

NORDIC ELECTRICITY MARKET

3.5.2021 Antti Kouvo, Gasum Portfolio Services Oy

WEATHER STILL CHILLY, FUELS ROBUST

Forecast to week 18:

ENOFUTBLQ3-21	↗ Bullish (>0%)
ENOFUTBLR-22	↗ Bullish (>0%)
NP System	↘ Bearish (<0%)
NEDEC21	↗ Bullish (>0%)

FORECAST TO WEEK 18

POWER FUTURES

Front quarter

The cold weather type is expected to turn warmer next week, which is expected to also be quite wet, although the weather forecast has dried up a lot with regard to rain during the current week. The hydro balance is expected to rise back to slightly above zero during next week. The weather, together with the rise in fuel and emission allowance prices, will bring upward pressure on near products and we expect near products to close the current week higher.

Annual products

The rise in fuel and emission allowance prices is supportive of annual products. Prices of annual products have exceeded the peaks in the nearest years and the technical picture together with strong fundamentals and earlier underpriced products are strongly supportive. Compared to the spot price level and Central Europe, annual products are considerably underpriced.

SPOT MARKET

The weather this week will still be cold for the time of year. The low temperature will keep flow rates slow and so hydropower producers will have no pressure, quite the opposite as some basins are very empty. Nordic wind power production will be very high on Tuesday and Wednesday and around normal on other days. Wind power production also in Germany will be high on the same days. Wind power production will put pressure on the spot price even though nuclear power is undergoing annual maintenance. We expect the system price to settle at just under €50/MWh at the weekly level. The Finnish area price is expected to settle at a level of around €55/MWh.

EMISSIONS

The weather in Europe will remain chilly during the current week but after that the weather will grow warmer in Europe, at least temporarily. High wind power production will offset increased consumption during the current week. The price of gas is very robust, bringing support to the emission allowance. The surrender season is over and uncertainty about free allocations and greater than normal demand have partly supported the market. The first auction of the current week is not until Tuesday. We expect the emission allowance price to continue rising.

Market signals

	spot	Q3-21	YR-22
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)
ENOFUTBLQ3-21	30.4.2021	29.90	-1.2%	-0.37
ENOFUTBLQ4-21	30.4.2021	34.70	2.3%	0.77
ENOFUTBLQ1-22	30.4.2021	39.18	2.7%	1.03
ENOFUTBLQ2-22	30.4.2021	25.80	5.7%	1.40
ENOFUTBLR-22	30.4.2021	29.00	4.9%	1.35
ENOFUTBLR-23	30.4.2021	27.40	2.8%	0.75
ENOFUTBLR-24	30.4.2021	27.25	2.3%	0.60
ENOFUTBLR-25	30.4.2021	27.50	3.4%	0.90
ENOFUTBLR-26	30.4.2021	27.75	3.0%	0.80
NEDEC21	30.4.2021	48.82	4.1%	1.94
NEDEC22	30.4.2021	49.32	4.2%	1.99

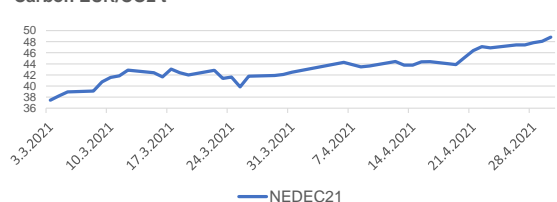
EPAD settlements

30.4.2021 (€/MWh)	2021	2022	2023
SYHEL	7.60	4.88	4.45
SE1- NP System	-6.25	-6.25	-6.00
SE2 - NP System	-6.25	-6.25	-6.00
SE3 - NP System	3.85	3.60	3.45
SE4 - NP System	16.00	10.03	10.03

