

# BP European Gas and Power – market update

## September 2018

### EGP business insights



The UK NBP gas curve suffered a similar fate to European Emissions Allowances and power prices in the week commencing 10th September after the extended bull run for NBP over August and September ended sharply. Surging coal and carbon prices under the EU ETS pushed the NBP winter 18 contract above 80p/th on Monday 10th before the UK gas curve suffered 3 straight days of significant losses. The Winter 18 contract lost 8% of its value since the Monday close, to be assessed at 75.175p/th on Thursday 13th September, after pressure from the crash in carbon prices with coal losing value as well.

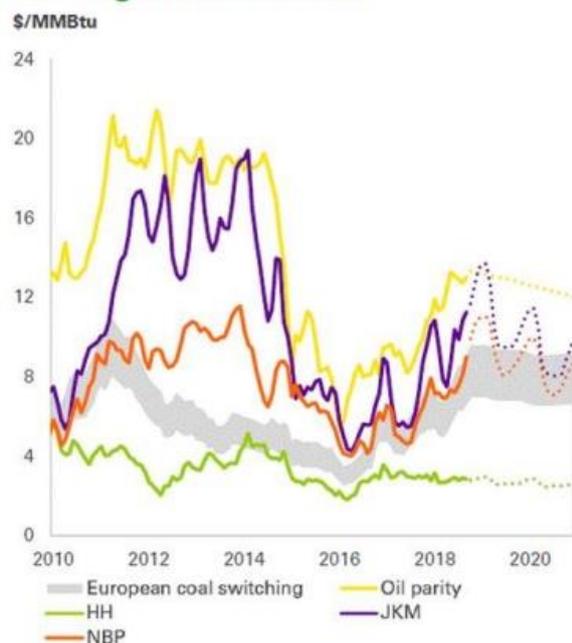


Thursday 14th September saw one of the largest crashes in carbon prices in a single-day since the launch of the EU Emissions Trading System in 2005. European Emissions Allowances (EUA's) have rallied strongly this year; surging to a 10 year intra-day high of EUR 25.79/mt on Monday 10th September from as little as EUR 4.40/mt in May 2017. However, following Monday's surge, EUA's entered 3 straight days of free-fall to close at EUR 18.90/mt on Thursday 14th September, a 17.6% fall from Wednesday's closing price. The crash in EUA prices was followed by power prices in Europe falling across the curve with UK Q4 2018 base falling by GBP 3.10/MWh to close at GBP 69.30 /MWh.

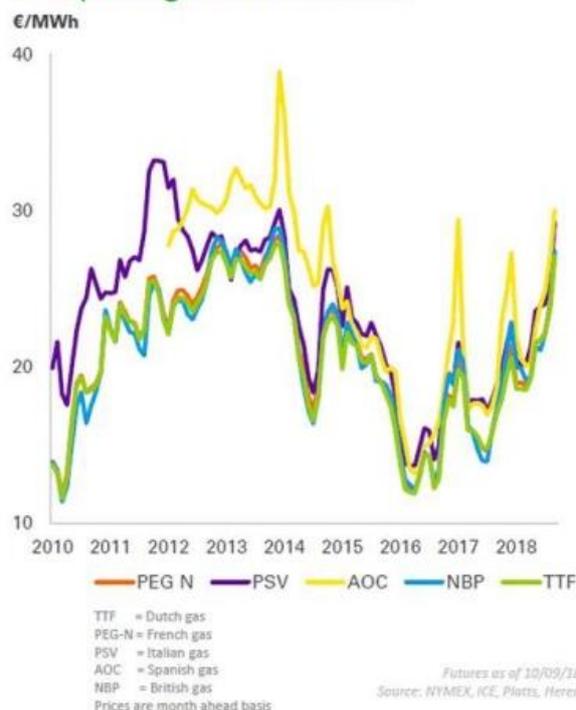
### August a strong month for commodities

Month on month, commodities performed well across the board with JKM, NBP, coal and emissions all making gains, shifting up the energy complex in Europe. Strong LNG demand in Asia combined with delayed LNG liquefaction plant start-ups have induced tightness in the LNG market, causing prompt JKM to rally and Dec, Jan and Feb JKM contracts to price above oil parity.

