

#### NORDIC ELECTRICITY MARKET

29.3.2021 Markus Herranen, Gasum Portfolio Services Oy

### SLIGHTLY WETTER THAN NORMAL WEATHER PICTURE BRINGS DOWNWARD PRESSURE ON NEAR PRODUCTS

Forecast to week 13:	
ENOFUTBLQ2-21	📉 Bearish (<0%)
ENOYR-22	📉 Bearish (<0%)
NP System	📉 Bearish (<0%)
NEDEC21	↔️ Sideways (± 0,5%)

#### FORECAST TO WEEK 13

#### POWER FUTURES

##### Front quarter

Last week started on a very mild and wet note for the time of year. However, temperatures will fall after Tuesday and at the same time the weather will turn dry momentarily. Precipitation amounts will rise towards the end of the week and are likely to approach normal levels. Next week, the weather will turn slightly colder than normal. As a whole, precipitation amounts in the two-week forecast are slightly higher than normal and the latest forecast models are milder than earlier. We expect near products to fall slightly.

##### Annual products

Near-term products have taken a downward turn and this, together with a damper than normal weather picture, will bring a slight downward pressure on annual products. The container ship blocking the Suez Canal has been freed and the easing of this situation is also easing the uncertainty on the oil market. The easing of the situation may also exert slight downward pressure on the price of coal and natural gas. Wide price fluctuations on the oil market could, however, continue when OPEC+ meets on Thursday. We expect prices of annual products to move close to the previous week's closing prices or to fall slightly.

#### SPOT MARKET

The weather in the earlier part of the week will be very mild for the time of year and also wet and windy. Flow rates will rise and in particular on Wednesday will be high for the time of year. Temperatures will fall towards the end of the week, but Easter means that demand for electricity will fall to lower than usual on Friday. Wind power production will be close to the normal level between Wednesday and Friday but will again rise at the weekend. In Finland, the early part of the week will also be very windy, but after Tuesday wind power production in Finland will fall. We expect spot prices to fall at the weekly level. We expect the system price to settle at an average level of around €28.5/MWh. At the weekly level, we expect the Finnish area price to settle close to the system price.

#### EMISSIONS

The early part of the present week will be warm in Europe, but temperatures will fall towards the weekend and next week. Because of the public holiday on Friday this week, auction availability will decrease by about 18%. The market has been seeking direction over the past few weeks. Publication of emissions data for 2020 could bring direction to the market and lower actual than expected emissions could have a downward effect on the market. It is expected that demand created by operators buying emission allowances for surrender could prevent major price decreases for a few more weeks. We expect the market to continue to seek direction and to mostly remain north of the level of €40/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	26.3.2021	30.70	11.0%	3.05
ENOFUTBLQ3-21	26.3.2021	28.25	12.3%	3.10
ENOFUTBLQ4-21	26.3.2021	32.35	6.8%	2.05
ENOFUTBLQ1-22	26.3.2021	36.08	4.9%	1.68
ENOYR-22	26.3.2021	27.00	1.5%	0.40
ENOYR-23	26.3.2021	26.45	-0.7%	-0.18
ENOYR-24	26.3.2021	26.74	-2.1%	-0.56
ENOYR-25	26.3.2021	27.05	-3.4%	-0.95
ENOYR-26	26.3.2021	27.65	-3.0%	-0.85
NEDEC21	26.3.2021	41.76	-0.5%	-0.23
NEDEC22	26.3.2021	42.12	-0.4%	-0.18

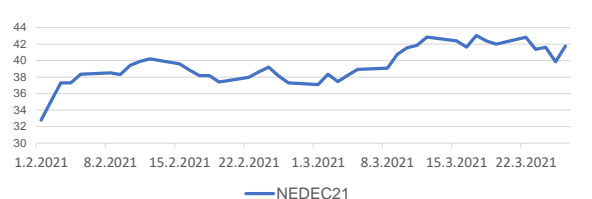
#### EPAD settlements

26.3.2021 (€/MWh)	2021	2022	2023
SYHEL	9.98	5.05	4.95
SE1 - NP System	-4.20	-4.20	-4.20
SE2 - NP System	-4.20	-4.20	-4.20
SE3 - NP System	4.75	4.75	3.80
SE4 - NP System	12.00	8.25	9.00

