

NORDIC ELECTRICITY MARKET

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DOWNWARD PRESSURE BROUGHT BY TRADE TENSIONS AND WET WEATHER PICTURE

Forecast to week 32:

ENOFUTBLQ4-19	📉 Bearish (<0%)
ENOYR-20	📉 Bearish (<0%)
NP System	↔ Sideways (± 0,5%)
NEDEC9	📉 Bearish (<0%)

FORECAST TO WEEK 32

ELECTRICITY DERIVATIVES

Front quarter

The dry weather type is coming to an end. Precipitation rates will rise close to the normal level and the weather will get considerably wetter than normal after the business days of the week. There are no clear signs of drier weather in the forecasts, and the hydro balance will increase considerably. We expect quarterly product prices to fall. The downward pressure is also strengthened by the falling fuel prices and the weaker emission allowance prices.

Annual products

The wet weather forecasts and plummeting quarterly product prices are exerting downward pressure on annual products. In addition, the general market mood is nervous as concerns about trade tensions between the U.S. and China and about global economic growth slowing have become core issues again. These concerns are reflected in the prices of fuels and emission allowances. We expect a fall in annual product prices.

SPOT MARKET

The weather will turn wet and the rising hydro balance is exerting downward pressure on spot prices. The weather is, however, cool and wind power production clearly weaker than normal during the business days of the week, with flow rates also remaining low for that period. At the weekend, Nordic wind power production will rise to an above-normal level. Electricity imports from Russia to Finland have risen in August. Finnish wind power production will, however, decrease again to a low level after Monday and the scarce wind power production will keep the Finnish spot price above the system price during the daytime hours of the business days. We expect spot prices at the weekly level to settle at a level close to that seen last week.

EMISSIONS

Falling share indices and concerns about global economic growth slowing are creating downward pressure on emission allowance prices. We expect a fall in emission allowance prices. August's slashed auction supply and the continuously strong technical picture are, however, curbing the downward pressure. Therefore we expect the price drop to be moderate.

Market signals

	spot	Q4-19	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)
ENOFUTBLQ4-19	2.8.2019	42.10	-0.8%	-0.35
ENOFUTBLQ1-20	2.8.2019	45.05	0.1%	0.05
ENOFUTBLQ2-20	2.8.2019	36.00	2.3%	0.80
ENOFUTBLQ3-20	2.8.2019	31.70	3.4%	1.05
ENOYR-20	2.8.2019	37.85	1.9%	0.70
ENOYR-21	2.8.2019	34.85	1.2%	0.40
ENOYR-22	2.8.2019	33.70	0.3%	0.10
ENOYR-23	2.8.2019	33.75	0.2%	0.07
ENOYR-24	2.8.2019	32.63	-0.5%	-0.17
NEDEC9	2.8.2019	29.24	3.5%	0.98
NEDEC20	2.8.2019	29.57	3.3%	0.94

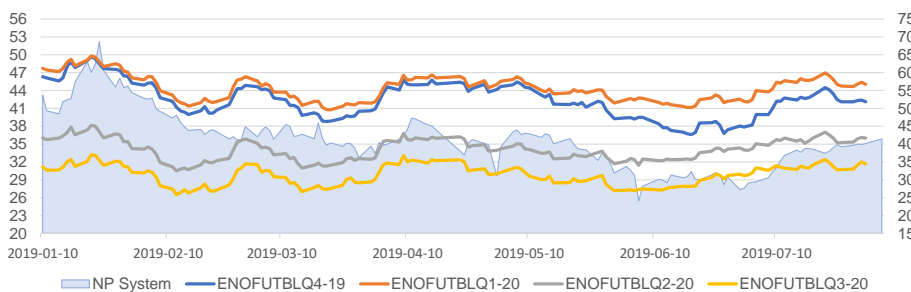
EPAD settlements

2.8.2019 (€/MWh)	2019	2020	2021	2022
SYHEL	5.50	3.10	3.15	3.30
SE1-NP System	-1.25	-1.50	-2.25	-2.25
SE2 - NP System	-1.25	-1.50	-2.25	-2.25
SE3 - NP System	1.38	1.25	1.35	1.35
SE4 - NP System	2.55	2.60	2.60	2.60