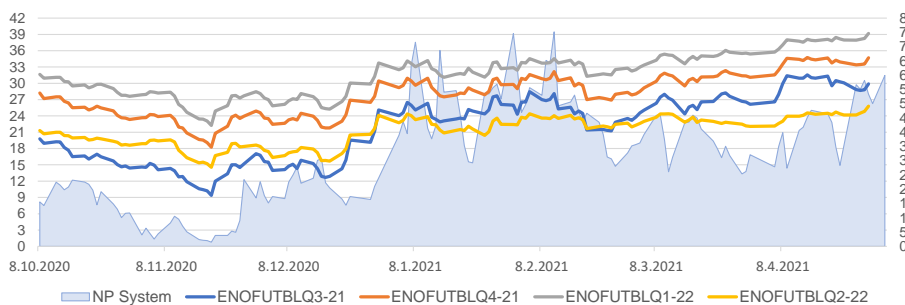
Week's spot price change

Price area (€/MWh)	Date	Value	% chg	Chg (EUR)
NP System	2.5.2021	52.79	45.3%	16.47
NP Area FI	2.5.2021	54.04	73.0%	22.80
NP Area SE1	2.5.2021	49.88	121.9%	27.40
NP Area SE2	2.5.2021	49.88	125.4%	27.75
NP Area SE3	2.5.2021	51.35	111.4%	27.06
NP Area SE4	2.5.2021	51.35	111.4%	27.06

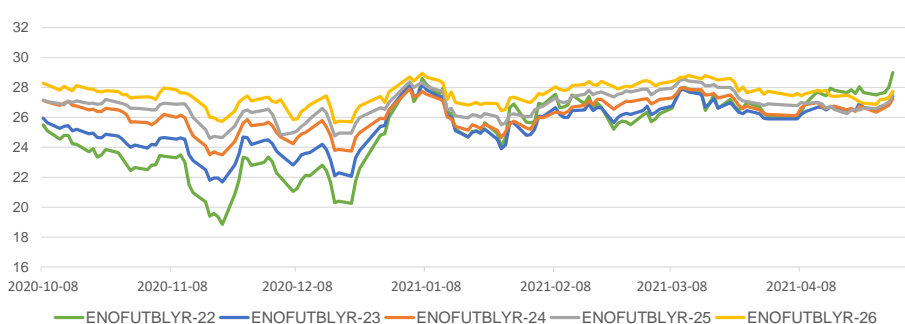
Carbon EUR/CO2 t



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



Years EUR/MWh



COMMENTS ON WEEK 17

POWER FUTURES

Front quarter

The weather forecast on Monday last week was cold and dry for the nearest week. On Tuesday, the forecast showed a clear change to wetter than normal weather during the following week, which put clear downward pressure on the near product. On Friday, the forecast clearly tried but remaining wetter than normal, however. On Friday, short-term prices rose partly on the back of the weather forecast and partly because of a wider rise on the energy markets. The change in near products remained small at the weekly level.

Annual products

The weather picture across Europe continued cold for the time of year, which contributed to increasing the price of natural gas, the emission allowance and the German electricity price. The annual product did not manage to end the fall on Tuesday with a wetter weather forecast, but the forecast prevented a rise in the annual product in the early part of the week. On Friday, the strong rise in energy commodities also affected Nordic electricity and the following annual product broke through the previous peaks to end at the highest prices in more than a year.

SPOT MARKET

Last week was cold for the time of the year. The much colder than normal weather has also delayed the start of melting in the mountains and flow rates were much lower than normal. Last week, wind power production was also mostly weak. Spot prices settled at their highest since February. Annual nuclear power maintenance also contributed to supporting the spot price. System spot prices were well up and despite the nuclear power maintenance price spreads between the areas were very small.

EMISSIONS

Last week, the emission allowance price continued to rise sharply. The rise was largely supported by investors, but last week a rise was also seen on the fuel markets. On Friday, the emission allowance price continued upwards despite a very poor auction result. On Friday, the emission allowance price closed at a record level of €48.84/t, up €1.89 at the weekly level.

