

### NORDIC ELECTRICITY MARKET

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#### DRY AND WARM DURING THE CURRENT WEEK, WETTER WEATHER ON THE HORIZON NEXT WEEK

| Forecast to week 33: |                 |
|----------------------|-----------------|
| ENOFUTBLQ4-20        | ↗ Bullish (>0%) |
| ENOYR-21             | ↗ Bullish (>0%) |
| NP System            | ↗ Bullish (>0%) |
| NEDEC20              | ↗ Bullish (>0%) |

| 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 33

#### POWER FUTURES

##### Front quarter

The current week will be very dry and warm. The Nordic hydro balance will fall noticeably, which will provide support for near products. However, forecasts show wetter weather is on way next week, with higher than normal amounts of rainfall. The change in the weather is still uncertain, however, and the change to wetter weather may be delayed. We expect near products to rise but the Nordic hydro balance is still high and the possible change in weather type will restrict the room to rise for the time being.

##### Annual products

The falling hydro balance will provide support for the nearest annual products but next week's wetter weather picture will limit the upward pressure. Scant auction availability and the heatwave in Central Europe will support the emission allowance price. Also the stronger price of natural gas will provide support for the German electricity market, which will in turn bring support for annual products on the Nordic market. We expect annual products to rise at the weekly level.

##### SPOT MARKET

The current week will be very dry and flow rates will fall to a much lower level than normal. Dry weather and falling flow rates will reduce compulsory hydropower production in Norway, which will provide support for the system price, which will also be supported by weak wind power production. Nuclear power production on the other hand will increase as the Ringhals 3 unit in Sweden starts up on Tuesday. We expect the system price to rise at the weekly level and to settle at an average level of €6.0/MWh. After Monday, wind power production in Finland will be weaker than normal and together with less nuclear power availability, the Finnish area price will remain notably higher than the system price. We expect the Finnish area price to rise slightly and to settle at an average level of €38.5/MWh.

##### EMISSIONS

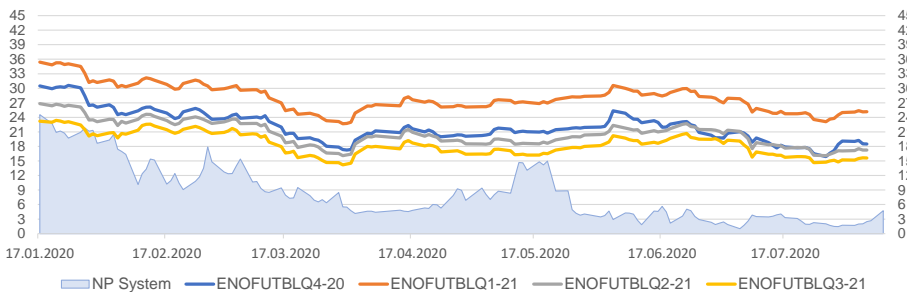
Last week trading volumes on the ICE were lower than normal, which may indicate that the holiday season has reduced interest in the emissions market. The situation has remained unchanged at the fundamentals level, lower auction availability in August and the warm weather in Central Europe provide support for emission allowances. The technical picture for emission allowances is neutral and in the short term there is a lateral trend. On the other hand, increasing coronavirus infections are fueling concerns about the impact of a second wave of the pandemic on a slightly recovered economy.