## Global gas benchmarks



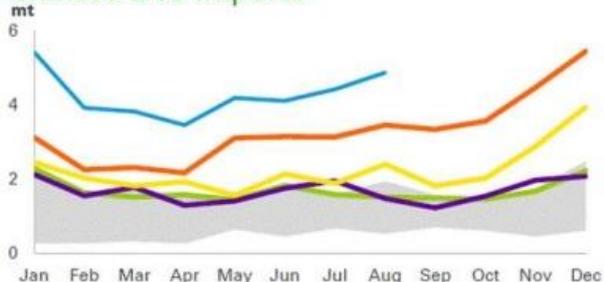
## European gas benchmarks



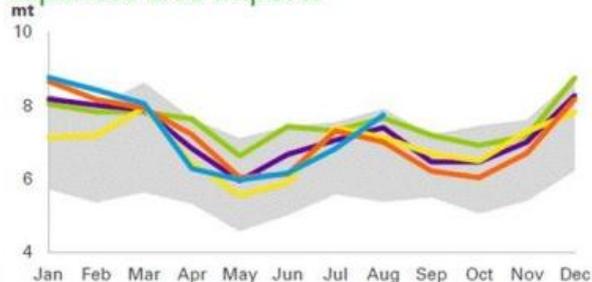
## North Asian LNG demand up year on year

To date, 2018 has been a strong year for LNG demand in North Asia. Taiwanese and South Korean LNG demand are both up 10% so far this year, whilst Chinese LNG demand in August is up a notable 40%, even after 2017's substantial growth. 2018 demand has been high partly owing to both a cold start to the year and a warm summer.

