

NORDIC ELECTRICITY MARKET

12.4.2021 Markus Herranen, Gasum Portfolio Services Oy

DRY WEATHER AND STRONG TECHNICAL PICTURE MAINTAIN MARKET RISE

Forecast to week 15:

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

FORECAST TO WEEK 15

POWER FUTURES

Front quarter

The weather forecasts have dried during the weekend. The weather will turn dry after the early part of the week and remain dry until at least the end of this week. There is growing uncertainty in the weather forecasts for next week and rainfall amounts could rise, at least momentarily. However, a more permanent change to a wet weather type seems unlikely. We expect near products to continue to rise on the back of drier than normal weather and the very strong technical picture.

Annual products

The dry weather and continued strongly rising near products are bringing upward pressure on annual products. The emission allowance price, natural gas price and German electricity market fell slightly after the start of last week, but the technical trend is still upward in these fundamentals. The dry weather picture may mean a narrowing of the price spread between annual products and the German electricity market. We expect the prices of annual products to rise.

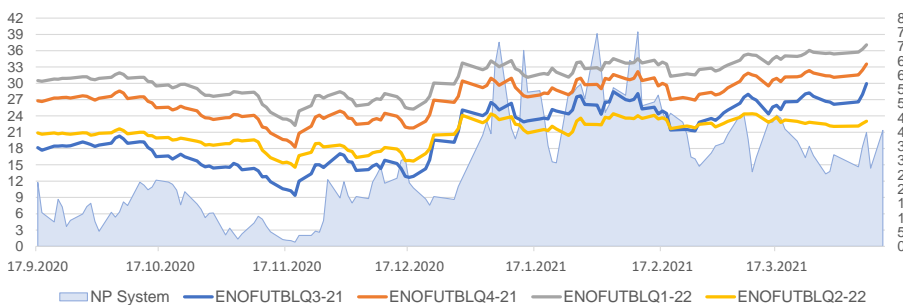
SPOT MARKET

The weather is colder than normal for the time of year and will grow colder towards Wednesday. Thereafter, temperatures will rise and approach normal later in the week. Nordic wind power production will be more abundant than normal at the start of the week but will drop to below normal after Tuesday. Towards the end of the week wind power production will continue falling. Flow rates are clearly lower than normal. Wind power production in Finland will fall mostly to slightly lower than normal after the early part of the week. We expect spot prices to rise at the weekly level. We expect the system price to settle at an average level of €39.0/MWh and the Finnish area price to settle at an average level of €42/MWh.

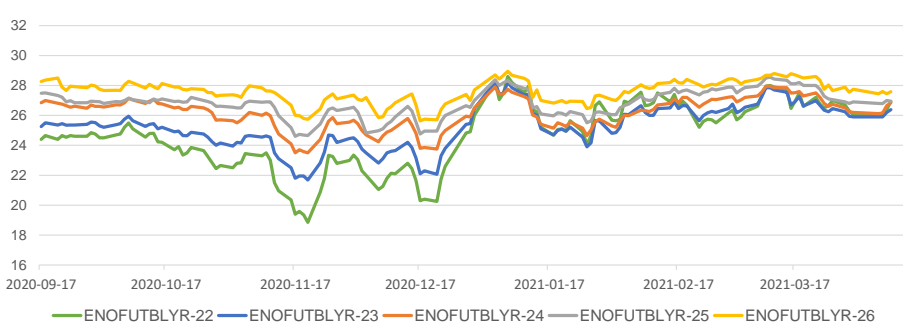
EMISSIONS

This week, the weather in Europe will cooler than normal and wind power production slightly weaker than normal, adding to demand for EUAs. Auction results may again provide direction. The stock market trend is still relatively robust, but the oil market has sought direction. The net positions of actors counted as speculative investors on ICE have fallen. It would seem that the majority of operators surrendering allowances have acquired most of their needs, but buyers may still be found when the price drops. We expect the emission allowance to remain strong but to seek direction between €41 – €45/t.

