

# **Wholesale Prices – Drivers & Implications**

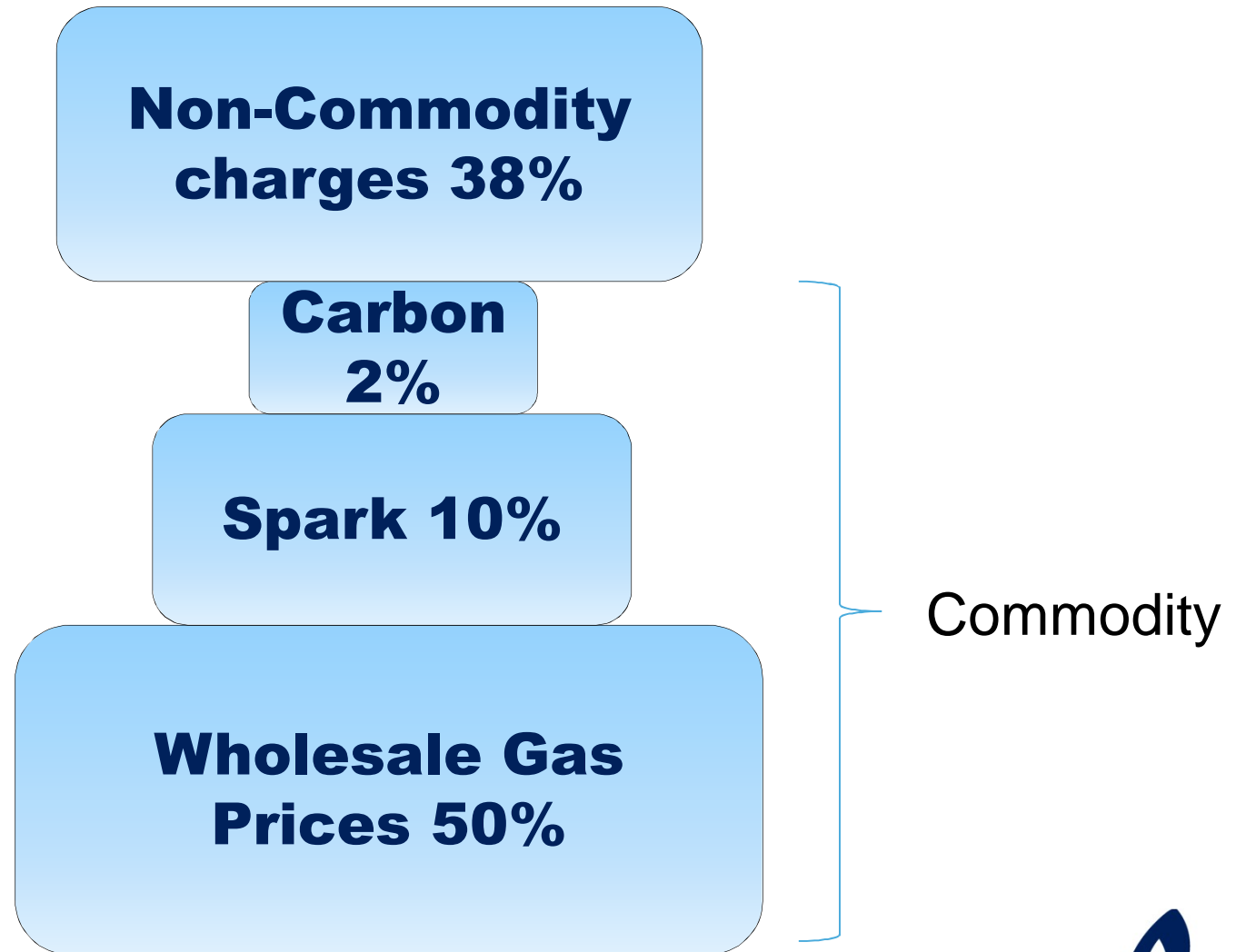
*John Heffernan Power Trading Manager  
Bord Gais Energy Limited*

## Energy's League Table

1	Oil	32.90%
2	Coal	30.10%
3	Gas	23.70%
4	Hydro	6.70%
5	Nuclear	4.40%
6	Renewables	2.70%



# Your Electricity Offer



# Impact of Lower Wholesale Gas Prices for Large Energy Users

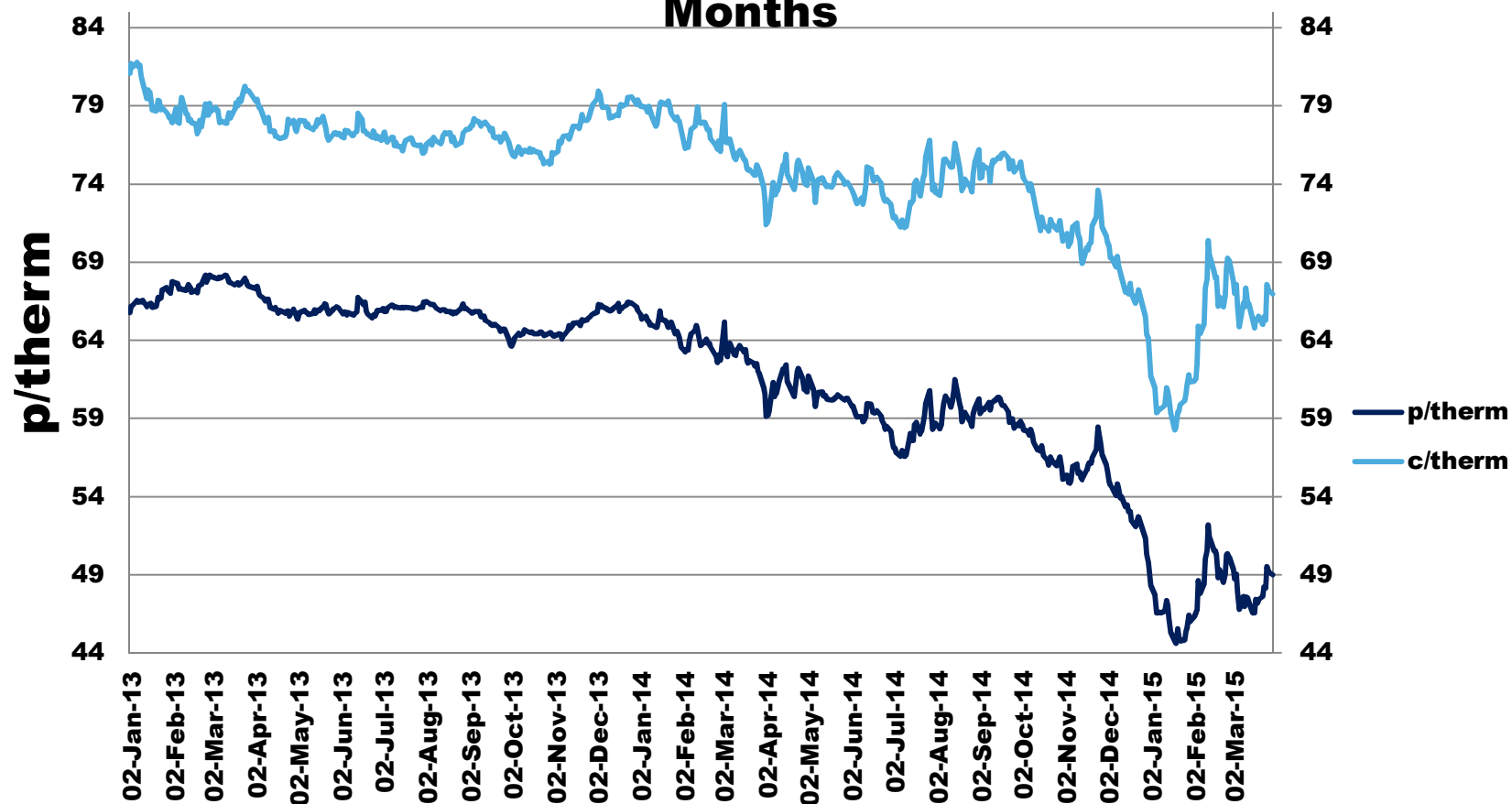
Jan-13	12 Month Contract starting Summer 15/Winter15	01/04/2015 - 31/03/2016
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27 Months before the contract starts. How did gas prices behave????

