

NORDIC ELECTRICITY MARKET

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VERY LOW SPOT PRICES AND HIGH WATER BASIN LEVELS MAINTAINING DOWNWARD PRESSURE

Forecast to week 45:	
ENOFUTBLQ1-21	📉 Bearish (<0%)
ENOYR-21	📉 Bearish (<0%)
NP System	📉 Bearish (<0%)
NEDEC20	📉 Bearish (<0%)

FORECAST TO WEEK 45

POWER FUTURES

Front quarter

The week is starting off on a very rainy and mild note for the time of year. Rainfall amounts will be temporarily lower on Tuesday and Wednesday, after which the weather will be wet until Saturday. The hydro balance is still rising and water basins in Norway are very high. Very low spot prices are also exerting downward pressure. However, the weather type will turn drier than normal next week and at the same time temperatures will fall to approach normal for the time of year. Next week's dry weather type will limit the downward pressure. We expect near products to continue to fall slightly in the early part of the week but after that we expect the downward pressure to calm down. We expect the nearest quarter product to fall slightly at the weekly level. All the same, the fall has been very strong, and the risk of an upward correction movement has grown significantly.

Annual products

The high hydro balance and low spot prices are also bringing downward pressure on the nearest annual product. Weak fuel prices are generally exerting downward pressure on annual products. Also, the emission allowance price has remained weak. General market sentiment has been jittery and share indexes have been falling. During the current week, the main focus will be on the US presidential elections. The election outcome could fluctuate share indexes but also bring significant changes in USD and EUR exchanges rate. Changes in forex pairs could in turn affect the marginal cost pricing of fuels, which will be reflected in the prices of annual products. For now, with the weak technical picture and weak fuel prices, we consider a downward trend more likely for annual products, but the election outcome may strongly determine the price towards the end of the week.

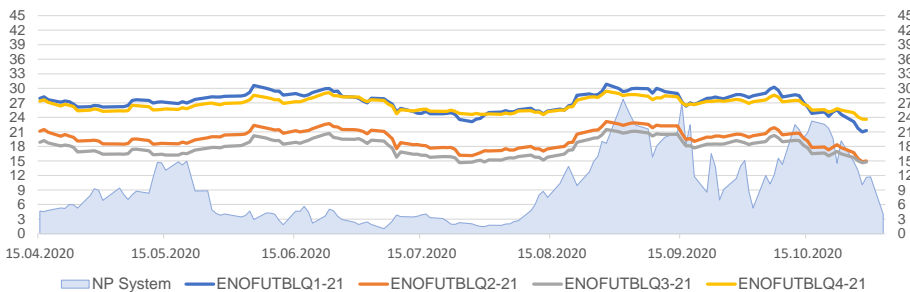
SPOT MARKET

Nordic wind power production will be very plentiful during the current week, especially on Monday when it will be exceptionally high. The weather is mild for the time of year and flow rates will be high after plenty of rainfall at the turn of the week. High flow rates, mild weather and very plentiful wind power production will mean spot prices will settle at low levels. In Finland, wind power production will be mostly plentiful. We expect the system price to fall and to settle at an average level of €6.0/MWh. We expect the Finnish area price to settle at an average level of €9.0/MWh.

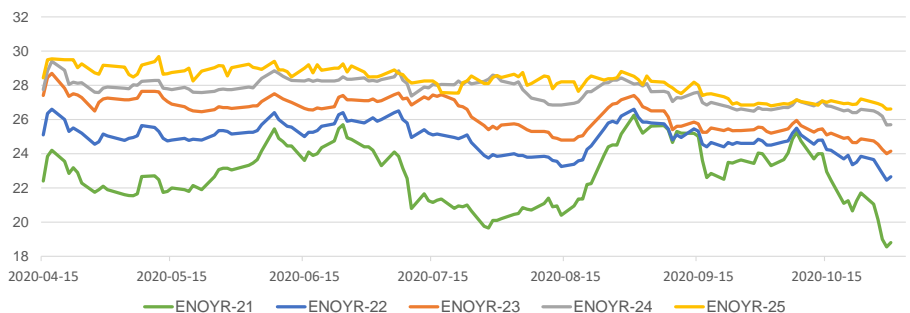
EMISSIONS

The emission allowance price is still technically weak despite an upward price correction at the end of the previous week. During the current week, the price has tested new four-month floors. The weakness in fuel prices, the fallout from the coronavirus pandemic and continuing high auction availability may keep the price low this week. The US presidential election can also give direction; a Biden win could be supportive of the stock markets and also the emission allowance price. Slightly weaker wind power production in Europe might also be supportive even if the weather remains mild. We expect the emission allowance price to continue falling.