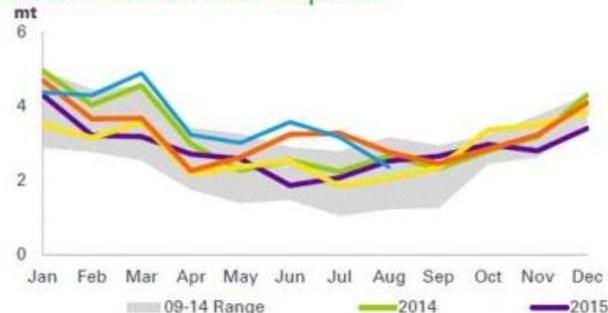
### Chinese LNG imports



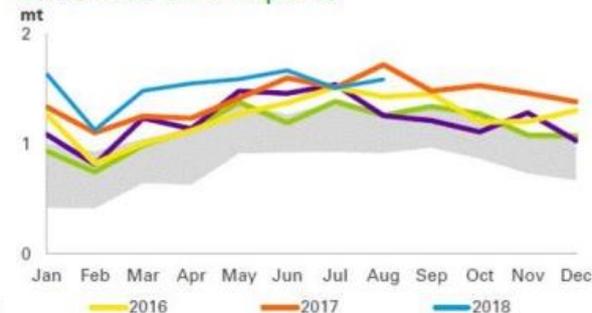
### Japanese LNG imports



### South Korean LNG imports



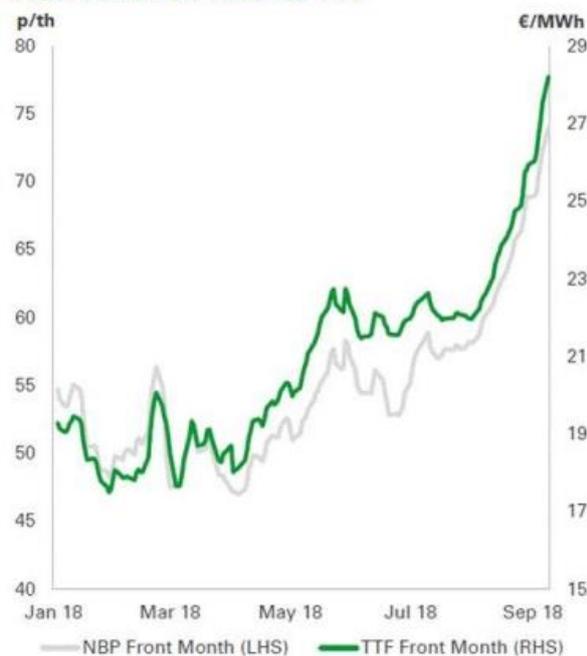
### Taiwanese LNG imports



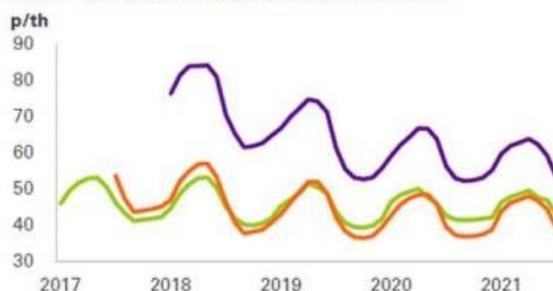
## European hub prices rally

Since April, European gas prices have been on a prolonged bull run, with front month TTF climbing 56% whilst NBP has made gains of 29 p/th, equating to 62%. Prompt strength has been felt down the length of the curve and the mid-term forward curves have moved into backwardation.

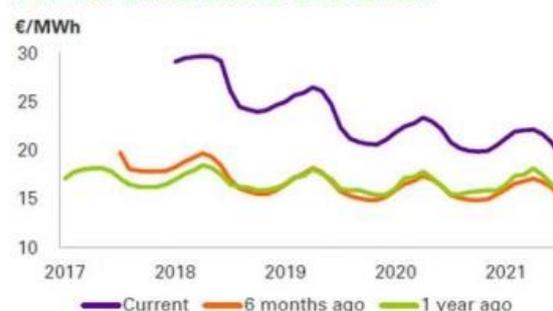
### Front month NBP & TTF



### NBP forward curve evolution



### TTF forward curve evolution



Forward curves as of 11/09/2018  
Source: ICE, IGS Heren

### Emission drift higher

In the last edition of BP's gas, power and LNG newsletter, emissions credits were trading just under €18/MT. EUAs have since continued their strong performance exceeding €25/MT on 10th September, a 10 year high, but has subsequently fallen slightly. A higher cost of emissions brings about a greater carbon cost to fossil fuel use for those covered by the emissions allowance scheme, with coal emitting around 2x the amount of carbon per unit of energy when compared to gas.

## EUA carbon futures



Source: ICE

## August power prices make gains

Power prices in Germany and the UK made gains in August with base power prices in the UK rising by £3.70/MWh on the month. Despite the rise in power prices, clean spark and clean dark base spreads saw a limited response owing to the rising cost of coal, gas and carbon emissions. Germany however saw a significant jump in power prices, with baseload power rising by €6.50/MWh and peak power leading with gains of €7/MWh, outweighing the rise in commodity prices.

