

LONDON ENERGY BROKERS' ASSOCIATION OTC ENERGY VOLUME REPORT – MARCH 2019

London Energy Brokers' Association ("LEBA") is the industry association representing the FCA regulated wholesale market brokers in the OTC and exchange traded European energy markets.

Market	March 2019			2019 Year to Date		
	Total OTC Bilaterally Settled Volume	Total OTC Cleared Volume	Grand Total OTC Volume	Total OTC Bilaterally Settled Volume	Total OTC Cleared Volume	Grand Total OTC Volume
Natural Gas (MWh)						
UK NBP	542,631,949	73,557,741	616,189,691	1,476,431,106	211,711,020	1,688,142,127
European Hubs						
Netherlands TTF	2,459,821,894	264,090,740	2,723,912,634	6,780,564,811	709,680,931	7,490,245,742
Germany NCG	187,802,469	564,960	188,367,429	636,318,342	1,441,760	637,760,102
Germany GasPool	120,795,081	0	120,795,081	374,573,208	61,488	374,634,696
France PEG	64,486,488	322,440	64,808,928	279,310,137	1,319,260	280,629,397
Austria VTP	63,791,943	0	63,791,943	161,742,204	0	161,742,204
Italy PSV	178,248,260	908,040	179,156,300	385,983,572	2,962,800	388,946,372
Zeebrugge Hub	51,548,595	0	51,548,595	126,420,673	82,060	126,502,733
Other Gas	24,870,869	1,631,160	26,502,029	71,323,452	5,444,151	76,767,603
Total European Gas	3,151,365,598	267,517,340	3,418,882,938	8,816,236,399	720,992,450	9,537,228,849
Power (MWh)						
UK Power	69,811,919	154,920	69,966,839	221,455,182	175,440	221,630,622
European Power						
German Power	307,488,326	114,698,682	422,187,008	938,728,387	339,476,901	1,278,205,288
French Power	29,902,149	13,086,131	42,988,280	96,310,889	34,845,430	131,156,319
Nordic Power	0	19,242,328	19,242,328	0	64,181,595	64,181,595
Italian Power	6,127,291	40,234,270	46,361,561	15,496,512	100,665,761	116,162,273
Spanish Power	1,677,594	11,248,517	12,926,111	10,055,350	32,956,152	43,011,502
Netherlands Power	13,981,366	2,393,469	16,374,835	41,584,911	8,311,496	49,896,407
Belgian Power	3,012,187	98,645	3,110,832	11,963,535	1,139,960	13,103,495
Central & Eastern Europe	16,169,873	9,931,019	26,100,892	46,219,981	25,890,747	72,110,728
Swiss Power	7,245,574	420,084	7,665,658	19,687,750	1,568,811	21,256,561
Other Power	11,881,038	2,112,798	13,993,836	29,585,835	5,600,548	35,186,383
Total European Power	397,485,398	213,465,943	610,951,341	1,209,633,150	614,637,401	1,824,270,551
European Financial Coal Swaps (MT)						
API 2 Rotterdam	0	66,790,500	66,790,500	6,000	200,965,500	200,971,500
API 4 Richards Bay	0	6,884,000	6,884,000	0	19,838,000	19,838,000
globalCOAL NEWC®	0	13,636,500	13,636,500	0	35,010,000	35,010,000
Total European Financial Coal	0	87,311,000	87,311,000	6,000	255,813,500	255,819,500
European Carbon Emission Allowances (MT)						
EUA	11,966,000	214,913,000	226,879,000	40,384,500	749,007,000	789,391,500
CER	0	603,000	603,000	0	853,000	853,000
Other Emissions	0	0	0	0	0	0
Total European Carbon Emissions	11,966,000	215,516,000	227,482,000	40,384,500	749,860,000	790,244,500

2018 and 2019 “Month” and “Year to Date” comparisons.

