

NORDIC ELECTRICITY MARKET

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DRIER THAN NORMAL WEATHER TYPE, BUT FUTURE UNCERTAINTY EXERTING PRESSURE ON MARKET

Forecast to week 50:

ENOFUTBLQ1-21	📉 Bearish (<0%)
ENOYR-21	📉 Bearish (<0%)
NP System	📈 Bullish (>0%)
NEDEC20	📉 Bearish (<0%)

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	→	→	→

FORECAST TO WEEK 50

POWER FUTURES

Front quarter

The weather type is mostly drier than normal but for the time being the weather will remain mild for the time of year. Next week's weather picture still contains uncertainty. Precipitation amounts will probably be almost at the normal level next week although some forecast models indicate the possibility of wetter than normal weather during the weekend. The weather forecasts have become slightly wetter. Technically, near products have been very strong but there are also signs of a weakening in the trend. We expect near products to show a slight fall this week.

Annual products

Slightly wetter weather forecasts and a downward turn in near-term products are putting pressure on the nearest annual product. However, fuel prices are still strong and the price of coal in particular is very strong. Also, the emission allowance price has risen abundantly. However, very strong resistance levels in the emission allowance price are approaching as the price has risen to near record prices of all times for the product. Strong resistance levels may limit a further rise in the emission allowance price and could also enable a break in the rise. We expect the nearest annual product to fall slightly this week. We expect longer annual products to move close to last week's levels or to fall slightly.

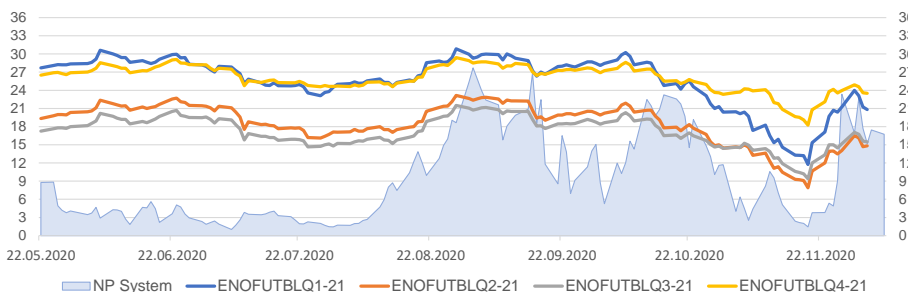
SPOT MARKET

The weather type is mild for the time of year, but temperatures will fall after the early part of the week. However, the weather type will continue to be mild for the time being. The week will start on a wetter than normal note and flow rates rise to slightly above normal. Dry weather will reduce flow rates later in the week. After Monday, Nordic wind power production will weaken to a lower level than normal. However, next week's wetter weather picture will decrease water values, limiting support in the system price. We expect the system price to rise slightly at the weekly level and to settle at an average level of €19/MWh. In Finland, wind power production will be close to the normal level until Thursday but will fall to a low level at the end of the week. Electricity imports from Russia to Finland have fallen compared to last week's level. We expect the Finnish area price to settle on average close to last week's level.

