

Electricity Monitor

Group Economics
Emerging Markets & Commodity
Research

13 September 2019

Electricity prices: Upside Potential on the Horizon

Farah Abi Morshed
Energy Economist

Tel: +31 6 1095 2889

farah.abi.morshed@nl.abnamro.com

- The Dutch wholesale electricity price to see a gradual increase on the back of tighter commodity markets moving forward
- Coal power generation to witness some upside potential as coal-to-gas switching frequency decreases
- Oversupply of LNG on the European market is pushing down gas prices...
- ... but storage limitations and increased demand will gradually tighten the market
- Fuel switching and a tighter market for carbon allowances will continue to set the carbon emission price

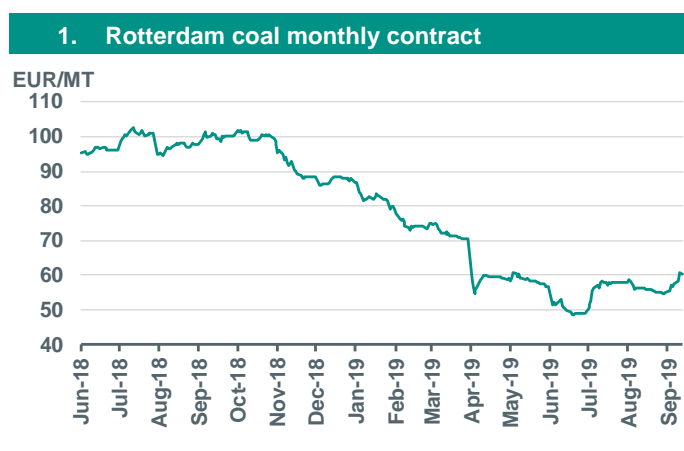
In August we have seen a slight decrease in the wholesale electricity price (first monthly baseload contract), but on average the electricity price has been moving in a stable manner (~€40/MWh). This is driven by a weaker global coal and gas market. Not until the second week of September that the Dutch electricity price surged to €45/MWh on the back of the French nuclear output concerns, Groningen earlier than expected phase-out, and legal restrictions on the Russian gas via the Nord Stream line. We expect that until the end of the year, the wholesale electricity price will gradually strengthen as the coal and gas markets tighten. From 2020 onwards, prices are expected to reach around €50/MWh.

Coal power generation to see some upside potential

Compared to last year, coal power generation has been under pressure due to a reduction in the economic viability of coal-fired power plants. This reduction was caused by higher emission prices, which have been punishing coal and will continue to do so. Meanwhile, the decrease in electricity prices, in comparison to a year ago, is also reducing the margins of coal generation. And the bearish gas market has also been putting pressure on the coal market, which is resulting in a continuation of coal-to-gas switching in H2 2019. This is reducing the coal share in the power generation mix.

In light with the French nuclear output concern only in the last week, coal and gas have seen a temporary demand boost and price surge (see Figure 1). Given the degree of interconnection in Europe and France's huge dependency on nuclear for power production (~44%), this resulted in the French, German and Dutch power prices and fossil fuel commodity price indices to surge. It remains to be seen whether these problems will lead to reactor closures which will result in a longer boost for prices.

These concerns come at a time where the demand for energy is increasing ahead of the winter heating season. However, coal-to-gas switching is expected to continue but the frequency of switching is expected to decline as the gas market will grow tighter and gas prices increase (more on that in the coming section). This decrease in the frequency of coal-to-gas switching will lead to an increase in demand for coal-power generation. This will lead to upside potential for coal demand leading to a slight recovery in coal prices in the coming months on the back of cold temperatures in Q4 2019 (see Figure 1). After all, seasonal electricity demand increases during the winter season. More structurally, if electricity demand in Asia picks up as well, we also expect to see an increase in demand for coal power generation. Lastly, the supply from the biggest exporters (Russia, Australia and Indonesia) will continue to be a stabilizing factor.



