

**NORDIC ELECTRICITY MARKET**

12.7.2021 Jussi Polvi, Gasum Portfolio Services Oy

**DRY WEATHER PICTURE MAINTAINS UPWARD PRESSURE ON NEAR PRODUCTS**

Forecast to week 28:	
ENOFUTBLQ4-21	↗ Bullish (>0%)
ENOFUTBLR-22	↔ Sideways (± 0,5%)
NP System	↔ Sideways (± 0,5%)
NEDEC21	↘ Bearish (<0%)

**FORECAST TO WEEK 28**

**POWER FUTURES**

**Front quarter**

The weather forecasts dried during the weekend. The weather forecast for the current week is warm and dry, with rainfall amounts momentarily rising to the normal level on Wednesday and Sunday. Otherwise, the weather will be drier than normal. Temperatures will continue to be very high until Thursday, when they will slowly drop towards normal. However, temperatures for the entire forecast period are much higher than normal. Winds will be weak in the early part of the week and rise to slightly above normal on Thursday and remain slightly above normal for the rest of the week. Flow rates will remain below normal. The hydro balance is drying further because of the warm spell. We expect near-term products to continue rising.

**Annual products**

Last week saw a correction in the price of fuels and the emission allowance following a strong rise but reversed back to a rise later in the week. Today, the emission allowance has fallen sharply with softer fuel prices. The price spread compared to Central Europe is very wide with the existing SYS product. We expect annual products to seek direction along with fuels and the emission allowance.

**SPOT MARKET**

With a predominating high pressure, the weather type also in the Nordics during the current week means very little rainfall and also wind power production will be very low, especially in the early part of the week. The temperature will rise during the early part of the week and even though it will fall later in the week, it will nevertheless remain well above normal. Towards the end of the week, wind power production will rise to slightly above normal and possibly to high from Sunday onwards. The expectation in Central Europe is that electricity price will still be very high price since wind power production in Germany will remain at just the normal level from Wednesday onwards. High fuel prices will maintain the German intraday price at a level of €80-€100/MWh, which will partly be reflected in the Nordic price. At the weekly level, we expect the SYS price to settle close to last week's price of above €56/MWh. The Finnish area price is expected to remain high at least during the early part of the week because of low wind power production. At the weekly level, the Finnish area price could even rise slightly.

**EMISSIONS**

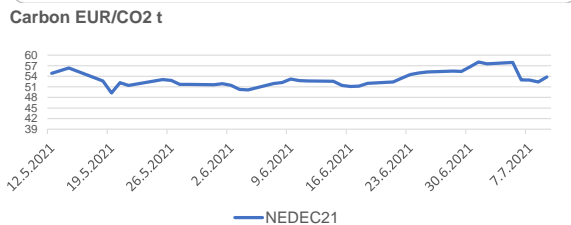
During the current week, the emission allowance opened on a downward note in the wake of softer fuel prices. The technical picture of the emissions market has weakened. However, the price of gas is maintaining the high cost of switching fuels and supporting the emission allowance price. We expect the market to show a slight fall at the weekly level.

Market signals			
	spot	Q4-21	YR-22
Hydrologic balance	↑	↑	↑
Precipitation forecast	→	↑	↑
Temperature forecast	↓	→	→
Spot	↓	↑	↑
Production and transmission exch.	↑	↑	→
Emissions allowance	→	→	→
Coal price	↑	↑	↑
German prices	↑	↑	↑
Technical analysis	↓	↑	↑

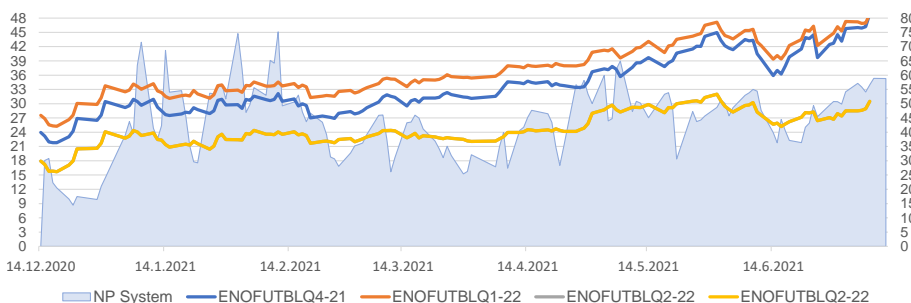
Product	Date	Value	% chg	Chg (EUR)
ENOFUTBLQ4-21	9.7.2021	48.90	13.3%	5.75
ENOFUTBLQ1-22	9.7.2021	48.90	8.0%	3.63
ENOFUTBLQ2-22	9.7.2021	30.50	11.3%	3.10
ENOFUTBLQ2-22	9.7.2021	30.50	11.3%	3.10
ENOFUTBLR-22	9.7.2021	33.00	6.1%	1.90
ENOFUTBLR-23	9.7.2021	29.73	2.0%	0.58
ENOFUTBLR-24	9.7.2021	29.50	3.0%	0.85
ENOFUTBLR-25	9.7.2021	29.65	1.2%	0.35
ENOFUTBLR-26	9.7.2021	29.70	-0.2%	-0.05
NEDEC21	9.7.2021	53.80	-6.5%	-3.71
NEDEC22	9.7.2021	54.53	-5.8%	-3.37