Indicator	ENOFUTBLQ3-21	ENOFUTBLR-22
Coal-fired production	71 %	62 %
Coal price	78 %	63 %
Gas price (NBP)	6 %	85 %
German price level	57 %	53 %
Spot	61 %	48 %
Crude oil Brent	95 %	68 %
Water reservoirs	59 %	58 %
EUR/USD FX rate	1 %	2 %
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
ENOFUTBLQ3-21	↻	-1.2%	↗	-2.5%
ENOFUTBLR-22	↻	4.9%	↗	-0.5%
NP System	↗	45.3%	↘	-25.2%
NEDEC21	↗	4.1%	↗	5.6%

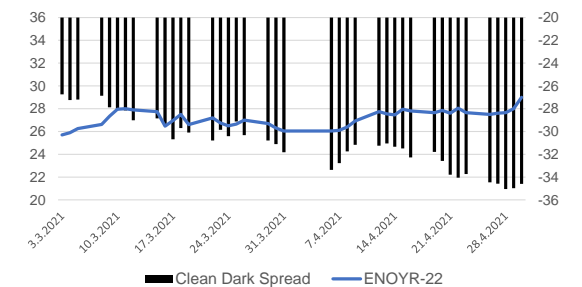
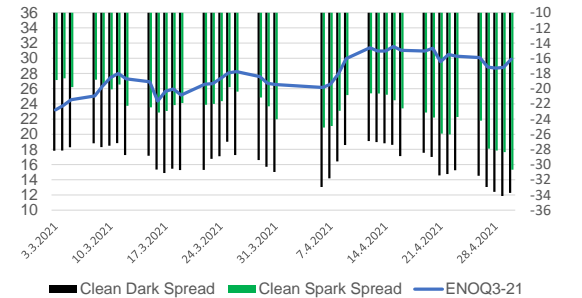
DETERMINANTS AFFECTING THE MARKET ON WEEK 18

RESTRICTIONS IN PRODUCTION AND TRANSMISSION CAPACITY

- Olkiluoto 1 (890 MW), maintenance 25.4.-10.5.2021, in use 0 MW
- Forsmark 2 (1120 MW), maintenance 2.5.-30.5.2021, in use 0 MW

- FI-SE1 (1100 MW), maintenance 7.5.2021, in use 750 MW
- SE1-FI (1500 MW), maintenance 3.-5.5.2021, in use 1200 MW
- FI-SE3 (1200 MW), limitation till 30.9.2021, in use 250 MW
- EE-FI (1016 MW), maintenance 3.-5.5.2021, in use 658 MW
- FI-RU (320 MW), maintenance 4.-31.5.2021, in use 0 MW

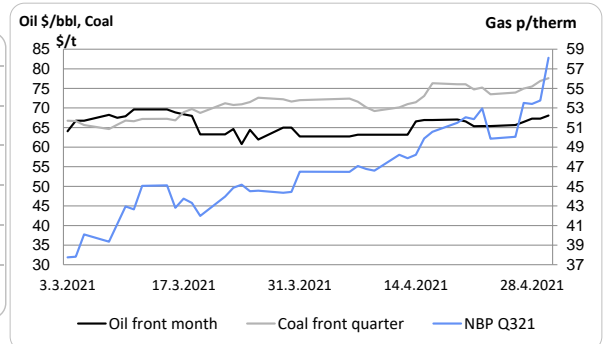
- Nordic nuclear power plants are currently operating at a capacity utilization rate of 80 %
- RU-FI transmission profile varies due to capacity payments, average imports from Russia last week were 67 % of the maximum



AVERAGE SPOT PRICE AND EPAD

Price area (€/MWh)	2013	2014	2015	2016	2017	2018	2019	2020	2021*
NP System	38.1	29.6	21	26.91	29.41	43.99	38.94	10.93	41.33
NP Area FI - NP System	3.10	6.40	8.70	5.54	3.78	2.81	5.10	17.28	4.45
NP Area SE1 - NP System	1.10	1.80	0.20	2.04	1.43	0.24	-1.00	3.60	-6.24
NP Area SE2 - NP System	1.10	1.80	1.00	2.04	1.43	0.24	-1.00	3.60	-6.26
NP Area SE3 - NP System	1.40	2.00	1.00	2.33	1.83	0.55	-0.58	10.53	1.45
NP Area SE4 - NP System	1.80	2.30	1.90	2.62	2.77	2.37	0.86	15.06	6.50

*Average for period between 1.1.2021-3.5.2021.



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Source for data: Gasum, Tilastokeskus

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