### German power spreads



### UK power spreads

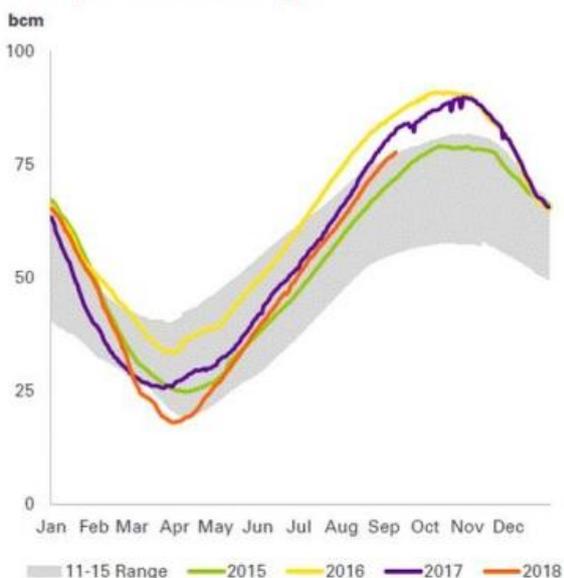


Source: Heret, ICE, EPEX, NZEX

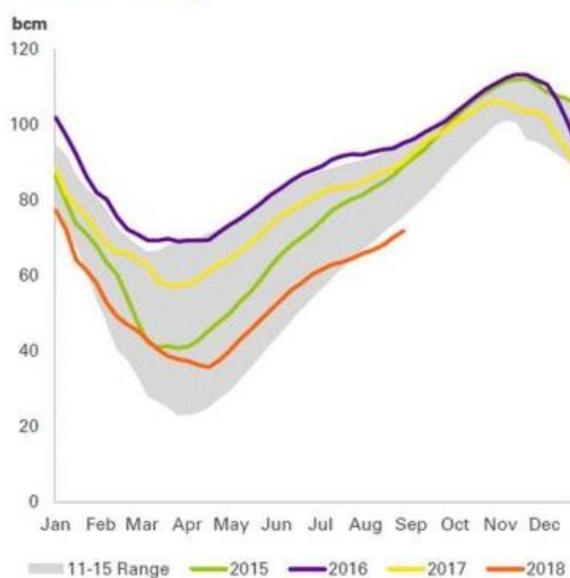
## European gas storage injections continue

European stocks climbed above the 2011 to 2015 range albeit at a slower rate than previous years. The deficit to last year has in fact widened to 5 bcm versus 2 bcm last month. Furthermore, US restocking has slowed since June, during the period in which cooling demand steps up. This has brought US gas stocks 4 bcm below the historic range in the lead up to winter.

## European GIE storage



## US DOE storage

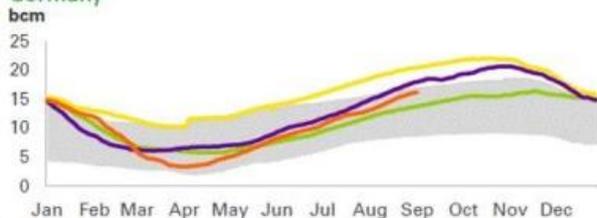


*N.B. data from GIE does not incorporate all storage facilities in each country, but rather can be used as a proxy for total storage  
Source: Gas Infrastructure Europe, EIA*

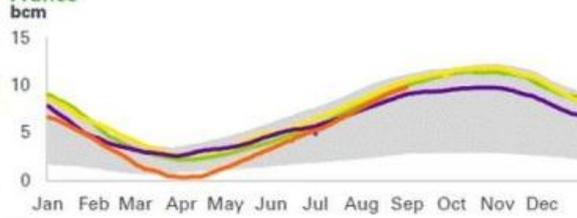
## France moves to surplus

Late July saw France become one of the only countries in Western Europe to move into a storage surplus to 2017. Throughout August, the surplus has grown, rising from 250 mcm to 750 mcm. Conversely, Germany and the Netherlands saw storage injections slow, owing to Russian pipeline maintenance during August.

