

NORDIC ELECTRICITY MARKET

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THE DRY WEATHER IS ABOUT TO END NEXT WEEK

Forecast to week 16:	
ENOFUTBLQ3-19	📉 Bearish (<0%)
ENOYR-20	📈 Bullish (>0%)
NP System	📉 Bearish (<0%)
NEDEC9	📈 Bullish (>0%)

Market signals	spot	Q3-19	YR-20
Hydrologic balance	↓	↓	↓
Precipitation forecast	↓	↓	↓
Temperature forecast	↓	↓	→
Spot	↓	↓	→
Production and transmission exch.	↑	→	→
Emissions allowance	↑	↑	↑
Coal price	↑	↑	↑
German prices	↑	↑	↑
Technical analysis	↓	↑	↑

FORECAST TO WEEK 16

ELECTRICITY DERIVATIVES

The nearest quarter

There have been no significant changes in weather forecasts over the weekend. There is strong high pressure on the Nordic countries, resulting in very dry weather for the current week. However, high pressure is likely to recede at the turn of the week to the southeast, resulting in the termination of the dry weather. With the termination of the dry weather, we expect near term products to turn slightly downwards. Temperatures have risen close to normal, and temperatures will rise in the following days to be higher than normal. The weather will probably continue to be warmer than normal.

Annual products

The end of the dry weather also brings downward pressure to the nearest annual product. However, the price of emission allowances is in a very strong upward trend, and the price of coal is also stronger in the short term. Technically, the closest annual product is strong. However, in the price of emission allowances, the risk of downward correction movement has risen, and a longer trend in coal and natural gas prices is still declining. We expect the prices of the annual products currently to rise, but in the annual products, we see the risk of a downward correction has appeared. On the market, general sentiment may be affected by China's first quarter GDP figures on Wednesday and the preliminary purchasing managers' indices of April in the euro area on Thursday.

SPOT MARKET

Temperatures are clearly rising, and the weather will turn warmer than normal after the beginning of the week. The weather is warming up towards the end of the week and electricity demand will fall in the coming days. In addition, Easter will reduce electricity demand, especially from Friday. However, Nordic wind production is mostly weaker than usual this week. In addition, the weather is dry, and the discharges are low. However, melting is accelerating in the coming days, and at the end of the week, the discharges will increase significantly. Until Thursday evening, wind production in Finland is mostly very weak. We expect the system price on a weekly level to continue to fall and to realize at an average of 42.5 €/MWh. We expect the Finnish regional price on weekdays to differ from the system price due to weak wind production, and at the weekly level, we expect the average area price in Finland to reach an average of 45.5 €/MWh.

EMISSIONS

The price of emission allowances is in a very strong technical upward trend, with the price rising above the very strong resistance level of 26.0 €/t. At the same time, the price of emission allowances has risen to its highest in about 11 years. A very strong technical picture brings upward pressure as the securing of long, strong upward trend increases, among other things interests of the speculative players in the market. Technically, the price of emission allowances is rising towards 30.0 €/t. However, as the price rises sharply, the risk of downward correction has already risen.

Product	Date	Value	% chg	Chg (EUR)
ENOFUTBLQ3-19	12.4.2019	42.30	5.2%	2.10
ENOFUTBLQ4-19	12.4.2019	44.95	3.1%	1.35
ENOFUTBLQ1-20	12.4.2019	45.78	3.0%	1.33
ENOFUTBLQ1-21	12.4.2019	40.93	-0.3%	-0.12
ENOYR-20	12.4.2019	37.76	0.7%	0.26
ENOYR-21	12.4.2019	34.07	-1.5%	-0.53
ENOYR-22	12.4.2019	32.65	0.2%	0.05
ENOYR-23	12.4.2019	32.13	-0.5%	-0.15
ENOYR-24	12.4.2019	31.88	0.2%	0.05
NEDEC9	12.4.2019	26.58	8.5%	2.08
NEDEC20	12.4.2019	26.91	8.4%	2.09

