Bord Gáis Energy Index

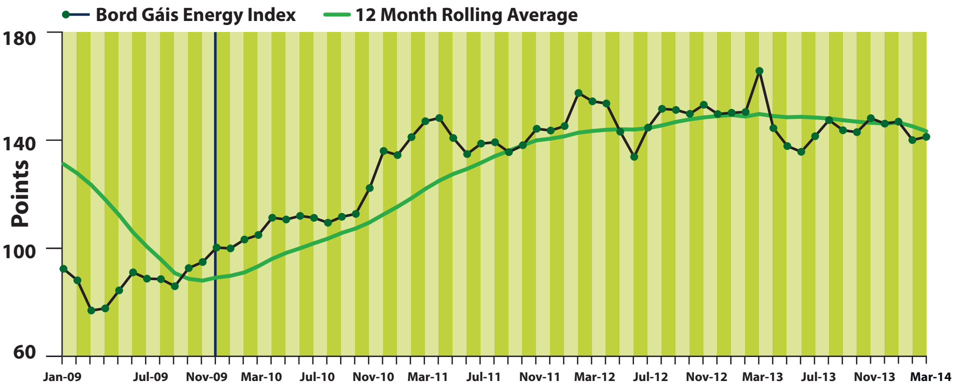
UNDERSTANDING ENERGY

March 2014

Bord Gáis Energy

March sees 1% rise in Bord Gáis Energy Index as rising wholesale electricity prices offset falling oil and gas prices

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



1 Mth	1%	3 Mth	-4%	12 Mth	-15%

Summary:

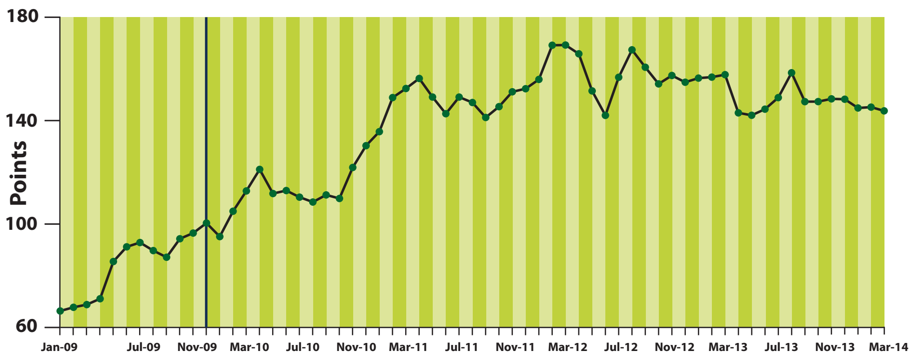
The Bord Gáis Energy Index rose 1% in March with wholesale electricity prices rising 6% month-on-month. Rising wholesale electicity prices offset falling Brent crude (down 1% month-on-month) and wholesale UK gas prices (down 5% month-on-month). Wholesale UK gas prices have tumbled in recent weeks amid mild weather and low demand.

Low wind volumes on certain days combined with the untimely forced outage of efficient gas powered plant and cheap coal powered plant on the same days were the factors behind the 6% increase.

To date the international dispute following Russia's annexation of Ukraine's Crimea peninsula has had no long-term impact on gas or oil prices. However there remains a concern that non-payment by Ukraine for its own gas imports could still trigger a crisis. In March 2014 the Index stood at 141.

According to the gas industry association Eurogas, gas consumption in the European Union's 28 member states fell by 1.4% in 2013 predominantly due to reduced usage in the power sector. The figures from Eurogas again highlight Europe's dependency on imported gas with just 33% of the region's indigenous supplies making up the total net supplies. In 2013 Russia made up 27% of supplies, Norway 23%, Algeria 8% and Qatar 4%. In an attempt to boost European gas production the European Parliament passed new EU environmental impact assessment rules in March that exclude early-stage shale exploration projects. Echoing the Parliament's approval, the EU president Herman Van Rompuy said that "Europe was intensifying its efforts to slash dependence on energy, and on Russian energy in particular, increasing efficiency, diversifying supply routes to and within Europe and expanding energy sources". US shale gas has been proposed as a potential new supply source and in this context the Department of Energy (DOE) in the US approved the seventh liquefied natural gas export terminal (most of which are for terminals on the US East and Gulf Coasts) for LNG exports to countries without free trade agreements with the US. There are now 24 other US LNG export projects in the DOE's queue for approval. Countries with US free trade agreements are automatically approved. It was reported in March that several US lawmakers wanted the Obama administration to quickly approve more LNG export applications in response to the crisis in Ukraine. This is on the basis that it could send a signal which could change the dynamics of long-term gas contracts throughout the world and influence Russian gas prices and its hold over European markets. Despite the promise of US gas arriving at European shores, at current prices Asian markets remain more attractive.