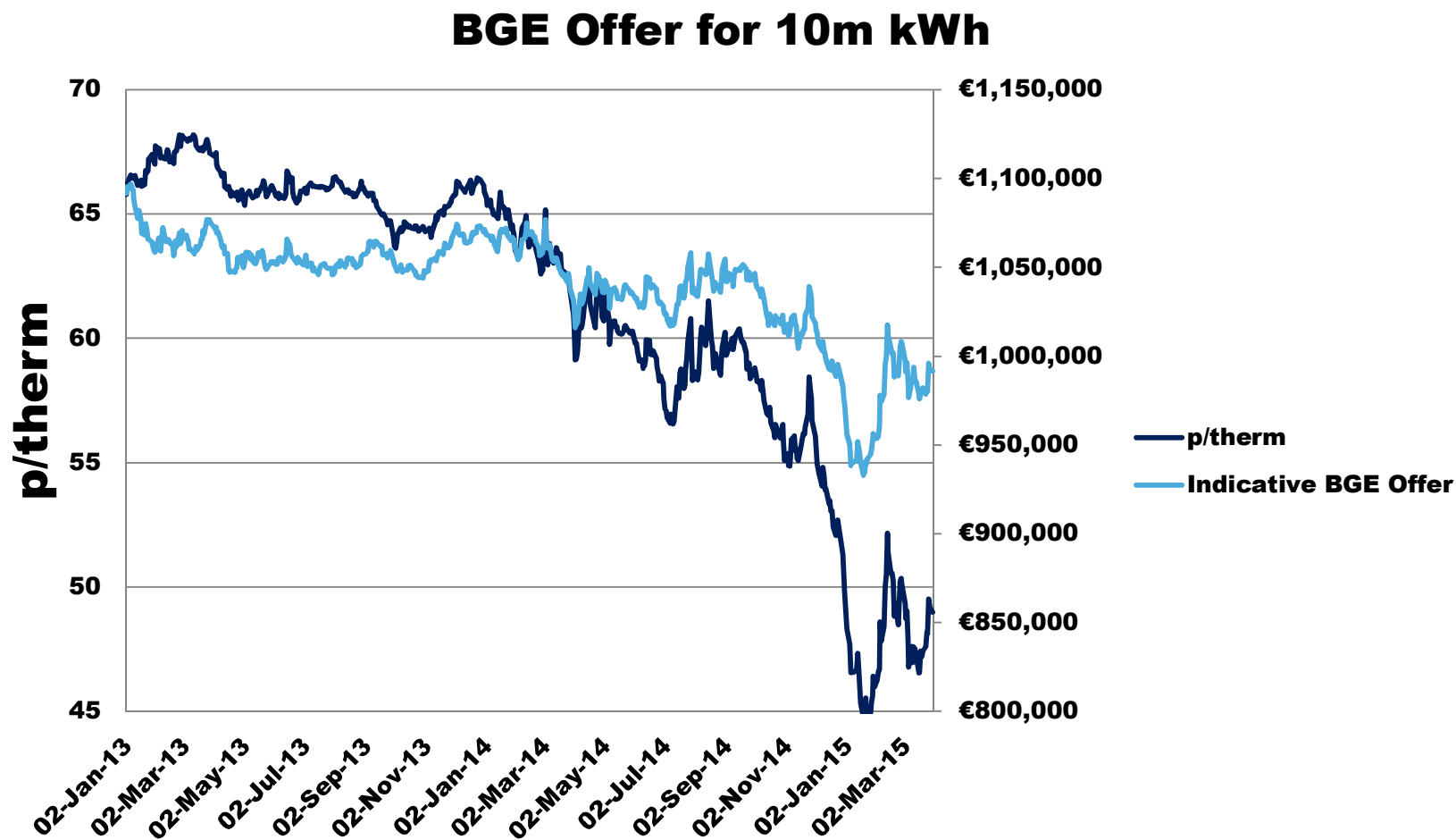


# Impact of Lower Wholesale Gas Prices for Large Energy Users

## Wholesale Gas Price Movements over the 27 Months



# Impact of Lower Wholesale Gas Prices for Large Energy Users

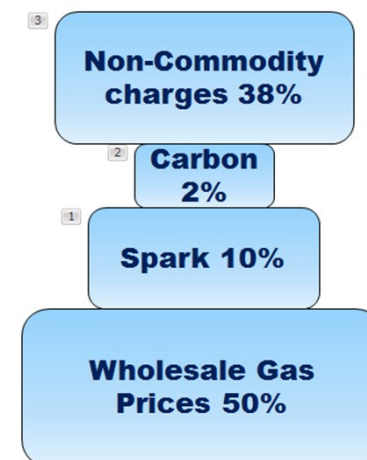


# Impact of Lower Wholesale Gas Prices for Large Energy Users

			Embebbbed Gas Price	
	Date	OFFER	€	£
Maximum	07-Jan-13	€1,096,766	€0.82	£0.67
Min	19-Jan-15	€932,667	€0.58	£0.45
		-15%	-29%	-33%

So why don't we see the full benefit of falling gas prices in our offers?

- Has the view of Spark changed?
- Carbon prices have risen
- Non-commodity charges including the PSO Levy
- FX



# The PSO Levy

The proceeds are used to support generators which are not recovered in the electricity market

**€335.4million (€210.9min 13/14) will be collected to support:**

- Renewables - €94.3m...40% of elec from renewables by 2020
- Peat - €119m
- Security of Supply €104.7m
- Other - €17.2m

## Why the increase?

- Lower wholesale prices due to falling UK gas prices
- Lower running for Tynagh
- More renewables

## Is industry happy?

- International cost competitive & upward pressure on electricity bills
- Medium & large customers €18.47/kVA to €34.20/WA