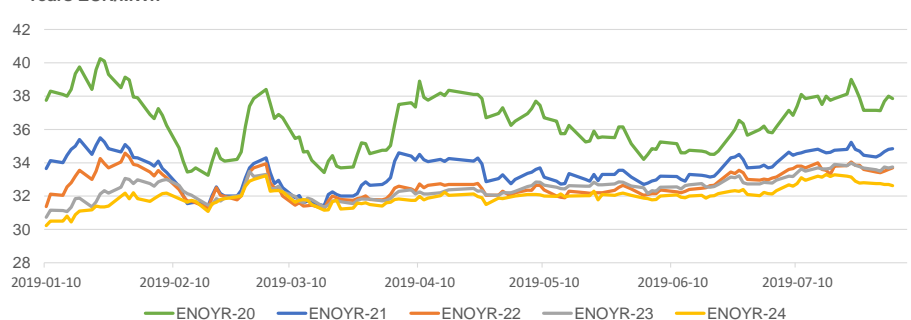
Week's spot price change

Price area (€/MWh)	Date	Value	% chg	Chg (EUR)
NP System	4.8.2019	39.78	4.6%	1.76
NP Area FI	4.8.2019	48.27	-12.9%	-7.16
NP Area SE1	4.8.2019	40.17	6.2%	2.35
NP Area SE2	4.8.2019	40.17	6.2%	2.34
NP Area SE3	4.8.2019	40.49	7.1%	2.67
NP Area SE4	4.8.2019	40.49	7.1%	2.67

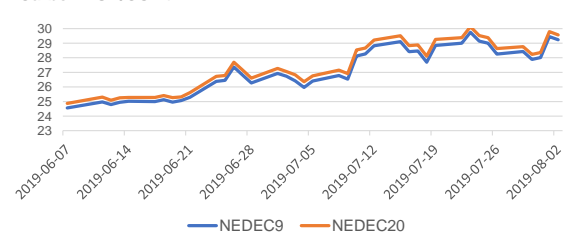
Quarters EUR/MWh (left), NP System EUR/MWh (right)



Years EUR/MWh



Carbon EUR/CO2 t



COMMENTS ON WEEK 31

ELECTRICITY DERIVATIVES

Front quarter

Last week quarterly products were supported by dry weather and the continued weakening of the hydro balance. In addition, upward pressure was exerted by the strong emission allowance prices. Quarterly products were, however, seeking direction as the forecasts for the week ahead were showing above-normal precipitation rates. The turn towards a wet weather type was confirmed further and at the weekly level the front quarter product ended up at a slight downward trajectory.

Annual products

Annual products rebounded last week in the wake of the strong run in emission allowance prices. The stock markets saw strong downward pressure in the second half of the week. The Federal Reserve cut its main interest rate but indices fell in the stock markets as the message communicated by the Fed concerning any future interest rate cuts was in part unclear. A higher degree of downward pressure on indices was created by Trump's announcement of new import tariffs on Chinese products, pushing the likelihood of a trade deal into a more distant future again. The weak stock market development and concerns about economic development were also reflected in the price of oil. Regardless of the stock markets and oil price, there were no major movements seen in the price of coal. Annual products were up at the weekly level.

SPOT MARKET

Spot prices rose last week. The temperatures took a dramatic downturn and the weather cooled to a level below normal for the time of year. The weather was dry and flow rates lower than normal. Spot prices were also supported by Nordic wind power production being generally weak. Finnish wind power production was high in the first days of the week but dropped to a low level towards the end of the week. On the other hand, imports of electricity from Russia increased from Thursday onwards as the interconnection restriction between Finland and Russia ended. The system price rose at the weekly level, whereas the Finnish area price dropped but still settled at a level considerably higher than the system price.

EMISSIONS

Last week, emission allowance prices took an upturn again. Emission allowance prices were supported by the auction supply -starved August and the strong technical upward trend. The upward pressure was, however, restricted by the receding of the heatwave and the reduced need for cooling. The bullish trend was also restricted by the pessimistic mood of the stock markets.