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



Years EUR/MWh



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	9.4.2021	29.95	12.8%	3.40
ENOFUTBLQ4-21	9.4.2021	33.55	7.0%	2.20
ENOFUTBLQ1-22	9.4.2021	37.08	4.3%	1.53
ENOFUTBLQ2-22	9.4.2021	23.03	3.8%	0.85
ENOFUTBLYR-22	9.4.2021	26.93	3.4%	0.88
ENOFUTBLYR-23	9.4.2021	26.38	1.9%	0.48
ENOFUTBLYR-24	9.4.2021	26.85	2.5%	0.65
ENOFUTBLYR-25	9.4.2021	26.95	0.2%	0.05
ENOFUTBLYR-26	9.4.2021	27.58	-0.6%	-0.17
NEDEC21	9.4.2021	43.60	2.6%	1.12
NEDEC22	9.4.2021	44.03	2.8%	1.21

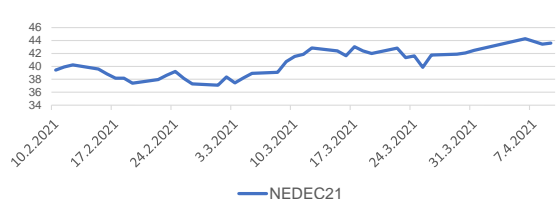
EPAD settlements

9.4.2021 (€/MWh)	2021	2022	2023
SYHEL	8.55	5.13	4.78
SE1- NP System	-4.50	-4.50	-4.50
SE2 - NP System	-4.50	-4.50	-4.50
SE3 - NP System	4.50	4.58	4.60
SE4 - NP System	13.88	8.50	8.50

Week's spot price change

Price area (€/MWh)	Date	Value	% chg	Chg (EUR)
NP System	11.4.2021	29.66	19.4%	4.81
NP Area FI	11.4.2021	28.75	10.9%	2.83
NP Area SE1	11.4.2021	19.40	10.5%	1.85
NP Area SE2	11.4.2021	19.40	10.5%	1.85
NP Area SE3	11.4.2021	27.25	15.6%	3.67
NP Area SE4	11.4.2021	27.25	15.6%	3.67

Carbon EUR/CO2 t



COMMENTS ON WEEK 14

POWER FUTURES

Front quarter

Near products continued falling in the first half of last week when the weather picture was wetter than normal. Also, low spot prices brought downward pressure. However, after the early part of last week, the weather forecasts for the following week were drier. The weather picture for the following week dried further and signs of a potential drying were given additional confirmation. Near products rose above the previous highest trading levels and thus near products began a very strong upward trend. The turn to the strong upward trend strengthened upward pressure.

Annual products

Last week, annual products took an upward turn along with near products. The continued very robust emission allowance price, which again rose to new record figures, put upward pressure on annual products. However, weaker fuel prices restricted this upward pressure on annual products. Also, the emission allowance price retreated slightly after the first part of the week. The rise in annual products was moderate at the weekly level.

SPOT MARKET

Last week got off to a very mild start for the time of year. At the same time, the weather was windy and wet. Flow rates rose. Last week, the weather was cold for the time of year, but the impact of very abundant wind power production and Easter meant that spot prices settled very low on Monday. After Monday, wind power production weakened and demand for electricity rose, but wind power production remained more plentiful than normal. On the other hand, flow rates continued to fall and were clearly lower than normal. At the weekly level, spot prices rose compared to the previous week's level.

EMISSIONS

On Tuesday last week, the emission allowance price opened on an upward note and reached a new peak at €44.35/t. Wednesday opened at this level before the market saw a downward correction both on Wednesday and Thursday. On Friday, the price recovered slightly, and the week closed at a level of €43.64/t, up €1.17 at the weekly level. The market was supported by an auction result that was €0.24 higher than the secondary market price and a softer energy complex weakened the price. Supported by the colder weather picture, the oil and gas markets were supportive on Friday.