EPAD settlements			
9.7.2021 (€/MWh)	2021	2022	2023
SYHEL	8.73	4.38	4.00
SE1- NP System	-7.00	-7.00	-7.00
SE2 - NP System	-7.00	-7.00	-7.00
SE3 - NP System	3.30	3.25	3.25
SE4 - NP System	24.00	21.00	14.50

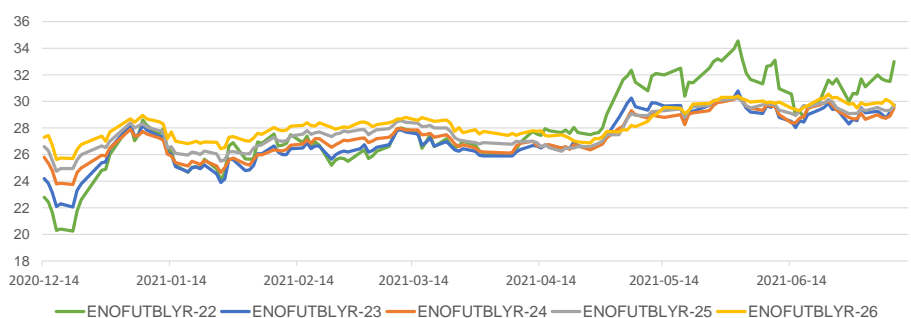
Week's spot price change				
Price area (€/MWh)	Date	Value	% chg	Chg (EUR)
NP System	11.7.2021	56.58	8.8%	4.59
NP Area FI	11.7.2021	80.56	7.5%	5.63
NP Area SE1	11.7.2021	53.74	34.0%	13.62
NP Area SE2	11.7.2021	57.30	42.8%	17.19
NP Area SE3	11.7.2021	66.12	40.0%	18.91
NP Area SE4	11.7.2021	66.12	40.0%	18.91



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



Years EUR/MWh



COMMENTS ON WEEK 27

**POWER FUTURES**

**Front quarter**

Since the early part of last week, near products have been seeking direction as the weather forecasts fluctuate between wetter and dry. The forecasts dried at the end of the week and there are no longer any signs of a turn in the weather type to wetter. The weather was warm and flow rates were falling and much lower than normal. Also, scant wind power production supported the spot price and strengthened the rise in near products at the end of the week. At the weekly level, the front quarter was up by almost €6 and the following quarters by around €3.

**Annual products**

Also, the prices of annual products rose on Monday but then fell until Wednesday driven by softer fuel prices. A strong rise was seen at the end of the week with the end of the correction movement in fuels and the emission allowance having returned to an upward trajectory. The price spread compared to Germany is very high. A fall in electricity prices in further years was seen at the start of the week but these prices, too, rose at the end of the week and closed the week up. At the weekly level, the nearest annual product was up by almost €2 and also further years rose somewhat.

**SPOT MARKET**

Even though last week was around 2 TWh rainier than normal, flow rates remained fairly low. The remaining amount of snow is already so low as to no longer maintain flow rates. Wind power production was around normal on Tuesday and Wednesday, otherwise there was little wind during the week. Also in Finland, there was stronger wind on Wednesday but otherwise the rest of the week saw quite little wind. The SYS price continued rising and the intraday average prices approached a level of €60/MWh. At the weekly level, the SYS price settled at a level of around €56.60/MWh. The Finnish area price was linked during the daytime hours via the Baltic to the Central European price as wind power production was so low and imports from Russia are low the whole month due to maintenance work. At its highest, the daily average settled north of a level of €90/MWh also last week. At the weekly level, also the Finnish area price continued rising and settled at a tad above €80/MWh, in other words settlement of the area price spread also remained high last week.

**EMISSIONS**

Last week, the emission allowance price was approaching peaks of €58/t at the start of the week until the price collapsed on Tuesday with the sharp fall in the gas price and at its lowest on Thursday touched €50.87/t. The emission allowance reversed on Friday and closed at a level of €54.13/t, down €3.38 at the weekly level.

