

Electricity Monitor

Group EconomicsEmerging Markets & Commodity
Research

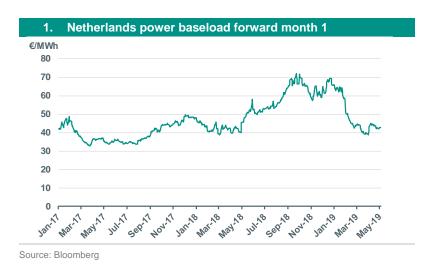
28 May 2019

Higher electricity prices from 2020

- A bearish view on the Dutch wholesale electricity price for or the coming two quarters and bullish view from 2020 onwards
- Coal-to-gas switching for power generation is happening on the back of lower gas prices and a higher carbon price.
- Gas inventory levels are at a record high in northwest Europe, which supports
 a bearish view on gas prices till the end of the year before we move into a tighter
 market starting 2020.
- Coal prices remain under pressure, with a high inflow of gas imports into Europe, strong carbon prices, and warmer-than-usual temperatures.
- EU ETS (the European Emission Trading Scheme) so far characterized by high volatility related to the Market Stability Reserve (MSR), a possible no-deal Brexit and speculative trading.

The Dutch electricity price in a volatile fuel and carbon environment

The Dutch baseload electricity price (first month contract) hovered between €38/MWh and €45/MWh in April with a monthly average of €42/MWh. The price has continued to drop since December (€65.8/MWh), with a €2/MWh increase from April 2018 (Figure 1).



Low gas prices - uncertainty is looming; bearish trend continues

An inflow of gas into Europe and record-high storage levels in northwest Europe (see Figure 3) have brought TTF gas prices down over 15% during the course of April to

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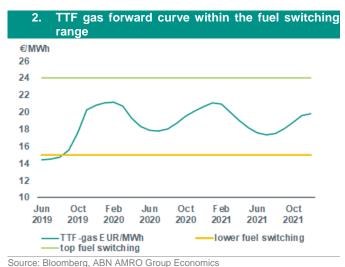
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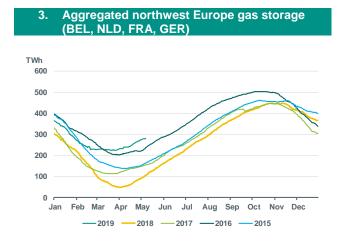
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below €14/MWh. The high inflow of gas comes at a time when there was a mild winter with record-high gas and LNG pipeline flows from Russia. This brought the forward curve into contango as near-term prices are at a discount to the medium term (see Figure 2).

However, the European gas hub prices are cushioned by the European power market through coal-to-gas switching. Over the course of the month, TTF gas prices hovered between €13.5 and €16.8/MWh and remained in the fuel switching price range for electricity generators. This was due, in particular, to higher emission prices that made the economics of gas more lucrative than that of coal. Still, the gas oversupply is not expected to be entirely absorbed by coal-to-gas switching. Besides, in the course of the last two months, higher levels of renewable energy production have also eaten up from the share of gas.





Source: Thomson Reuters, ABN AMRO Group Economics

Over the coming months gas prices are expected to remain relatively low on the back of:

- (1) more gas and LNG deliveries from Russia, the US, Malaysia and Australia,
- (2) a slowdown in demand for gas over the summer. The main drivers for gas prices are seasonality and temperature. The demand for cooling will increase during the summer, which will reduce this oversupply gap to some extent. But all in all, we expect the northwest market to remain oversupplied.

The low coal price - geopolitics in the air

Coal prices plummeted over the course of April due to:

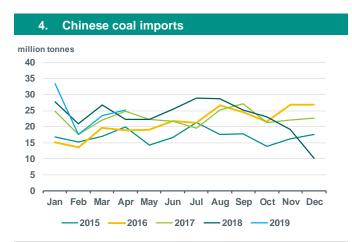
- (1) international geopolitical tensions,
- (2) low gas prices resulting from the oversupply of gas/LNG,
- (3) higher-than-usual temperatures,
- (4) the expansion of Russia's port capacity for coal,
- (5) higher EU ETS prices.

