

### NORDIC ELECTRICITY MARKET

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#### WE EXPECT THE MARKET TO DIP SLIGHTLY

##### Forecast to week 17:

ENOFUTBLQ3-20	📉 Bearish (<0%)
ENOYR-21	📉 Bearish (<0%)
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 17

### POWER FUTURES

#### Front quarter

The weather type is very dry and temperatures have risen to higher than normal for the time of year. Amounts of rain will show an upward turn at the weekend, but the weather type is likely to remain drier than normal at least until the early part of next week. The hydro balance will fall, but despite the spell of dry weather is still very high. Signs of an end to the dry weather type and low spot prices will usher in downward pressure on front products. We expect front products to fall slightly.

#### Annual products

General market sentiment has remained largely positive and share indexes have continued to recover. However, oil prices have again fallen clearly despite an agreement by major oil producers to cut production. Weak oil prices exert downward pressure on natural gas and coal prices, which in turn also puts downward pressure on annual product prices. Despite rising share indexes, the economic outlook remains weak. We expect annual products to return to a slightly downward trend.

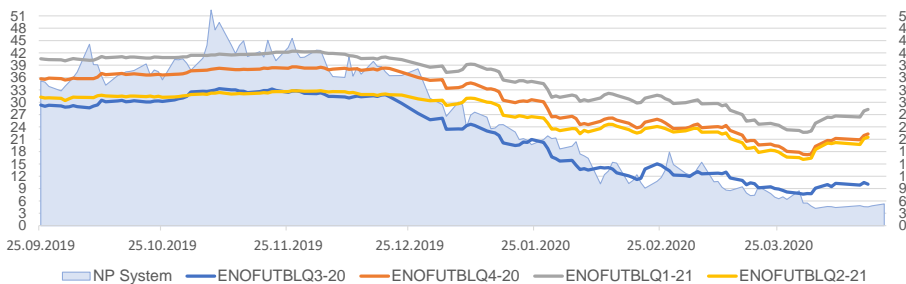
### SPOT MARKET

The weather during the current week is very dry and during the working week clearly warmer than normal for the time of year. Despite the dry weather, flow rates will start to rise as melting accelerates. However, flow rates will remain lower than normal. Nordic wind power production will be weaker than normal. We expect the system price to remain low, but to rise at the weekly level and settle at a level averaging €5.5/MWh. Maintenance work on the transmission link between Northern Sweden and Finland has been completed, but there will be a brief restriction in the link at the weekend. In Finland, wind production will fluctuate near the normal level. We expect the Finnish area price to fall somewhat at the weekly level and to settle at a level averaging €20.5/MWh.

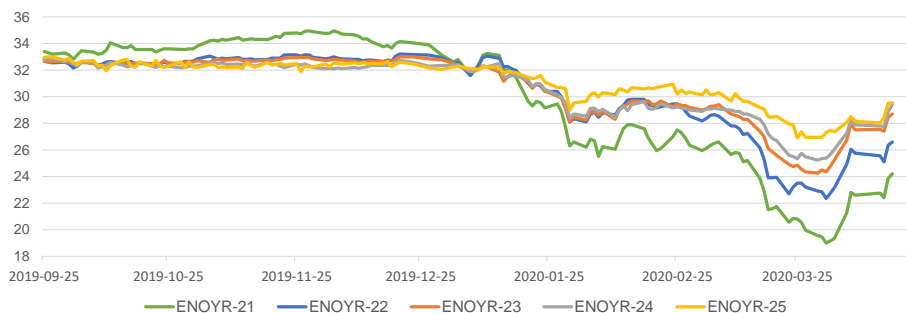
### EMISSIONS

High volatility in emission allowance prices is likely to continue in line with general market sentiment. Weak fuel prices are exerting downward pressure on the German electricity market, which in turn can put downward pressure on emission allowance prices. Emission allowance prices have risen significantly and we see a possibility for a slight downward correction. We expect the emission allowance prices to show a slight dip this week.

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



Years EUR/MWh



Product	Date	Value	% chg	Chg (EUR)
ENOFUTBLQ3-20	17.4.2020	10.07	6.0%	0.57
ENOFUTBLQ4-20	17.4.2020	22.30	8.0%	1.65
ENOFUTBLQ1-21	17.4.2020	28.25	7.4%	1.95
ENOFUTBLQ2-21	17.4.2020	21.50	7.8%	1.55
ENOYR-21	17.4.2020	24.20	7.1%	1.60
ENOYR-22	17.4.2020	26.60	3.3%	0.85
ENOYR-23	17.4.2020	28.70	4.4%	1.20
ENOYR-24	17.4.2020	29.40	5.5%	1.52
ENOYR-25	17.4.2020	29.55	5.0%	1.40
NEDEC20	17.4.2020	21.70	2.3%	0.49
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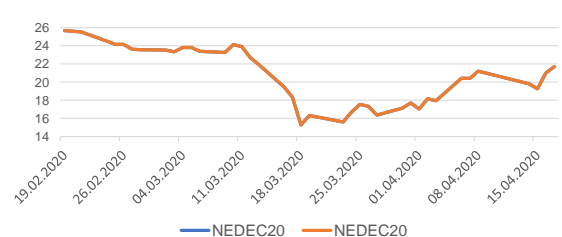
#### EPAD settlements

