

NORDIC ELECTRICITY MARKET

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DRY WEATHER FORECASTS MAINTAIN THE UPWARD PRESSURE

Forecast to week 15:

ENOFUTBLQ3-19	↗ Bullish (>0%)
ENOYR-20	↗ Bullish (>0%)
NP System	↗ Bullish (>0%)
NEDEC9	↗ Bullish (>0%)

FORECAST TO WEEK 15

ELECTRICITY DERIVATIVES

The nearest quarter

The weather forecasts have dried during the weekend. The current high pressure seems to be permanent for now and the weather type is likely to be dry also during next week. At the end of next week the weather forecasts show cautious signs of the ending of the high pressure, but the uncertainty on this is still very high. With the dry weather outlook and the strong technical outlook we expect the front contracts to continue increasing.

Annual products

Dry weather outlook, weakening hydrobalance and increasing front contracts support the closest annual contract. The coal and gas prices have increased and the upward correction might still continue supported by for example strong oil price. However, the coal and gas trends are still decreasing. The emission price is technically strong, but the price is close to the highest prices of the year, which might already limit the additional increase. The political uncertainty is high and on Wednesday the EU leaders will hold an emergency meeting on Brexit. Probably the meeting decides to grant the additional time. On Wednesday there is also the ECB meeting, but probably the meeting will not have any big changes on the monetary policy.

SPOT MARKET

The weather has turned to dry and when the weather type continues to be dry, the inflows continue to decrease towards the end of the week. The Nordic wind power production is high at the beginning of the week, but on Thursday, Friday and Saturday the wind power production is at low level. The temperatures have fallen close to normal. The temperatures continue falling and the weather turns to colder than normal, especially on Wednesday and Thursday. We expect the spot prices to continue increasing at the weekly level and we expect the system price to realize at about 42,5 €/MWh. In Finland the wind power production is very high at the beginning of the week, until after Thursday the wind power production decreases to weaker than normal. However, we expect the Finnish area price to stay close to system price at the weekly level.

EMISSIONS

The emission price is technically strong when the price increased to above the resistance level of 23,5 €/MWh. The price is technically increasing towards the extremely strong resistance level of 26,0 €/MWh, where the market has often started to decrease again. The political uncertainty continues to be high, but likely on Wednesday the EU leaders conclude to continue the additional time for Brexit negotiations. We expect the emission price fluctuation to continue to be strong, but we think the price increase towards the strong resistance level is more likely.

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	↔	↑	↑

Product	Date	Value	% chg	Chg (EUR)
ENOFUTBLQ3-19	5.4.2019	40.20	12.1%	4.35
ENOFUTBLQ4-19	5.4.2019	43.60	9.7%	3.87
ENOFUTBLQ1-20	5.4.2019	44.45	6.9%	2.87
ENOFUTBLQ1-21	5.4.2019	41.05	3.5%	1.40
ENOYR-20	5.4.2019	37.50	8.5%	2.95
ENOYR-21	5.4.2019	34.60	6.0%	1.95
ENOYR-22	5.4.2019	32.60	2.5%	0.80
ENOYR-23	5.4.2019	32.28	1.4%	0.46
ENOYR-24	5.4.2019	31.83	1.0%	0.33
NEDEC9	5.4.2019	24.50	13.8%	2.98
NEDEC20	5.4.2019	24.82	13.6%	2.97

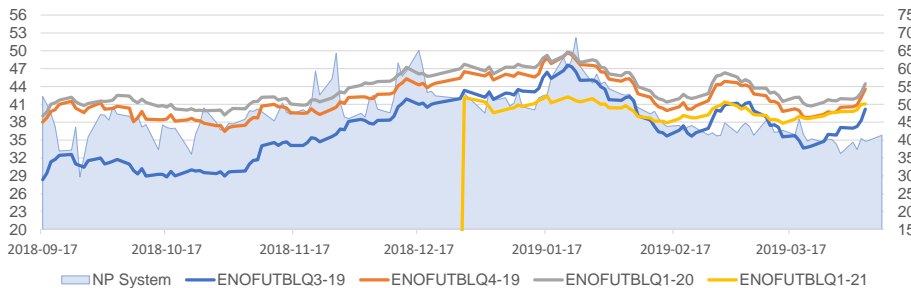
EPAD settlements

5.4.2019 (€/MWh)	2019	2020	2021	2022
SYHEL	3.80	3.25	3.53	3.45
SE1-NP System	-1.00	-1.25	-1.25	-1.25
SE2 - NP System	-0.83	-1.25	-1.25	-1.25
SE3 - NP System	1.75	1.93	1.75	1.75
SE4 - NP System	3.20	3.23	3.25	3.35

