

WINTER NATURAL GAS MARKETS OUTLOOK

Dr Aura Sabadus Senior reporter, ICIS Kyiv, 11 October 2018



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Corporate structure











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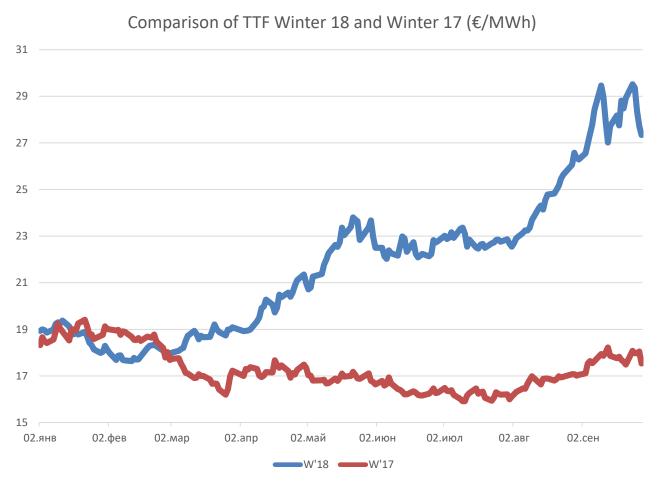
Discussion points

- 1. Commodities a brief review
- 2. LNG supply to Europe
- 3. Winter weather outlook for Europe
- 4. CEE gas supply outlook
- 5. Factors to watch out





1. Commodities: European winter gas price and supply outlook



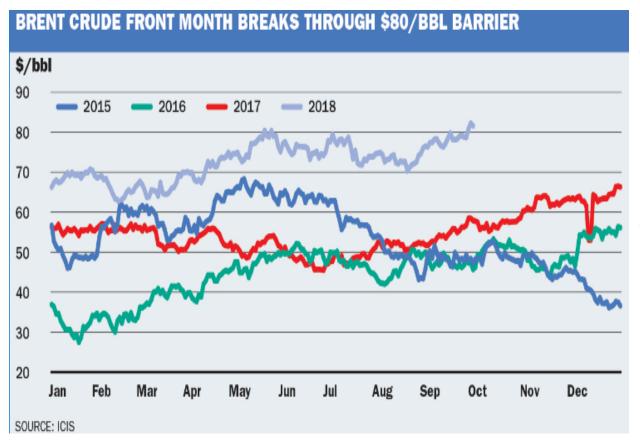
- Bullish outlook for the European benchmark TTF winter prices
- Prices driven up by carbon, coal, electricity prices, low (but improving) storage levels, falling production at Dutch Groningen gas field
- There may be flexibility on Russian supplies which could be ramped up to cover spiking demand
- Norwegian production set to be range-bound year on year at 33bcm in Q4 '18.
- More LNG could reach European markets if hub spreads to East Asia narrow
- Traders significantly more cautious following the surge in demand at the end of Winter '17.
- Much will depend on weather



Source: ICIS



Commodities – Brent crude prices

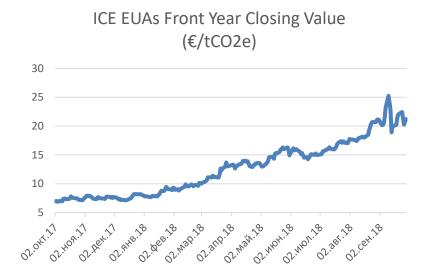


- Recent upside may be ephemeral as US producers could start to ramp up production
- Concerns persist regarding Venezuelan supplies and pending sanctions against Iran





Commodities: Coal and carbon prices



Benchmark December '18 carbon prices expected by ICIS to reach €21.65/tCO2e. ICIS expects Q1 '19 carbon prices around €23.70/tCO2e

Rotterdam coal futures forecast at around \$100/tonne throughout the remaining part of 2018

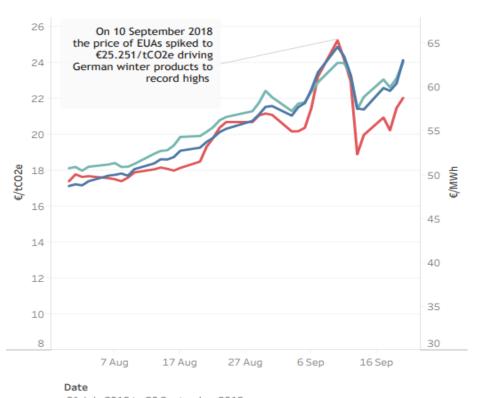
ICE Rotterdam Coal Futures Month +1 Closing Value (\$/tonne)





Source: ICE coal, carbon prices

Commodities: European electricity outlook



31 July 2018 to 20 September 2018 and Null values

EUAs Dec '18

ICIS price assessment German power Q1 '19

ICIS price assessment German power Q4 '18

- Electricity prices across

 Europe expected to be bullish

 on the combined effect of

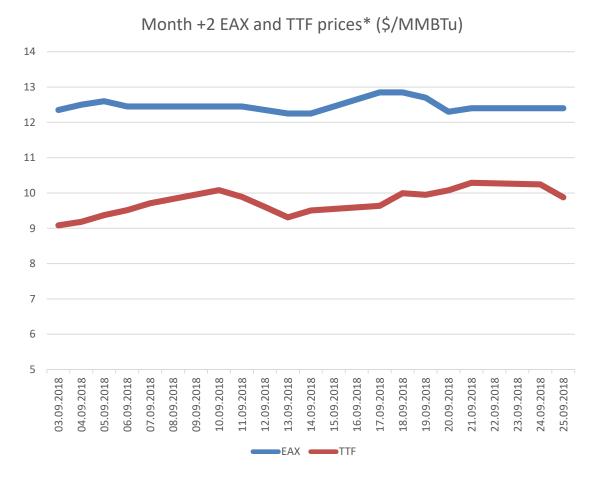
 strong carbon/coal prices
- Further upside could come from Belgian nuclear outages

 only one out of seven
 Belgian NPPs to be online until end of 2018. Further
 Belgian outages expected in Q1 '19
- French nuclear availability around 83%, the highest in the last four years.
- