

### NORDIC ELECTRICITY MARKET

13.7.2020 Toni Sjöblom, Gasum Portfolio Services Oy

#### WET AND COOL WEATHER TYPE CONTINUES, HIGH EMISSION ALLOWANCE SUPPORTS ELECTRICITY PRICE

Forecast to week 29:	
ENOFUTBLQ4-20	↔ Sideways (± 0,5%)
ENOYR-21	↗ Bullish (>0%)
NP System	↗ Bullish (>0%)
NEDEC20	↔ Sideways (± 0,5%)

Market signals	spot	Q4-20	YR-21
Hydrologic balance	↓	↓	↓
Precipitation forecast	↓	↓	↓
Temperature forecast	→	→	→
Spot	→	↓	↓
Production and transmission exch.	↓	→	→
Emissions allowance	→	↑	↑
Coal price	→	↑	↑
German prices	↑	↑	↑
Technical analysis	↔	→	→

### FORECAST TO WEEK 29

#### POWER FUTURES

##### Front quarter

The weather forecasts have dried up considerably over the weekend but overall remain above the normal. The current week will be drier than normal but next week wetter and cooler weather is again expected. The hydro balance forecast has dipped slightly since last week, which provides support for front products. The rise in emission allowance price also supports a rise. We expect only a moderate rise in the near product because the weather forecast is for the wet and cool weather type to continue at the end of the period.

##### Annual products

Forecasts for drier weather and the rise in emission allowance prices provide support for annual products. Since the nearest annual product saw a sharp fall last week, there is room for an upward correction. However, like the front quarter product, a rise in the nearest annual product will be limited by a continuation of a wetter than normal weather type at the end of the weather forecast period. However, the price difference between Germany and the marginal price cost of coal/gas condensate has grown as the emission allowance has risen, which adds to the risk of a rise when the weather type again changes. Annual products are expected to rise at the weekly level propelled by the emission allowance price.

#### SPOT MARKET

The current week starts on a much cooler than normal note and flow rates will be lower than normal. Wind power production will be below normal for the whole week and will fall to a very low level mid-week. Also in Finland, wind power production will be very low the whole week. Consumption is very low because of the summer holiday season. We expect the system price to continue to show a cautious rise. The Finnish area price is expected to rise on last week's price due to low wind power production, when the Finnish price is more often linked to the Baltic price level rather than the Swedish one. At the weekly level, the system price is expected to rise to €3.5/MWh and the Finnish area price to a level of around €20/MWh.

#### EMISSIONS

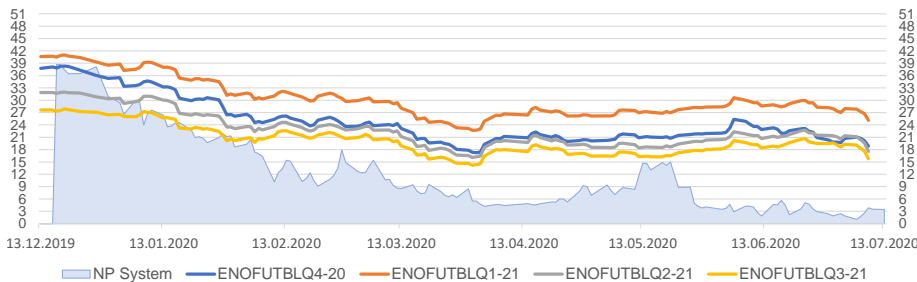
During the current week, the emission allowance price has opened on a strong note and has risen to a new record of €30.34/t. At the fundamental level, demand remains weak, but analysts appear optimistic that the European Commission will propose new tighter emission reduction targets for 2030. Last week, buyers of emission allowances appeared once the price fell to a level approaching €28/t. We expect the emission allowance price to remain strong, albeit with the possibility of a sharp downward correction.

Product	Date	Value	% chg	Chg (EUR)
ENOFUTBLQ4-20	10.7.2020	18.85	-4.3%	-0.85
ENOFUTBLQ1-21	10.7.2020	25.10	-7.0%	-1.90
ENOFUTBLQ2-21	10.7.2020	17.55	-14.8%	-3.05
ENOFUTBLQ3-21	10.7.2020	15.80	-15.1%	-2.80
ENOYR-21	10.7.2020	20.79	-10.8%	-2.51
ENOYR-22	10.7.2020	24.95	-4.0%	-1.05
ENOYR-23	10.7.2020	26.85	-0.9%	-0.25
ENOYR-24	10.7.2020	27.37	-3.4%	-0.96
ENOYR-25	10.7.2020	28.13	-1.6%	-0.45
NEDEC20	10.7.2020	29.06	3.9%	1.10
NEDEC20	10.7.2020	29.06	3.9%	1.10

