

Electricity Monitor

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Fluctuating electricity prices

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- Coal has been under pressure not only because it is losing grounds from an environmental perspective ...
- ... but short term, emission and fossil fuel prices have been putting equal pressure downwards on coal powered generation
- European gas prices saw record low price levels since 10 years – a trend supported by high LNG inflows...
- ...however, an abrupt increase in gas prices in mid of July caught almost everyone by surprise
- Emission price remains volatile and continues to impact electricity price positively

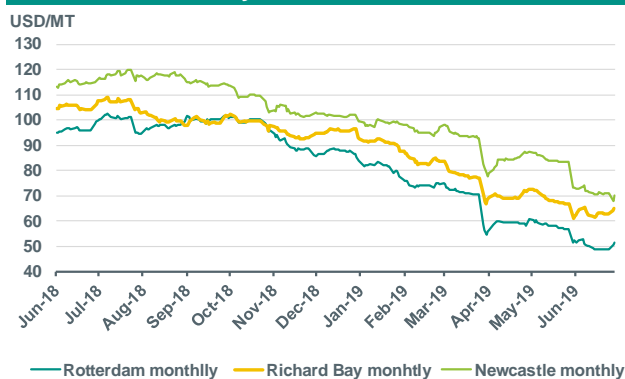
Coal prices losing ground

Thermal Coal prices have halved since July 2018 and continue to decline month on month. Short term, the Rotterdam coal price (monthly contract) went down to USD 50/MT in June, from USD 58/MT the previous month. The Newcastle coal price witnessed a similar decrease from USD 85/MT to USD 71/MT (Figure 1). Amid environmental concerns and a high emission price, thermal coal has been put under pressure. Low gas prices have also eaten up from coal market share and depressed coal in the merit order¹. The high European coal stocks and the dwindling Chinese imports ([see earlier publication](#)) have also contributed to the price pressure on coal. Finally high wind and solar generation (Germany producing 12TWH more than the previous year) contributed its fair share in driving coal out of the European merit order.

Looking at the coal forward curve (Figure 2), and given that the European electricity demand is still on the rise, it can give a signal of a comeback of coal especially as gas prices started to rise since mid of July. However, what we see now is that coal prices are also on the rise (10% increase since end of June). However since EU ETS price is on the rise as well (~EUR 29/MT), this will continue to punish coal in the short term.

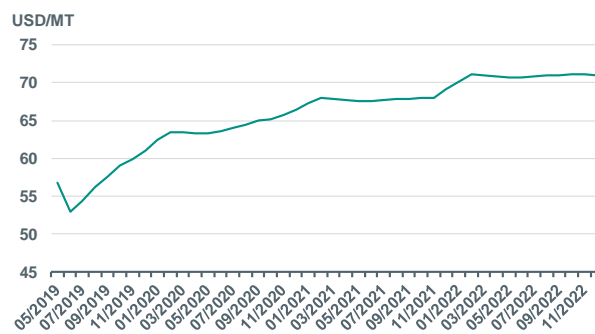
¹ The order of power stations in which they contribute to the power market

1. Coal monthly contracts



Source: Bloomberg, ABN AMRO Economic Bureau

2. Rotterdam coal forward curve

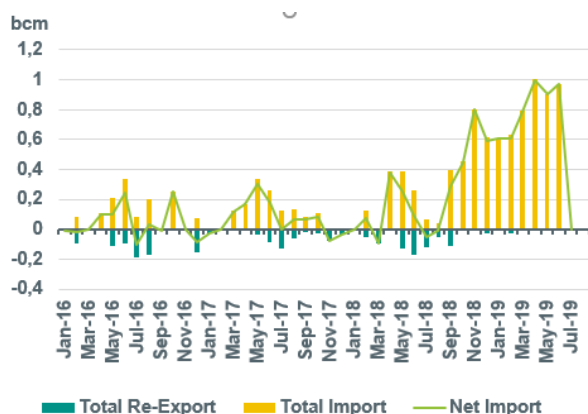


Source: Bloomberg, ABN AMRO Economic Bureau

Gas prices saw record low levels in June...

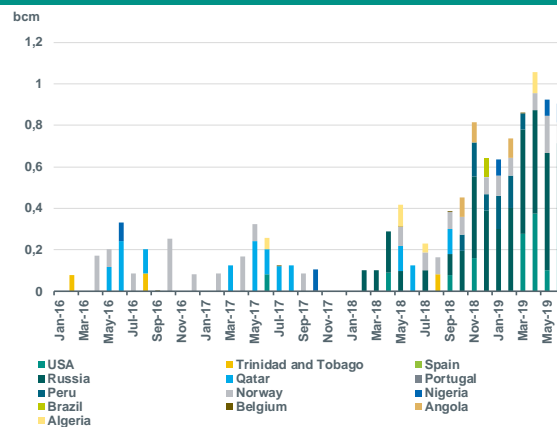
During the course of June, the continued inflow of gas entering Europe (pipeline gas) and the record high storage in Northwest Europe have brought TTF gas prices below EUR10/MWh. Another factor contributed to the bear gas market is LNG landing into Europe. Looking into the figures of LNG net imports into the Netherlands, the total 2019 inflows are at record high in comparison to the previous two years (see figure 3) with the majority of the inflow coming from Russia, USA, and Norway (Figure 4). However, the TTF price fell to levels around USD 4/mmbtu in June – this is considered a resistance but also an infliction point for US LNG exports as it can put to test their profitability levels. US LNG feed price is around USD 3/mmbtu and transportation to Europe ranges between USD 0.6 and USD 0.9/mmbtu. Therefore, US LNG continues to have an impact on European gas prices.

