

NORDIC ELECTRICITY MARKET

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END OF WARM, DRY WEATHER TYPE

Forecast to week 18:	
ENOFUTBLQ3-19	↘ Bearish (<0%)
ENOYR-20	↘ Bearish (<0%)
NP System	↘ Bearish (<0%)
NEDEC9	↘ Bearish (<0%)

FORECAST TO WEEK 18
ELECTRICITY DERIVATIVES

The nearest quarter
The weather earlier in the week will be dry and warm for the time of year, but the dry and warm weather type is coming to an end. The weather will grow colder than normal during the second half of the week, with higher precipitation. However, the latest weather forecast is for drier conditions than earlier forecasts and the amount of precipitation will increase to only a shade above normal. No major changes are expected in the hydro balance according to the two-week forecast. However, the weather type shows no signs of a permanent high pressure and the technical indicators show a downward trend. We expect a slight fall in quarterly product prices.

Annual products
The end of the dry weather type and weak price of coal are exerting downward pressure on annual products. In addition, emission allowance prices may continue to retreat with the end of seasonal demand resulting from the last surrender date for emission allowances at the end of April. Also, technical indicators have shown signals of a downward turn. We expect a slight fall in annual product prices.

SPOT MARKET
Warmer than normal will still persist for the early part of the week and flow rates will be high. May Day also reduces demand for electricity. However, temperatures will fall sharply in the second half of the week and the weather will grow much colder than normal for the time of year. Melting will clearly slow, but flow rates will still remain high during the current week. Nordic wind power production will be weak during the early part of the week and quite plentiful during the second half of the week. We expect a slight fall in the system price at the weekly level and expect the system price to settle at an average of €35.5/MWh. Maintenance of the transmission link between South Sweden and Lithuania will increase the price level in the Baltics and increase the Finnish area price risk. The Finnish area price differed from the system price on Monday and Tuesday. After Wednesday, however, wind power production in Finland will again be more abundant than normal. High flow rates and abundant wind power generation in both Sweden and Finland after the early part of the week can again take spot prices at night to a low level. At the weekly level, we expect Finnish area prices to settle close to the system price.

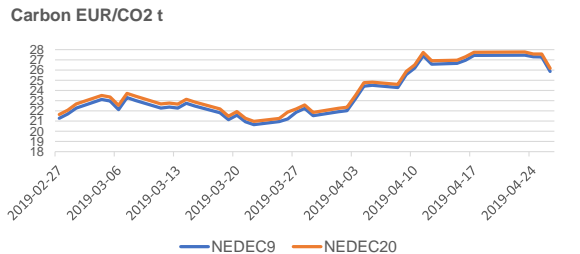
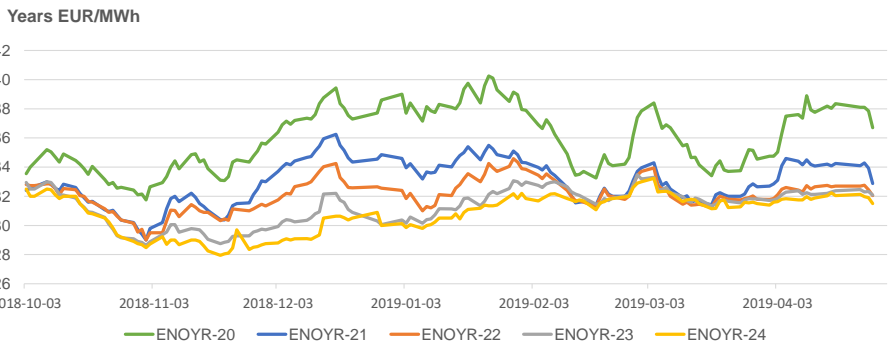
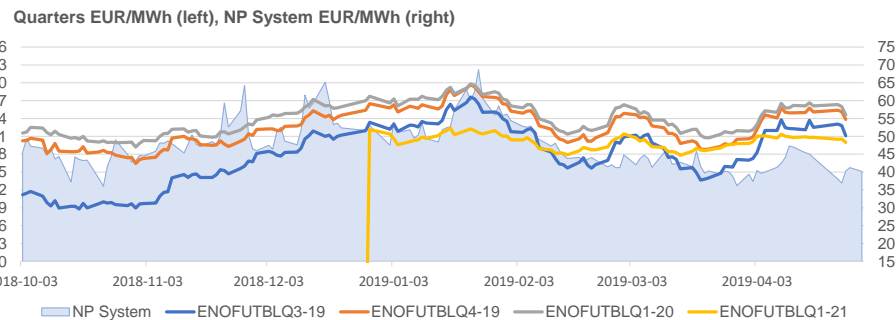
EMISSIONS
Despite Friday's fall in prices, the market is technically still strong and there is support for a price level approaching €26/t. However, emission allowance prices may continue to retreat with the end of seasonal demand resulting from the last surrender date for emission allowances at the end of April. In addition, weak fuel prices may create downward pressure on the German electricity market and also on emission allowance prices.

