Last Month Highlights

THE EUA DEC18 HIT 14 EURO

The benchmark carbon contract gained more than 30% in March. In the first three trading days the price still fell shortly below the 10 euro mark, but it increased continuously during the month until it hit a seven year high at 14.17 euro. Despite the correction in the last days of the month, March showed the biggest price increase in years. The monthly candle is the biggest white candle in years. Both traded volume and open interest in the EUA Dec18 increased.

Last month, we identified the following factors as supportive for the carbon market:

- The compliance deadline is in less than one month. All the companies must know by now their exact 2017 emissions (as they had to report them until 31 March) and cover the shortage. Many of those installations that did not cover their 2017 emissions last year were frightened by the price rally and delayed their purchases continuously. They are however running out of time. If they fail to purchase and surrender the allowances until the end of April, they risk a fine of 100 euro per each not surrendered allowance (and in addition, they have to purchase the EUAs and surrender them).
- Industrial installations are afraid of lower free allocation in the future. The rules of free allocation will be significantly stricter in Phase 4 when they are recalculated based on new (and declining) benchmarks, reviewed production levels and shortened carbon leakage list. They do therefore not borrow allowances from next year's allocation, but purchase them in the market.
- In addition, industrial installations that had a surplus in the last years accumulated during the financial crisis are running out of their extra allowances and have to turn to the market to buy allowances. They do not appear on the sellers' side at all (see the previous bullet point). It is difficult to find sellers these days and buyers are just running behind the offers.
- Utilities were more active in hedging their production. Although December and January were very mild, February and March this year had below seasonal average temperatures in Europe with gas storages at low levels (therefore gas was more expensive) that incentivised the burning of hard coal and lignite. Utilities are hedging this extra power demand covered with coal burning.
- Speculative buyers.

⇒ One reason for speculation is that all the reforms that will tighten the supply from next year (and in Phase 4) have been approved. The market stability reserve will have the double feed rate than the original proposal of the Commission AND approximately 2 billion allowances will be cancelled in 2023. There measures affect the auction supply, but free allocation for industrial installations will be also reduced.

⇒ Other reason for speculation is that EUA became financial instrument in January 2018 (due to MiFID II), and are appealing for hedge funds to diversify their portfolio. If they check the chart, they realise that the carbon price moves in an increasing trend since last May. As these are financially strong companies, even by investing just a fraction of their money they can lift the carbon price significantly.

- Mid March, the European Commission announced that it would publish 2017 verified emissions 3 April. The broad market consensus was that emissions had broken the trend and increased last year because of the strong industry and construction sectors.

Topic of the Month

EMISSIONS INCREASE FOR THE FIRST TIME SINCE 2013

Emissions of open installations in the EU ETS increased by 1.1% in 2017 to 1.821 billion tonnes of CO2. Emissions without aviation reached 1.756 billion tonnes (+1.0% y/y), in line with the market consensus.

Methodology: When comparing 2017 and 2016 verified emissions, we assumed flat emissions for those open installations that did not report any emissions for 2017.

Spain and Portugal posted the biggest increase in their emissions (10.5% and 18.1%, respectively) as low hydro reserves forced utilities to burn more fossil fuels. Central eastern European countries also increased their emissions in tandem with their consolidating economy.

The UK (-3.7%) and Germany (-3.0%) were the top emission reducing countries. Both countries had several days in 2017 when the whole power demand of the country could be sourced from renewables. In addition, British utilities are also incentivised to reduce their emissions and to switch fuels by the carbon tax of GBP 18. France saw an unusual increase in its emissions due to the outage of its nuclear capacities that had to be replaced by fossil fuels (mainly gas).

Industrial emissions increased by 1.4% on average, while the power sector cut emissions by 1.2%. Aviation emissions increased by 5.5%.

2017 was the first year since 2013, when emissions of installations covered by the European emissions trading system increased. The price posted a marginal gain (+0.2% d/d) on the day of the publication of the data.