Source: Bloomberg, ABN AMRO Group Economics

The picture of a bearish gas market is about to change

Asian demand for LNG declined in H1 2019 compared to H1 2018 (see Figure 3). China is the only country that has seen some growth since H1 2018 but this growth is only half of what it experienced in LNG demand growth from the 2016/2017 figures. On the other hand, LNG global supply increased by more than 12% in H1 2019 versus last year. As a result, the LNG surplus is being diverted to Europe, as Europe has LNG/gas storage capacity. This pushed down European gas hub prices due to the oversupplied market. It does not come as a surprise that the decline in European gas prices coincided with the decline in demand in Asia and the global supply increase.

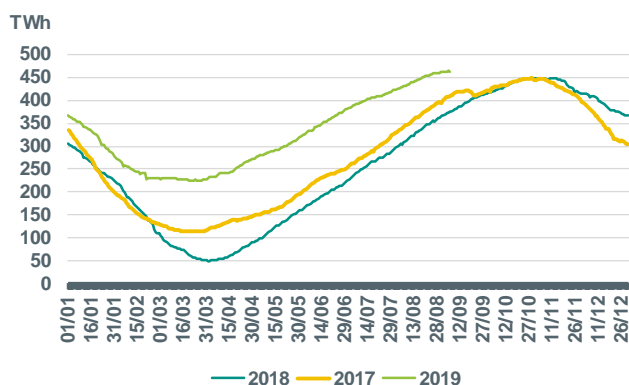
However, the picture seems to change now. With a total storage capacity of 500 TWH, gas storage in Europe is close to record high levels, which will be reached by September as Europe continues to absorb the LNG surplus (see Figure 2). This means gas storage is running six weeks ahead of its normal seasonal pattern. Due to limitations in LNG storage capacity, this curtails the risk of a further gas price drop beyond September.

Less structurally, TTF gas price volatility has surged in the second week of September on the back of: 1) concerns on nuclear reactor closures in France, 2) the news on Groningen earlier than expected phase-out, and 3) the legal restriction on the use of a

gas link that receives Russian gas via Nord Stream. In other words, any news that can eat up from the record high gas storage is going to result in high price volatility.

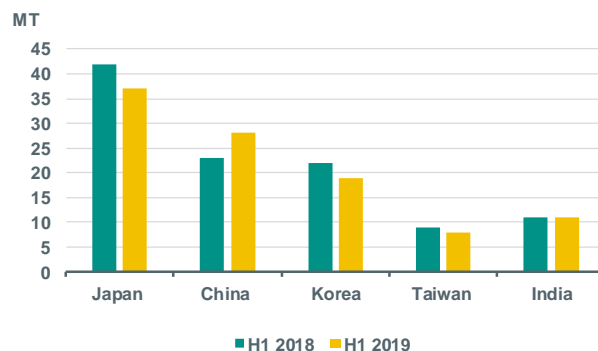
As such, the gas price is expected to recover gradually in the coming quarters as the market grows tighter on increasing heating demand during the winter and the concerns on planned and unplanned gas supply downtime.

2. Europe gas storage (BEL, FRA, GER, NLD)



Source: Thomson Reuters, ABN AMRO Group Economics

3. LNG demand breakdown in Asia



Source: Thomson Reuters, ABN AMRO Group Economics

Emission price set by the fuel-switching range, supported by the MSR

The risk of recessions and the trade war dispute are weighing on energy commodities in general. This conversely affects the carbon price as well, putting the EU ETS price (Emission Trading System) under pressure (~ €27/mt) (see Figure 4). However, the EU ETS price is not just influenced by power generation demand from economic development but also by industrial demand, the weather, expected renewable energy generation levels and the short-term fuel-switching range.

According to Bloomberg, with temperatures expected to be slightly above normal through the end of summer and lower renewable energy generation in Northwest Europe, an increase in demand for thermal generation is expected. This puts upward pressure on the EU ETS price in the short term. Furthermore, a higher gas price in the medium term, resulting in less coal-to-gas switching could set the price for emissions at the higher end (~ €29/mt). This is due to higher demand for carbon allowances by coal-fired power plants. It therefore appears that fuel prices, and the volumes of fuel switching required, continue to structurally set the price for carbon.