Oil Index



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

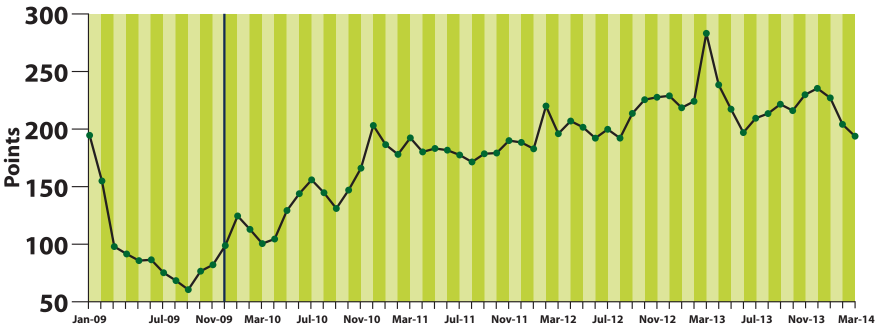
*Index adjusted for currency movements.
Data Source: ICE

Oil

Month-on-month the front month Brent crude price fell 1% in euro terms.

In early March Brent crude prices reacted to the news that Russia's President Putin had obtained parliamentary permission to use Russian troops not just in Crimea, but in the Ukraine as a whole. On this news the front month Brent crude price hit its high of the year at US$112.39 but as tensions eased prices subsequently softened and the crude price was trading at US$107.76 on 31 March. Ukraine transited approximately 313,000 b/d of Russian crude through the Druzhba pipeline in 2013 but according to reports this only accounted for 8% of Russia's total crude exports last year. According to Platts, in 2013 OECD Europe relied on Russia for 36% of its total net crude oil imports and Russia exported an average of 3.05million b/d to OECD Europe. While gas exports to OECD Europe generated revenue of around US$57billion for Gazprom in 2013, Russian crude exports were worth about US$100billion. During the month the US administration made a surprise announcement that it was selling up to 5 million barrels of oil from its Strategic Petroleum Reserves (SPR) and this move pushed crude prices lower in the short term. This action was interpretted as a warning shot to Russia over tensions in Ukraine as Russia's oil revenue is dependant on high prices. The SPR, the largest government stockpile of crude in the world, is a series of underground caverns with the capacity to hold 727 million barrels of crude. Despite a softening in prices from the high achieved on 3 March, geopolitical tensions and lost supplies continue to prop up Brent crude prices. News from Libya continued to disappoint the market in March on reports that the country's crude oil output has slumped to just 150,000 b/d after the Elephant field in western Libya was shut in following disruption to the pipeline linking it to the Mellitah export terminal. Earlier in the month production fell to 230,000 b/d after the major Sharara field was again shut by protestors. Oil production levels were about 1.6million b/d prior to the collapse of the previous regime. Libya's four main eastern ports remain blockaded by anti-government rebels. However in early April news started to filter through that a deal in Libya to end the 10 month port blockage in the eastern part of the country could be reached. News that the International Energy Agency (IEA) revised upwards its estimate of global oil demand in 2014, once again amid an improving economic picture, may have also supported prices. The expected 1.35million b/d year-on-year increase is being linked to an increase in China's consumption but also with rising consumption in other emerging economies. Supplies are also expected to increase due to "relentless growth in US and Canadian supplies". Despite the expectation of continued oil consumption growth, economic news from China once again points to some fragility. In March China's corporate-bond market suffered its first default, exports tumbled, a widely watched manufacturing index fell for a fifth month in a row, industrial production missed expectations and officials in one eastern country reportedly rushed to placate depositors lining up to withdraw money. The IMF also warned that the world faces "years of slow and subpar growth" due to low-flation in the euro zone and geopolitical tensions stemming from the crisis in Ukraine. Western powers again met with Iran in March for a second time in a series of talks that are hoped to produce a verifiable settlement on the scope of Iran's nuclear programme. It was reported that it will be difficult to overcome the differences between the two sides but the parties are scheduled to meet again on 7-9 April in Vienna.

