

NORDIC ELECTRICITY MARKET

10.5.2021 Markus Herranen, Gasum Portfolio Services Oy

HYDRO BALANCE TURNING UPWARDS AND BRINGING DOWNWARD PRESSURE ON NEAR PRODUCTS

Forecast to week 19:	
ENOFUTBLQ3-21	📉 Bearish (<0%)
ENOFUTBLR-22	📉 Bearish (<0%)
NP System	📉 Bearish (<0%)
NEDEC21	📈 Bullish (>0%)

FORECAST TO WEEK 19

POWER FUTURES

Front quarter

Temperatures have taken a sharp upward turn and this week the weather will be warm for the time of year. Next week temperatures will fall, but only close to the normal level. Rainfall amounts have risen to above normal, and the hydro balance is taking an upward turn. For the time being, rainfall amounts will remain higher than normal without any clear signs of a turn to drier weather. The rising hydro balance and wetter than normal weather picture means we expect near products to fall.

Annual products

Fuel prices and in particular the emission allowance price remain very strong, which is maintaining support in the prices of annual products. However, the wet weather picture and fall in near-term products are bringing downward pressure on the nearest annual product. We expect annual products to show a slight fall along with near products.

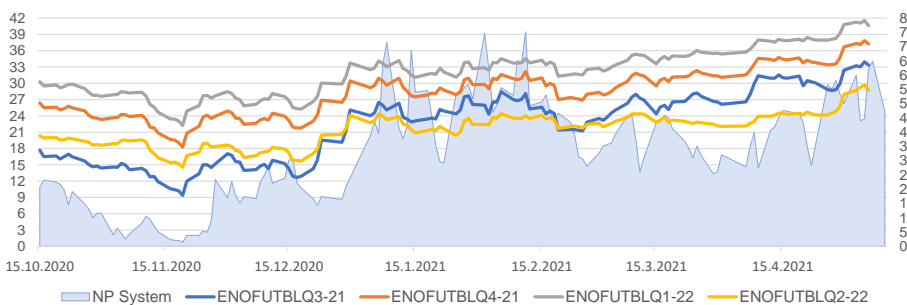
SPOT MARKET

The weather has turned warmer than normal for the time of year and temperatures will continue rising until Thursday. Temperatures will fall at the weekend and on Sunday the temperatures will approach normal. Demand for electricity will fall compared to last week's level. The weather will be mostly wetter than normal. The wet and warmer weather will see flow rates turn to a sharp rise. Nordic wind power production will approach normal in the early part of the week. Towards the end of the week, wind power production will weaken, which will slightly limit the downward pressure on spot prices brought about by rising flow rates. We expect the system price to fall and to settle at a weekly level of around €39.0/MWh. On Monday, electricity imports from Russia to Finland are plentiful because of the public holiday in Russia. The re-start of the Olkiluoto 1 unit has been delayed until Tuesday and the plant is expected to reach normal capacity on Thursday evening. Wind power production in Finland will be close to or slightly more plentiful than normal during the first half of the week, but in the second half of the week will be mostly weaker than normal. We expect the Finnish area price to settle at an average level of around €36.5/MWh.

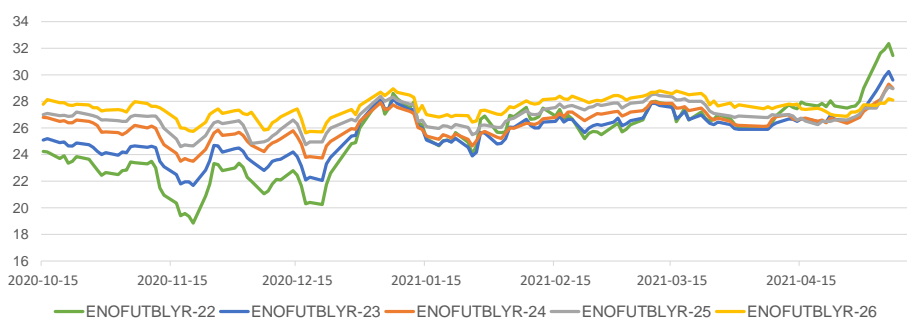
EMISSIONS

There will be only three auctions during the current week since auctions on Thursday and Friday have been cancelled because of the public holiday on Thursday. Continued cold weather in Europe and tightness on the gas market are still supportive also of the emission allowance price, although this week there is the possibility of a softening of the fuel markets. The net positions of investors on the market have decreased, which may predict a market correction although we expect the emission allowance price to continue rising for the time being.

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	7.5.2021	33.35	11.5%	3.45
ENOFUTBLQ4-21	7.5.2021	37.25	7.3%	2.55
ENOFUTBLQ1-22	7.5.2021	40.60	3.6%	1.42
ENOFUTBLQ2-22	7.5.2021	28.75	11.4%	2.95
ENOFUTBLYR-22	7.5.2021	31.45	8.4%	2.45
ENOFUTBLYR-23	7.5.2021	29.60	8.0%	2.20
ENOFUTBLYR-24	7.5.2021	29.00	6.4%	1.75
ENOFUTBLYR-25	7.5.2021	28.95	5.3%	1.45
ENOFUTBLYR-26	7.5.2021	28.10	1.3%	0.35
NEDEC21	7.5.2021	51.07	4.6%	2.25
NEDEC22	7.5.2021	51.55	4.5%	2.23

