

NORDIC ELECTRICITY MARKET

22.3.2021 Antti Kouvo, Gasum Portfolio Services Oy

MILD AND WET WEATHER, EMISSION ALLOWANCE AND CENTRAL EUROPE STRONG

Forecast to week 12:	
ENOFUTBLQ2-21	↗ Bullish (>0%)
ENOYR-22	↗ Bullish (>0%)
NP System	↘ Bearish (<0%)
NEDEC21	↗ Bullish (>0%)

FORECAST TO WEEK 12

POWER FUTURES

Front quarter

Even though the weather is mild and wet, this could already be seen in last week's forecasts, when the market fell sharply. There was no change in the hydro balance forecasts over the weekend and the balance forecast has remained a shade above zero. However, both precipitation and temperature will again approach normal at the very end of the forecast period. If the end of the forecasts does not change to wet again, the forecasts will be supportive of the market together with very high Norwegian spot pricing. The market will also be supported technically as last week's lows remained higher than the previous low.

Annual products

The emission allowance price together with the price level in Central Europe will fundamentally put upward pressure on annual products in the longer term. A short-term examination of fuels shows rising gas and coal prices and support for electricity as marginal cost prices rise for fuel-based production. Also, technically the market trend is upwards with new peaks and lows being higher than earlier. We expect annual products to rise at the weekly level. However, the price level of wind power production will limit a larger rise for longer annual products.

SPOT MARKET

The temperature will be much milder than normal for the entire week. Also, wind power production will largely be higher than normal, with Wednesday being the windiest day. The transmission link between Norway and Germany is out of use during weekdays. These will bring downward pressure on spot prices. Also, in Finland wind power production will rise from Monday's low level with a windy week apart from Friday. The transmission constriction between Finland and Sweden and between Sweden and Norway will reduce night prices in Finland and at the weekend to below the system price. We expect spot prices to fall at the weekly level. We expect the system price to settle at an average level of €33/MWh at the weekly level and the Finnish area price to settle at an average level of €32.6/MWh.

EMISSIONS

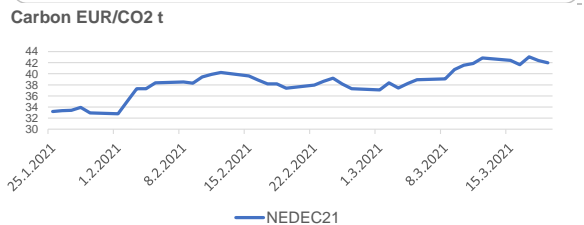
During the current week, the weather in Europe will overall approach normal temperatures for the time of year and renewables production will approach normal levels. Technically, the emission allowance price is strong and there is no particular reason for it to fall. In addition, emissions reporting and the approaching deadline for surrenders are supportive of any price falls and with this demand will support the market. We expect the emission allowance price to seek direction close to €42/t and to potentially test new peaks above €44/t.

Market signals			
	spot	Q2-21	YR-22
Hydrologic balance	→	→	→
Precipitation forecast	→	↓	↓
Temperature forecast	↓	→	→
Spot	↓	↑	↑
Production and transmission exch.	→	→	→
Emissions allowance	↑	↑	↑
Coal price	↑	↑	↑
German prices	↑	↑	↑
Technical analysis	↓	↑	↑

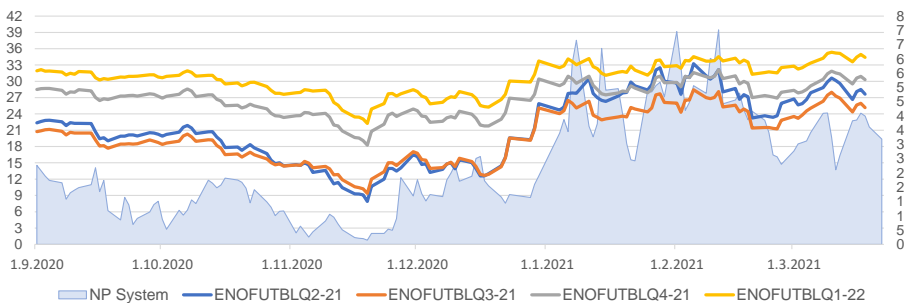
Product	Date	Value	% chg	Chg (EUR)
ENOFUTBLQ2-21	19.3.2021	27.65	-8.3%	-2.51
ENOFUTBLQ3-21	19.3.2021	25.15	-7.9%	-2.15
ENOFUTBLQ4-21	19.3.2021	30.30	-4.0%	-1.25
ENOFUTBLQ1-22	19.3.2021	34.40	-2.3%	-0.80
ENOYR-22	19.3.2021	26.60	-4.7%	-1.30
ENOYR-23	19.3.2021	26.63	-3.9%	-1.07
ENOYR-24	19.3.2021	27.30	-2.0%	-0.55
ENOYR-25	19.3.2021	28.00	-1.5%	-0.43
ENOYR-26	19.3.2021	28.50	-1.0%	-0.30
NEDEC21	19.3.2021	41.99	-2.0%	-0.86
NEDEC22	19.3.2021	42.30	-2.1%	-0.90

EPAD settlements			
19.3.2021 (€/MWh)	2021	2022	2023
SYHEL	11.88	5.55	4.75
SE1- NP System	-4.00	-4.00	-4.00
SE2 - NP System	-4.00	-4.00	-4.00
SE3 - NP System	4.55	4.15	3.20
SE4 - NP System	8.95	8.25	8.25