	Grand Total OTC Volume			Grand Total OTC Volume		
	March 2018	March 2019	% Change	Year to Date 2018	Year to Date 2019	% Change
<u>Natural Gas (MWh)</u>						
UK NBP	665,590,693	616,189,691	-7.42%	2,073,191,106	1,688,142,127	-18.57%
<u>European Hubs</u>						
Netherlands TTF	2,030,262,273	2,723,912,634	34.17%	5,601,390,704	7,490,245,742	33.72%
Germany NCG	149,803,381	188,367,429	25.74%	438,110,756	637,760,102	45.57%
Germany GasPool	96,801,393	120,795,081	24.79%	250,093,712	374,634,696	49.80%
France PEG*	122,051,183	64,808,928	-46.90%	213,398,164	280,629,397	31.51%
Austria VTP	43,707,278	63,791,943	45.95%	150,597,147	161,742,204	7.40%
Italy PSV	92,125,825	179,156,300	94.47%	242,685,483	388,946,372	60.27%
Zeebrugge Hub	42,283,763	51,548,595	21.91%	140,333,843	126,502,733	-9.86%
Other Gas	51,611,805	26,502,029	-48.65%	150,569,714	76,767,603	-49.02%
Total European Gas	2,635,640,710	3,418,882,938	29.72%	7,203,395,085	9,537,228,849	32.40%
<u>Power (MWh)</u>						
UK Power	71,836,823	69,966,839	-2.60%	199,273,077	221,630,622	11.22%
<u>European Power</u>						
German Power	400,623,585	422,187,008	5.38%	1,325,079,131	1,278,205,288	-3.54%
French Power	60,726,055	42,988,280	-29.21%	199,669,570	131,156,319	-34.31%
Nordic Power	19,137,921	19,242,328	0.55%	67,715,540	64,181,595	-5.22%
Italian Power	28,992,615	46,361,561	59.91%	101,920,392	116,162,273	13.97%
Spanish Power	7,131,645	12,926,111	81.25%	28,140,690	43,011,502	52.84%
Netherlands Power	26,571,450	16,374,835	-38.37%	59,526,348	49,896,407	-16.18%
Belgian Power	4,608,802	3,110,832	-32.50%	13,421,157	13,103,495	-2.37%
Central & Eastern Europe	24,648,952	26,100,892	5.89%	92,651,385	72,110,728	-22.17%
Swiss Power	N/A	7,665,658	N/A	N/A	21,256,561	N/A
Other Power**	13,250,521	13,993,836	5.61%	38,018,289	35,186,383	-7.45%
Total European Power	585,691,546	610,951,341	4.31%	1,926,142,502	1,824,270,551	-5.29%
<u>European Financial Coal Swaps (MT)</u>						
API 2 Rotterdam	52,777,000	66,790,500	26.55%	171,918,000	200,971,500	16.90%
API 4 Richards Bay	6,458,000	6,884,000	6.60%	22,273,000	19,838,000	-10.93%
globalCOAL NEWC®	10,425,000	13,636,500	30.81%	32,184,000	35,010,000	8.78%
Total European Financial Coal	69,660,000	87,311,000	25.34%	226,375,000	255,819,500	13.01%
<u>European Carbon Emission Allowances (MT)</u>						
EUA	312,132,000	226,879,000	-27.31%	724,781,000	789,391,500	8.91%
CER	350,000	603,000	72.29%	1,255,000	853,000	-32.03%
Other Emissions	0	0	0.00%	0	0	0.00%
Total European Carbon Emissions	312,482,000	227,482,000	-27.20%	726,036,000	790,244,500	8.84%

Notes:

* Month and Year to Date comparisons for ‘France PEG’, which now covers TRF, will be made against previous France PEG volumes.

** Month and Year to Date comparisons for ‘Other Power’ will be made against volumes that previously included Swiss Power.

