

NORDIC ELECTRICITY MARKET

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WEATHER TURNING COOLER AND RAINIER THAN NORMAL

Forecast to week 30:	
ENOFUTBLQ4-21	📉 Bearish (<0%)
ENOFUTBLR-22	↔️ Sideways (± 0,5%)
NP System	↔️ Sideways (± 0,5%)
NEDEC21	📈 Bullish (>0%)

FORECAST TO WEEK 30

POWER FUTURES

Front quarter

The weather is very warm, but the weather type is turning. Temperatures will fall clearly and the weather at the end of the week will turn chilly for the time of year. After Monday, rainfall amounts will rise to higher than normal, and the weather will continue rainier than normal for the time being. The hydro balance will show a marked rise and there are currently no clear signs of a return to dry, warm weather. We expect near products to fall with the rainier than normal weather picture. However, the hydro balance will remain much lower than the long-term normal and this will limit downward pressure. Also, strong fuel prices will limit the fall.

Annual products

Fuel prices are following sharply upward trends and also the emission allowance price has been supported as strong support levels have approached. The rising marginal cost prices of fuels and the rising German power market are providing support for the prices of annual products. The rainier than normal weather picture will limit upward pressure. We expect annual products to move close to last week's closing prices.

SPOT MARKET

Nordic wind power production will be weak during the first half of the week, which will provide support for spot prices. Also, flow rates will be very low at the start of the week. Maintenance of the Ringhals 4 nuclear power unit will also support spot prices. After the early part of the week, flow rates will start to rise and in the second half of the week, wind power production will increase to higher than normal. Temperatures will fall clearly and at the end of the week the weather will turn chilly for the time of year. In Finland, wind power production will be very weak during the first half of the week, which means the Finnish area price will settle at much higher than the system price. At the weekly level, we expect the system price to remain close to last week's level. We expect the Finnish area price to rise slightly at the weekly level and to settle at an average level of €72.50/MWh.

EMISSIONS

The emission allowance has taken an upward turn, supported by strong fuel prices and the German power market, which has again risen. In addition, halved auction availability in August will be supportive of the price but on the other hand free allowance allocations will limit support. The emission allowance price has received technical support when the lowest trading figures in mid-June and the €50/t support level have held in the price. We expect the emission allowance price to show a slight rise.

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	23.7.2021	46.85	1.8%	0.85
ENOFUTBLQ1-22	23.7.2021	46.95	-0.6%	-0.28
ENOFUTBLQ2-22	23.7.2021	28.25	-1.7%	-0.50
ENOFUTBLQ2-22	23.7.2021	28.25	-1.7%	-0.50
ENOFUTBLR-22	23.7.2021	31.65	-0.8%	-0.25
ENOFUTBLR-23	23.7.2021	29.35	0.0%	0.00
ENOFUTBLR-24	23.7.2021	28.80	-0.7%	-0.20
ENOFUTBLR-25	23.7.2021	30.08	0.9%	0.28
ENOFUTBLR-26	23.7.2021	30.28	-0.5%	-0.15
NEDEC21	23.7.2021	50.88	-4.4%	-2.32
NEDEC22	23.7.2021	51.30	-4.4%	-2.34

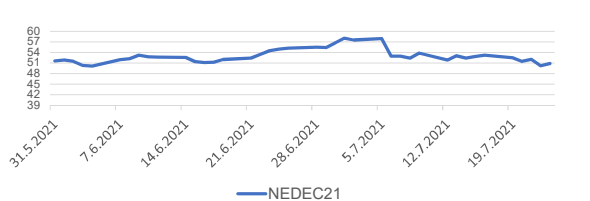
EPAD settlements

23.7.2021 (€/MWh)	2021	2022	2023
SYHEL	10.30	5.38	5.00
SE1- NP System	-7.00	-7.00	-7.00
SE2 - NP System	-7.00	-7.00	-7.00
SE3 - NP System	3.25	3.25	3.25
SE4 - NP System	22.75	20.75	15.50

