

NORDIC ELECTRICITY MARKET

11.5.2020 Markus Herranen, Gasum Portfolio Services Oy

HYDRO BALANCE CONTINUES TO FALL BUT FUELS ARE WEAK

Forecast to week 20:	
ENOFUTBLQ3-20	📈 Bullish (>0%)
ENOYR-21	↔️ Sideways (± 0,5%)
NP System	📈 Bullish (>0%)
NEDEC20	📉 Bearish (<0%)

Market signals	spot	Q3-20	YR-21
Hydrologic balance	↑	↑	↑
Precipitation forecast	↑	↑	↑
Temperature forecast	↑	↑	→
Spot	↓	↑	→
Production and transmission exch.	→	→	→
Emissions allowance	↓	↓	↓
Coal price	→	↓	↓
German prices	→	→	↓
Technical analysis	↓	→	→

FORECAST TO WEEK 20

POWER FUTURES

Front quarter

Rainfall amounts will again be low after Monday but return to near normal at the end of the week. Next week rainfall amounts will probably approach normal levels but the forecasts also show the possibility of dry weather. The hydro balance has fallen and will continue to fall moderately for the time being. However, snow reserves are very high. Strengthening spot prices support front products. We expect front prices to approach the closing prices of the previous week or to continue to show a slight rise.

Annual products

Fuel markets remain very weak, despite slightly stronger prices last week. Weak fuel prices are maintaining downward pressure on the German electricity market, which in turn puts downward pressure on emission allowance prices. We expect the prices of annual products to fall slightly. With the nearest annual product, the continuing slight fall in the hydro balance will limit downward pressure and we expect the nearest annual product to approach last week's closing level.

SPOT MARKET

The weather is considerably cooler than normal for the time of year. Whereas temperatures will again climb later in the week, the weather will remain clearly cooler than normal during the current week. Demand for electricity is more plentiful than normal but mostly abundant wind power production and very high snow reserves will limit the upward pressure on spot prices. Chilly weather means that snow melt is much slower than normal for the time of year. The Olkiluoto 2 unit is undergoing annual maintenance. We expect the system price to continue to rise and to settle at a level averaging €10.0/MWh. Lower nuclear power output in Finland will lift spot prices. Wind power production in Finland will be weaker than normal on Tuesday and Wednesday but will mostly be slightly more abundant than normal towards the end of the week. We expect the Finnish area price to rise at the weekly level and to settle at a level averaging €23.5/MWh.

EMISSIONS

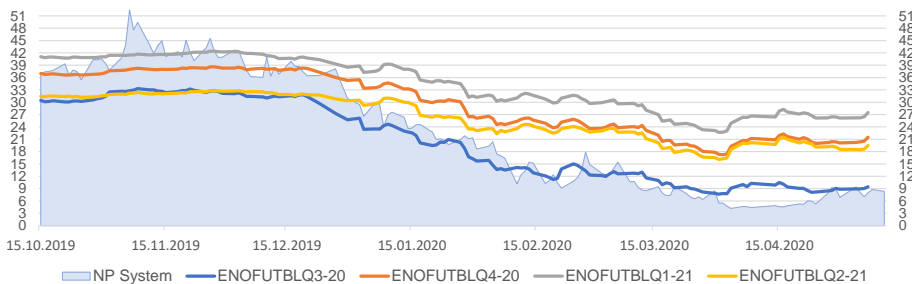
Weak fuel prices and the German electricity market continue to exert downward pressure on emission allowance prices. General market sentiment has been optimistic with expectations of restrictions being lifted and share indexes have mostly continued to rise. However, on Monday the indexes showed a slight fall. We expect emission allowance prices to show a slight fall at the weekly level.