Tops and flops by country

	2017 emissions	2016 emissions	Y/Y %
Portugal	31,857,922	26,983,825	18.1%
Spain	141,507,792	128,079,833	10.5%
Hungary	23,170,446	21,255,739	9.0%
France	111,097,931	105,562,983	5.2%
Poland	203,536,048	198,801,586	2.4%

	2017 emissions	2016 emissions	Y/Y %
Denmark	15,683,732	17,778,433	-11.8%
UK	153,342,367	159,193,858	-3.7%
Germany	448,350,247	462,160,282	-3.0%
Norway	26,499,711	26,738,962	-0.9%
Czech Republic	67,508,294	68,009,280	-0.7%

Tops and flops by sector

	2017 emissions	2016 emissions	Y/Y %
Production of non-ferrous metals	7,319,678	6,702,106	9.2%
Aircraft operator activities	64,858,539	61,453,009	5.5%
Production of ammonia	22,219,560	21,166,810	5.0%
Manufacture of ceramics	13,708,348	13,065,368	4.9%
Production of paper or cardboard	19,159,400	18,299,859	4.7%

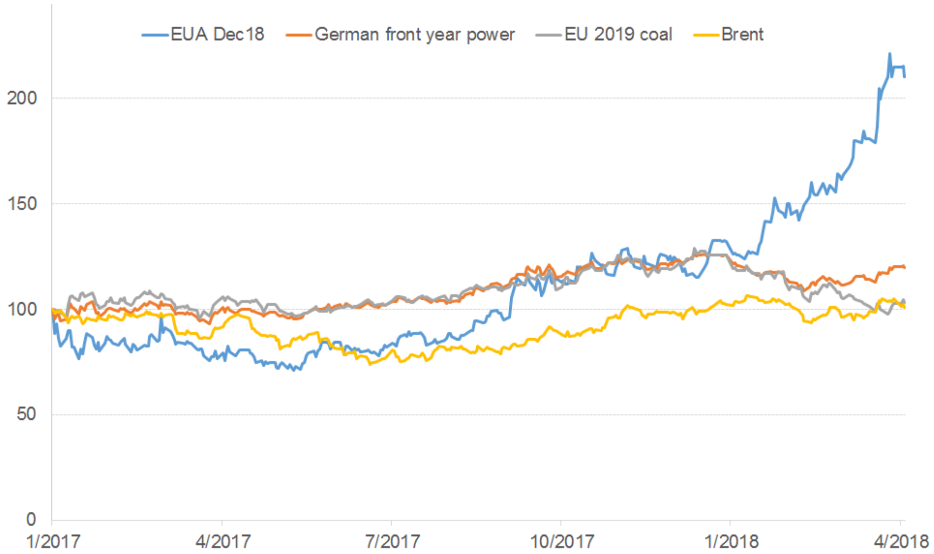
	2017 emissions	2016 emissions	Y/Y %
Production of glyoxylic acid	9,940	11,112	-10.5%
Production of pig iron or steel	5,561,637	5,867,374	-5.2%
Mineral oil refineries	10,909,835	11,389,367	-4.2%
Combustion (> 20 MW)	126,852,780	131,478,315	-3.5%
Manufacture of glass	16,617,120	16,711,980	-0.6%

This Month Preview

April is the last month for installations to purchase allowances to comply for their 2017 emissions. Many of them were delaying their purchases because of the rally the carbon market witnessed in the first months of the year. Late buyers will support the carbon price this month. The deadline for surrendering allowances is 30 April.

On 2 May 2018 at 12:00 CEST, the European Commission will grant unlimited access on the EUTL website to the quantity of allowances surrendered per installation for 2017 as well as the installation-level compliance code, based on the data available on 30 April, setting out whether an operator surrendered the required amount of allowances. The compliance information data will also be published at the same time in an Excel spreadsheet on the Union Registry page of this website.