| Product       | Date     | Value | % chg | Chg (EUR) |
|---------------|----------|-------|-------|-----------|
| ENOFUTBLQ4-20 | 7.8.2020 | 18.50 | 0.4%  | 0.07      |
| ENOFUTBLQ1-21 | 7.8.2020 | 25.18 | 2.8%  | 0.68      |
| ENOFUTBLQ2-21 | 7.8.2020 | 17.25 | 0.9%  | 0.15      |
| ENOFUTBLQ3-21 | 7.8.2020 | 15.60 | 5.4%  | 0.80      |
| ENOYR-21      | 7.8.2020 | 20.70 | 2.5%  | 0.50      |
| ENOYR-22      | 7.8.2020 | 23.80 | -0.3% | -0.08     |
| ENOYR-23      | 7.8.2020 | 25.30 | -1.5% | -0.38     |
| ENOYR-24      | 7.8.2020 | 27.25 | -3.5% | -1.00     |
| ENOYR-25      | 7.8.2020 | 28.10 | -1.2% | -0.35     |
| NEDEC20       | 7.8.2020 | 26.45 | 0.7%  | 0.19      |
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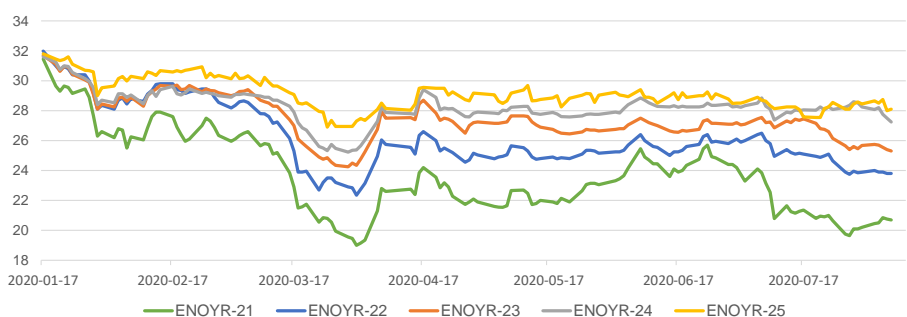
| EPAD settlements |       |       |       |
|------------------|-------|-------|-------|
| 7.8.2020 (€/MWh) | 2021  | 2022  | 2023  |
| SYHEL            | 12.25 | 6.13  | 4.20  |
| SE1- NP System   | -1.50 | -2.70 | -2.50 |
| SE2 - NP System  | -1.50 | -2.70 | -2.50 |
| SE3 - NP System  | 2.48  | 2.25  | 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                | 9.8.2020 | 2.25  | 35.7%  | 0.59      |
| NP Area FI               | 9.8.2020 | 36.29 | 34.1%  | 9.22      |
| NP Area SE1              | 9.8.2020 | 5.10  | 66.1%  | 2.03      |
| NP Area SE2              | 9.8.2020 | 5.10  | 66.1%  | 2.03      |
| NP Area SE3              | 9.8.2020 | 24.48 | 270.9% | 17.88     |
| NP Area SE4              | 9.8.2020 | 24.48 | 270.9% | 17.88     |

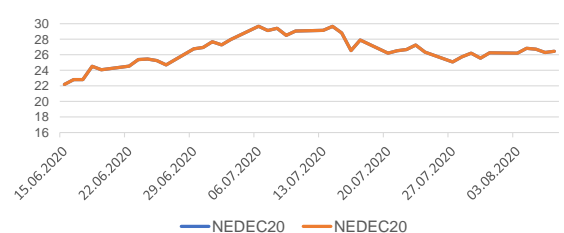
Quarters EUR/MWh (left), NP System EUR/MWh (right)



Years EUR/MWh



Carbon EUR/CO2 t



COMMENTS ON WEEK 32

**POWER FUTURES**

**Front quarter**

The upward correction movement in near products in the first half of last week continued with the dry weather picture. However, the correction movement then discontinued as the weather forecasts showed signs of the dry, warm weather type coming to an end the following week. The signs gained strength towards the end of the week and near products took a downward turn. The front quarter product ultimately closed the week just slightly up.

**Annual products**

Last week the nearest annual product was supported by the dry weather picture, falling hydro balance forecast and near-term products that had continued to rise. The emission allowance price also rose earlier in the week. However, the rise in the nearer annual product discontinued in the second half of the week and the product retreated slightly with forecasts for wetter weather. Also the emission allowance price took a downward turn at the end of the week. However, the nearest annual product rose slightly at the weekly level. No major changes occurred in the price of coal at the weekly level, whereas annual products on the German electricity market rose with the stronger price for natural gas.

**SPOT MARKET**

Last week, Nordic wind power production was at a low level after Wednesday, which provided support for spot prices. Dry weather after the start of the week and the ensuing lower flow rates, also provided support. However, water reservoirs were still very high and maintained the system price at a low level. The Finnish area price rose amply with the outage of the Loviisa 2 unit for annual maintenance. Wind power production in Finland was largely also weaker than normal and the Finnish area price linked to the Estonian price level. In Sweden (SE3 and SE4), spot prices also rose amply as nuclear power plant unit maintenance continued, which in turn also contributed to a rise in the Finnish area price.

**EMISSIONS**

The emission allowance price sought direction last week. On Monday, the price showed signs of softness following a poor auction result, but the following two trading days were slightly stronger as the price approached a level of €27/t. A weaker day on Thursday and the price closing at the same level on Friday brought the level to €26.45/t, with the emission allowance price closing up €0.19 at the weekly level. New economic data indicating better than expected recovery in the economies of a number of states has provided support for the emission allowance price.