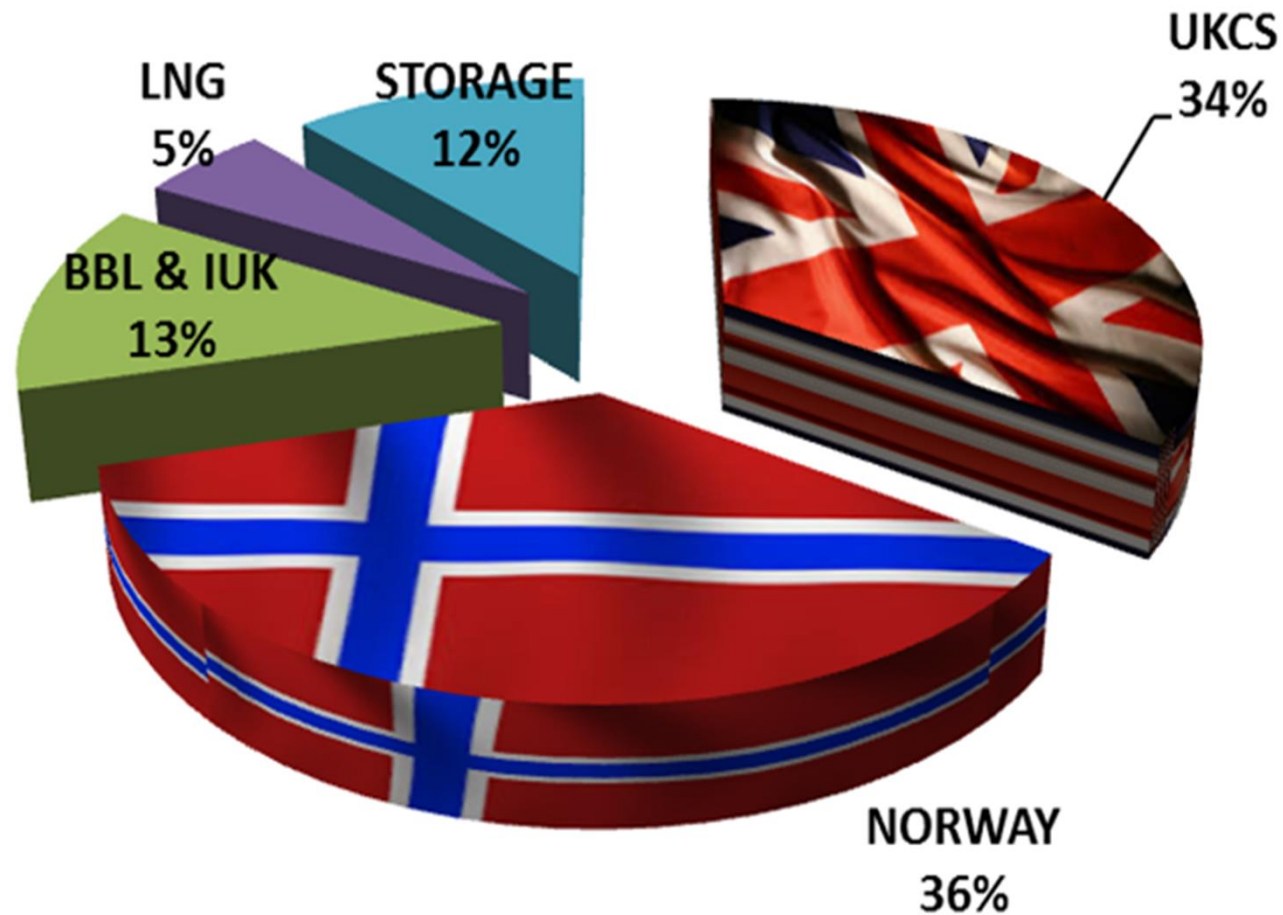




# Downstream gas comes from a number of sources...



## Where the UK gets its Gas



# **Are Low Wholesale Gas Prices set to continue?**

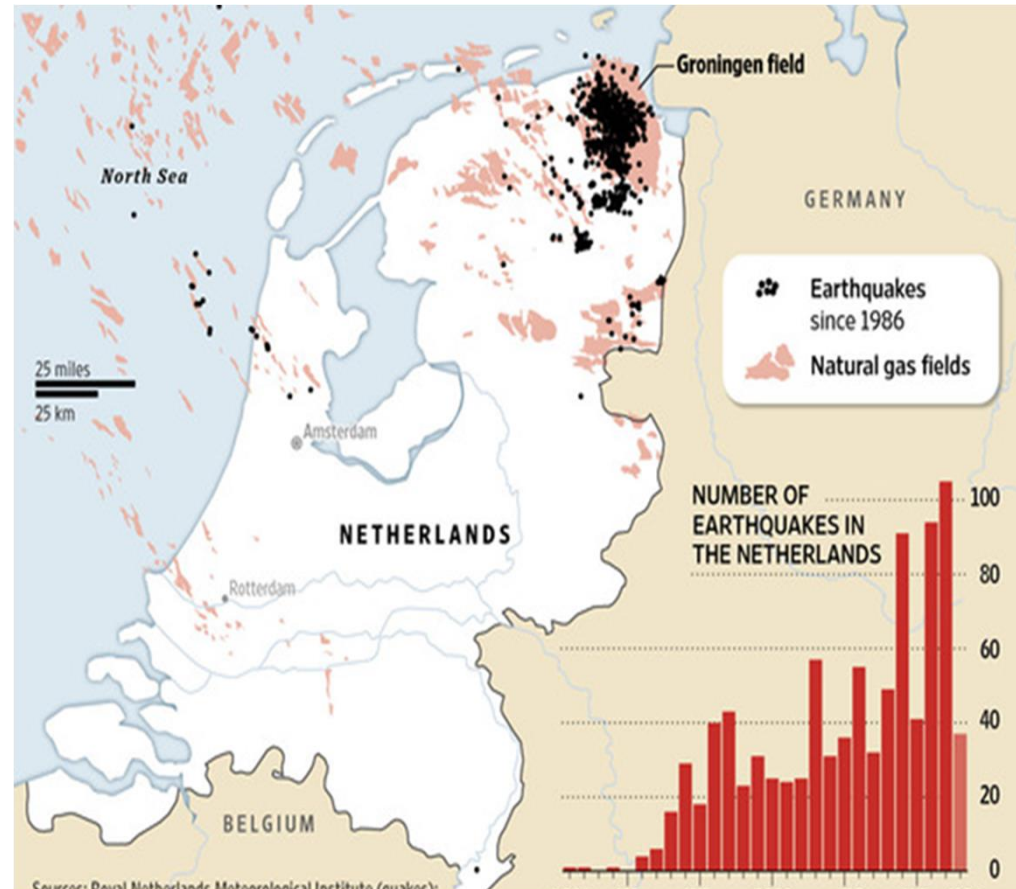


# Groningen

**Feb 9th Dutch government, in light of concerns over seismic activity in the area, announced a production cap on the Groningen field**

**Production from the field was expected to be 39bcm for 2015. The Cap for H12015 was 16.5bcm and a Scientific study was established to report in July**