Normalized chart of German 2019 power, European 2019 coal, Brent and EUA Dec18



Source: Bloomberg, Vertis

Technical Analysis

EUA Dec18 Price development (EUR)

Source: Bloomberg, ICE, Vertis

Support levels: : 12.62 (Fibonacci level), 12.08 (20DMA)

Resistance levels: 13.59 (local high), 14.05 (upper Bollinger band), 14.17 (2018 high)

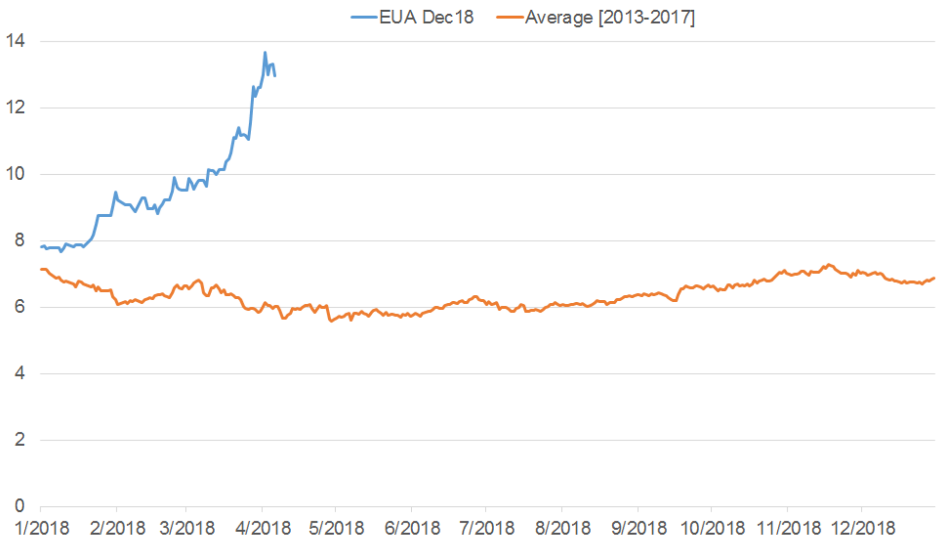
The EUA Dec18 continued its increasing trend in the first half of March and accelerated the rally in after the 15 March. The sudden jump made the price overbought and lifted the RSI above 70. After hitting a new seven year high at 14.17 euro, the price started a correction, but remained above the Fibonacci level at 12.62 euro.

Should the price of the benchmark carbon contract fall further, it could retest the 20DMA at 12.08 euro and the Fibonacci level at 11.66 euro.

In a positive scenario, if compliance buyers, utilities and speculators support the price, the EUA Dec18 could retest the 2018 high at 14.17 euro.

Most probably, however, the price will take a break as it was increasing continuously since May 2017 and consolidate between 12.60 and 14.20 euro, maintaining its high volatility.

Seasonality chart of the December EUA contracts (Dec18 and Avg. 2013-2017)



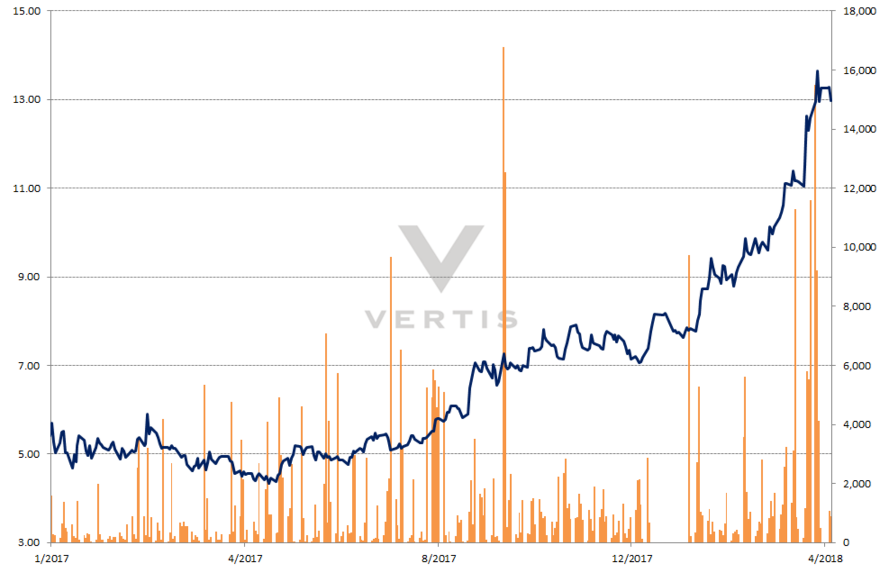
Vertis price forecasts (last update 5 April 2018)