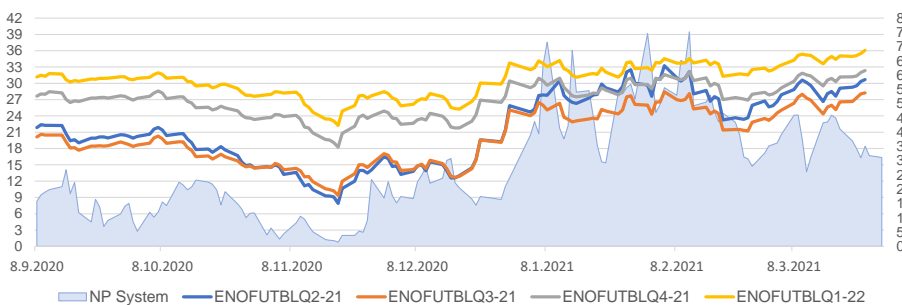
#### Week's spot price change

Price area (€/MWh)	Date	Value	% chg	Chg (EUR)
NP System	28.3.2021	30.81	-21.1%	-8.23
NP Area FI	28.3.2021	33.52	-21.3%	-9.05
NP Area SE1	28.3.2021	21.29	-26.3%	-7.61
NP Area SE2	28.3.2021	21.29	-26.3%	-7.61
NP Area SE3	28.3.2021	30.38	-25.4%	-10.36
NP Area SE4	28.3.2021	30.38	-25.4%	-10.36

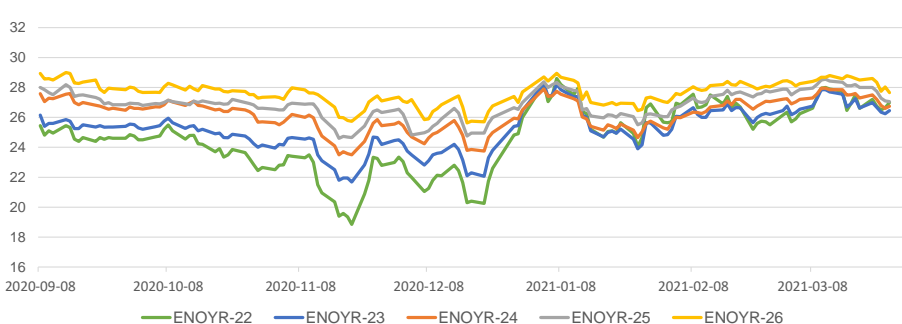
#### Carbon EUR/CO2 t



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



Years EUR/MWh



## COMMENTS ON WEEK 12

### POWER FUTURES

#### Front quarter

Last week, the weather was mild for the time of year and mostly wetter than normal. Despite this, near products rose. The following week's weather picture, where there were signs of temperatures and precipitation amounts normalizing, will be supportive of near products. Higher fuel prices will also bring upward pressure to near products.

#### Annual products

Last week, annual products received support from higher near-term products. Also, fuel prices rose. The blockage of the Suez Canal brought uncertainty to the oil market. This uncertainty was seen in a great fluctuation in the oil price, but there were ultimately no great changes in the oil price at the weekly level. Prices of coal and natural gas rose and this in turn brought upward pressure to the prices of annual products. However, the emission allowance price fell, which limited the upward pressure brought about by fuel prices. On Friday, the emission allowance price recovered. At the weekly level, the nearest annual product closed the week slightly up and longer annual products closed the week slightly down.