**Introduced uncertainty as to production from Groningen going forward**





# **LNG....will it continue to arrive?**

**Gas produced in  
Qatar**



**Delivered to the  
UK**



**Super-cooled and  
liquefied for  
transport**



# Rough

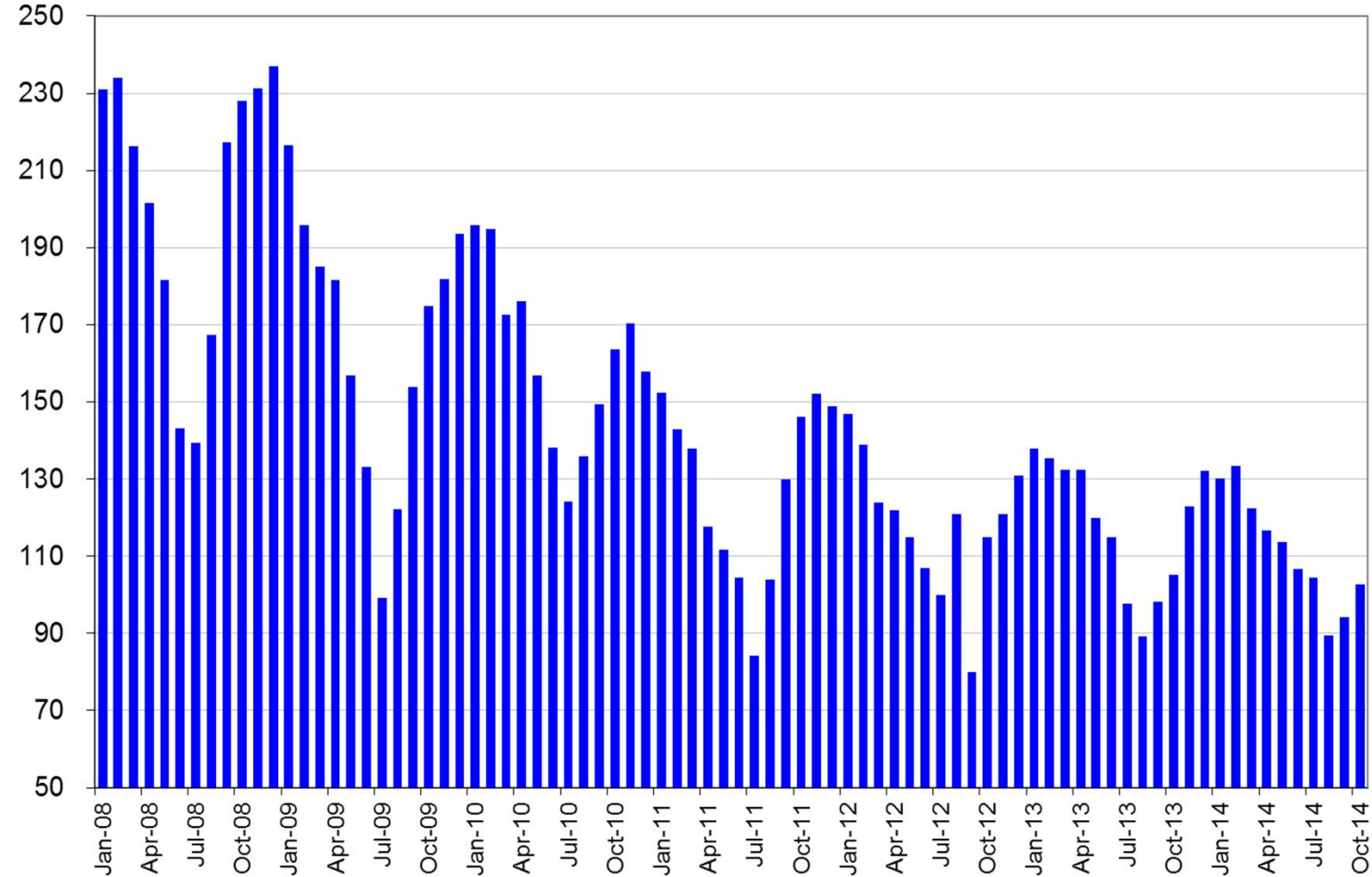
**Centrica announce potential technical issue which could reduce storage capacity at its storage facility by 25%**

**Gas is injected during lower demand summer months for withdrawal during higher demand winter months**

**The issue could reduce the gas available for withdrawal in winter 15/16**



# UKCS



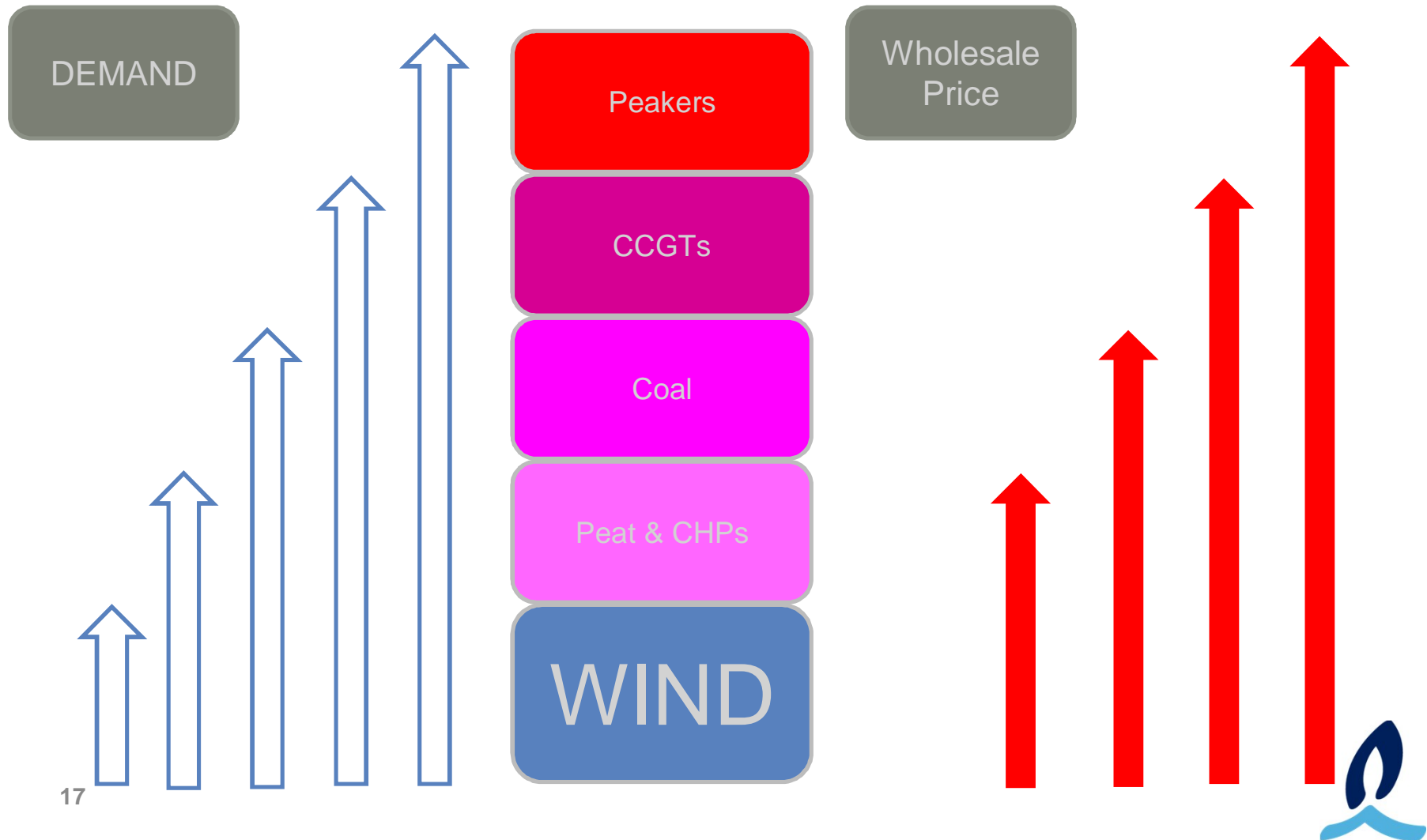
## **Other Factors**

- **Weather & storage**
- **Ukraine & Russia**
- **Oil Prices**
- **Natural disasters**
- **The global economy**
- **Renewables**