Natural Gas Index



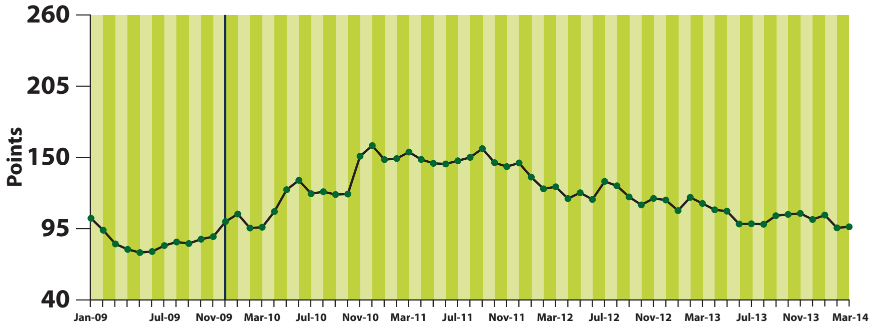
1 Mth	-5%	3 Mth	-18%	12 Mth	-32%

*Index adjusted for currency movements.
Data Source: Spectron Group

Natural Gas

In euro terms, the average Day-ahead gas price for March was 5% lower month-on-month as above average temperatures in the UK and healthy supplies combined to push prices lower for the third month running. As stated in previous reports, of particular influence on prices is the volume of gas held in store. Total stock levels across the UK were nearly 53% full at the end of March, compared to just over 5% a year earlier. Unused gas is as a result of lower demand due to mild temperatures over recent months. February's mean UK temperatures were the 10th warmest since records began in 1910 and it was the 15th warmest January. Unusually during the October-March winter period, the average Day-ahead gas contract on the NBP trading hub averaged at 63.84p a therm compared to the 65.40p a therm average of the 2013 summer contract period. Summer 13 prices were supported after a particularly cold March 13 drew heavily on domestic stocks and saw the UK's key storage facility, Rough, completely depleted at the beginning of April. This resulted in an aggressive injection period throughout the summer period. Net injections of 14mcm in April - September would now fill storage sites in time for next winter compared to a 26mcm requirement this time last year. A reduced demand for gas over summer 14 consequently weighed heavily on the contract and it closed at the end of March at just over 53p a therm (this was the lowest the summer 14 contract had traded at in nearly four years). 12 months ago wholesale UK gas prices traded at over £1 a therm on supply disruptions and concerns that the UK would run out of gas. Throughout 2013 these anxieties have stoked and supported prices but the mild weather in 2014 has eroded these concerns along with wholesale UK gas prices which have been tumbling. Despite on-going international tensions between Russia and Western powers and the potential for gas supplies to Europe being interrupted, the market seems to have completely discounted this possibility. It would appear that neither the Russian or Ukrainian authorities have any intention of disrupting supplies in pursuit of military or political objectives but there remains a concern that non-payment by Ukraine for its own imports could trigger a crisis in which European supplies are interrupted. As at 1 April, Ukraine owes Russia US$1.711 billion in gas debt and Gazprom's decision to raise Q2 prices by 44% on Q1 prices will place further financial pressure on Ukraine.

Coal Index



1 Mth	1%	3 Mth	-5%	12 Mth	-15%

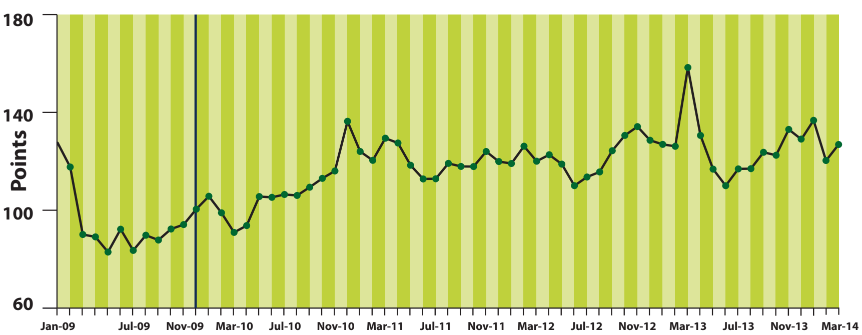
*Index adjusted for currency movements.
Data Source: ICE

Coal

In euro terms the ICE Rotterdam Monthly Coal Futures contract was 1% higher month-on-month. Intra-month prices closed at a four year low of US$73.15/mt on 5 March before recovering toward the back-end of the month. With the exception of the last trading day, over the month prices were relatively stable amid negligible buying appetite coupled with the oversupplied Atlantic basin which has sapped price volatility.

