just 0.1% in the first quarter of 2013. With inflation at just 1.4% in May and well below the ECB's target of 2%, the ECB had room to cut its main refinancing rate to a record low of 0.5%. Given the economic malaise, there is a growing expectation that the ECB will cut again and this

Market Outlook

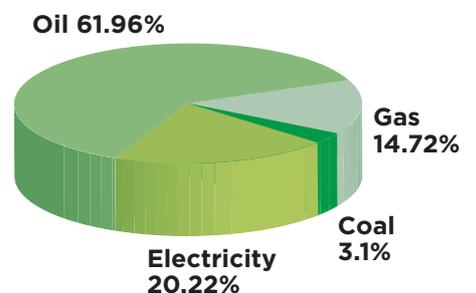
If forecasts from the International Energy Agency prove accurate, Platts are reporting that OPEC is set for several difficult years as booming US shale production sends shockwaves through the global supply chain and security concerns in the wake of the Arab Spring steer investment away from the cartel. According to Bank of America, North American shale oil production is exceeding optimistic estimates and as a result forecasts for Brent crude oil prices in 2013 are being pared back. However, in the short-term OPEC's influence will continue to attempt to steer prices toward USD\$100. With Brent oil closing the month at USD\$100.39, it is difficult to see prices trading below this level in the short-term.

However, along with the pressures of shale oil production, OPEC has to contend with potentially reduced monetary stimulus. With cheap cash fuelling the stock market rally, talk of tapering the Federal Reserve's asset-purchasing programme is starting to weigh on equity indices. As oil prices have become increasingly financialised, weak equity indices will add further weight on global oil prices as will a strong US Dollar if the flow of Dollars is restricted. A weaker euro vis-à-vis the US Dollar could mean that euro zone buyers would not feel the full benefits of future oil price falls. The escalating conflict in Syria, coupled with the recent unrest in Turkey which has echoes of the 'Arab Spring', is continuing to stoke the geopolitical risk premium which will keep traders watchful of any situation that could develop to affect oil supplies. Also of note is the fact that the 10th round of nuclear talks between Iran and the IAEA ended in mid-May without an agreement to let the UN's nuclear agency resume an inspection of Iran's suspected nuclear bomb research facilities. On the domestic front, encouraged by the Barryroe oil find by Providence Resources in 2012, the Irish government is, together with some industry participation, funding a new seismic survey of the Irish offshore to study the potential for further oil and gas exploration in the Atlantic Margin.

Near-term wholesale UK gas prices will continue to be influenced over the summer months by the cocktail of maintenance, LNG arrivals, storage injections and demand. Further out the curve, gas traders will continue to monitor developments in the price of oil and future gas supplies. With the US Department of Energy (DOE) believing that 'the public interest generally supports authorising (LNG) export projects that lead to net benefits to the economy' most of the remaining LNG export applications in the US could be approved. On the 17th of May, the DOE announced conditional approval for LNG exports from the planned Freeport LNG facility in Texas to countries that do not have free trade agreements with the US. This development could see the US becoming an exporter of gas in the form of LNG to Asian and European markets which would boost global supplies in the years 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.



For more information please contact:

Fleishman-Hillard — James Dunny — 086 388 3903

Bord Gáis Energy — Aoife Donohoe — 087 773 3344

The contents of this report are provided solely as an information guide. The report is presented to you "as is" and may or may not be correct, current, accurate or complete. While every effort is made in preparing material for publication no responsibility is accepted by or on behalf of Bord Gáis Eireann, the SEMO, ICE Futures Europe, the Sustainable Energy Authority of Ireland or Spectron Group Limited (together, the "Parties") for any errors, omissions or misleading statements within this report. No representation or warranty, express or implied, is made or liability accepted by any of the Parties or any of their respective directors, employees or agents in relation to the accuracy or completeness of the information contained in this report. Each of the Parties and their respective directors, employees or agents does not and will not accept any liability in relation to the information contained in this report. Bord Gáis Eireann reserves the right at any time to revise, amend, alter or delete the information provided in this report.