As explained in our previous publication (press here), the Asian coal market, particularly the Chinese market, is able to swing the global coal market. Since the



beginning of 2019, China's attempts to stabilize domestic coal production resulted in a decrease in Chinese imports, especially from Australia (see Figure 4). In addition, the low contract price of Australian thermal coal agreed with Japanese utilities (Japan is the largest buyer of this product) put downward pressure on Rotterdam coal prices. This resulted in prices plummeting more than 15% (see Figure 5). The short-term decrease in coal prices on the forward curve has increased the contango on the Rotterdam coal curve as near contracts were at a discount from those further in the curve. Since mid-April and early May, Chinese imports have started to increase and political tensions in the pacific basin have eased, pushing Rotterdam thermal coal prices back to \$60/tonne from \$54/tonne.

We expect Rotterdam coal prices to remain under pressure over the course of the summer in light of the continued inflow of gas imports into Europe, strong EU ETS prices (~\$25/Mt), higher seasonal temperatures that support lower coal demand, and higher wind generation. However, increased imports from China and India due to the start of the cooling season may support coal prices in the Pacific basin and hence the Atlantic basin, creating a floor at \$60/tonne.





Source: Thomson Reuters, ABN AMRO Group Economics

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The EU ETS price surge

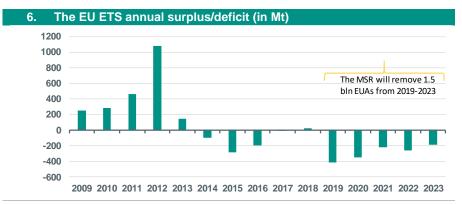
The carbon price has been on the rise throughout April. Factors contributing to the tailwind are:

- (1) the Market Stability Reserve (MSR), which started in January,
- (2) the 30 April deadline for companies to surrender their carbon permits on their 2018 emissions.
- (3) financial speculation,
- (4) the postponed Brexit deal.

The MSR, which was initiated this year as an instrument to tackle oversupply in allowances and remove the EUA (European Emission Allowances) from auctions (see Figure 6), has pushed the EU ETS price up to an 11-year high of \$27.5/Mt. The price increase was further supported by companies racing to comply with the 30 April deadline to get their 2018 emissions covered.



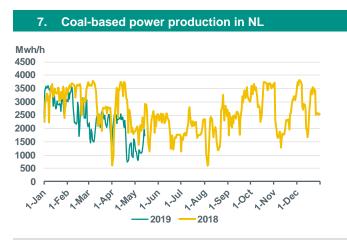
Following the Brexit postponement, fears of a carbon allowances dump eased in March/ April, which contributed to the EUA price increase. And finally, prices were further fuelled by the EU ETS hedges and trader speculation. For the coming two quarters we expect prices to continue hovering around \$25/Mt.

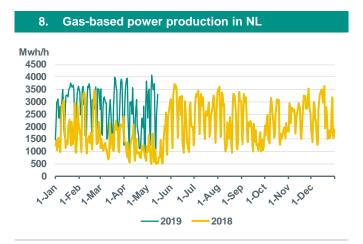


Source: EU Commissions, Thomson Reuters

Dutch electricity baseload price - bearish short-term view will turn bullish

Since March 2019, coal power production in the Netherlands fell on an annual basis, while gas power production increased compared to the year-earlier period. This indicates a shift from coal to gas in the merit order (see Figures 7 and 8).





Source: Thomson Reuters, ABN AMRO Economic Bureau

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Although the prospects for gas and coal prices continue to be weak this year, it appears in the short term that the price of ETS will offset this downward pressure on the electricity wholesale price. We therefore expect the price in the coming two quarters to stabilize at around €43/MWh.

In the long term – from 2020 onwards – the Dutch baseload electricity price is expected to gradually increase and remain around €50/MWh due to:



- (1) strong carbon prices hovering around \$25/Mt on the back of a tighter carbon allowances market,
- (2) higher demand for gas with a tighter supply market (i.e., higher gas prices from 2020 onwards),
- (3) an incremental phase-out of efficient coal units from the generation mix,
- (4) the increasing demand for flexibility, which could lead to a de-mothballing of Combined Cycle Gas Turbines (CCGT).

The increase will gradually slow due to the increasing penetration of subsidy-free renewables both nationally and from neighbouring countries.

Average		Q2 19	Q3 19	Q4 19	2019	Q1 20	Q2 20	Q3 20	Q4 20	2020	2021
Dutch Wholesale baseload electricity	€/MWh	43	43	50	45	54	48	46	50	50	52

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