	YTD Total OTC Market Volume Change 1 year	Proportion Cleared OTC March 2019	Proportion Cleared OTC March 2018	Average Price March 2019	Price Change 1 Month	Price Change 1 Year	Historical Volatility 1 Month
<u>Natural Gas (MWh)</u>							
UK NBP	- 19 %	11.94%	15.87%				
Netherlands TTF	+ 34 %	9.70%	6.14%	Monthly Average LEBA TTF Day Ahead 15.69 €/MWh			
Germany NCG	+ 46 %	0.30%	0.00%				
Germany GasPool	+ 50 %	0.00%	0.00%				
France PEG	+ 32 %	0.50%	0.74%				
Austria VTP	+ 7 %	0.00%	0.00%				
Italy PSV	+ 60 %	0.51%	0.62%				
Zeebrugge Hub	- 10 %	0.00%	0.00%				
Other Gas	- 49 %	6.15%	47.22%				
Total European Gas	+ 32 %	7.82%	5.71%			- 18 %	- 25 %
<u>Power (MWh)</u>							
UK Power	+ 11 %	0.22%	0.29%		- 11 %	- 16 %	44%
German Power	- 4 %	27.17%	15.10%	Monthly Average LEBA UK Power Day Ahead 44.94 £/MWh			
French Power	- 34 %	30.44%	20.29%				
Nordic Power	- 5 %	100.00%	100.00%				
Italian Power	+ 14 %	86.78%	75.94%				
Spanish Power	+ 53 %	87.02%	49.02%				
Netherlands Power	- 16 %	14.62%	22.98%				
Belgian Power	- 2 %	3.17%	6.33%				
Central & Eastern Europe	- 22 %	38.05%	9.11%				
Swiss Power	N/A	5.48%	N/A				
Other Power	- 7 %	15.10%	2.11%				
Total European Power	- 5 %	34.94%	21.58%				
<u>European Financial Coal Swaps (MT)</u>							
API 2 Rotterdam	+ 17 %	100.00%	100.00%	Monthly Average LEBA API 2 Front Month 71.85 US\$/MT			
API 4 Richards Bay	- 11 %	100.00%	100.00%				
globalCOAL NEWC®	+ 9 %	100.00%	100.00%				
Total Coal	+ 13 %	100.00%	100.00%		- 7 %	- 12 %	9%
<u>European Carbon Emission Allowances (MT)</u>							
EUA	+ 9 %	94.73%	96.83%	Monthly Average LEBA EUA Spot 22 €/MT			
CER	- 32 %	100.00%	100.00%				
Other Emissions	N/A	N/A	N/A				
Total Emissions	+ 9 %	94.74%	96.84%		- 2 %	+ 65 %	48%

Notes:

1. Price Change - 1 Month: calculated using the percentage change from the previous month
2. Price Change - 1 year: calculated using the percentage change from the previous year
3. Historical Volatility - 1 month: calculated by taking the annualised standard deviation of daily logarithmic returns over the last month.
4. N/A - no comparable data

For media enquiries, please contact: Harriet Leatherbarrow, Greentarget – +44(0) 207 324 5483

NOTES TO EDITORS:

LEBA, the London Energy Brokers' Association, is the industry association representing the FCA regulated wholesale market brokers in the over the counter (OTC) and the exchange traded liberalised European energy markets. These brokers intermediate and facilitate bilateral contracts to be concluded between banks, trading houses, commercial enterprises, public utilities and integrated energy businesses, providing liquidity and price discovery to these markets as well as contributing significant liquidity to European exchange traded markets.

The LEBA member firms that currently operate in the European gas, power, coal and emissions markets are:

42Financial Services	www.42fs.com	BGC Partners LP	www.bgcpartners.com
Evolution Markets	www.evomarkets.com	GFI Brokers	www.gfigroup.com
Griffin Markets	www.griffinmarkets.com	ICAP Energy	www.icapenergy.com
Marex Spectron	www.marexspectron.com	Tradition Financial Services	www.tfsbrokers.com
Tullett Prebon Energy	www.tullettprebon.com	PVM Commodities*	www.pvmoil.co.uk

**PVM Commodities is a division of PVM Oil Futures Ltd. (a Tullett Prebon company)*

Copyright © LEBA Limited 2019. LEBA encourages the reproduction and dissemination of its monthly volumes reports. Permission to reproduce or disseminate the data by members of the media is authorized on condition that it is attributed to LEBA. For queries on rights and licenses, please contact leba@leba.org.uk. LEBA and the LEBA logo are trademarks of LEBA Limited, a company wholly owned by the trade association, the London Energy Brokers' Association. No responsibility is accepted by or on behalf of LEBA for errors, omissions, or inaccuracies in the Data.

- API 2 and API 4 refer to the physical coal market indexes owned by Argus Media Limited and IHS Global Limited. "API 2" and "API 4" are trademarks of Argus Media Limited and IHS Global Limited.
- globalCOAL®, NEWC® and NEWC Index® are registered trademarks of Global Coal Ltd.