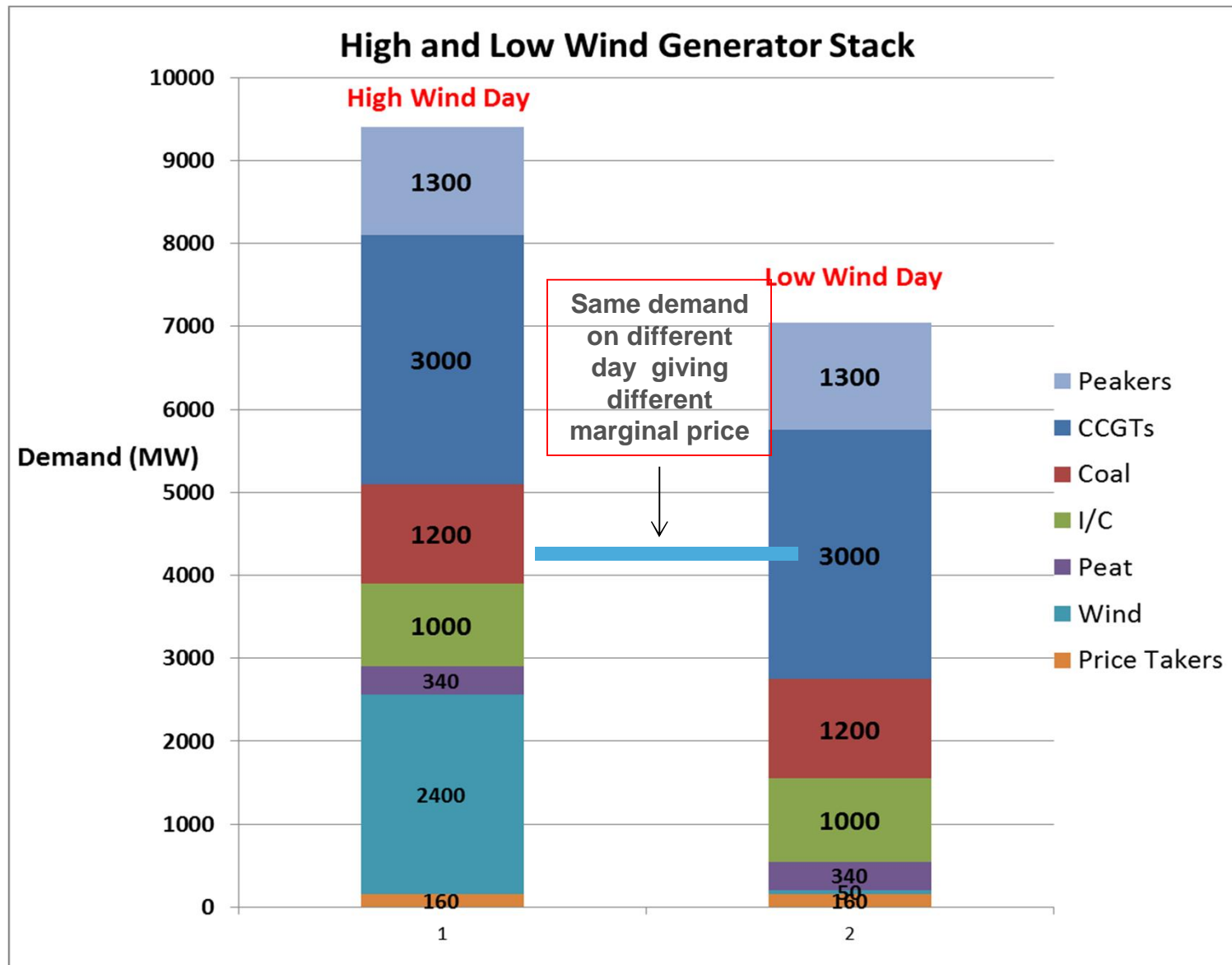




# Why Wholesale UK Gas prices are so important?



# Typical Generator Stack



# How do we compare Cal 2016?

- **Wholesale price is enough to cover:**
- **Gas**
- **Carbon**
- **The rest = 'Spark'**

Ireland	MWh	c/Kwh
Gas	€45.08	76%
Carbon	€2.62	4%
<b>Cost of Prodction</b>	<b>€47.70</b>	
Spark 2014	€11.45	19%
	<u>€59.15</u>	5.92



UK	€62.74	€3.59
Belgium	€48.85	-€10.30
Italy	€47.30	-€11.85
Spain	€45.55	-€13.60
Hungary	€41.35	-€17.80
Poland	€40.57	-€18.58
Holland	€39.06	-€20.09
France	€39.05	-€20.10
Germany	€31.90	-€27.25
Czech	€31.60	-€27.55