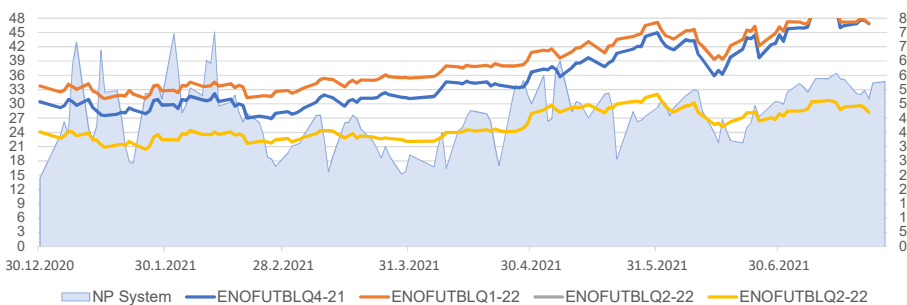
Week's spot price change

Price area (€/MWh)	Date	Value	% chg	Chg (EUR)
NP System	25.7.2021	54.31	1.2%	0.67
NP Area FI	25.7.2021	70.91	-16.7%	-14.18
NP Area SE1	25.7.2021	47.69	-20.4%	-12.25
NP Area SE2	25.7.2021	47.69	-20.4%	-12.25
NP Area SE3	25.7.2021	55.12	-15.2%	-9.88
NP Area SE4	25.7.2021	55.12	-15.2%	-9.88

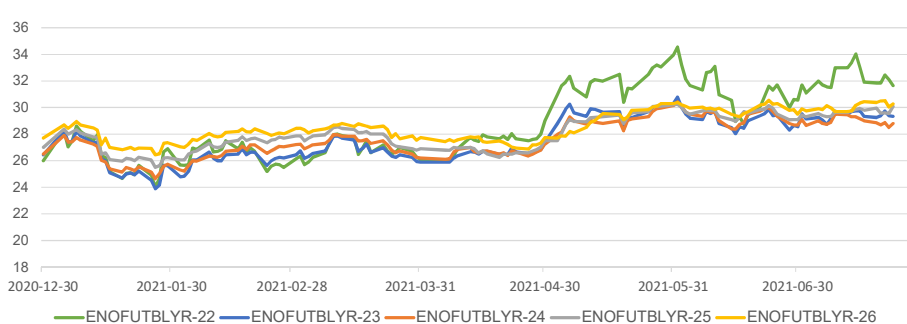
Carbon EUR/CO2 t



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



Years EUR/MWh



COMMENTS ON WEEK 29

**POWER FUTURES**

**Front quarter**

Last week, near products remained fairly flat, rising just slightly. The weather last week was very warm and dry, but the forecasts already showed signs of a clear change to rainy at the end of the week. No major changes were seen in the forecasts during the week. Nor were there any major price movements on the fuel markets.

**Annual products**

The weekly change in the front annual product was almost zero. Last week was dry and this combined with a rainy start to the current week has not given momentum to price movements. The weekly change in the gas price was non-existent and the small rise in coal and Germany was offset by the decrease in the emission allowance towards the bottom spectrum of the range. The price spread to Central Europe and the marginal cost continue to approach record levels.

**SPOT MARKET**

Wind power production was more plentiful than normal until Friday both in the Nordic countries and in Finland. Flow rates remained only at about half the normal rates because of very little rainfall. Temperatures were close to normal at the beginning of the week but again rose to hot at the end of the week. At the weekly level, the system price rose slightly as hydropower producers retained strong control. The Finnish area price fell because of higher wind power production but was still linked to the Baltic and Central European price level several hours during the day. Imports from Russia are restricted for the whole of July and in addition the transmission link between North Sweden and Finland has been restricted to 400 MW. At the weekly level, the SYS price settled at around €54.30/MWh. The Finnish area price fell and settled at €70.90/MWh, a wide price spread despite the fall.