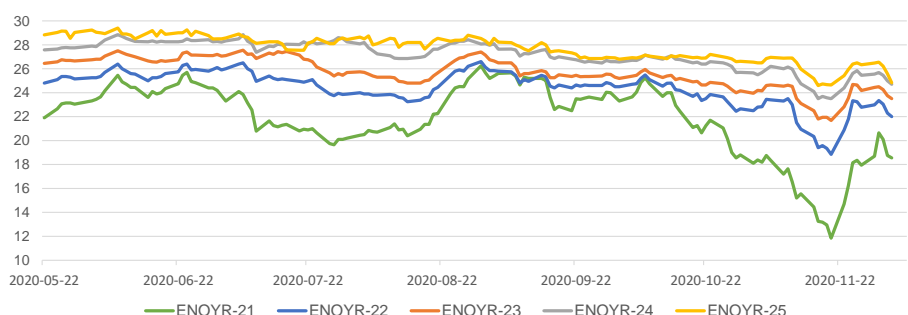
EMISSIONS

The weather picture in Central Europe remains cooler than normal but temperatures are rising. Tighter availability as emission allowance auctions take a break in just under a week continues to be supportive. Since last week, broader market sentiment has weakened because of increasingly tightening coronavirus restrictions and, among other things, the price of oil has softened. Brexit negotiations as well as the EU leaders' summit, where the European Climate Law is on the agenda, may give direction this week. Any decision could increase market volatility but putting off the decision to next year could affect prices. Technically, the emission allowance price is strong, but there is also much resistance to a rise in the product above the level of €30/t. However, we expect the emission allowance to remain strong.

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



Years EUR/MWh



Product	Date	Value	% chg	Chg (EUR)
ENOFUTBLQ1-21	4.12.2020	20.82	2.1%	0.42
ENOFUTBLQ2-21	4.12.2020	14.82	9.8%	1.32
ENOFUTBLQ3-21	4.12.2020	15.50	6.9%	1.00
ENOFUTBLQ4-21	4.12.2020	23.50	-0.2%	-0.05
ENOYR-21	4.12.2020	18.55	3.3%	0.60
ENOYR-22	4.12.2020	22.00	-3.5%	-0.79
ENOYR-23	4.12.2020	23.50	-2.9%	-0.69
ENOYR-24	4.12.2020	24.70	-2.9%	-0.75
ENOYR-25	4.12.2020	24.83	-5.7%	-1.50
NEDEC20	4.12.2020	30.06	6.7%	1.90
NEDEC20	4.12.2020	30.06	6.7%	1.90

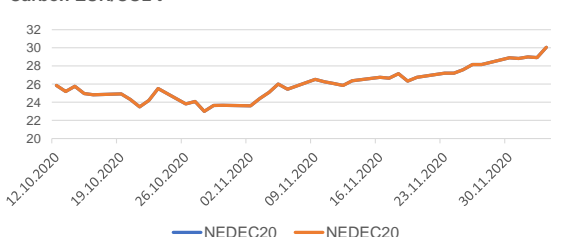
EPAD settlements

4.12.2020 (€/MWh)	2021	2022	2023
SYHEL	20.03	12.08	5.53
SE1- NP System	-1.00	-2.05	-2.50
SE2 - NP System	-1.00	-2.05	-2.50
SE3 - NP System	7.30	3.85	2.50
SE4 - NP System	16.03	77.50	6.50

Week's spot price change

Price area (€/MWh)	Date	Value	% chg	Chg (EUR)
NP System	6.12.2020	18.19	72.8%	7.66
NP Area FI	6.12.2020	43.86	19.1%	7.05
NP Area SE1	6.12.2020	15.83	39.1%	4.45
NP Area SE2	6.12.2020	15.83	39.1%	4.45
NP Area SE3	6.12.2020	43.78	52.7%	15.11
NP Area SE4	6.12.2020	43.78	52.7%	15.11

Carbon EUR/CO2 t



COMMENTS ON WEEK 49

POWER FUTURES

Front quarter

The weather forecasts were much drier than normal earlier in the week and no change was in sight. Electricity derivatives continued the previous week's strong rise on Monday and Tuesday. However, the weather forecast did not promise particularly dry or colder than normal weather. On Thursday, the monthly forecast showed signs of a possible return to a least as wet weather as normal and prices corrected notably downwards. Friday's change was minor and overall prices were moderately up at the weekly level.

Annual products

Also, the prices of annual products rose in the early part of the week supported by weather forecasts and near-term products. Fuels were robust as the emission allowance price continued to rise and coal reached its highest figures since January. Since the end of the week, also annual products retreated as the weather forecast changed sentiment and added impetus was given by Thursday's downward correction movement on the fuel markets. Opec+ countries managed, as expected, to reach agreement on continuing production restrictions from the turn of the year onwards at almost the existing level. The expected decision meant that the price movement was minor. At the weekly level, the nearest annual product showed a slight rise but despite the rise in emission allowance and fuel prices, more distant years closed the week down.

