

NORDIC ELECTRICITY MARKET

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GENERAL MARKET SENTIMENT HAS TURNED HOPEFUL

Forecast to week 15:	
ENOFUTBLQ3-20	↗ Bullish (>0%)
ENOYR-21	↗ Bullish (>0%)
NP System	↘ Bearish (<0%)
NEDEC20	↗ Bullish (>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 15

POWER FUTURES

Front quarter

The weather forecasts are close to normal for the time of year. This week's weather will be drier than normal except for Wednesday but will return to normal next week, and there is no permanent change in sight for the weather type for the time being. The colder spell starting on Friday is also looking to last less than a week. The current weather forecasts are not indicating any major changes in the hydro balance. The coronavirus epidemic is showing some lessening in Southern Europe, which can be seen as price increases and hopefulness in all markets. We expect quarterly product prices to rise.

Annual products

The general market sentiment has gained a great deal of hopefulness as the coronavirus epidemic is lessening in Southern Europe. The economic outlook is of course still very weak and, despite major stimulus measures, the exit path from the crisis is still very unclear. The price of oil has been supported by talks between Saudi Arabia and Russia and the meeting scheduled for Thursday. The general positivity is also reflected in emission allowances and German power. Only coal prices have still remained quite soft and close to their lows. The hopefulness may not persist, but we expect prices to rise this week. The market will be closed already from Thursday because of the Easter holiday.

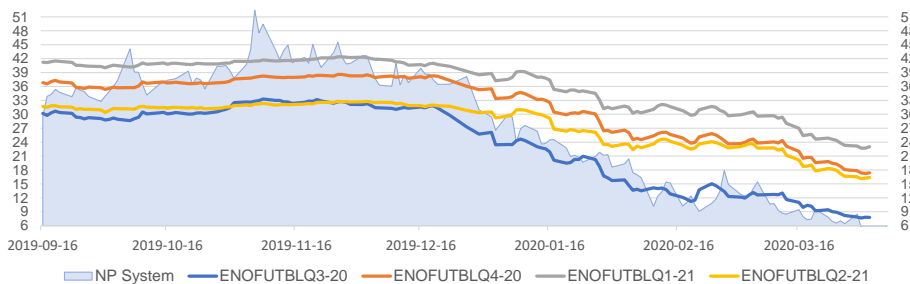
SPOT MARKET

Temperatures will be clearly above normal until Thursday and then drop below normal for a bit less than a week. Nordic wind power production will also be abundant until Thursday. Easter will result in a drop in consumption and contribute towards a fall in spot prices. Flow rates will be below normal due to the cooler and drier weather, facilitating hydro producers. We expect the system price to fall at the weekly level to an average of €4.5/MWh. Finnish wind power production will also mainly be abundant until Thursday. The Olkiluoto 1 nuclear power plant unit is still on slightly lower capacity. We expect the Finnish area price to fall clearly at the weekly level and to settle at an average of €11/MWh.

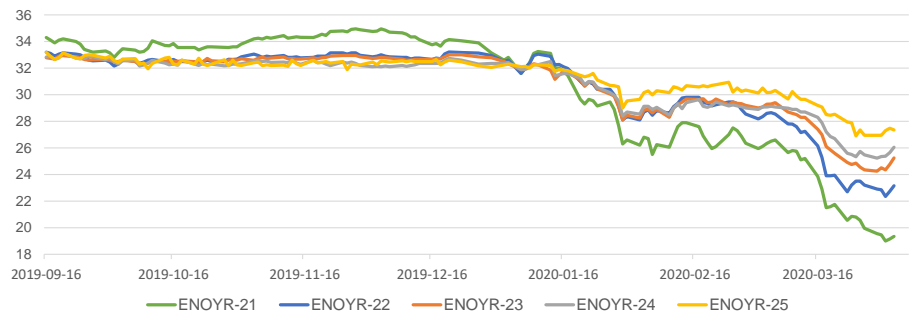
EMISSIONS

The more hopeful mood and rising energy prices are lending support to emission allowances. In addition, the surrender of allowances for last year's emissions is still resulting in final surrender purchases in the market. The big picture is obviously still unchanged, meaning that emissions are declining strongly as natural gas is cheaper than coal and emissions are decreasing due to the coronavirus epidemic. It remains to be seen whether or not the deteriorating business outlook is resulting in pressure to sell emission allowances yet. The technical picture for emission allowances has become clearly stronger. We expect emission allowance prices to continue on an upward trajectory along with energy products, but the rise will not necessarily be sustained.