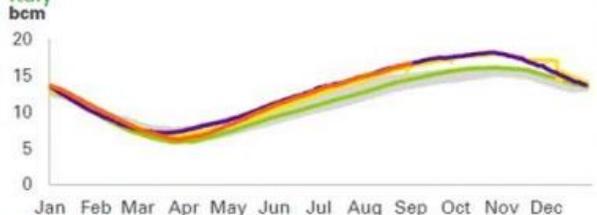
### Germany



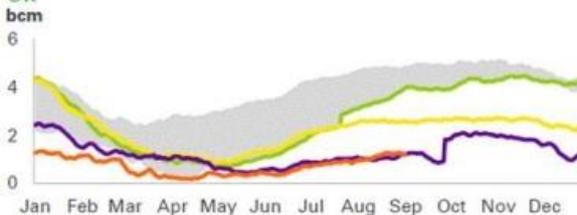
### France



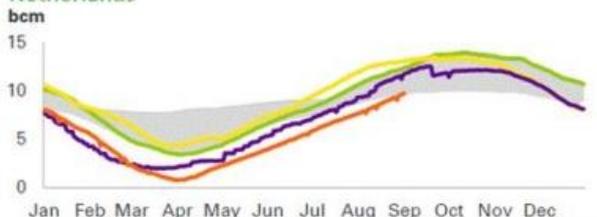
### Italy



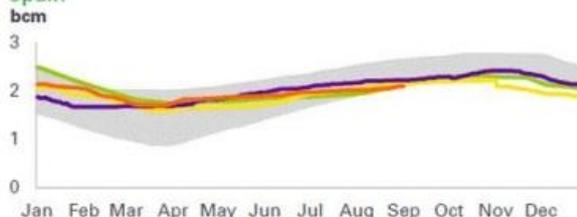
### UK



### Netherlands



### Spain

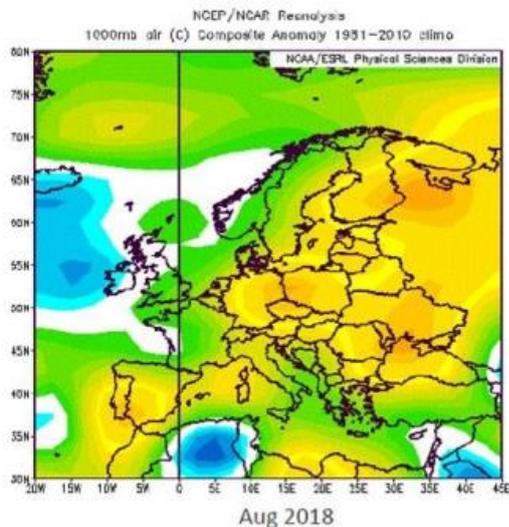


*N.B. data from GIE does not incorporate all storage facilities in each country, but rather can be used as a proxy for total storage  
Source: Gas Infrastructure Europe*

## Temperatures dial back

In contrast to July, temperatures in August were much milder with the Netherlands and the UK coming in 2°C and 3°C colder, month on month, respectively. Despite this respite from the heatwave experiences in July, heating degree days across the board for Spain, Italy and much of NWE were above seasonally average.

## Europe



## European demand in CDDs

	Belgium	Germany	UK	Spain	Italy	France	Netherlands
Sep	48	48	29	363	293	151	50
Syr avg	55	47	42	357	296	158	47
Oct	10	7	6	200	86	50	9
Syr avg	6	2	6	173	125	51	3
Nov	0	0	0	11	7	1	0
Syr avg	1	0	0	20	30	6	0
Dec	0	0	0	2	2	0	0
Syr avg	0	0	0	1	2	0	0
Jan	0	0	0	5	4	0	0
Syr avg	0	0	0	2	2	0	0
Feb	0	0	0	0	0	0	0
Syr avg	0	0	0	2	1	0	0
Mar	0	0	0	4	3	0	9
Syr avg	0	1	0	8	2	1	0
Apr	34	29	17	52	88	56	16
Syr avg	3	1	0	48	32	13	0
May	124	124	42	129	189	122	125
Syr avg	39	36	16	174	149	68	30
Jun	158	187	112	359	381	260	97
Syr avg	126	107	75	419	368	234	71
Jul	370	298	300	563	548	477	287
Syr avg	195	168	146	502	434	309	144
Aug	231	272	147	609	545	369	178
Syr avg	171	168	111	579	514	329	141

Key ■ = hotter than avg.  
■ = colder than avg.

CDD source: BP Internal Data  
Data/Image provided by the NOAA/GAR/ESRL PSD, Boulder, Colorado, USA, from their Web site at <http://www.esrl.noaa.gov/psd/>