SPOT MARKET

Flow rates fell to near the normal level and this enabled hydropower plant operators a gradual improvement in control in Norway. Wind power production was lower than normal in the early part of the week and the SYS price reached its highest on Tuesday. Thursday saw strong wind power production only to fall towards the end of the week. Temperatures remained above normal and increased consumption only moderately. Swedish nuclear power output was still much lower than normal, but the re-starts of the Oskarshamn 3 and Ringhals 4 units took place last week and the Forsmark 2 unit was out of action for a two-week service and this dampened the change. As expected, the SYS price rose to settle at €18.2/MWh at the weekly level. In Finland, wind power production was stronger than normal except for Tuesday. Linking to the South Sweden price, which rose because of the shortage of nuclear power, had the greatest impact on the Finnish spot price. The highest daily prices were reached on Monday. At the weekly level, the Finnish price rose more than expected to reach a level of €43.9/MWh.

EMISSIONS

Last week, the emission allowance price continued rising because of cool weather and tighter availability outlook. A strong power market supported the emission allowance price as temperatures in Europe remained cool and renewables production weak. On Tuesday, the emission allowance price tested levels approaching €30/t but started to fall since then. On Thursday, the weak oil market also hit the emission allowance price. Also, news of an approaching Brexit agreement was supportive of the emissions market on Friday and the emission allowance price closed the week at a level of €30.11/t, which was near to the closing levels last seen in September.

DETERMINANTS AFFECTING THE MARKET ON WEEK 50

RESTRICTIONS IN PRODUCTION AND TRANSMISSION CAPACITY

Forsmark 2 (1118 MW), 1.-15.12.2020, failure, in use 0 MW
 Ringhals 1 (881 MW), 25.10.-31.12.2020, restrictions before end of production, in use 600 MW
 Forsmark 1 (988 MW), 27.10.-21.12.2020, maintenance, in use 494 MW

EE-FI (1016 MW), 7.12.-20.12.2020, maintenance, in use 958 MW
 NO2-DE (1400 MW), new transmission connection starts 9.12.2020

- Nordic nuclear power plants are currently operating at a capacity utilization rate of 83%
- 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	2020*
NP System	31.20	38.10	29.60	21.00	26.91	29.41	43.99	38.94	10.24
NP Area FI - NP System	5.50	3.10	6.40	8.70	5.54	3.78	2.81	5.10	16.95
NP Area SE1 - NP System	0.50	1.10	1.80	0.20	2.04	1.43	0.24	-1.00	3.83
NP Area SE2 - NP System	0.60	1.10	1.80	1.00	2.04	1.43	0.24	-1.00	3.83
NP Area SE3 - NP System	1.10	1.40	2.00	1.00	2.33	1.83	0.55	-0.58	10.34
NP Area SE4 - NP System	3.00	1.80	2.30	1.90	2.62	2.77	2.37	0.86	14.86

*Average for period between 1.1.2020-7.12.2020.

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 Source for data: intStream, Tilastokeskus

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Indicator	ENOFUTBLQ1-21	ENOYR-21
Coal-fired production	9 %	10 %
Coal price	2 %	2 %
Gas price (NBP)	6 %	85 %
German price level	7 %	10 %
Spot	0 %	0 %
Crude oil Brent	0 %	0 %
Water reservoirs	10 %	3 %
EUR/USD FX rate	11 %	11 %
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	49	Chg	48	Chg
ENOFUTBLQ1-21	↗	2.1%	↗	73.6%
ENOYR-21	↗	3.3%	↗	51.5%
NP System	↗	72.8%	↗	515.0%
NEDEC20	↗	6.7%	↗	5.2%