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



Years EUR/MWh



Product	Date	Value	% chg	Chg (EUR)
ENOFUTBLQ3-20	3.4.2020	7.76	-9.2%	-0.79
ENOFUTBLQ4-20	3.4.2020	17.37	-7.5%	-1.40
ENOFUTBLQ1-21	3.4.2020	23.00	-3.4%	-0.80
ENOFUTBLQ2-21	3.4.2020	16.40	-4.7%	-0.80
ENOYR-21	3.4.2020	19.35	-3.0%	-0.60
ENOYR-22	3.4.2020	23.15	-0.2%	-0.05
ENOYR-23	3.4.2020	25.25	3.7%	0.90
ENOYR-24	3.4.2020	26.05	2.2%	0.57
ENOYR-25	3.4.2020	27.35	1.5%	0.40
NEDEC20	3.4.2020	17.96	9.7%	1.59
NEDEC20	3.4.2020	17.96	9.7%	1.59

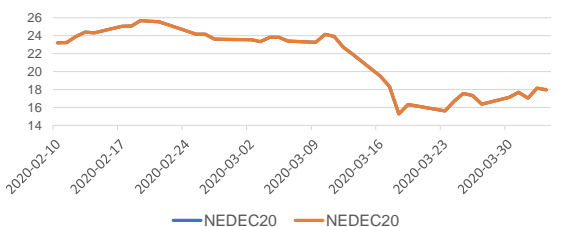
EPAD settlements

3.4.2020 (€/MWh)	2021	2022	2023
SYHEL	8.18	4.95	3.88
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	5.4.2020	5.37	-16.4%	-1.05
NP Area FI	5.4.2020	20.32	55.5%	7.25
NP Area SE1	5.4.2020	4.91	-19.6%	-1.20
NP Area SE2	5.4.2020	4.91	-19.6%	-1.20
NP Area SE3	5.4.2020	8.64	-1.3%	-0.11
NP Area SE4	5.4.2020	8.64	-1.3%	-0.11

Carbon EUR/CO2 t



COMMENTS ON WEEK 14

POWER FUTURES

Front quarter

Last week, quarterly products continued on a downward trajectory following a change in the weather forecasts towards conditions clearly rainier than normal towards the end of the forecast period. The weather forecasts got slightly drier towards the end of the week, and the fall of quarterly products halted after Thursday morning as the market ended up relatively unchanged for the rest of the week. Precipitation rates did not fully materialize as regards the rainiest days of the early part of the week, but the total weekly precipitation was clearly above normal. The price level is generally very low not only for the months ahead but also for the further-ahead quarterly product.

Annual products

Last week, annual products also fell, with the lowest prices seen on Wednesday, when individual front-year product prices went as low as below €19/MWh. Annual products also took an upturn towards the end of the week as emission allowances momentarily climbed in the wake of oil to above €18/t. Despite a clear upturn in oil prices during the week, coal price was not affected by this and coal dropped to a new low for the further-ahead annual product. This did not affect Nordic power prices, however.

SPOT MARKET

Last week's wind power production rose to higher levels again after the low winds of Monday, but from Friday onwards the wind power output was more moderate again over the weekend. The Ringhals 1 nuclear power plant unit was announced to be closed at least until September due to the low price level. In addition, in Finland the Olkiluoto 1 unit had a brief outage early this week. Finnish wind power production rose considerably again after Monday but dropped again on Thursday which, like Monday, was a day of low winds. The spot price took a clear downturn after Monday and the day averages fell close to €4/MWh towards the end of the week. At the same time, the weekly average continued to decline. On the other hand, the Finnish area price climbed more clearly at the weekly level and settled at around €20/MWh, a level higher than projected due to the Olkiluoto outage. In addition, the Saturday price was clearly higher than anticipated.