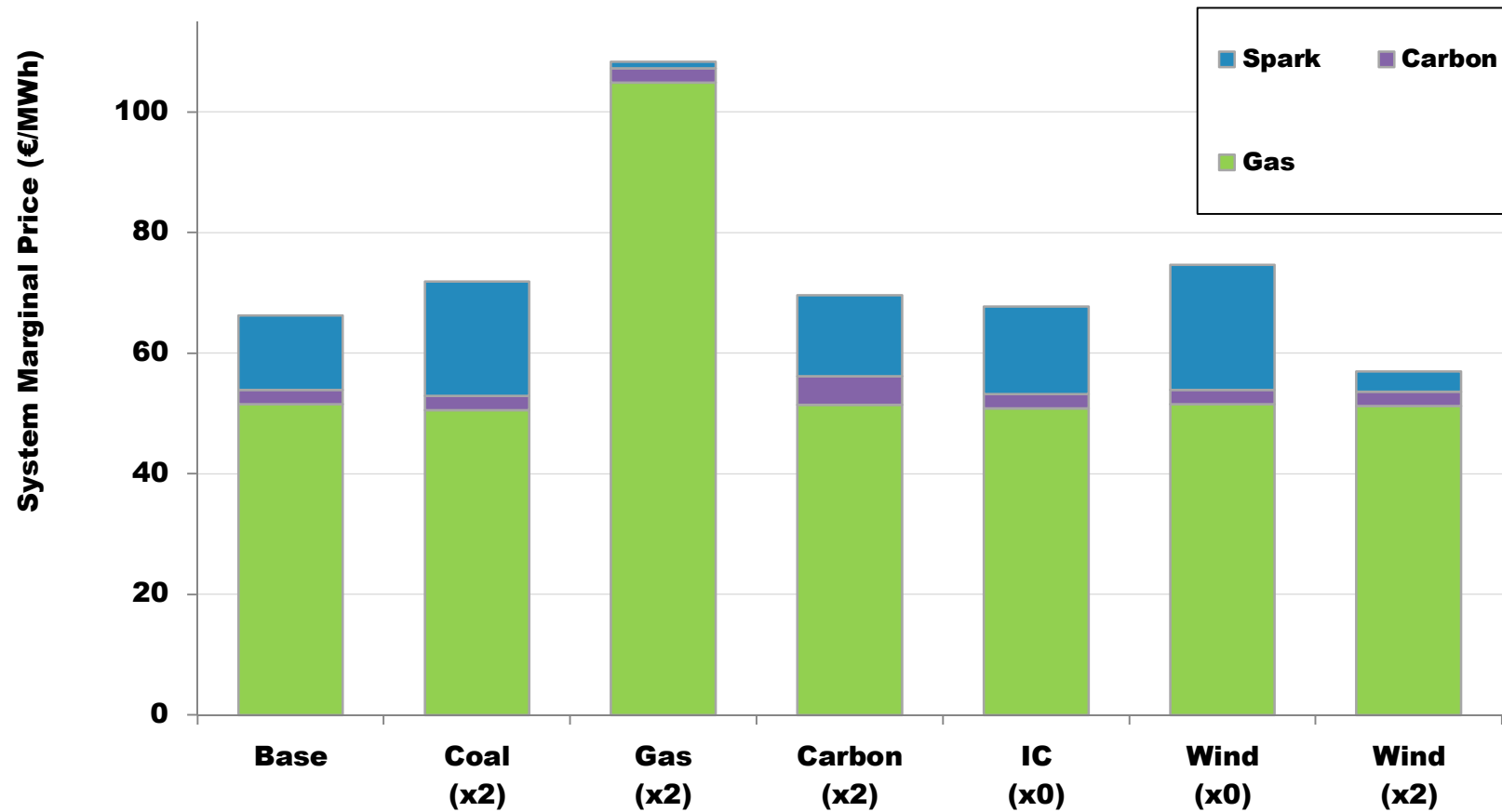


## **Why is it high?**

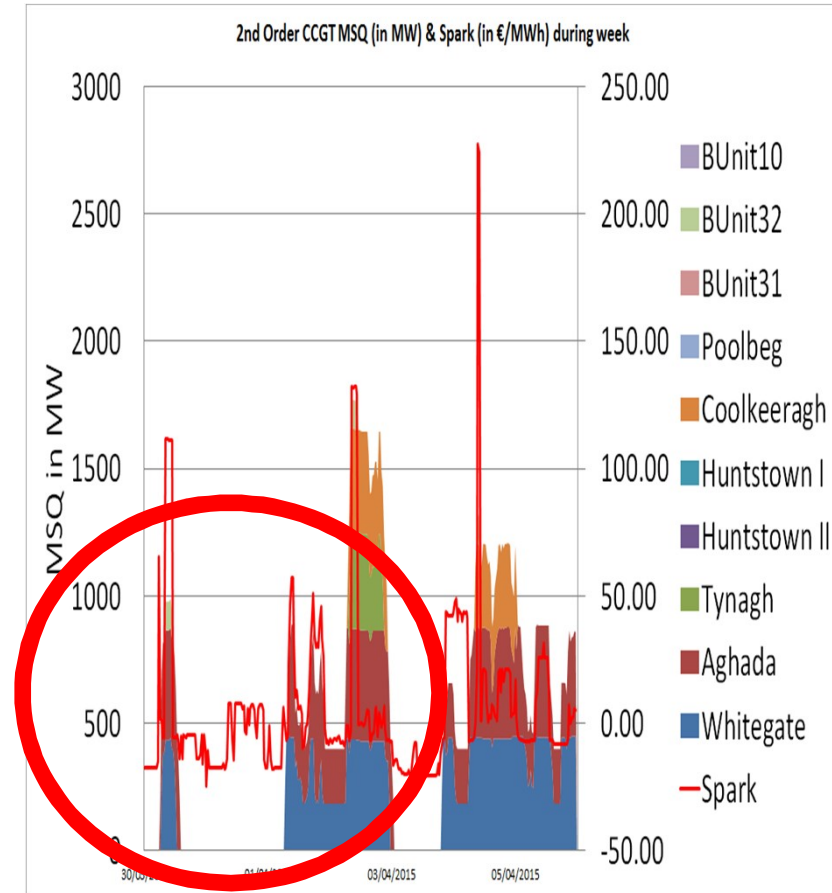
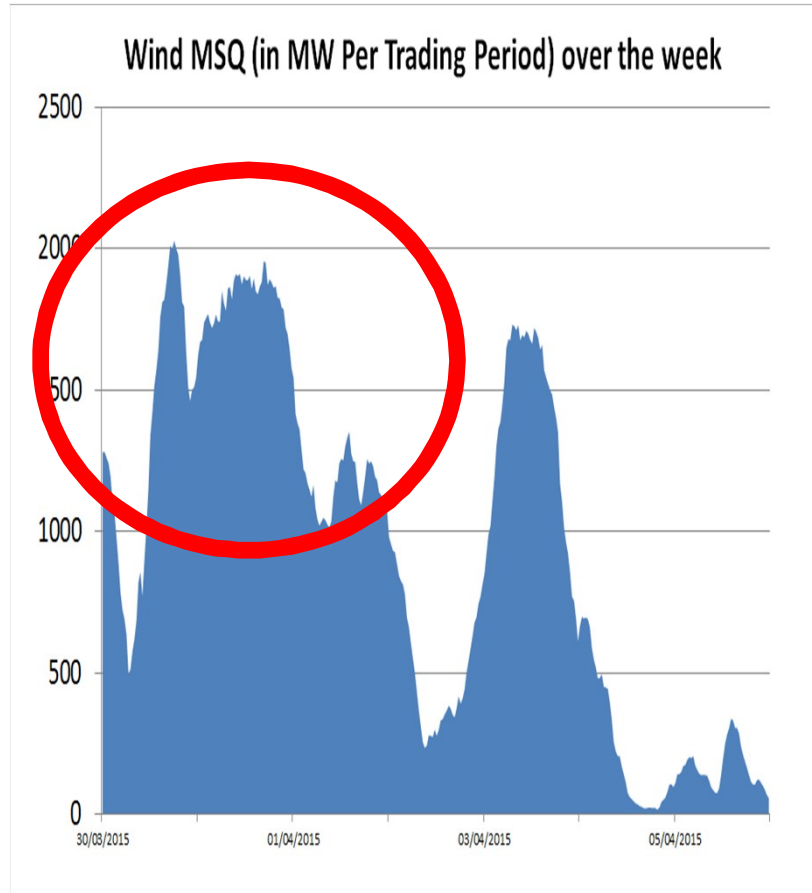
- 1. Our reliance on gas-fired electricity generation**
- 2. Our low population density which drives a higher network cost per unit**