4. EU ETS price, monthly contract



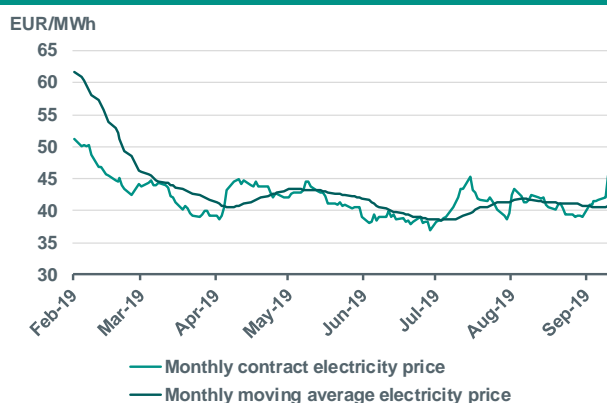
Source: Thomson Reuters, ABN AMRO Group Economics

Electricity price upside potential on the horizon

Up to July 2019, the Dutch electricity price remained flat within a bearish global coal and gas market. Since August 2019, we have seen a slight decline in the Dutch wholesale electricity prices (monthly contract), driven by a weaker global coal and gas market as well as a decrease in emission prices (Figure 5). Not until the second week of September that the Dutch electricity price started to gain on the back of the gas and coal price volatility driven by France's nuclear output concerns and the legal restriction on the use of a gas link that receives Russian gas via Nord Stream. Overall, electricity prices seem to have broken the range-bound (EUR 37-45/ MWh) which has been the case since March 2019 (see Figure 5).

The Dutch wholesale electricity price has proven to be able to defy bearish commodity prices. We expect the Dutch wholesale electricity price to gradually increase on the back of a tighter gas market moving forward, demand for coal recovering mildly but gradually, and high emission prices.

5. Netherlands' power baseload forward month 1



Source: Bloomberg, ABN AMRO Group Economics

In the long term – from 2020 onwards – the Dutch baseload electricity price is expected to increase and reach around €50/MWh due to: (1) higher demand for gas in a tighter supply market, (2) the incremental phaseout of coal from the generation mix, and (3)

carbon prices being supported by continuous reduction of auctioned volumes as per the market stability reserve.

DISCLAIMER

This document has been prepared by ABN AMRO. It is solely intended to provide financial and general information on economics. The information in this document is strictly proprietary and is being supplied to you solely for your information. It may not (in whole or in part) be reproduced, distributed or passed to a third party or used for any other purposes than stated above. This document is informative in nature and does not constitute an offer of securities to the public, nor a solicitation to make such an offer.

No reliance may be placed for any purposes whatsoever on the information, opinions, forecasts and assumptions contained in the document or on its completeness, accuracy or fairness. No representation or warranty, express or implied, is given by or on behalf of ABN AMRO, or any of its directors, officers, agents, affiliates, group companies, or employees as to the accuracy or completeness of the information contained in this document and no liability is accepted for any loss, arising, directly or indirectly, from any use of such information. The views and opinions expressed herein may be subject to change at any given time and ABN AMRO is under no obligation to update the information contained in this document after the date thereof.

Before investing in any product of ABN AMRO Bank N.V., you should obtain information on various financial and other risks and any possible restrictions that you and your investments activities may encounter under applicable laws and regulations. If, after reading this document, you consider investing in a product, you are advised to discuss such an investment with your relationship manager or personal advisor and check whether the relevant product – considering the risks involved – is appropriate within your investment activities. The value of your investments may fluctuate. Past performance is no guarantee for future returns. ABN AMRO reserves the right to make amendments to this material.

© Copyright 2019 ABN AMRO Bank N.V. and affiliated companies ("ABN AMRO")