17.4.2020 (€/MWh)	2021	2022	2023
SYHEL	8.38	5.15	3.98
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	19.4.2020	4.42	-3.7%	-0.17
NP Area FI	19.4.2020	22.17	72.1%	9.29
NP Area SE1	19.4.2020	3.80	-7.4%	-0.31
NP Area SE2	19.4.2020	3.80	-7.4%	-0.31
NP Area SE3	19.4.2020	7.01	-15.0%	-1.23
NP Area SE4	19.4.2020	7.01	-15.0%	-1.23

#### Carbon EUR/CO2 t



COMMENTS ON WEEK 16

**POWER FUTURES**

**Front quarter**

Last week front products rose on the back of forecasts for dry weather. The weather type turned drier in the second half of the week and weather forecasts indicate continued dry weather also for the following week. However, weather forecast signs of the amounts of rain normalizing during the following week limited upward pressure. In addition, regardless of the falling hydro balance, the hydro balance was still high.

**Annual products**

Last week annual products continued to show a strong rise. Support for annual products was maintained by the continued rise in emission allowance prices. The price of coal fell in the early part of the week but rose towards the end of the week. EDF's announcement to cut the target for nuclear output by 20% during the current year with impact of the Covid-19 pandemic on i.a. the company's nuclear power plant maintenance work put upward pressure on fuel and emission allowance prices. Continued rising share indexes also supported fuel and emission allowance prices.

**SPOT MARKET**

Last week the weather was mainly cooler than normal for the time of year and flow rates were clearly below normal. Nordic wind power production was very abundant during the working week. Despite cooler than normal weather, demand for electricity fell due to the effect of Easter. The system price remained very low and fell slightly at the weekly level. Wind power production in Finland approached the normal level in the early part of the week, but in the second half wind power production in Finland was largely abundant. However, the Finnish area price rose a lot at the weekly level as there were restrictions in place on the transmission link between Northern Sweden and Finland. In addition, the Olkiluoto 2 nuclear power unit malfunctioned on Thursday and the situation was particularly reflected in the balancing power market when the up-regulating price in Finland rose momentarily to a level of up to €3,500/MWh.

**EMISSIONS**

Last week emission allowance prices continued to rise supported by news of a cut in French nuclear power production. The continued rise in share indexes and the confirmed technical picture maintained upward pressure on emission allowance prices.

DETERMINANTS AFFECTING THE MARKET ON WEEK 17

**RESTRICTIONS IN PRODUCTION AND TRANSMISSION CAPACITY**

Olkiluoto 1 (890 MW) 8.4.-24.5.2020 failure, in use 836 MW  
 Ringhals 3 (1063 MW) 5.4.-6.6.2020 maintenance, in use 0 MW  
 Ringhals 1 (881 MW), 13.3.-30.9.2020 maintenance, in use 0 MW

SE1-FI (1500 MW), 26.4.2020, maintenance, in use 1000 MW

- Nordic nuclear power plants are currently operating at a capacity utilization rate of 82%
- RU-FI transmission profile varies due to capacity payments, average imports from Russia last week were 6 % 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	13.49
NP Area FI - NP System	5.50	3.10	6.40	8.70	5.54	3.78	2.81	5.10	9.42
NP Area SE1 - NP System	0.50	1.10	1.80	0.20	2.04	1.43	0.24	-1.00	0.03
NP Area SE2 - NP System	0.60	1.10	1.80	1.00	2.04	1.43	0.24	-1.00	0.03
NP Area SE3 - NP System	1.10	1.40	2.00	1.00	2.33	1.83	0.55	-0.58	3.11
NP Area SE4 - NP System	3.00	1.80	2.30	1.90	2.62	2.77	2.37	0.86	5.16

\*Average for period between 1.1.2020-20.4.2020.

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 Source for data: intStream, Tilastokeskus

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Indicator	ENOFUTBLQ3-20	ENOYR-21
Coal-fired production	83 %	89 %
Coal price	82 %	70 %
Gas price (NBP)	88 %	79 %
German price level	6 %	85 %
Spot	96 %	87 %
Crude oil Brent	59 %	79 %
Water reservoirs	94 %	92 %
EUR/USD FX rate	17 %	21 %
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	16	Chg	15	Chg
ENOFUTBLQ3-20	↗	6.0%	↗	22.4%
ENOYR-21	↔	7.1%	↗	16.8%
NP System	↗	-3.7%	↘	5.8%
NEDEC20	↘	2.3%	↗	18.1%