# Factors Impacting the Wholesale Electricity Market



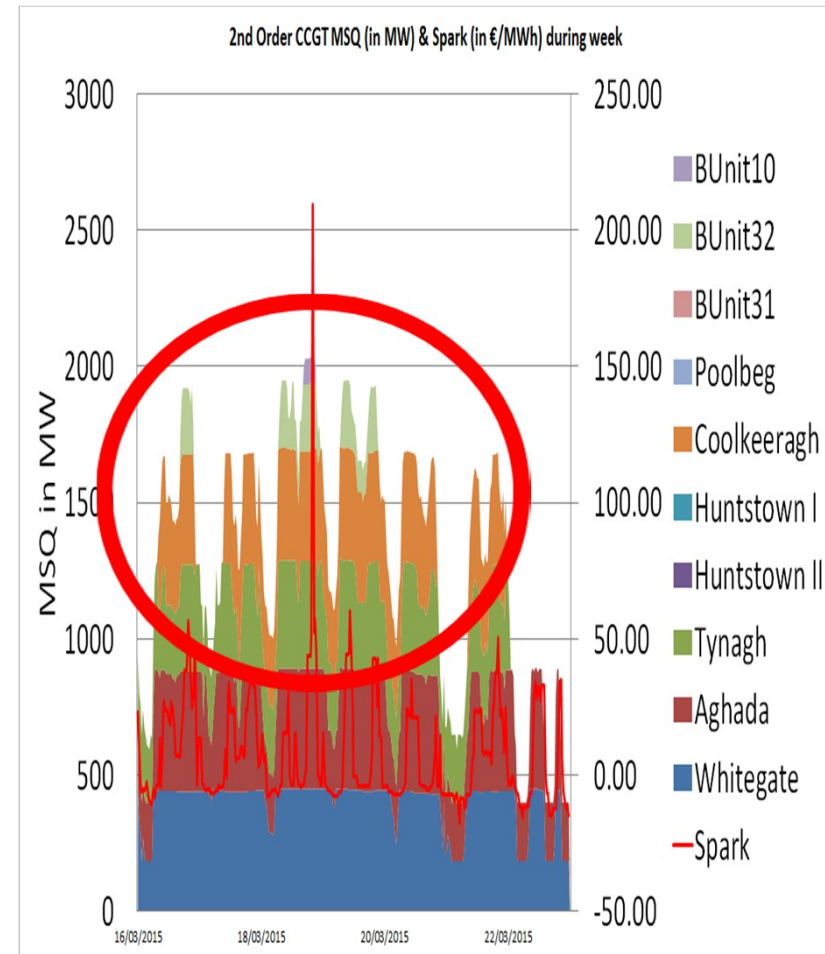
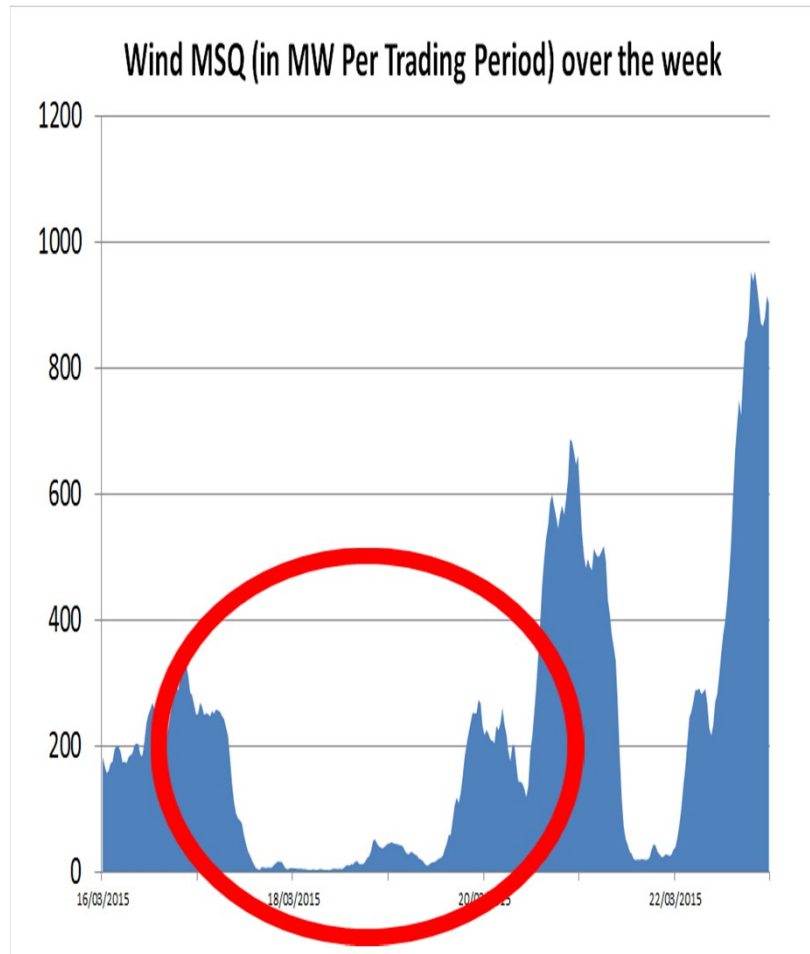
## Wind...the Good



An average spark  
of just €4 recorded..



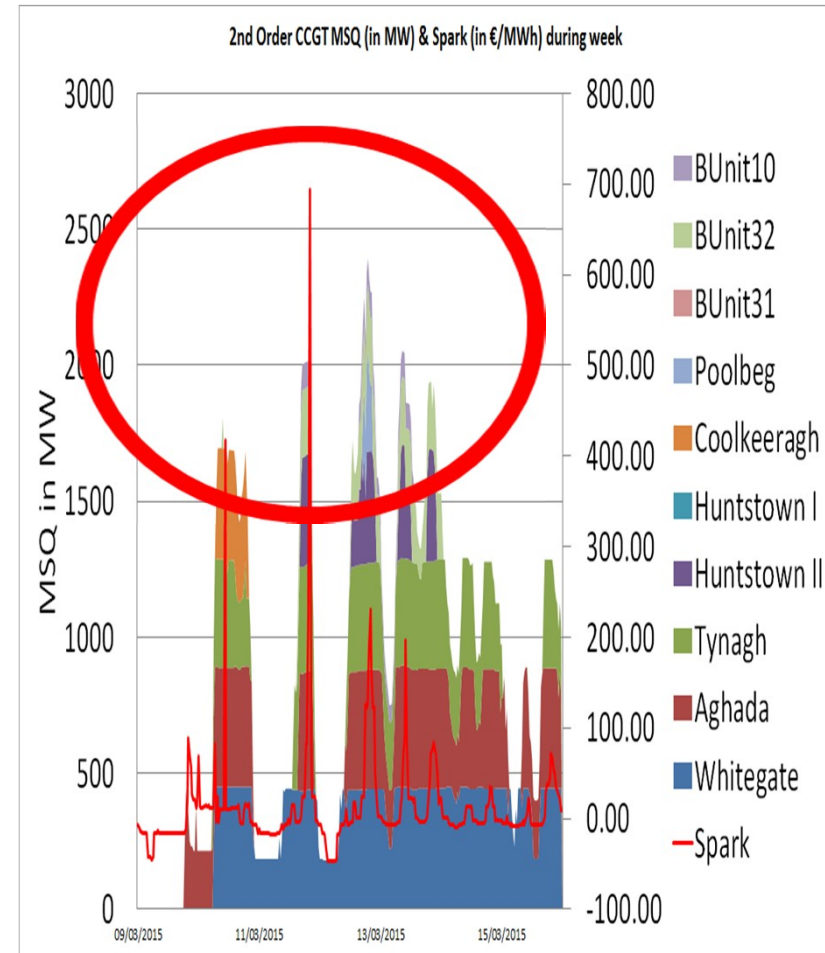
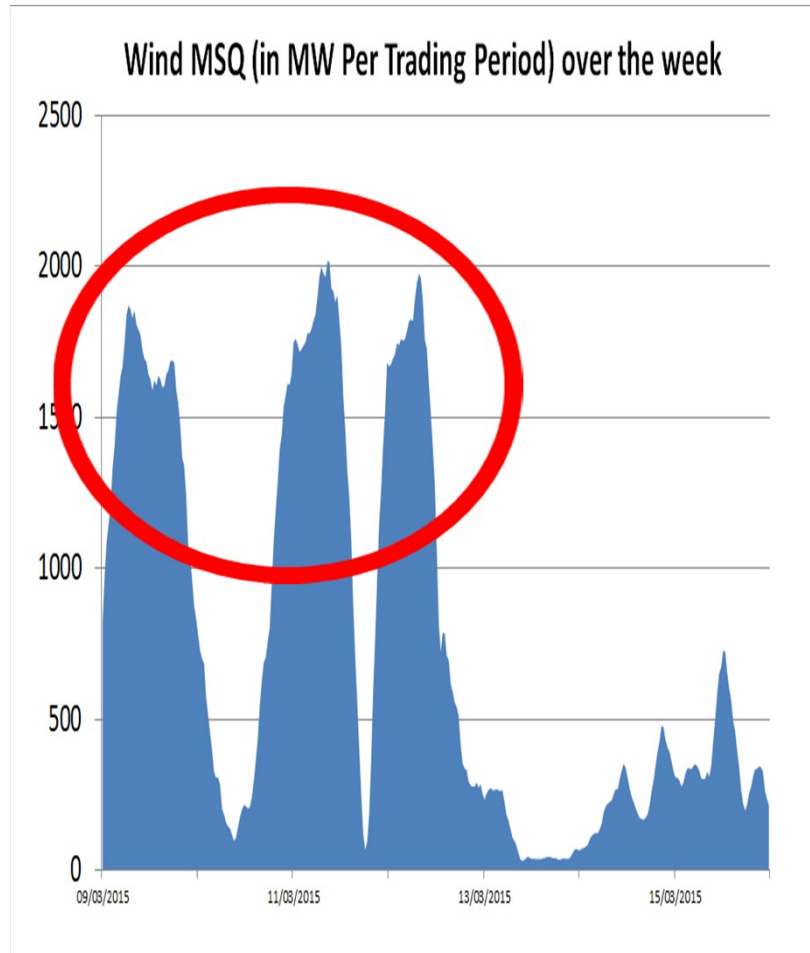
## ....the bad