Indicator	ENOFUTBLQ4-21	ENOFUTBLYR-22
Coal-fired production	57 %	53 %
Coal price	81 %	79 %
Gas price (NBP)	6 %	85 %
German price level	20 %	19 %
Spot	70 %	65 %
Crude oil Brent	81 %	80 %
Water reservoirs	59 %	59 %
EUR/USD FX rate	0 %	1 %
Temperature	8 %	5 %
Precipitation	16 %	13 %

**Definition**

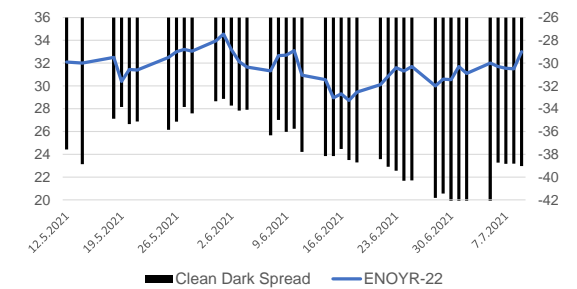
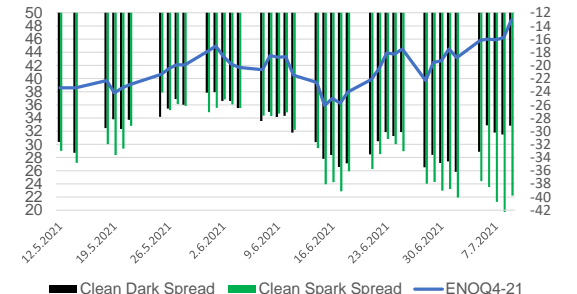
The above figures measure the ability of market determinants to describe the price changes occurred in last 6 months. The affect is measured as Coefficient of Determination\*. Each variable is evaluated independently. We use a color scale to demonstrate efficacy, green (strong), yellow (moderate), red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

Forecast history	27	Chg	26	Chg
ENOFUTBLQ4-21	↻	13.3%	↗	-3.0%
ENOFUTBLYR-22	↻	6.1%	↗	-1.9%
NP System	↻	8.8%	↗	19.3%
NEDEC21	↘	-6.5%	↗	4.1%

DETERMINANTS AFFECTING THE MARKET ON WEEK 28

**RESTRICTIONS IN PRODUCTION AND TRANSMISSION CAPACITY**

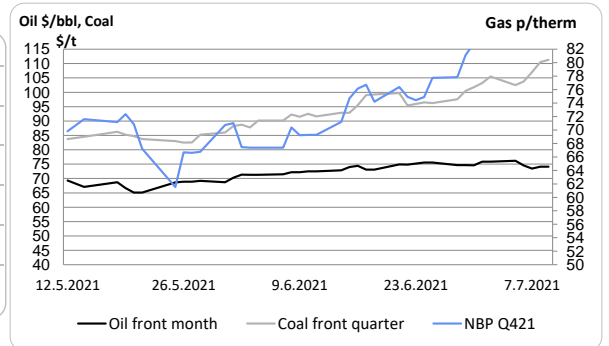
- Forsmark 1 (984 MW), maintenance 4.-24.7.2021 in use 0 MW
- Ringhals 3 (1074 MW), maintenance 24.5.-27.8.2021, in use 0 MW
- Loviisa 1 (507), failure 11-18.7.2021, in use 450 MW
- SE1-FI (1500 MW), maintenance 8.7.-14.7.2021, in use 1350 MW 14.7.-4.8.2021, in use 1000 MW
- FI-RU (320 MW), maintenance 30.6.-31.7.2021, in use 0 MW
- RU-FI (1300 MW), maintenance 30.6.-31.7.2021, in use 405 MW
- FI-SE3 (1200 MW), limitation till 15.11.2021, in use 250 MW
- Nordic nuclear power plants are currently operating at a capacity utilization rate of 79%
- RU-FI transmission profile varies due to capacity payments, average imports from Russia last week were 36 % 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	42.96
NP Area FI - NP System	3.10	6.40	8.70	5.54	3.78	2.81	5.10	17.28	6.77
NP Area SE1 - NP System	1.10	1.80	0.20	2.04	1.43	0.24	-1.00	3.60	-6.40
NP Area SE2 - NP System	1.10	1.80	1.00	2.04	1.43	0.24	-1.00	3.60	-6.29
NP Area SE3 - NP System	1.40	2.00	1.00	2.33	1.83	0.55	-0.58	10.53	0.58
NP Area SE4 - NP System	1.80	2.30	1.90	2.62	2.77	2.37	0.86	15.06	10.77

\*Average for period between 1.1.2021-12.7.2021.



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Source for data: Gasum, Tilastokeskus

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