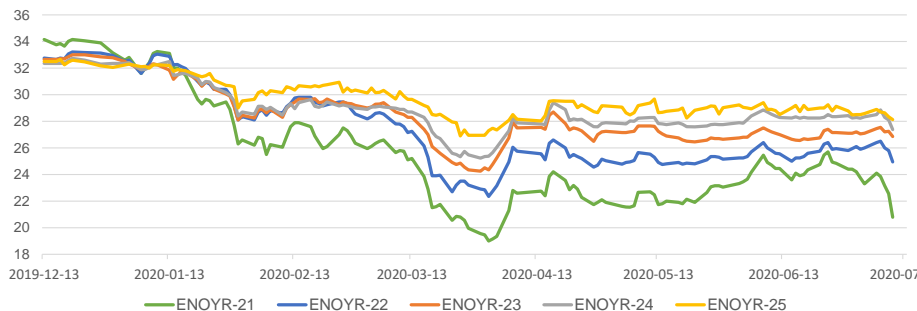
EPAD settlements			
10.7.2020 (€/MWh)	2021	2022	2023
SYHEL	9.75	5.85	4.33
SE1- NP System	-1.50	-2.70	-2.50
SE2 - NP System	-1.50	-2.70	-2.50
SE3 - NP System	2.48	2.25	2.05
SE4 - NP System	4.75	3.75	3.75

Week's spot price change				
Price area (€/MWh)	Date	Value	% chg	Chg (EUR)
NP System	12.7.2020	2.42	31.2%	0.58
NP Area FI	12.7.2020	16.83	-28.7%	-6.77
NP Area SE1	12.7.2020	11.01	30.1%	2.55
NP Area SE2	12.7.2020	11.01	30.1%	2.55
NP Area SE3	12.7.2020	11.07	9.1%	0.92
NP Area SE4	12.7.2020	11.07	9.1%	0.92

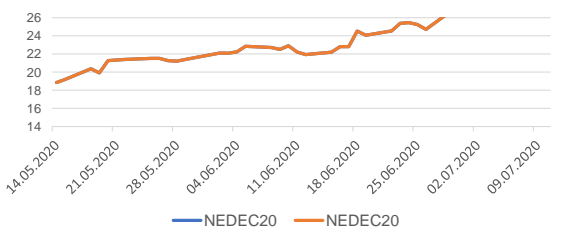
Quarters EUR/MWh (left), NP System EUR/MWh (right)



Years EUR/MWh



Carbon EUR/CO2 t



COMMENTS ON WEEK 28

**POWER FUTURES**

**Front quarter**

The front quarter opened the week on an upward note as the weather forecasts dried up significantly. However, the direction reversed during the week and the fall was particularly sharp since the end of the week as the weather forecasts again were for very wet weather. At the weekly level, the near quarter closed in a fall of just under €1. The continuing low spot price and the forecast for a higher hydro balance supported the fall.

**Annual products**

Last week, the nearest annual product, like other near products, opened on an upward note along with the weather forecast and strong emission allowances. Similarly, the direction of the annual product changed mid-week with the onset of damper weather and with the partial correction of the earlier rise in the emission allowance price. On Thursday, and especially on Friday, the nearest annual product fell sharply and closed at the lowest prices for three months. The fall was abundant given that the emission allowance price climbed back to close the day at more than €29/t. Coal prices also rose in earlier in the week before falling slightly towards the end of the week. The same movement was also seen in the German electricity price. The price difference between the German and Nordic price has widened. Regarding further annual products, price movements have been moderate.

**SPOT MARKET**

Last week, the weather was much cooler than normal and flow rates fell to below normal after the earlier rainfall. Wind power production at the start of the week was above normal and towards the end of the week again rose to above the normal. Nuclear power output has been the normal amount. Transmission restrictions continued aplenty from South Norway to other areas and Norwegian hydropower producers have still been unable to significantly increase pricing. At the weekly level, the system price rose by less than €1 and remained south of the €3/MWh level. With more abundant wind power production, the Finnish area price fell to nearer the Swedish SE3 price and differed from the high Baltic price level.

**EMISSIONS**

Last week, emission allowance prices remained robust, even though the intraday price fell clearly on a few days at the end of the week. Emission allowance prices fell following news about growing cases of Covid-19 cases around the world, especially in the United States, with a fall seen on the stock markets. At the start of the week, Tuesday saw the emission allowance price rose to a level of €29.93/t, which was the highest figure this year. At the weekly level, the emission allowance price was 4% up.

