

NORDIC ELECTRICITY MARKET

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DOWNWARD PRESSURE MAINTAINED BY WET WEATHER FORECASTS AND WEAK TECHNICAL PICTURE

Forecast to week 25:

ENOFUTBLQ3-19	📉 Bearish (<0%)
ENOYR-20	📉 Bearish (<0%)
NP System	📉 Bearish (<0%)
NEDEC9	📉 Bearish (<0%)

FORECAST TO WEEK 25

ELECTRICITY DERIVATIVES

Front quarter

Weather forecasts are as a whole wetter than normal and show no clear signs of the weather type drying up apart from some individual dry days. The hydro balance continues to rise and quarterly products are very weak technically. We expect quarterly product prices to continue to fall.

Annual products

Downward pressure on the front-year product is maintained by weak quarterly products and the continuing rise of the hydro balance. In addition, fuel prices are still in strong downward trends and the German electricity market is declining over the short term. We expect a fall in annual product prices. Movement in the stock market may be brought by eurozone purchasing managers' indices and the Wednesday meeting of the Federal Reserve. Economic figures and comments concerning possible interest rate cuts may also generate movement in fuel and emission allowance prices.

SPOT MARKET

Temperatures have risen again to levels above normal for the time of year and the weather will be warm throughout the business days of the week. Electricity demand will be scarcer than normal due to the warm weather. During the weekend, temperatures will drop to a level close to normal but demand for electricity will be decreased from Thursday afternoon onwards by the effect of the Midsummer celebrations. Nordic wind power production is mainly weaker than normal. Flow rates are slightly below normal for the time of year but, as is typical of June, the rates are high. Downward pressure on spot prices is created by nuclear power production having risen close to the normal level, the hydro balance having risen, weather forecasts being wet and futures products declining. We expect the system price to settle at an average of €27.5/MWh. Finnish wind power production is mainly slightly above normal but will drop to a low level on Thursday. We expect the Finnish area price to settle close to the system price at the weekly level.

EMISSIONS

Weak fuel prices will maintain downward pressure on the electricity market, which will also put downward pressure on emission allowance prices. Emission allowance prices are falling also technically over the short term, and the closest support level for the price is €23.7/t. In the current week, any greater movement in the stock market may also generate movement in emission allowance prices. With fuels and the technical picture being weak, we expect emission allowance prices to fall slightly.

Market signals

	spot	Q3-19	YR-20
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)
ENOFUTBLQ3-19	14.6.2019	31.70	-4.4%	-1.45
ENOFUTBLQ4-19	14.6.2019	37.75	-4.4%	-1.75
ENOFUTBLQ1-20	14.6.2019	41.85	-2.1%	-0.88
ENOFUTBLQ1-21	14.6.2019	40.35	-0.1%	-0.05
ENOYR-20	14.6.2019	34.75	-1.4%	-0.50
ENOYR-21	14.6.2019	33.30	0.3%	0.10
ENOYR-22	14.6.2019	32.40	0.1%	0.03
ENOYR-23	14.6.2019	32.68	0.5%	0.15
ENOYR-24	14.6.2019	32.00	0.0%	0.00
NEDEC9	14.6.2019	25.02	1.9%	0.46
NEDEC20	14.6.2019	25.28	1.6%	0.41

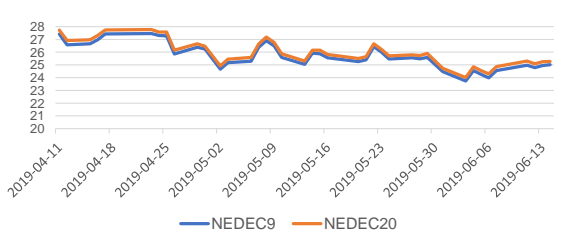
EPAD settlements

14.6.2019 (€/MWh)	2019	2020	2021	2022
SYHEL	4.25	3.25	3.38	3.43
SE1-NP System	-1.75	-2.90	-2.90	-2.90
SE2 - NP System	-1.75	-2.90	-2.70	-2.90
SE3 - NP System	1.25	1.25	1.25	1.25
SE4 - NP System	2.60	2.60	2.60	2.60

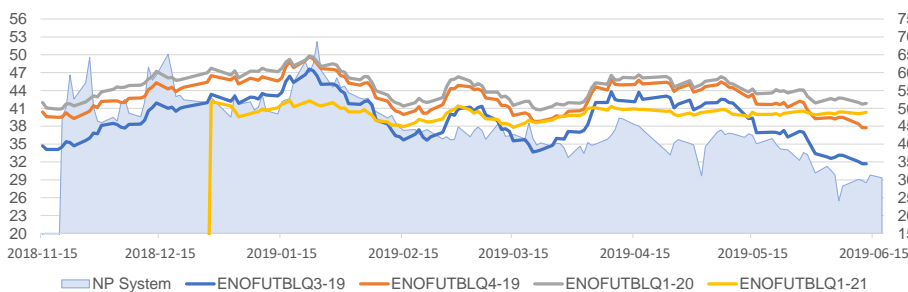
Week's spot price change

Price area (€/MWh)	Date	Value	% chg	Chg (EUR)
NP System	16.6.2019	28.13	12.6%	3.16
NP Area FI	16.6.2019	27.39	-27.0%	-10.14
NP Area SE1	16.6.2019	25.15	25.8%	5.15
NP Area SE2	16.6.2019	25.15	25.8%	5.15
NP Area SE3	16.6.2019	25.15	25.8%	5.15
NP Area SE4	16.6.2019	25.15	25.8%	5.15