European coal prices received some support on 31 March and participants cited ongoing delays to US miner Drummond's loading restart in Colombia. US firm Drummond was ordered to halt its Colombian export coal loadings in early January until its direct loading system had been completed. However these concerns and price moves were assuaged as news broke late 31 March that Drummond had restarted coal loadings from its Colombian export terminal after environmental restrictions were lifted. Shipping sources said the first cargo loaded at Puerto Drummond was a 93,000 mt vessel, booked by a northwest European utility trader. Spot thermal coal prices in Europe, the main destination for Colombian coal, rose $4 to $84.30/mt on 8 January after the Drummond suspension was confirmed. The speed with which Drummond's coal arrives to Europe will be important as South African cargoes into Europe have reportedly eased and the market could be a little tighter in the weeks ahead. This tightness has nudged prices to over US$77/mt on 1 April.

Electricity Index



1 Mth	6%	3 Mth	-2%	12 Mth	-20%

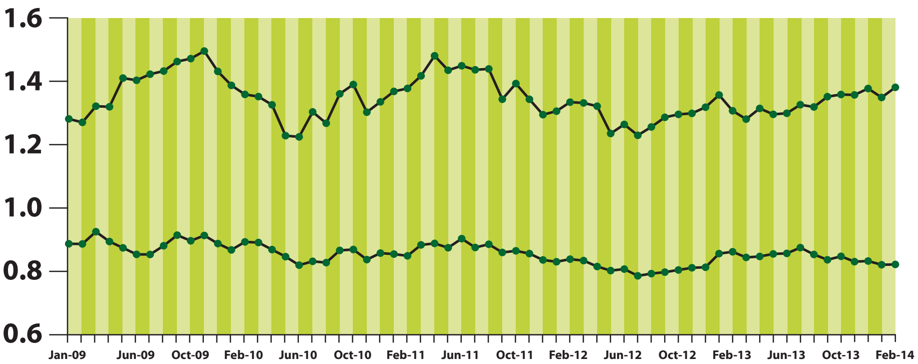
Data Source: SEMO

Electricity

In March the monthly average Irish wholesale electricity price rose by 6% month-on-month despite falling gas prices (as gas powered generation dominates the generation mix on the island of Ireland the price of imported gas from the UK has a significant influence on Irish wholesale electricity prices).

Month-on-month the average 'clean sparks' in March rose by nearly €7/MWh to over €13/MWh (the 'clean spark' is the theoretical gross margin of a gas-fired power plant from selling a unit of electricity, having bought the fuel required to produce this unit of electricity and the cost of abating the carbon emitted) and this was the key driver behind rising wholesale Irish electricity prices. Exceptionally high sparks between 10 March and 13 March (during this period they averaged at nearly €43/MWh) had a significant impact on pushing the monthly average spark up to over €13/MWh. In a reversal of the positive wind effect experienced in February (wind turbines met 23% of the Island of Ireland's electricity demand and the flood of wind powered electricity helped to displace costly gas fired generation which fed through to lower wholesale prices) the lack of wind during this period combined with the unexpected outage of efficient gas and cheap coal plants, pushed sparks higher to bring wholesale prices close to €100/MWh. The average wholesale electricity price during the month was approximately €65/MWh. Low volumes of wind powered electricity (volumes were at virtually 0MWs at times during this period) and these outages resulted in the starting up of more inefficient and costly plants which had an immediate impact on wholesale prices and ultimately drove the average monthly price higher.