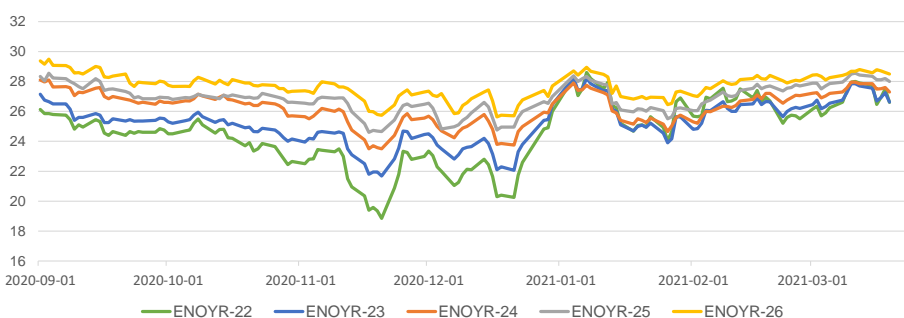
Week's spot price change				
Price area (€/MWh)	Date	Value	% chg	Chg (EUR)
NP System	21.3.2021	39.04	9.2%	3.28
NP Area FI	21.3.2021	42.57	-2.8%	-1.24
NP Area SE1	21.3.2021	28.90	7.1%	1.92
NP Area SE2	21.3.2021	28.90	7.1%	1.92
NP Area SE3	21.3.2021	40.75	0.5%	0.22
NP Area SE4	21.3.2021	40.75	0.5%	0.22



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



Years EUR/MWh



COMMENTS ON WEEK 11

POWER FUTURES

Front quarter

Near products fell last week as the weather forecast promised much more precipitation than normal for the following week. On Monday prices still showed no significant movement with the cold, dry weather at the start of last week. Tuesday saw a sharp fall as looks turned to the following week and the fall in the emission allowance, fuel and German price provided pressure. Spot prices remained quite strong because of the cooler weather and weak wind power production, which was not particularly reflected in weaker near products, which fell driven by the following week's weather forecast.

Annual products

The prices of annual products fell last week. A wetter and milder forecast from the following week brought about a fall in the prices of annual products in the same way as in near products. In addition, a small softening in the emission allowance price and German electricity price were seen after a long time. Regarding fuels, gas and oil were down last week but the price of coal was rising. Stock markets have remained strong except for a correction movement on Thursday. The pricing of annual products in the Nordic countries is well below the marginal cost of condensate production or the German price level and reflects the surplus energy balance with wind power production increasing abundantly.

SPOT MARKET

Last week was cool and with little wind, which raised spot prices. Temperatures fell to below normal from Tuesday to Saturday and also wind power production was much weaker than normal over the same period. However, temperatures rose towards the end of the week as did wind power production, which was seen in low-cost spot prices. South Norway kept spot prices clearly much higher than other areas at the weekend and it will be interesting to see whether this is a longer term phenomenon such as the North Norway and North Sweden areas which remain cheaper. In Finland, the cool weather and little wind increased spot prices earlier in the week, but at the weekend the Finnish area price settled much lower than the system price and fell at the weekly level.

EMISSIONS

Last week, the emission allowance price sought direction roughly between €41 - €44/t and closed slightly down at the weekly level. The market fell on the back of, among other things, a fall in the fuel markets and a deterioration of general sentiment with the disruption in corona vaccine distribution. On Wednesday, the market direction was again up and on Thursday rose to new record levels at €43.77/t before the price softened towards the end of the day. On Friday, trading was still at lower levels and smaller volumes with the weaker auction result. CER prices were rising last week as the last possible CER-EUA exchange day approaches.

DETERMINANTS AFFECTING THE MARKET ON WEEK 12

RESTRICTIONS IN PRODUCTION AND TRANSMISSION CAPACITY

- SE1-FI (1500 MW), maintenance 22.-23.3.2021, in use 900 MW
- FI-SE1 (1100 MW), maintenance 24.3.-11.4.2021 in use 750 MW
- FI-SE3 (1200 MW), maintenance 15.-29.3.2021, in use 0 MW

- Nordic nuclear power plants are currently operating at a capacity utilization rate of 100%
- RU-FI transmission profile varies due to capacity payments, average imports from Russia last week were 69 % 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	43.57
NP Area FI - NP System	3.10	6.40	8.70	5.54	3.78	2.81	5.10	17.28	7.10
NP Area SE1 - NP System	1.10	1.80	0.20	2.04	1.43	0.24	-1.00	3.60	-4.24
NP Area SE2 - NP System	1.10	1.80	1.00	2.04	1.43	0.24	-1.00	3.60	-4.24
NP Area SE3 - NP System	1.40	2.00	1.00	2.33	1.83	0.55	-0.58	10.53	4.09
NP Area SE4 - NP System	1.80	2.30	1.90	2.62	2.77	2.37	0.86	15.06	6.78

*Average for period between 1.1.2021-22.3.2021.

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Source for data: intStream, Tilastokeskus

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Indicator	ENOFUTBLQ2-21	ENOYR-22
Coal-fired production	52 %	41 %
Coal price	59 %	48 %
Gas price (NBP)	6 %	85 %
German price level	69 %	50 %
Spot	39 %	28 %
Crude oil Brent	65 %	49 %
Water reservoirs	67 %	58 %
EUR/USD FX rate	11 %	6 %
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	11	Chg	10	Chg
ENOFUTBLQ2-21	↻	-8.3%	↗	13.2%
ENOYR-22	↗	-4.7%	↗	6.3%
NP System	↗	9.2%	↗	-20.6%
NEDEC21	↗	-2.0%	↻	10.1%