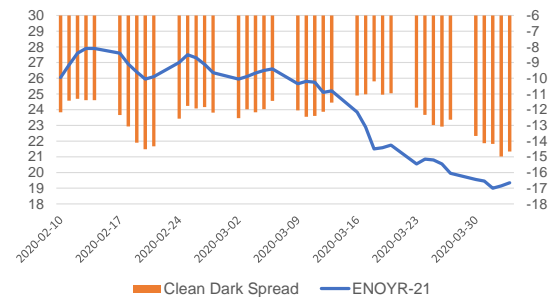
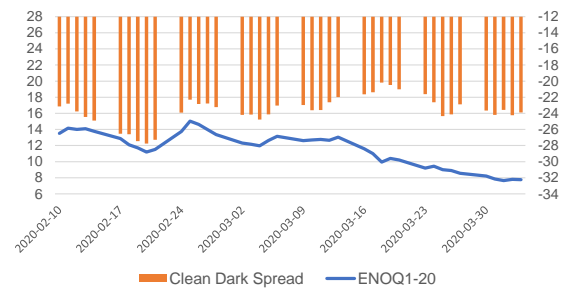
EMISSIONS

Last week, emission allowances climbed clearly in the wake of the stabilization of the stock markets. Last year's verified emissions data was published on Wednesday, and the reduction was around 8%. The emission reduction was slightly greater than expected and, consequently, Wednesday was the only day when prices declined in the emission allowance market. The reduction mainly took place in the energy sector, as renewables increased and natural gas was cheaper than coal in power production.

Indicator	ENOFUTBLQ3-20	ENOYR-21
Coal-fired production	82 %	88 %
Coal price	81 %	68 %
Gas price (NBP)	86 %	77 %
German price level	6 %	85 %
Spot	96 %	86 %
Crude oil Brent	57 %	77 %
Water reservoirs	94 %	92 %
EUR/USD FX rate	14 %	17 %
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	14	Chg	13	Chg
ENOFUTBLQ3-20	📉	-9.2%	📉	-16.2%
ENOYR-21	📉	-3.0%	📉	-8.3%
NP System	📉	-16.4%	↔️	-32.9%
NEDEC20	📉	9.7%	📉	1.4%



DETERMINANTS AFFECTING THE MARKET ON WEEK 15

RESTRICTIONS IN PRODUCTION AND TRANSMISSION CAPACITY

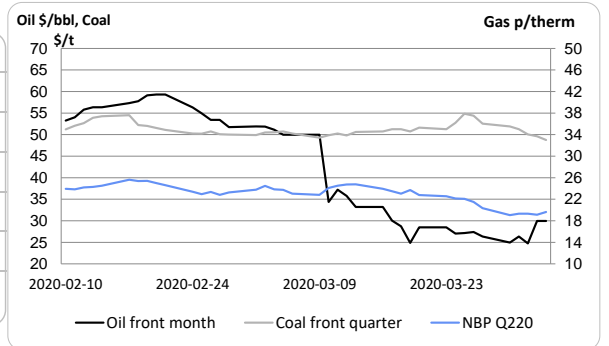
- Olkiluoto 1 (890 MW) 2.-8.4.2020 failure, in use 610-800 MW
- Ringhals 3 (1063 MW) 5.-22.4.2020 maintenance, in use 930 MW
- Ringhals 1 (881 MW), 13.3.-30.9.2020 maintenance, in use 0 MW

- Nordic nuclear power plants are currently operating at a capacity utilization rate of 90%
- RU-FI transmission profile varies due to capacity payments, average imports from Russia last week were 18 % 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	14.78
NP Area FI - NP System	5.50	3.10	6.40	8.70	5.54	3.78	2.81	5.10	8.81
NP Area SE1 - NP System	0.50	1.10	1.80	0.20	2.04	1.43	0.24	-1.00	0.11
NP Area SE2 - NP System	0.60	1.10	1.80	1.00	2.04	1.43	0.24	-1.00	0.11
NP Area SE3 - NP System	1.10	1.40	2.00	1.00	2.33	1.83	0.55	-0.58	3.09
NP Area SE4 - NP System	3.00	1.80	2.30	1.90	2.62	2.77	2.37	0.86	4.67

*Average for period between 1.1.2020-6.4.2020.



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