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



Years EUR/MWh



Market signals

	spot	Q1-21	YR-21
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)
ENOFUTBLQ1-21	30.10.2020	21.30	-16.6%	-4.25
ENOFUTBLQ2-21	30.10.2020	15.00	-18.3%	-3.35
ENOFUTBLQ3-21	30.10.2020	14.80	-12.7%	-2.16
ENOFUTBLQ4-21	30.10.2020	23.60	-8.5%	-2.20
ENOYR-21	30.10.2020	18.80	-13.4%	-2.90
ENOYR-22	30.10.2020	22.65	-5.0%	-1.20
ENOYR-23	30.10.2020	24.15	-2.9%	-0.72
ENOYR-24	30.10.2020	25.70	-3.4%	-0.90
ENOYR-25	30.10.2020	26.62	-2.1%	-0.58
NEDEC20	30.10.2020	23.67	-7.2%	-1.84
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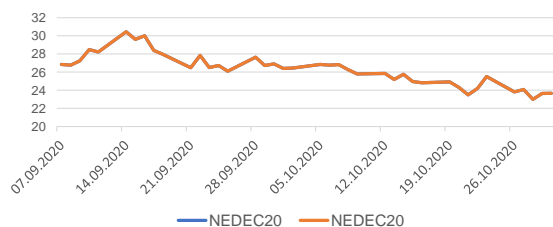
EPAD settlements

30.10.2020 (€/MWh)	2021	2022	2023
SYHEL	16.60	8.10	4.43
SE1- NP System	-1.50	-2.70	-2.50
SE2 - NP System	-1.50	-2.70	-2.50
SE3 - NP System	2.48	2.25	2.05
SE4 - NP System	4.75	3.75	3.75

Week's spot price change

Price area (€/MWh)	Date	Value	% chg	Chg (EUR)
NP System	1.11.2020	10.88	-37.7%	-6.58
NP Area FI	1.11.2020	21.15	-37.5%	-12.71
NP Area SE1	1.11.2020	11.91	-37.2%	-7.06
NP Area SE2	1.11.2020	11.91	-37.2%	-7.06
NP Area SE3	1.11.2020	12.33	-49.2%	-11.93
NP Area SE4	1.11.2020	12.33	-49.2%	-11.93

Carbon EUR/CO2 t



COMMENTS ON WEEK 44

POWER FUTURES

Front quarter

Last week near products were sharply down driven by a very rainy, windy, and mild weather picture. Very high water basin levels in Norway also brought downward pressure. The rainy, mild weather picture also meant the short-term outlook was for very abundant hydropower availability, which was especially visible in the strong sales pressure on front products. The very weak technical picture also strengthened the downward pressure as near products fell to new lower prices.

Annual products

Last week, the price of annual products fell. The rainy, mild weather picture in particular and the continually rising hydro balance brought downward pressure on the nearest annual products. The general jittery atmosphere with the second wave of the coronavirus epidemic brought overall downward pressure on annual products. General weak sentiment resulted in share indexes, fuel prices and emission allowance prices falling.

SPOT MARKET

Last week, the weather was very mild and Nordic wind power production was plentiful on Tuesday and Wednesday. In addition, the following week's very rainy, windy, and mild weather picture brought downward pressure on spot prices. However, last week rainfall amounts were still near the normal level and flow rates were only slightly higher than normal. In Finland, wind power production was mostly plentiful, and the Finnish area price also fell heavily. Also, Finnish nuclear power production returned to a normal level. However, Finnish wind power production fell to a low level on Friday and the Finnish area price rose a lot. At the weekly level, however, the Finnish area price fell a lot and the spread between the Finnish area price and system price narrowed.

EMISSIONS

Last week, the emission allowance price continued to fall. Besides the technical picture, concern about the fall in energy demand and weak stock markets as a result of the coronavirus pandemic brought a softening to the price in the early part of the week. There was a falling trend on the fuel markets last week. Also auction results remained weak, reflecting the low demand. On Thursday, the emission allowance price was supported by better auction results and the upward correction movement spilled over into Friday supported by GDP figures in the EU area. However, at the weekly level the emission allowance price remained falling.