Base case **April 2018 – December 2018: EUR 11.00-15.15**

Worst case April 2018 – December 2018: EUR 9.05-14.17

Best case April 2018 – December 2018: EUR 11.75-16.25

Market data



	EUA spot	EUA Dec18
Open in March 2018 (€)	10.03	10.05
High in March 2018 (€)	14.13	14.17
Low in March 2018 (€)	9.91	9.92
Close in March 2018 (€)	13.26	13.28
Change February/March 2018 (%)	31.5%	31.5%
Open Interest end of March 2018 (`000)		482,017
Change in Open Interest February/March 2018 (%)		1.9%
Monthly Volume Traded in March 2018 (`000)	81,768	473,822
Change in Volume Traded February/March 2018 (%)	242.0%	45.3%
20-day average (€)	11.63	11.65
30-day average (€)	10.97	10.99
50-day average (€)	10.23	10.26
100-day average (€)	8.94	8.98

Sales contacts

Péter Szánthó
Head of Sales—Hungary
+36 1 489 1903
peter.szantho@vertis.com

Zoltán Rácz, dr.
Corporate Trader—Hungary
+36 1 489 1903
zoltan.racz@vertis.com

Verónica Belinchón
Corporate Trader—Spain
+34 91 123 9008
veronica.belinchon@vertis.com

Christian Gordziel
Corporate Trader—Germany
+32 494 25 38 15
christian.gordziel@vertis.com

Emanuel Erdem
Corporate Trader—Germany
+32 494 25 38 15
emanuel.erdem@vertis.com

Tomasz Bujacz
Corporate Trader—Poland
+48 22 219 5262
tomasz.bujacz@vertis.com

Alexandra Härmatis
Corporate Trader
Sweden, Norway, Denmark
+46 844 683 979
alexandra.harmatis@vertis.com

Inês Alvim
Corporate Trader—Portugal
+34 91 123 9008
ines.alvim@vertis.com

José María García Berrendero
Corporate Trader—Spain
+34 91 123 9008
josemaria.garcia@vertis.com

Guillaume Verger
Corporate Trader—France, Belgium
+33 9 70 73 68 16
guillaume.verger@vertis.com

Mattia Ferracchiato
Corporate Trader—Italy
+39 02 4070 8040
mattia.ferracchiato@vertis.com

Bartosz Wilamowski
Corporate Trader—Poland
+48 22 219 5262
bartosz.wilamowski@vertis.com

Katerina Kolaciova
Corporate Trader—Czech Republic
+36 1 489 1933
katerina.kolaciova@vertis.com

Patrik Petrasek
Corporate Trader—Czech Republic,
Slovakia
+36 1 489 1933
patrik.petrasek@vertis.com

Alexandra Petrujinschi
Corporate Trader—Romania
+36 1 489 1900
alexandra.petrujinschi@vertis.com

Sebastian Niculescu
Corporate Trader—Romania
+36 1 489 1900
sebastian.niculescu@vertis.com

Tibor Papp
Wholesale Trader
+36 1 489 1908
tibor.papp@vertis.com

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