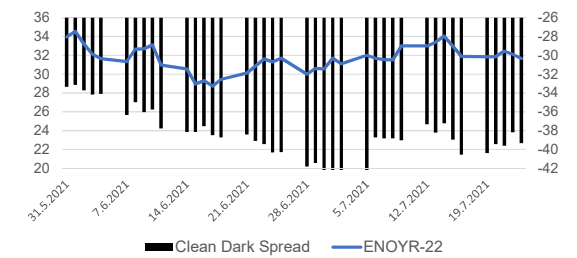
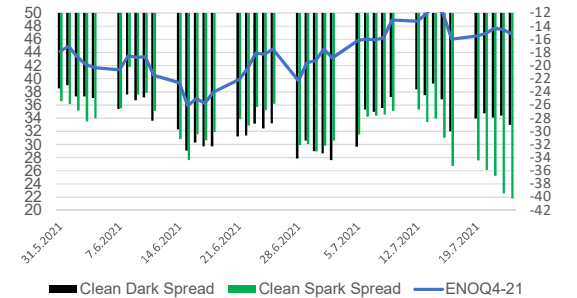
**EMISSIONS**

The emission allowance continued to show a small decrease the week before last after the publication of the Fit for 55 package. Nor did the fuel markets provide support for the emission allowance market. The price was more than €2 down last week and struggled to remain above €50/t. The emissions market has softened with the start of free allocations of emission allowances in some countries.

Indicator	ENOFUTBLQ4-21	ENOFUTBLYR-22
Coal-fired production	59 %	51 %
Coal price	90 %	75 %
Gas price (NBP)	6 %	85 %
German price level	13 %	12 %
Spot	70 %	64 %
Crude oil Brent	89 %	80 %
Water reservoirs	53 %	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	29	Chg	28	Chg
ENOFUTBLQ4-21	↻	1.8%	↻	-5.9%
ENOFUTBLYR-22	↻	-0.8%	↻	-3.3%
NP System	↘	1.2%	↻	-0.7%
NEDEC21	↻	-4.4%	↘	-1.1%



DETERMINANTS AFFECTING THE MARKET ON WEEK 30

**RESTRICTIONS IN PRODUCTION AND TRANSMISSION CAPACITY**

- Oskarshamn 3 (1400 MW), failure, July 21-29, 2021, in use 1300 MW
- Ringhals 3 (1074 MW), maintenance, May 24 - August 27, 2021, in use 0 MW
- Ringhals 4 (1130 MW), maintenance, July 26, 2021, in use 565 MW, July 27 – September 8, 2021, in use 0 MW
- SE1-FI (1500 MW), maintenance, July 14 - August 4, 2021, in use 1000-1350 MW
- FI-RU (320 MW), maintenance, June 30 - July 31, 2021, in use 0 MW
- RU-FI (1300 MW), maintenance June 30 - July 31, 2021, in use 405 MW
- FI-SE3 (1200 MW), restriction November 15, 2021, in use 150 MW
- NO1-SE3 (2145 MW), restriction July 26-28, 2021, in use 1500 MW
- The capacity utilization rate of Nordic nuclear power plants is currently 83%
- The RU-FI transmission profile varies depending on capacity charges, average imports from Russia last week were 38% 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	43.62
NP Area FI - NP System	3.10	6.40	8.70	5.54	3.78	2.81	5.10	17.28	7.75
NP Area SE1 - NP System	1.10	1.80	0.20	2.04	1.43	0.24	-1.00	3.60	-6.25
NP Area SE2 - NP System	1.10	1.80	1.00	2.04	1.43	0.24	-1.00	3.60	-6.14
NP Area SE3 - NP System	1.40	2.00	1.00	2.33	1.83	0.55	-0.58	10.53	0.74
NP Area SE4 - NP System	1.80	2.30	1.90	2.62	2.77	2.37	0.86	15.06	10.53

\*Average for period between 1.1.2021-26.7.2021.

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Source for data: Gasum, Tilastokeskus

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