FX Rates



1 Mth	0%	3 Mth	0%	12 Mth	7%	EURUSD
1 Mth	0%	3 Mth	0%	12 Mth	-2%	EURGBP

FX Rates

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

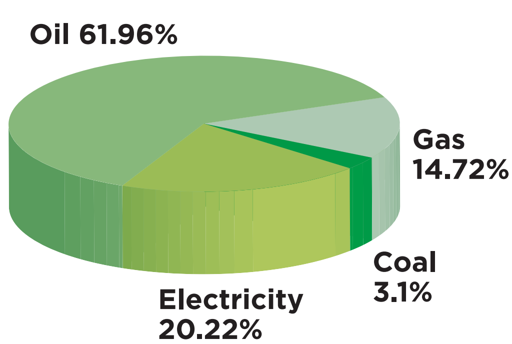
A lack of volatility in exchange rate movements between the euro, the Pound and the US Dollar can be attributed to record low interest rates and the prospect of these rates remaining low into the visible future. The outlook is clearest in Europe where the ECB may consider negative rates as a means of combating the threat of deflation. But 'normal' rates in the US and the UK are still a distant prospect. Last month the Bank of England confirmed that an increase is not imminent and that when rates start to rise, the pace will be slow. On 19 March the US Federal Reserve offered similar guidance as it said that it would wait a "considerable time" after concluding its asset purchase programme before pushing borrowing costs higher. Markets project that short-term rates in both economies will still be just 2% in early 2017, a level the euro zone will not hit until 2020. Low inflation in these economies is also a contributing factor. American inflation is now just 1.2%. Euro zone inflation is 0.7% and in the UK consumer prices rose by just 1.7% in the year to February. Most central banks have a set inflation target of around 2% a year so these economies are not under pressure to raise rates to tackle inflation. As interest rate normalization recedes toward the horizon, exchange rates are stabilising. During the month there were further signs of the UK's "resilient" economy. The Office of Budget Responsibility suggested the country will grow by 2.7% in 2014, British GDP growth is the fastest in the rich world, house prices are rising (helped by low interest rates) and more people are working than ever before. Issues such as the level of business investment, savings driven consumption and the cost-of-living squeeze remain concerns. There were also some positive economic releases from the US in March. The economy created a further 175,000 jobs in February, US retail rose for the first time in three months and a survey suggests that US consumers confidence is at a six year high.

Market Outlook

With Russia supplying 30% of Europe's natural gas and with more than half of these volumes being transported via Ukraine, issues of European gas security are being raised in recent weeks following the annexation of Crimea. It would appear that neither the Russian or Ukrainian authorities have any intention of disrupting supplies in pursuit of military or political objectives but there remains a concern that non-payment by Ukraine for its own imports could trigger a crisis in which European supplies are interrupted. It is estimated that in 2013 Gazprom delivered up to US$10 billion worth of gas to Ukraine and, according to Platts, Russia claims it is owed a total of US$16 billion from Ukraine in voided gas price discounts and unpaid bills stretching back to agreements put in place in 2010. Adding further pressure on Ukraine, on 4 March Gazprom announced that discounted Russian gas prices agreed between Putin and Yanukovich would be withdrawn. Price hikes of 44% were seen in early April and Russian officials were considering a draft law that cancels the US$100/1,000 cu m gas discount Moscow offered to Kiev in April 2010 in return for the extension of a lease for Russia's navel base in Crimea (this law was signed in early April). Combined Ukraine could face a gas price increase to US$500/1,000 cu m but Ukraine's energy and coal minister said that it will pay no more than US$387/1,000 cu m. Non-payments of debt accumulated for imported gas were the triggers for the gas disputes of January 2006 and January 2009. In 2009 shipments of Russian gas to European destinations were halted for two weeks. Ukraine's gas debt is being exacerbated by the inability to collect payment from customers amid the crisis and by a wider financial crisis that has engulfed Ukraine. The government in Kiev is seeking some US$15 billion in IMF assistance in order to invest in key projects and make foreign loan payments. As analysts see it, the danger of supply interruptions arises now from the difficulty of negotiating such a major loan package in the midst of a political and military crisis. In the short-term the availability of alternative gas supply routes, the adaptation of existing pipelines, subdued gas demand, the advent of summer and high levels of gas storage inventories will limit the impact on Northern European wholesale prices. The crisis has put Europe's energy dependency at the top of the political agenda and has strengthened the rationale for the South Stream pipeline and the development of indigenous sources. It has also sparked a debate in the US on the benefits of exporting abundant quantities of shale gas to Europe.

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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