Product	Date	Value	% chg	Chg (EUR)
ENOFUTBLQ3-20	8.5.2020	9.45	4.4%	0.40
ENOFUTBLQ4-20	8.5.2020	21.50	5.7%	1.15
ENOFUTBLQ1-21	8.5.2020	27.50	4.2%	1.10
ENOFUTBLQ2-21	8.5.2020	19.50	2.1%	0.41
ENOYR-21	8.5.2020	22.66	3.5%	0.76
ENOYR-22	8.5.2020	25.65	2.4%	0.61
ENOYR-23	8.5.2020	27.65	1.5%	0.40
ENOYR-24	8.5.2020	28.23	1.2%	0.33
ENOYR-25	8.5.2020	29.18	0.1%	0.03
NEDEC20	8.5.2020	19.36	-0.6%	-0.11
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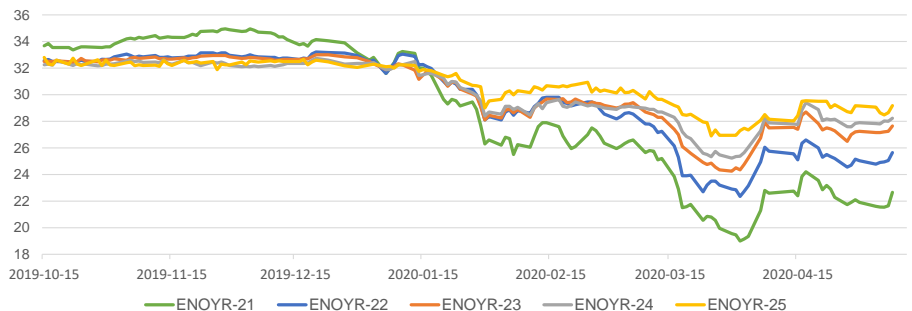
EPAD settlements	2021	2022	2023
8.5.2020 (€/MWh)			
SYHEL	9.53	5.68	4.48
SE1- NP System	-1.50	-2.25	-2.25
SE2 - NP System	-1.50	-2.25	-2.25
SE3 - NP System	1.25	1.35	1.35
SE4 - NP System	2.60	2.60	2.60

Week's spot price change				
Price area (€/MWh)	Date	Value	% chg	Chg (EUR)
NP System	10.5.2020	8.15	9.4%	0.70
NP Area FI	10.5.2020	16.65	-14.8%	-2.88
NP Area SE1	10.5.2020	7.58	-15.3%	-1.37
NP Area SE2	10.5.2020	7.58	-15.3%	-1.37
NP Area SE3	10.5.2020	12.16	-10.8%	-1.47
NP Area SE4	10.5.2020	12.16	-10.8%	-1.47

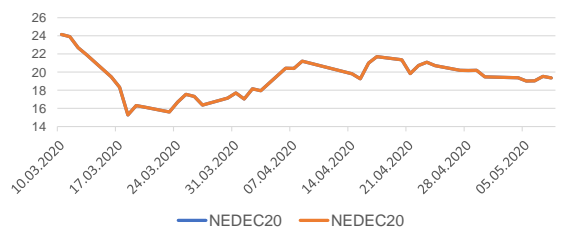
Quarters EUR/MWh (left), NP System EUR/MWh (right)



Years EUR/MWh



Carbon EUR/CO2 t



COMMENTS ON WEEK 19

**POWER FUTURES**

**Front quarter**

Last week, front products sought direction since total rainfall in the two-week forecast was close to normal and there were no clear changes in sight in the hydro balance. All the same, front products rose on Friday, when forecasts showed signs of drier weather. Following Friday's rise, front products closed slightly up on the week.

**Annual products**

Last week price movements of annual products remained modest. In the first half of the week, prices of annual products fell slightly as concerns about Sino-USA relations again rose to the fore. These concerns put downward pressure on fuel and emission allowance prices. The concerns receded in the second half of the week and expectations of restrictions being lifted restored an optimism to general market sentiment. Coal and emission allowance prices recovered later in the week and annual products again rose. Annual products showed a clear rise on Friday and signs of drier weather brought support for the nearest annual product. Annual products rose at the weekly level.

**SPOT MARKET**

Last week was cooler than normal, snow melting was slower and flow rates were clearly lower than normal for the time of year. The system price rose at the weekly level. However, Nordic wind production was mostly more abundant than normal, which together with plentiful snow reserves limited upward pressure. Wind production in Finland was also mainly slightly more abundant than normal. The Finnish area price fell at the weekly level and the difference between the Finnish area price and system price narrowed considerably.

**EMISSIONS**

Last week, emission allowance prices headed south along with weaker general market sentiment, weaker fuel prices and the German electricity market. Market sentiment strengthened later in the week, giving support to fuel prices. Emission allowance prices strengthened at the same time but, however, showed a slight decrease at the weekly level.