Indicator	ENOFUTBLQ1-21	ENOYR-21
Coal-fired production	2 %	2 %
Coal price	10 %	2 %
Gas price (NBP)	10 %	11 %
German price level	6 %	85 %
Spot	14 %	6 %
Crude oil Brent	0 %	6 %
Water reservoirs	10 %	3 %
EUR/USD FX rate	3 %	0 %
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	44	Chg	43	Chg
ENOFUTBLQ1-21	📉	-16.6%	📉	-2.3%
ENOYR-21	📉	-13.4%	📉	-3.3%
NP System	📉	-37.7%	📉	-17.6%
NEDEC20	📉	-7.2%	🔄	2.8%

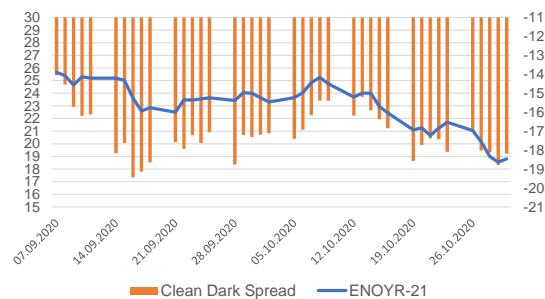
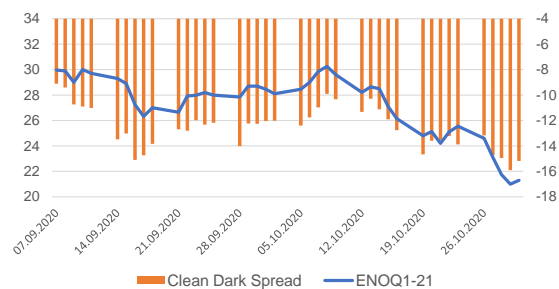
DETERMINANTS AFFECTING THE MARKET ON WEEK 45

RESTRICTIONS IN PRODUCTION AND TRANSMISSION CAPACITY

Ringhals 1 (881 MW), 25.10.-31.12.2020, maintenance before end of production, in use 700 MW
 Forsmark 1 (988 MW), 27.10.-6.1.2021, maintenance, in use 494 MW
 Oskarshamn 3 (1400 MW) 1.8.-9.11.2020 maintenance, in use 0 MW

EE-FI (1016 MW), 6.-10.11.2020 maintenance, in use 808-1016 MW

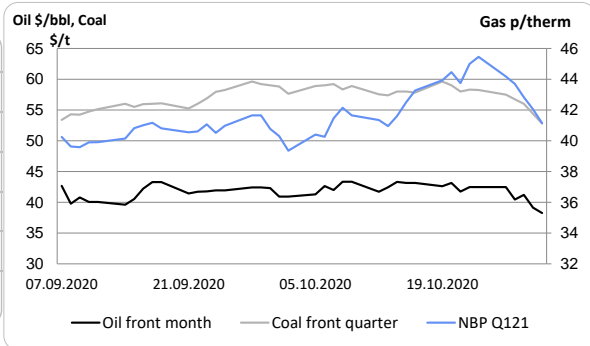
- Nordic nuclear power plants are currently operating at a capacity utilization rate of 81%
- RU-FI transmission profile varies due to capacity payments, average imports from Russia last week were 16 % of the maximum



AVERAGE SPOT PRICE AND EPAD

Price area (€/MWh)	2012	2013	2014	2015	2016	2017	2018	2019	2020*
NP System	31.20	38.10	29.60	21.00	26.91	29.41	43.99	38.94	10.41
NP Area FI - NP System	5.50	3.10	6.40	8.70	5.54	3.78	2.81	5.10	16.36
NP Area SE1 - NP System	0.50	1.10	1.80	0.20	2.04	1.43	0.24	-1.00	4.38
NP Area SE2 - NP System	0.60	1.10	1.80	1.00	2.04	1.43	0.24	-1.00	4.38
NP Area SE3 - NP System	1.10	1.40	2.00	1.00	2.33	1.83	0.55	-0.58	9.61
NP Area SE4 - NP System	3.00	1.80	2.30	1.90	2.62	2.77	2.37	0.86	13.44

*Average for period between 1.1.2020-2.11.2020.



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