### SPOT MARKET

Last week was very mild for the time of year. At the same time, there was mostly more wind power production than normal. The mild and wetter than normal weather resulted in higher flow rates. In addition, maintenance of the transmission link between Norway and Germany brought downward pressure on the system price. Wind power production in Finland was also mostly plentiful. Spot prices were well down at the weekly level. The Finnish area price fell slightly, even more than the system price.

### EMISSIONS

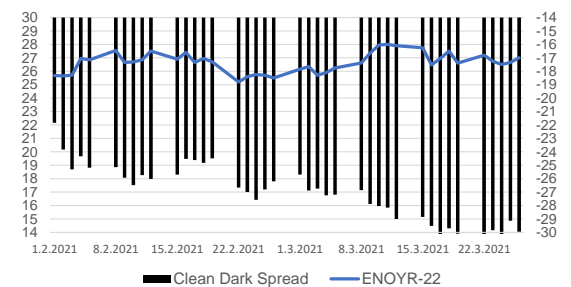
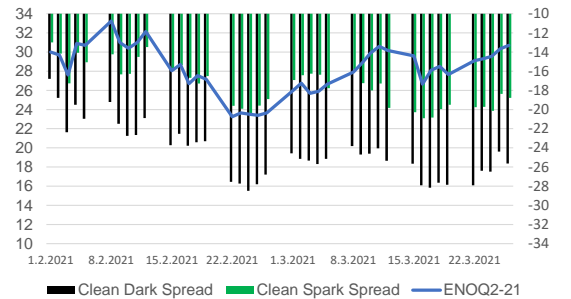
Last week, the emission allowance price again sought direction and traded at roughly between €40 – 43/t. The emission allowance price sought direction from movements on the oil market, which had a volatile week, reacting among other things, to the blockage of the Suez Canal. The price rose on Monday, but after this a market fall was seen at the daily level. However, on Friday the price saw a slight upward correction and the emission allowance price closed slightly down at the weekly level.

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	12	Chg	11	Chg
ENOFUTBLQ2-21	↗	11.0%	↻	-8.3%
ENOYR-22	↗	1.5%	↗	-4.7%
NP System	↘	-21.1%	↗	32.0%
NEDEC21	↗	-0.5%	↗	-2.0%



## DETERMINANTS AFFECTING THE MARKET ON WEEK 13

### RESTRICTIONS IN PRODUCTION AND TRANSMISSION CAPACITY

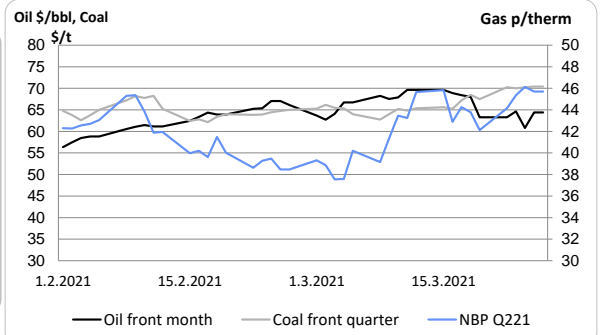
- FI-SE1 (1100 MW), maintenance, 24.3.-11.4.2021 in use 750 MW
- FI-SE3 (1200 MW), maintenance 29.3.-30.4.2021, in use 250 MW, 30.3.-5.4.2021 0 MW

- 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 53 % 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	42.43
NP Area FI - NP System	3.10	6.40	8.70	5.54	3.78	2.81	5.10	17.28	6.59
NP Area SE1 - NP System	1.10	1.80	0.20	2.04	1.43	0.24	-1.00	3.60	-4.56
NP Area SE2 - NP System	1.10	1.80	1.00	2.04	1.43	0.24	-1.00	3.60	-4.56
NP Area SE3 - NP System	1.40	2.00	1.00	2.33	1.83	0.55	-0.58	10.53	3.65
NP Area SE4 - NP System	1.80	2.30	1.90	2.62	2.77	2.37	0.86	15.06	7.09

\*Average for period between 1.1.2021-29.3.2021.



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Source for data: Gasum, Tilastokeskus

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