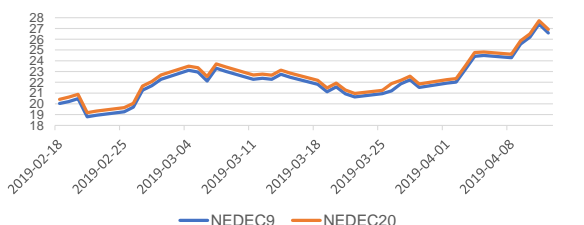
EPAD settlements

12.4.2019 (€/MWh)	2019	2020	2021	2022
SYHEL	3.88	3.25	3.25	3.38
SE1- NP System	-1.00	-1.40	-1.40	-1.40
SE2 - NP System	-1.00	-1.40	-1.40	-1.40
SE3 - NP System	1.65	1.90	1.75	1.75
SE4 - NP System	3.18	3.20	3.33	3.35

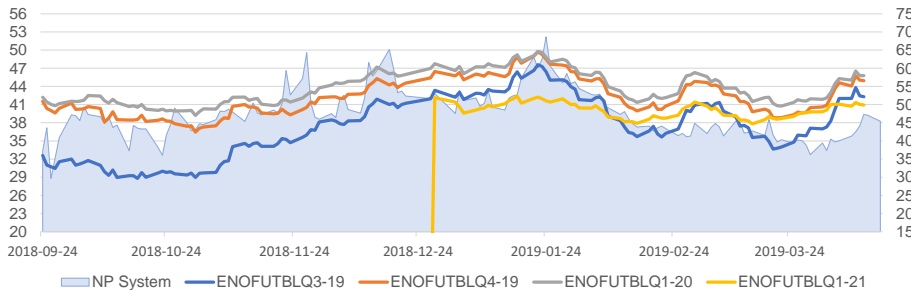
Week's spot price change

Price area (€/MWh)	Date	Value	% chg	Chg (EUR)
NP System	14.4.2019	44.13	12.0%	4.71
NP Area FI	14.4.2019	44.79	14.5%	5.67
NP Area SE1	14.4.2019	43.79	14.0%	5.38
NP Area SE2	14.4.2019	43.79	14.0%	5.38
NP Area SE3	14.4.2019	43.79	13.9%	5.35
NP Area SE4	14.4.2019	43.79	13.9%	5.35

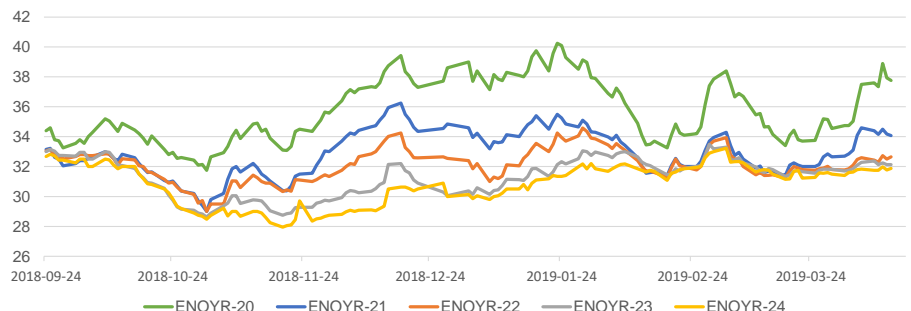
Carbon EUR/CO2 t



Quarters EUR/MWh (left), NP System EUR/MWh (right)



Years EUR/MWh



COMMENTS ON WEEK 15

ELECTRICITY DERIVATIVES

The nearest quarter

Last week, near term products continued to grow very strongly. With strong high pressure, the weather type turned very dry, and the next week the weather type seems to stay dry. The especially strong development in the price of emission allowances also contributed to the upward pressure. In addition, the technical image was further strengthened as the price rose above the highest trading figures in March.

Annual products

Last week, dry weather forecasts, a deteriorating water situation, a strong price for emission allowances and a rise in short-term products brought upwards pressure on the nearest annual products. The nearest annual product rose over the highest trading figures of March, and thus the technical upward trend strengthened further. Next year, the development of the following annual products was modest, despite the very strong price of emission allowances. On Friday, the annual products withdrew along with the lower emission allowances, and fuel prices. At the weekly level, there were no major changes in the prices of annual products. Additional information was received from the Olkiluoto 3 unit according to which the installation of the fuel in the reactor will be delayed from the planned June timeframe to at least the end of August. The announcement turned the next year's regional price difference in Finland slightly to a rise.

SPOT MARKET

Last week's spot prices rose on a weekly basis. Spot prices were backed by a dry weather type and downward discharges. Nordic wind production was abundant in the first week, but in the second half of the week, wind production fell to a low level. Temperatures were falling, and the weather was clearly colder than normal on Wednesday. On Friday, the regional price in Finland was higher than the system price due to weak wind production, but at the weekly level, the Finnish area price was close to the system price.