| Indicator             | ENOFUTBLQ4-20 | ENOYR-21 |
|-----------------------|---------------|----------|
| Coal-fired production | 1 %           | 9 %      |
| Coal price            | 1 %           | 1 %      |
| Gas price (NBP)       | 27 %          | 33 %     |
| German price level    | 6 %           | 85 %     |
| Spot                  | 29 %          | 20 %     |
| Crude oil Brent       | 15 %          | 32 %     |
| Water reservoirs      | 1 %           | 0 %      |
| EUR/USD FX rate       | 11 %          | 4 %      |
| 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 | 32 | Chg   | 31 | Chg    |
|------------------|----|-------|----|--------|
| ENOFUTBLQ4-20    | ↗  | 0.4%  | ↘  | 5.3%   |
| ENOYR-21         | ↗  | 2.5%  | ↘  | -2.2%  |
| NP System        | ↗  | 35.7% | ↘  | -23.0% |
| NEDEC20          | ↗  | 0.7%  | ↘  | -0.3%  |

DETERMINANTS AFFECTING THE MARKET ON WEEK 33

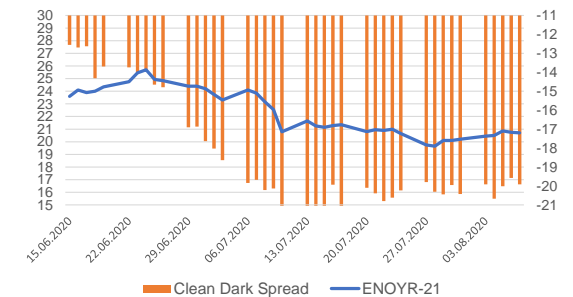
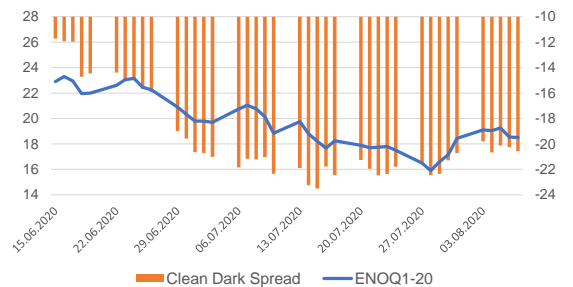
**RESTRICTIONS IN PRODUCTION AND TRANSMISSION CAPACITY**

Forsmark 3 (1167 MW), 16.8.-13.9.2020, maintenance, in use 0 MW  
 Loviisa 2 (507 MW) 2.-26.8.2020 maintenance, in use 0 MW, 26.-28.8.2020 in use 253 MW  
 Oskarshamn 3 (1400 MW) 1.8.-26.10.2020 maintenance, in use 0 MW  
 Ringhals 3 (1063 MW) 22.4-11.8.2020 maintenance, in use 0 MW  
 Ringhals 4 (1130MW) 5.7.-31.8.2020 maintenance, in use 0 MW

FI-RU (320 MW), 2.-30.8.2020 maintenance, in use 0 WM

FI-SE3 (1200 MW) 12.-23.8.2020, maintenance, in use 0 MW

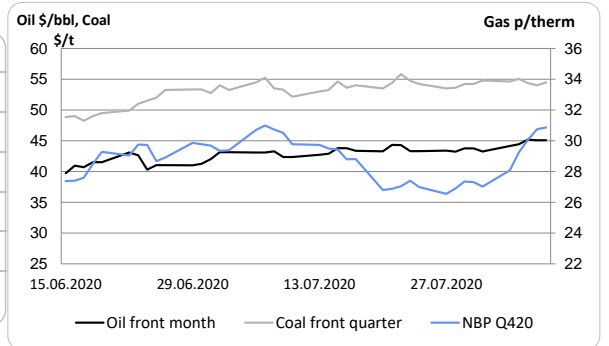
- Nordic nuclear power plants are currently operating at a capacity utilization rate of 63%
- RU-FI transmission profile varies due to capacity payments, average imports from Russia last week were 22 % of the maximum



**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 | 9.03  |
| NP Area FI - NP System  | 5.50  | 3.10  | 6.40  | 8.70  | 5.54  | 3.78  | 2.81  | 5.10  | 13.91 |
| NP Area SE1 - NP System | 0.50  | 1.10  | 1.80  | 0.20  | 2.04  | 1.43  | 0.24  | -1.00 | 2.07  |
| NP Area SE2 - NP System | 0.60  | 1.10  | 1.80  | 1.00  | 2.04  | 1.43  | 0.24  | -1.00 | 2.07  |
| NP Area SE3 - NP System | 1.10  | 1.40  | 2.00  | 1.00  | 2.33  | 1.83  | 0.55  | -0.58 | 7.02  |
| NP Area SE4 - NP System | 3.00  | 1.80  | 2.30  | 1.90  | 2.62  | 2.77  | 2.37  | 0.86  | 10.96 |

\*Average for period between 1.1.2020-10.8.2020.



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 Source for data: intStream, Tilastokeskus

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