Indicator	ENOFUTBLQ4-19	ENOYR-20
Coal-fired production	79 %	46 %
Coal price	21 %	1 %
Gas price (NBP)	37 %	1 %
German price level	27 %	63 %
Spot	40 %	4 %
Crude oil Brent	31 %	8 %
Water reservoirs	8 %	0 %
EUR/USD FX rate	8 %	10 %
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	31	Chg	30	Chg
ENOFUTBLQ4-19	🔄	-0.8%	📈	-0.8%
ENOYR-20	📈	1.9%	📈	-1.8%
NP System	📈	4.6%	📈	1.7%
NEDEC9	📈	3.5%	📈	-2.0%

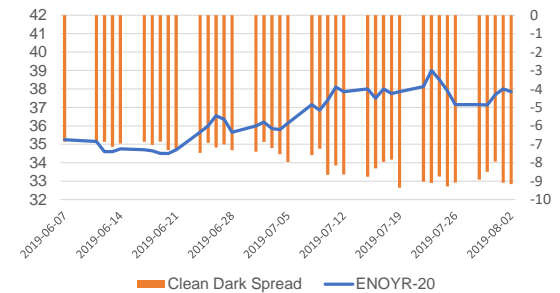
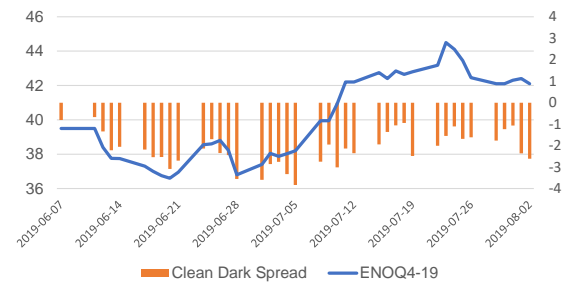
DETERMINANTS AFFECTING THE MARKET ON WEEK 32

RESTRICTIONS IN PRODUCTION AND TRANSMISSION CAPACITY

Ringhals 1 (881 MW), maintenance 18 July - 15 August 2019, 0 MW in use
 Ringhals 4 (1103 MW), maintenance 6 July - 27 August 2019, 680 MW in use
 Forsmark 2 (1120 MW), maintenance 28 July - 12 August 2019, 0 MW in use
 Oskarshamn 3 (1400 MW), maintenance 6 - 31 August 2019, in use 1165 MW

NO1-SE3 (2145 MW), maintenance 30 July - 18 October 2019, 1645-1945 MW in use

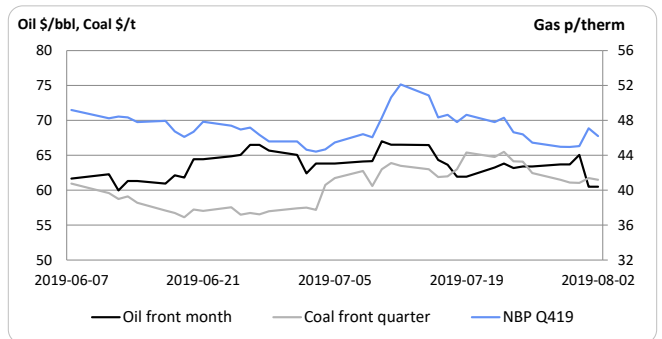
- Nordic nuclear power plants are currently operating at a capacity utilization rate of 80%
- RU-FI transmission profile varies due to capacity payments, average imports from Russia last week were 53% of the maximum



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	40.33
NP Area FI - NP System	5.50	3.10	6.40	8.70	5.54	3.78	2.81	2.56
NP Area SE1 - NP System	0.50	1.10	1.80	0.20	2.04	1.43	0.24	-1.46
NP Area SE2 - NP System	0.60	1.10	1.80	1.00	2.04	1.43	0.24	-1.46
NP Area SE3 - NP System	1.10	1.40	2.00	1.00	2.33	1.83	0.55	-1.26
NP Area SE4 - NP System	3.00	1.80	2.30	1.90	2.62	2.77	2.37	-0.09

*Average for period between 1.1.2019-5.8.2019.



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 Source for data: intStream, Tilastokeskus

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