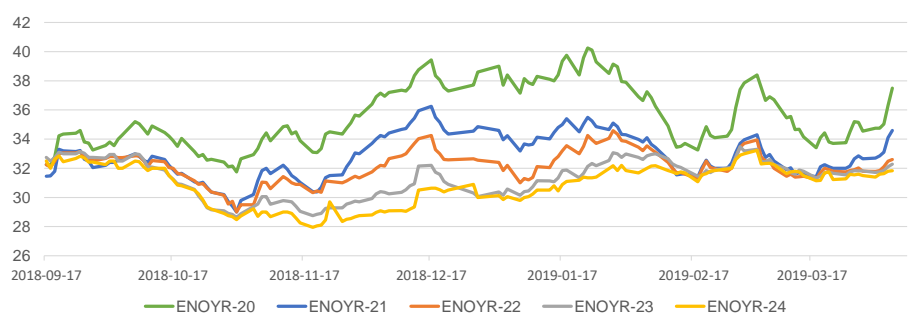
Week's spot price change

Price area (€/MWh)	Date	Value	% chg	Chg (EUR)
NP System	7.4.2019	39.41	4.0%	1.53
NP Area FI	7.4.2019	39.12	13.0%	4.49
NP Area SE1	7.4.2019	38.41	11.4%	3.92
NP Area SE2	7.4.2019	38.41	11.4%	3.92
NP Area SE3	7.4.2019	38.44	11.5%	3.95
NP Area SE4	7.4.2019	38.44	11.5%	3.95

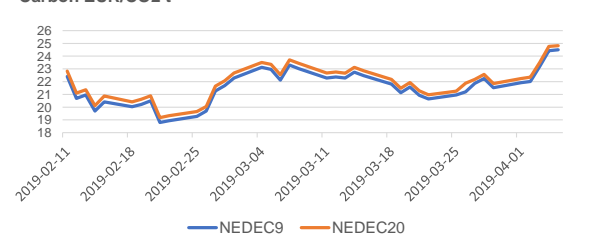
Quarters EUR/MWh (left), NP System EUR/MWh (right)



Years EUR/MWh



Carbon EUR/CO2 t



COMMENTS ON WEEK 14

ELECTRICITY DERIVATIVES

The nearest quarter

Last week the front contracts continued increasing very sharply. The strong high pressure in the weather forecasts seemed to be permanent and there were no clear signs of the weather type change to wet. The upward pressure was also strengthened by the strong upward correction in fuel prices and sharply increased emission price.

Annual products

Last week the annual contract prices increased sharply, when there was a strong upward correction in fuel prices. Additionally the emission price and the German power market were strong. The upward pressure at the German power market was strengthened by technical outlook, when the closest annual contract started to increase from the strong support level. The annual contract prices were supported also by dry weather forecasts and strongly bullish front contracts. The general market sentiment was also very confident and the indexes at the stock market increased clearly.

SPOT MARKET

Last week the spot prices increased at the weekly level, when compared to previous week's level the wind power production was lower. Also the drier weather outlook and therefore weaker hydrobalance supported the spot prices. However, also last week the wind power production was mainly higher than normal. In Finland the wind power production was high during the working days, but the electricity import from Russia to Finland decreased slightly compared to March level. However, at the weekly level the Finnish area price realized still slightly lower than system price.

EMISSIONS

The emission price increased strongly last week. The reason was strongly increasing fuel prices and therefore strong development at the electricity market. Additionally, the general market atmosphere was confident and at the stock market the indexes were clearly bullish. The political uncertainty was high due to continuation of Brexit negotiations, but the negotiations between May and the opposition leader were interpreted to be a step towards reaching an understanding. Last week the preliminary figures showed the decrease in last year's realized emissions of more than 4 % compared to previous year's level.