Indicator	ENOFUTBLQ3-21	ENOFUTBLYR-22
Coal-fired production	62 %	48 %
Coal price	69 %	53 %
Gas price (NBP)	6 %	85 %
German price level	65 %	52 %
Spot	53 %	39 %
Crude oil Brent	61 %	65 %
Water reservoirs	64 %	59 %
EUR/USD FX rate	6 %	4 %
Temperature	8 %	5 %
Precipitation	16 %	13 %

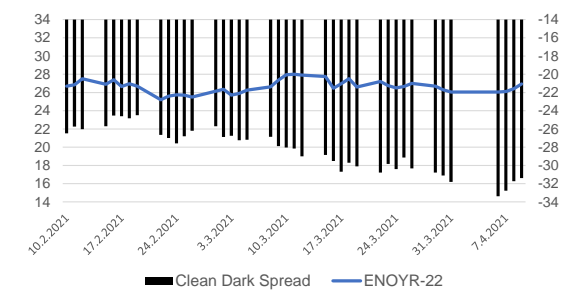
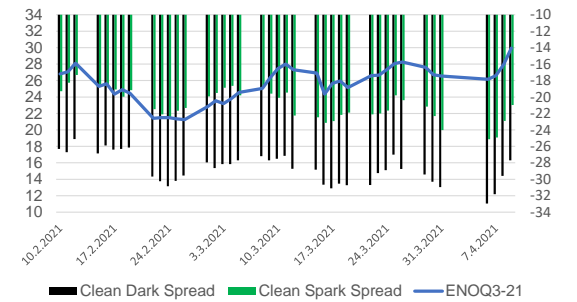
Definition
The above figures measure the ability of market determinants to describe the price changes occurred in last 6 months. The affect is measured as Coefficient of Determination*. Each variable is evaluated independently. We use a color scale to demonstrate efficacy, green (strong), yellow (moderate), red (weak)

Forecast history	14	Chg	13	Chg
ENOFUTBLQ3-21	📉	12.8%	📉	-6.0%
ENOFUTBLYR-22	🔄	3.4%	📉	-3.5%
NP System	📈	19.4%	📉	0.9%
NEDEC21	📈	2.6%	🔄	1.7%

DETERMINANTS AFFECTING THE MARKET ON WEEK 15

RESTRICTIONS IN PRODUCTION AND TRANSMISSION CAPACITY

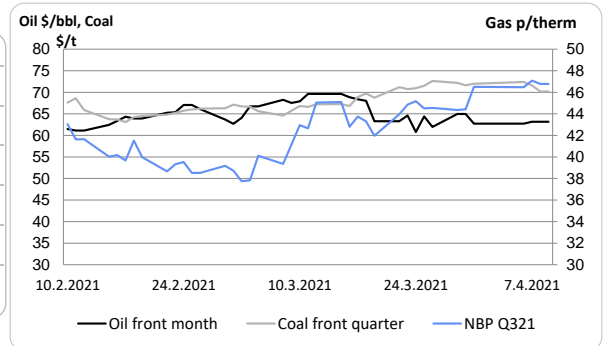
- Forsmark 2 (1118 MW), maintenance 12.4.-2.5.2021, in use 1018 MW
- SE1-FI (1500 MW), maintenance 12.-20.4.2021, in use 1100 MW
- FI-SE3 (1200 MW), maintenance 29.3.-30.4.2021, in use 250 MW, 12.4.-20.5.2021 0 MW
- Nordic nuclear power plants are currently operating at a capacity utilization rate of 99 %
- RU-FI transmission profile varies due to capacity payments, average imports from Russia last week were 37 % 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	40.49
NP Area FI - NP System	3.10	6.40	8.70	5.54	3.78	2.81	5.10	17.28	5.73
NP Area SE1 - NP System	1.10	1.80	0.20	2.04	1.43	0.24	-1.00	3.60	-5.26
NP Area SE2 - NP System	1.10	1.80	1.00	2.04	1.43	0.24	-1.00	3.60	-5.26
NP Area SE3 - NP System	1.40	2.00	1.00	2.33	1.83	0.55	-0.58	10.53	2.90
NP Area SE4 - NP System	1.80	2.30	1.90	2.62	2.77	2.37	0.86	15.06	6.92

*Average for period between 1.1.2021-12.4.2021.



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Source for data: Gasum, Tilastokeskus

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