3. Monthly LNG net imports into NL



Source: Thomson Reuters, ABN AMRO Group Economics

4. LNG gross imports into NL by region



Source: Thomson Reuters, ABN AMRO Group Economics

... but abrupt strengthening in July increases gas price volatility

Since the second week of July, we saw an abrupt increase in TTF gas price from ~EUR 10/MWh to EUR 13.8/MWh (Figure 5). Planned and unplanned outages that are limiting the Norwegian and Russian gas inflows have put some upward pressure on

gas prices. Coal price increase (10% increase in Newcastle index since the end of June) and the EU ETS price peaking to levels above EUR 29/MT are driving gas demand upwards, since it is a source of cleaner input. As a result, we see support for gas prices and increase in gas price volatility as the coal-to-gas switching continues, which leads to a rise in gas demand. Moreover, the increased share of renewable energy in European power generation and the need for backup capacity to mitigate the intermittency of renewables is putting gas demand at a favoured position. Not to forget, market speculation which can also be a contributing factor to this abrupt increase in TTF gas prices and gas price volatility.

5. TTF gas monthly contract

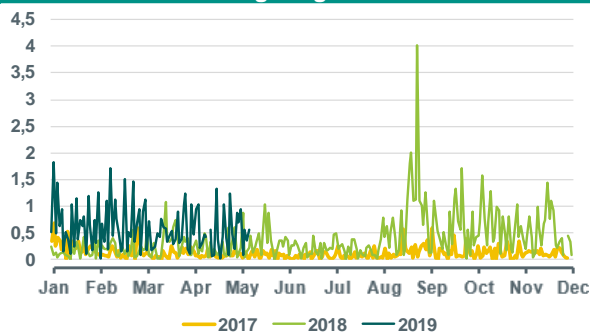


Source: Bloomberg, ABN AMRO Group Economics

EU ETS continues to impact the electricity wholesale price

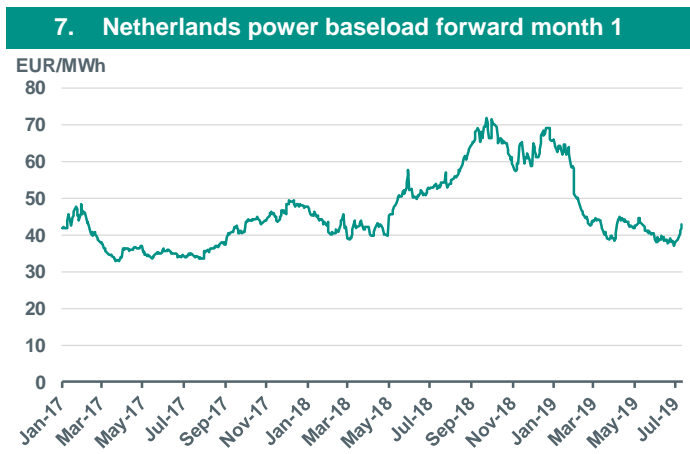
In the course of the second half of June, lower renewable energy production and a heat wave triggered higher thermal demand, and as a result, the EU ETS spiked to EUR 27/MT. Now EU ETS price continued its rally to EUR 29/MT as a result of short term increase in fossil fuel prices. Therefore, the EU ETS remains volatile on the back of the stronger/weaker fossil fuel prices, auctioned volumes to market, speculative behaviour, and – indirectly - weather forecast. This is portrayed in Figure 6. This shows that volatility (trading range) is higher in 2019 than earlier years, but lower than the Fall season last year, as volatility peaked during the second half of 2018.

6. EU ETS trading range



Source: Thomson Reuters, ABN AMRO Group Economics

Until the end of June, the EU ETS price seemed to offset the downward pressure of coal and gas prices on the electricity wholesale price and that's why electricity prices remained trading around EUR 40/MWh during Q2 2019 (Figure 7). Since July, as coal and gas prices witness an increase, the EU ETS is adding to the upward pressure and we see electricity prices being pushed above EUR 45/MWh. We maintain our forecast for the Dutch electricity price as follows ([refer to previous publication](#)).



Source: Bloomberg, ABN AMRO Group Economics

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

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