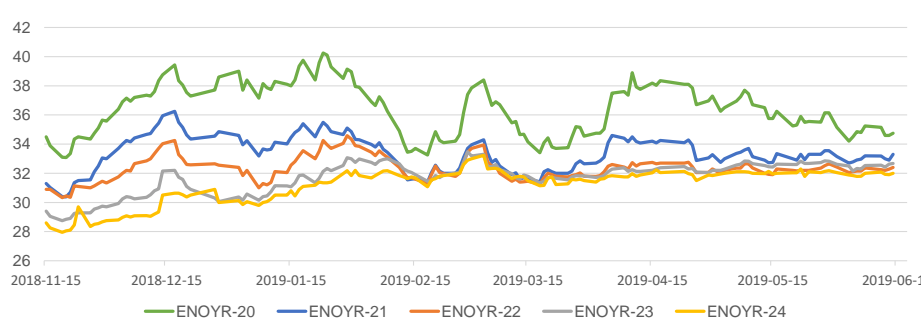
Carbon EUR/CO2 t



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



Years EUR/MWh



COMMENTS ON WEEK 24

ELECTRICITY DERIVATIVES

Front quarter

Last week, quarterly products continued on a downward trajectory. Downward pressure was maintained by the water situation having risen and the technical picture being very weak. Weather forecasts were also for slightly higher precipitation during the week and did not show any clear signs of a more permanent turn for a drier weather type.

Annual products

Last week, annual products were supported by the more positive general market sentiment as the import tariffs planned by the U.S. for Mexican products were cancelled. Consequently, fuel and emission allowance prices rose in the first days of the week. Oil prices were supported by news of OPEC intending to extend oil output cuts also into the second half of the year. After the first days of the week, however, fuel prices took another downturn due to the abundant supply and weak technical trend. Oil prices were driven up again towards the end of the week by the tanker attacks in the Gulf of Oman. At the weekly level, coal prices ended up on a downward trajectory but emission allowances were on an upward trajectory. The front-year product was pulled down at the weekly level by very weak quarterly products, but there were hardly any changes in the prices of further-ahead annual products.

SPOT MARKET

Last week, the weather turned considerably cooler and in the middle part of the week temperatures dropped to below normal for the time of year. Towards the end of the week, however, the weather got warmer than normal again. On Monday, electricity demand at the Nordic level was reduced by the Norwegian and Danish public holidays. Flow rates were at a high level in the first days of the week but then fell close to normal for the time of year. Nordic wind power production was abundant in the first half of the week but declined mostly to a lower-than-normal level in the second half. Nuclear power production increased when the Olkiluoto 1 power plant unit was operational again on Tuesday night. The system price rose at the weekly level but the Finnish area price fell owing to increased nuclear power production. In addition, the interconnection between Finland and Southern Sweden was fully operational again and electricity imports from Russia to Finland were high on Wednesday due to the Russian public holiday.

EMISSIONS

The more positive general market mood brought support to fuel prices, the electricity market and also emission allowance prices again in the first days of last week. Emission allowance prices were also supported by the scarcer auction supply. After the first days of the week, fuel prices and the electricity market retreated but emission allowance prices were seeking direction. At the weekly level, emission allowance prices closed on an upward trajectory.

DETERMINANTS AFFECTING THE MARKET ON WEEK 25

RESTRICTIONS IN PRODUCTION AND TRANSMISSION CAPACITY

Ringhals 1 (881 MW), maintenance 18.6-20.7.2019, 750 MW available

- Current Nordic nuclear power plant utilization rate 100%
- RU-FI transfer profile varies due to capacity charges, with average import from Russia having been 42% of maximum last week

AVERAGE SPOT PRICE AND EPAD

Price area (€/MWh)	2012	2013	2014	2015	2016	2017	2018	2019*
NP System	31.20	38.10	29.60	21.00	26.91	29.41	43.99	42.17
NP Area FI - NP System	5.50	3.10	6.40	8.70	5.54	3.78	2.81	1.84
NP Area SE1 - NP System	0.50	1.10	1.80	0.20	2.04	1.43	0.24	-1.69
NP Area SE2 - NP System	0.60	1.10	1.80	1.00	2.04	1.43	0.24	-1.69
NP Area SE3 - NP System	1.10	1.40	2.00	1.00	2.33	1.83	0.55	-1.46
NP Area SE4 - NP System	3.00	1.80	2.30	1.90	2.62	2.77	2.37	-0.66

*Average for period between 1.1.2019-17.6.2019.

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Source for data: intStream, Tilastokeskus

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Indicator	ENOFUTBLQ3-19	ENOYR-20
Coal-fired production	68 %	63 %
Coal price	36 %	25 %
Gas price (NBP)	32 %	26 %
German price level	42 %	55 %
Spot	50 %	35 %
Crude oil Brent	1 %	4 %
Water reservoirs	14 %	16 %
EUR/USD FX rate	12 %	13 %
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	24	Chg	23	Chg
ENOFUTBLQ3-19	↗	-4.4%	↘	-7.3%
ENOYR-20	↗	-1.4%	↘	0.3%
NP System	↗	12.6%	↘	-11.5%
NEDEC9	↗	1.9%	↘	0.3%