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	26.4.2019	41.10	-5.9%	-2.60
ENOFUTBLQ4-19	26.4.2019	43.85	-4.2%	-1.90
ENOFUTBLQ1-20	26.4.2019	44.60	-4.4%	-2.03
ENOFUTBLQ1-21	26.4.2019	40.00	-2.0%	-0.80
ENOYR-20	26.4.2019	36.70	-4.3%	-1.65
ENOYR-21	26.4.2019	32.87	-4.0%	-1.38
ENOYR-22	26.4.2019	32.05	-2.0%	-0.65
ENOYR-23	26.4.2019	32.08	-0.9%	-0.30
ENOYR-24	26.4.2019	31.50	-1.7%	-0.55
NEDEC9	26.4.2019	25.86	-5.7%	-1.57
NEDEC20	26.4.2019	26.16	-5.7%	-1.58

EPAD settlements	2019	2020	2021	2022
26.4.2019 (€/MWh)	3.75	3.08	3.00	3.00
SYHEL	3.75	3.08	3.00	3.00
SE1-NP System	-1.00	-1.50	-1.50	-1.50
SE2 - NP System	-1.00	-1.50	-1.50	-1.50
SE3 - NP System	1.43	1.75	1.75	1.75
SE4 - NP System	2.90	3.18	3.00	3.35

Week's spot price change	Date	Value	% chg	Chg (EUR)
NP System	28.4.2019	36.81	-14.7%	-6.36
NP Area FI	28.4.2019	35.80	-20.5%	-9.22
NP Area SE1	28.4.2019	34.40	-19.6%	-8.39
NP Area SE2	28.4.2019	34.40	-19.6%	-8.39
NP Area SE3	28.4.2019	34.40	-19.6%	-8.39
NP Area SE4	28.4.2019	34.40	-19.6%	-8.39



COMMENTS ON WEEK 17

ELECTRICITY DERIVATIVES

The nearest quarter

Front quarter products took a downturn last week. Downward pressure on quarter products was ushered in by the weather pattern for the following week, where it seems the weather type will grow damper than normal. Downward pressure strengthened in the wake of emission allowance prices, which had taken a downward turn towards the end of the week, and a clear fall in the price of coal.

Annual products

Last week annual products fell driven by the weak price of coal and emission allowance prices, which had taken a downward turn towards the end of the week. Demand for coal remained sluggish. A clear fall in the price of oil towards the end of the week also exerted downward pressure on coal. The oil price correction was triggered by Trump calling on the OPEC to increase oil production. The front-year product fell furthest of the annual products as forecasts for damper weather and lower quarterly products also strengthened the downward pressure on the front-year product.

SPOT MARKET

Last week, spot prices continued to be in clear decline at the weekly level. Demand for electricity was sluggish due to the very warm weather for the time of year. The impact of Easter also led to a fall in the demand for electricity. Melting was prolific as a result of the very warm weather and flow rates were high. Wind power generation was also abundant during the first half of the week and during the night spot prices settled very low also in Finland. Wind power generation fell, and night prices rose in the second half of the week. Because of low night prices Finnish area prices settled at a lower price than the system price at the weekly level.

EMISSIONS

Emission allowance prices were seeking a direction last week, until on Friday the price took a sharp downturn. The downward price correction triggered a slowdown in buying interest with the imminence of the end of April and the last day to surrender emission allowances. Also, weak fuel prices put downward pressure on the German electricity market and this in turn strengthened the correction in emission allowance prices.