Indicator	ENOFUTBLQ3-20	ENOYR-21
Coal-fired production	85 %	93 %
Coal price	87 %	77 %
Gas price (NBP)	93 %	85 %
German price level	6 %	85 %
Spot	97 %	88 %
Crude oil Brent	66 %	80 %
Water reservoirs	92 %	81 %
EUR/USD FX rate	24 %	29 %
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)

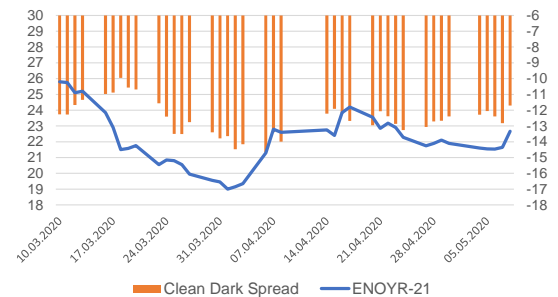
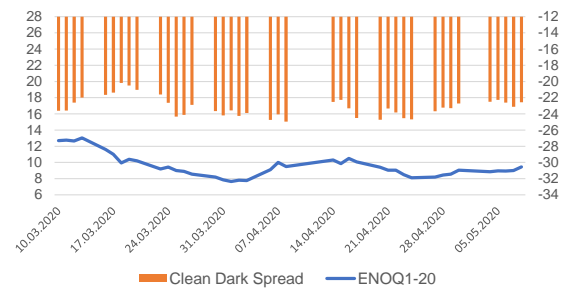
Forecast history	19	Chg	18	Chg
ENOFUTBLQ3-20	↻	4.4%	↗	11.7%
ENOYR-21	↘	3.5%	↗	-1.7%
NP System	↗	9.4%	↗	30.4%
NEDEC20	↘	-0.6%	↻	-6.0%

DETERMINANTS AFFECTING THE MARKET ON WEEK 20

**RESTRICTIONS IN PRODUCTION AND TRANSMISSION CAPACITY**

- Olkiluoto 2 (890 MW), maintenance 10.-18.5.2020, in use 0 MW
- Forsmark 2 (1120 MW), 3.5.-26.6.2020, maintenance, in use 0 MW
- Olkiluoto 1 (890 MW) 8.4.-24.5.2020 failure, in use 836 MW
- Ringhals 3 (1063 MW) 5.4.-4.6.2020 maintenance, in use 0 MW
- Ringhals 1 (881 MW), 13.3.-30.9.2020 maintenance, in use 0 MW

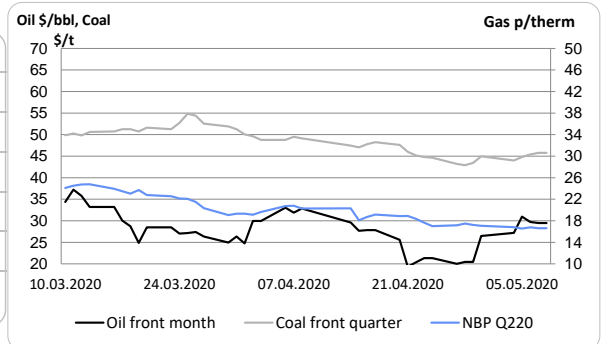
- Nordic nuclear power plants are currently operating at a capacity utilization rate of 64%
- RU-FI transmission profile varies due to capacity payments, average imports from Russia last week were 8 % of the maximum



**AVERAGE SPOT PRICE AND EPAD**

Price area (€/MWh)	2012	2013	2014	2015	2016	2017	2018	2019	2020*
NP System	31.20	38.10	29.60	21.00	26.91	29.41	43.99	38.94	12.48
NP Area FI - NP System	5.50	3.10	6.40	8.70	5.54	3.78	2.81	5.10	9.79
NP Area SE1 - NP System	0.50	1.10	1.80	0.20	2.04	1.43	0.24	-1.00	0.06
NP Area SE2 - NP System	0.60	1.10	1.80	1.00	2.04	1.43	0.24	-1.00	0.06
NP Area SE3 - NP System	1.10	1.40	2.00	1.00	2.33	1.83	0.55	-0.58	3.37
NP Area SE4 - NP System	3.00	1.80	2.30	1.90	2.62	2.77	2.37	0.86	5.65

\*Average for period between 1.1.2020-11.5.2020.



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Source for data: intStream, Tilastokeskus

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