EMISSIONS

The prices of emission allowances rose sharply last week. The price of emission allowances was supported by an increase in the price of natural gas and the extra time for the Brexit negotiations. On Wednesday, the price of the allowances rose above the very strong level of 26.0 €/t. At the same time, the price of emission allowances rose to its highest since the summer of 2008. On Wednesday evening, EU countries decided to extend Brexit negotiations until the end of October. The extension was a compromise when several countries supported a one-year extension. However, among others, with a short position in France, the extension period was placed at the end of October. It is also possible to perform the separation of Britain before the deadline if the separation agreement can be concluded earlier.

Indicator	ENOFUTBLQ3-19	ENOYR-20
Coal-fired production	8 %	24 %
Coal price	7 %	0 %
Gas price (NBP)	3 %	0 %
German price level	8 %	0 %
Spot	29 %	33 %
Crude oil Brent	51 %	44 %
Water reservoirs	2 %	12 %
EUR/USD FX rate	0 %	1 %
Temperature	8 %	5 %
Precipitation	16 %	13 %

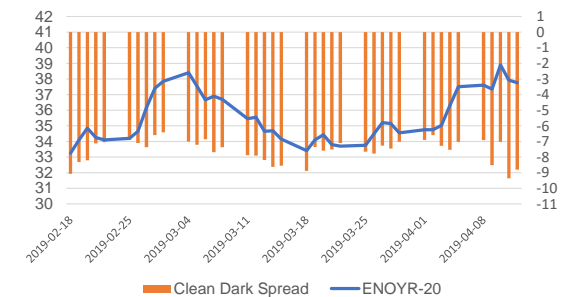
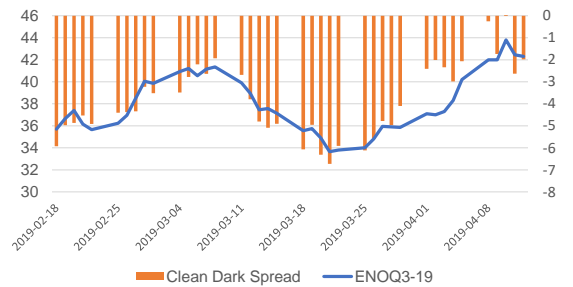
Definition
The above figures measure the ability of market determinants to describe the price changes occurred in last 6 months. The affect is measured as Coefficient of Determination*. Each variable is evaluated independently. We use a color scale to demonstrate efficacy, green (strong), yellow (moderate), red (weak)

Forecast history	15	Chg	14	Chg
ENOFUTBLQ3-19	↗	5.2%	↗	12.1%
ENOYR-20	↗	0.7%	↔	8.5%
NP System	↗	12.0%	↗	10.5%
NEDEC9	↗	8.5%	↘	13.8%

DETERMINANTS AFFECTING THE MARKET ON WEEK 16

RESTRICTIONS IN PRODUCTION AND TRANSMISSION CAPACITY

- Ringhals 2 (852 MW), failure 27.12.-5.4.2019 and 23.-30.4.2019 available 452 MW, 5.-23.4.2019 available 0 MW
- Ringhals 3 (1063 MW), maintenance 5.3.-30.4.2019 available 770 MW
- Nordic nuclear power plants are currently operating at 90%
- RU-FI transfer profile varies due to capacity charges, on average imports from Russia last week were 60 % of the maximum.



AVERAGE SPOT PRICE AND EPAD

Price area (€/MWh)	2012	2013	2014	2015	2016	2017	2018	2019*
NP System	31.20	38.10	29.60	21.00	26.91	29.41	43.99	46.17
NP Area FI - NP System	5.50	3.10	6.40	8.70	5.54	3.78	2.81	0.71
NP Area SE1 - NP System	0.50	1.10	1.80	0.20	2.04	1.43	0.24	-0.80
NP Area SE2 - NP System	0.60	1.10	1.80	1.00	2.04	1.43	0.24	-0.80
NP Area SE3 - NP System	1.10	1.40	2.00	1.00	2.33	1.83	0.55	-0.43
NP Area SE4 - NP System	3.00	1.80	2.30	1.90	2.62	2.77	2.37	-0.06

*Average for period between 1.1.2019-15.4.2019.

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Source for data: intStream, Tilastokeskus

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