Indicator	ENOFUTBLQ3-19	ENOYR-20
Coal-fired production	22%	39%
Coal price	2%	0%
Gas price (NBP)	1%	0%
German price level	3%	0%
Spot	17%	21%
Crude oil Brent	14%	15%
Water reservoirs	2%	6%
EUR/USD FX rate	1%	3%
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	17	Chg	16	Chg
ENOFUTBLQ3-19	🔻	-5.9%	🔻	3.3%
ENOYR-20	🔻	-4.3%	🔼	1.6%
NP System	🔻	-14.7%	🔻	-6.3%
NEDEC9	🔼	-5.7%	🔼	3.2%

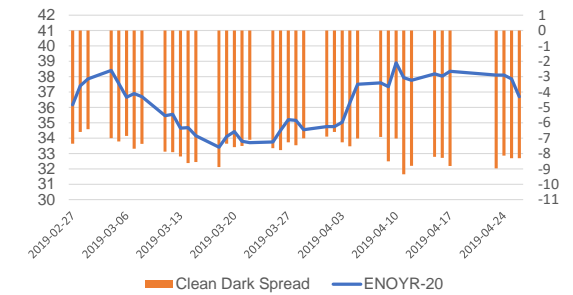
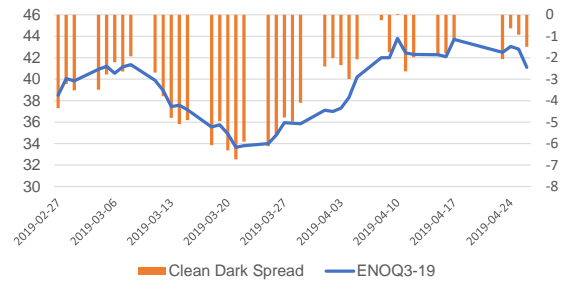
DETERMINANTS AFFECTING THE MARKET ON WEEK 18

RESTRICTIONS IN PRODUCTION AND TRANSMISSION CAPACITY

Oililuoto 2 (890 MW), yearly maintenance 5.-26.5.2019 available 0 MW
 Ringhals 3 (1063 MW), maintenance 05.03 - 30.04.2019 available 770 MW, 30.4.-25.5.2019 yearly maintenance, available 0 MW
 Forsmark 1 (984 MW), yearly maintenance 22.04 - 07.06.2019, available 0 MW

SE1-FI (1500 MW), maintenance 4.-5.5.2019, available 1500-1200 MW

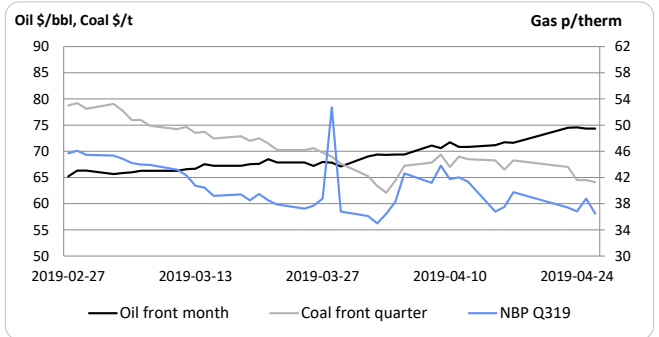
-The utilization rate of Nordic nuclear power plants is currently 89%
 -RU-FI transfer profile varies due to capacity charges, average import from Russia last week was 55% of maximum



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	45.40
NP Area FI - NP System	5.50	3.10	6.40	8.70	5.54	3.78	2.81	1.08
NP Area SE1 - NP System	0.50	1.10	1.80	0.20	2.04	1.43	0.24	-0.89
NP Area SE2 - NP System	0.60	1.10	1.80	1.00	2.04	1.43	0.24	-0.89
NP Area SE3 - NP System	1.10	1.40	2.00	1.00	2.33	1.83	0.55	-0.56
NP Area SE4 - NP System	3.00	1.80	2.30	1.90	2.62	2.77	2.37	-0.20

*Average for period between 1.1.2019-29.4.2019.



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 Source for data: intStream, Tilastokeskus

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