An average spark  
of €10/MWh



## ....and the ugly

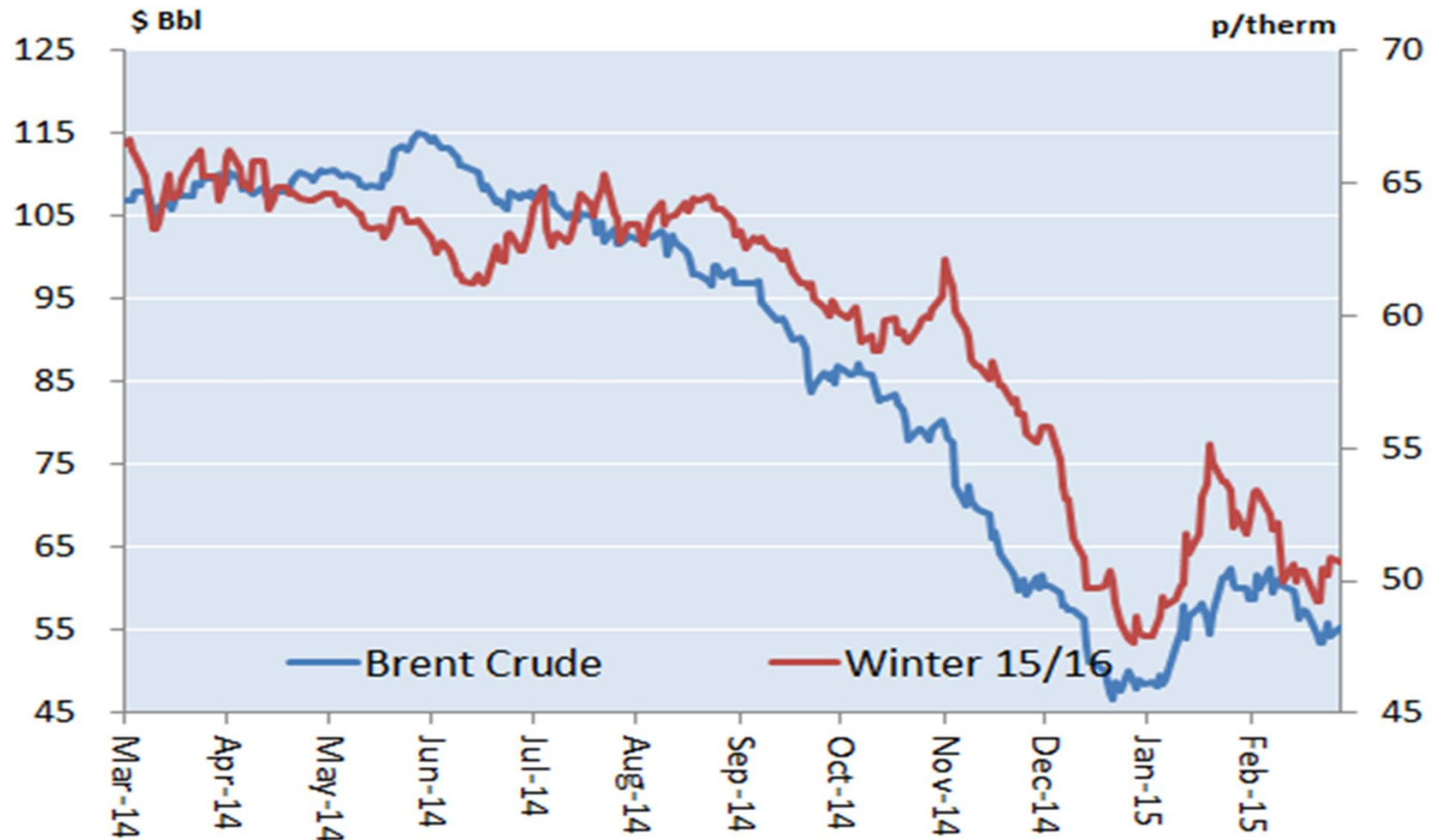


The Spark hit  
€693/MWh





## Spot the Difference?



# US Tight-oil

- **From “Peak Oil” to “Post Peak Oil”**
- **“It’s only the beginning”**
- **The US is “drowning in oil”**
- **US producing 9.419 m b/d on 13<sup>th</sup> March. Not since the 1970s has it been here**
- **US production up 70% over the last six years**
- **Providing an extra 1 m b/d in 2014...again**
- **If you add in NGLs (natural-gas liquids) & bio-fuels the US is the world’s number 1 producer (total oil + liquid fuels)**
- **Tight oil and gas is giving the US a significant competitive advantage**



## Price Outlook

### In the long-term:

- The world needs **60 m b/d** of new crude production by 2040 but conventional discoveries are down. Don't ignore OPEC
- **Deepwater exploration** is increasingly important
- Despite high oil prices upstream returns are low as capital costs rise
- **US\$120 (in real terms)** is required. High prices needed to balance the market?



# **The forgotten revolution - Unconventional US Gas Supply**

- **US gas production from shale in 2000 was 5%**
- **It was 23% in 2010**
- **It is expected to be 50% by 2035**
- **Henry Hub 12 month strip = 18.9p therm**
- **NBP equivalent = 46.9p therm**



## **Europe & energy**

**EU President – “we have no major game changer on the horizon”**

**EU Commission President – “the landscape is changing, and not in Europe’s favour”**

### **Solutions:**

- Energy efficiency
- Complete the internal market
- Tap all resources
- Europe to become a free-trade-agreement partner



## Europe & energy

- Cheap energy is seen as the new cheap labour
- While Asian economies attracted manufacturing because of the price of labour they are now less attractive with wages up 5.7% between 2006 & 2011. In developed economies this number was just 0.4%
- The US in particular has benefit from lower oil and gas prices
- According to John Gapper of the Financial times **“Europe has made the wrong bet”** by subsidising renewables and charging for emissions which is **“nullifying the benefits of lower energy prices”**
- According to Gapper, there are real risks for countries that impose high costs on themselves while their competitors enjoy low ones



## **ISEM**

# **Will it deliver lower wholesale prices and offers?**

- We cannot say with certainty
- It could apply downward pressure on spark but this is only a relatively small portion of an offer
- Still dependant on gas powered plants
- Where are wholesale gas prices going?