Indicator	ENOFUTBLQ4-20	ENOYR-21
Coal-fired production	34 %	56 %
Coal price	33 %	43 %
Gas price (NBP)	48 %	56 %
German price level	6 %	85 %
Spot	63 %	52 %
Crude oil Brent	69 %	78 %
Water reservoirs	32 %	23 %
EUR/USD FX rate	4 %	7 %
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	28	Chg	27	Chg
ENOFUTBLQ4-20	↗	-4.3%	↘	-11.5%
ENOYR-21	↗	-10.8%	↘	-6.2%
NP System	↗	31.2%	↻	-35.5%
NEDEC20	↗	3.9%	↗	13.2%

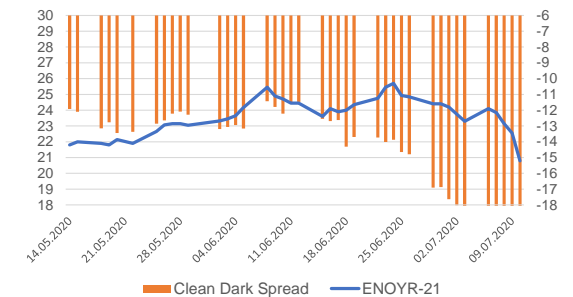
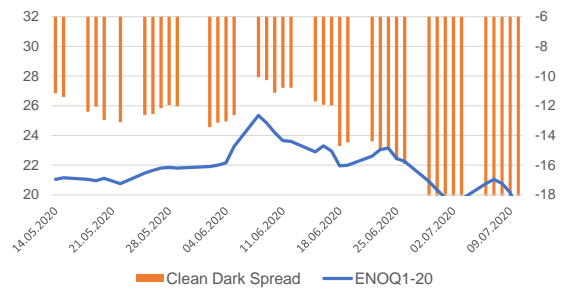
DETERMINANTS AFFECTING THE MARKET ON WEEK 29

**RESTRICTIONS IN PRODUCTION AND TRANSMISSION CAPACITY**

Ringhals 3 (1063 MW) 22.4-24.7.2020 maintenance, in use 0 MW  
Ringhals 4 (1130 MW) 5.7.-31.8.2020 maintenance, in use 0 MW

RU-FI (1300 MW), 30.6.-31.7.2020 maintenance, in use 400 MW  
FI-RU (320 MW), 30.6.-31.7.2020 maintenance, in use 0 MW

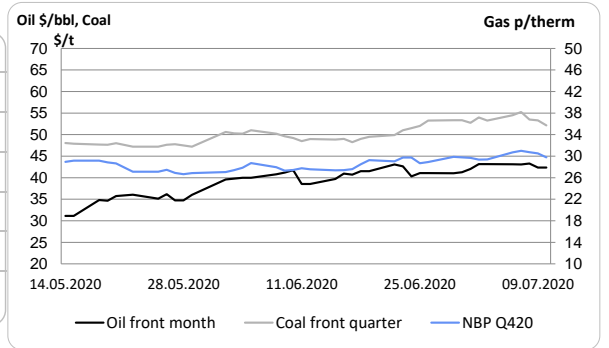
- Nordic nuclear power plants are currently operating at a capacity utilization rate of 80%
- RU-FI transmission profile varies due to capacity payments, average imports from Russia last week were 1 % of the maximum



**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	9.98
NP Area FI - NP System	5.50	3.10	6.40	8.70	5.54	3.78	2.81	5.10	12.93
NP Area SE1 - NP System	0.50	1.10	1.80	0.20	2.04	1.43	0.24	-1.00	1.76
NP Area SE2 - NP System	0.60	1.10	1.80	1.00	2.04	1.43	0.24	-1.00	1.76
NP Area SE3 - NP System	1.10	1.40	2.00	1.00	2.33	1.83	0.55	-0.58	6.46
NP Area SE4 - NP System	3.00	1.80	2.30	1.90	2.62	2.77	2.37	0.86	8.97

\*Average for period between 1.1.2020-13.7.2020.



Copyright 2020 Gasum Oy – All rights reserved  
Source for data: intStream, Tilastokeskus

Disclaimer: This document is issued by Gasum Oy in jointly by its subsidiaries Gasum Portfolio Services Oy and intStream Oy. The information in this document, which is for private circulation only, was obtained from sources believed to be reliable but its accuracy or completeness cannot be guaranteed. No liability whatsoever is accepted for any direct or consequential loss arising from the use of this document. This document is not intended for the use of private customers. Do not distribute. If you received this from a third party that is not affiliated to Gasum Oy, please let us know. For all inquiries and notifications, contact us at support@intstream.fi.