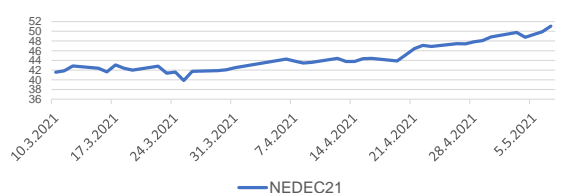
EPAD settlements

7.5.2021 (€/MWh)	2021	2022	2023
SYHEL	6.38	4.48	4.00
SE1- NP System	-6.00	-6.00	-6.00
SE2 - NP System	-6.00	-6.00	-6.00
SE3 - NP System	3.50	3.48	3.13
SE4 - NP System	13.58	10.13	10.50

Week's spot price change

Price area (€/MWh)	Date	Value	% chg	Chg (EUR)
NP System	9.5.2021	50.79	-3.8%	-2.00
NP Area FI	9.5.2021	52.64	-2.6%	-1.40
NP Area SE1	9.5.2021	48.54	-2.7%	-1.33
NP Area SE2	9.5.2021	48.54	-2.7%	-1.33
NP Area SE3	9.5.2021	48.74	-5.1%	-2.62
NP Area SE4	9.5.2021	48.74	-5.1%	-2.62

Carbon EUR/CO2 t



COMMENTS ON WEEK 18

POWER FUTURES

Front quarter

Last week, the weather was cold and dry for the time of year. The cold and dry weather meant that spot prices remained strong and near products continued rising. Besides the weather, near products were supported by a continued very strong emission allowance price as well as continuously rising fuel prices. However, the following week's weather picture, which showed signs of wetter and warmer than normal weather, limited the upward pressure. On Friday, near products saw a downward correction but were well up at the weekly level.

Annual products

Last week saw fuel prices continue to rise and the emission allowance price again reached new top prices. Higher near-term products are also bringing upward pressure on annual products. In addition, annual products were technically strong.

SPOT MARKET

The weather last week was very cold and dry for the time of year. The cold, dry weather meant flow rates were low and hydropower producers retained strong control. However, Nordic wind power production was very plentiful on Wednesday and Thursday, and this put downward pressure on spot prices, which fell slightly at the weekly level. The Finnish area price fell slightly less than the system price at the weekly level, but overall, the Finnish area price still settled at slightly higher than the system price.

EMISSIONS

Last week, the emission allowance price continued rising despite a small weakness in the early part of the week. The strong technical picture and investor pressure together with Germany's decision to increase its emission goals brought support to the market. In addition, particularly on Friday, the market rose on the back of the comment by the EU climate chief that the EU would not intervene in the EU ETS price rise and that the EU's climate targets require a high emission allowance price. The emission allowance price was up €1.61 at the weekly level.

DETERMINANTS AFFECTING THE MARKET ON WEEK 19

RESTRICTIONS IN PRODUCTION AND TRANSMISSION CAPACITY

- Olkiluoto 2 (890 MW), maintenance 16.5.-15.6.2021, in use 0 MW
- Olkiluoto 1 (890 MW), maintenance 25.4.-13.5.2021, in use 0 MW
- Forsmark 2 (1120 MW), maintenance 2.5.-30.5.2021, in use 0 MW

- FI-SE3 (1200 MW), limitation till 30.9.2021, in use 250 MW
- FI-RU (320 MW), maintenance 4.-31.5.2021, in use 0 MW

- Nordic nuclear power plants are currently operating at a capacity utilization rate of 80 %
- RU-FI transmission profile varies due to capacity payments, average imports from Russia last week were 81 % 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	41.74
NP Area FI - NP System	3.10	6.40	8.70	5.54	3.78	2.81	5.10	17.28	4.28
NP Area SE1 - NP System	1.10	1.80	0.20	2.04	1.43	0.24	-1.00	3.60	-6.05
NP Area SE2 - NP System	1.10	1.80	1.00	2.04	1.43	0.24	-1.00	3.60	-6.07
NP Area SE3 - NP System	1.40	2.00	1.00	2.33	1.83	0.55	-0.58	10.53	1.22
NP Area SE4 - NP System	1.80	2.30	1.90	2.62	2.77	2.37	0.86	15.06	6.01

*Average for period between 1.1.2021-10.5.2021.

Copyright 2021 Gasum Oy – All rights reserved

Source for data: Gasum, Tilastokeskus

Disclaimer: This document is issued by Gasum Oy in jointly by its subsidiary Gasum Portfolio Services Oy. The information in this document, which is for private circulation only, was obtained from sources believed to

Indicator	ENOFUTBLQ3-21	ENOFUTBLYR-22
Coal-fired production	71 %	62 %
Coal price	78 %	63 %
Gas price (NBP)	6 %	85 %
German price level	57 %	53 %
Spot	61 %	48 %
Crude oil Brent	95 %	68 %
Water reservoirs	59 %	58 %
EUR/USD FX rate	1 %	2 %
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	18	Chg	17	Chg
ENOFUTBLQ3-21	↗	11.5%	↻	-1.2%
ENOFUTBLYR-22	↗	8.4%	↻	4.9%
NP System	↘	-3.8%	↗	41.4%
NEDEC21	↗	4.6%	↗	4.1%