Indicator	ENOFUTBLQ3-19	ENOYR-20
Coal-fired production	5 %	23 %
Coal price	8 %	0 %
Gas price (NBP)	5 %	0 %
German price level	11 %	3 %
Spot	33 %	35 %
Crude oil Brent	65 %	48 %
Water reservoirs	2 %	15 %
EUR/USD FX rate	2 %	1 %
Temperature	8 %	5 %
Precipitation	16 %	13 %

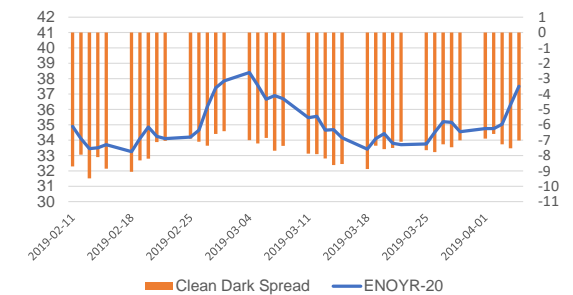
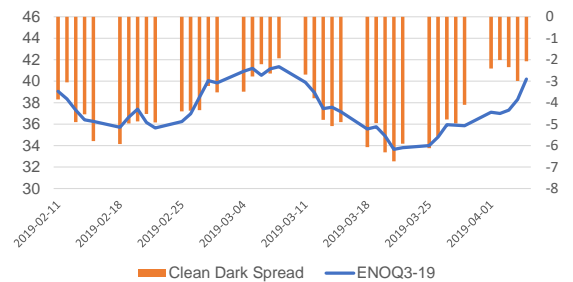
Definition
The above figures measure the ability of market determinants to describe the price changes occurred in last 6 months. The affect is measured as Coefficient of Determination*. Each variable is evaluated independently. We use a color scale to demonstrate efficacy, green (strong), yellow (moderate),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

Forecast history	14	Chg	13	Chg
ENOFUTBLQ3-19	↗	12.1%	↘	6.1%
ENOYR-20	↻	8.5%	↘	2.5%
NP System	↗	4.0%	↘	-10.2%
NEDEC9	↘	13.8%	↘	4.2%

DETERMINANTS AFFECTING THE MARKET ON WEEK 15

RESTRICTIONS IN PRODUCTION AND TRANSMISSION CAPACITY

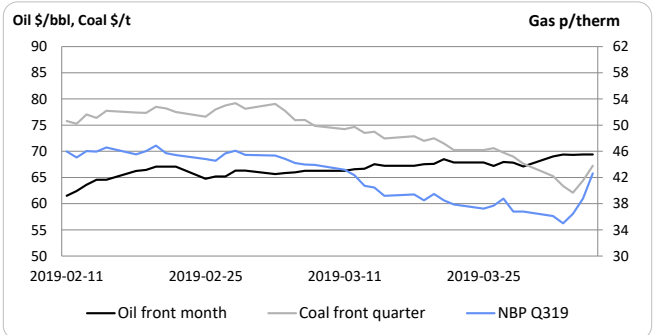
- Ringhals 2 (852 MW), failure 27.12.-5.4.2019 and 23.-30.4.2019 available 452 MW, 5.-23.4.2019 available 0 MW
- Ringhals 3 (1063 MW), maintenance 5.3.-30.4.2019 available 770 MW
- SE1 – FI (1500 MW), maintenance 12.-14.4.2019, available 500 MW
- Nordic nuclear power plants are currently operating at 90%
- RU-FI transfer profile varies due to capacity charges, on average imports from Russia last week were 64 % 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	46.28
NP Area FI - NP System	5.50	3.10	6.40	8.70	5.54	3.78	2.81	1.17
NP Area SE1 - NP System	0.50	1.10	1.80	0.20	2.04	1.43	0.24	-0.83
NP Area SE2 - NP System	0.60	1.10	1.80	1.00	2.04	1.43	0.24	-0.83
NP Area SE3 - NP System	1.10	1.40	2.00	1.00	2.33	1.83	0.55	-0.44
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 1.1.2019-8.4.2019.



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Source for data: intStream, Tilastokeskus

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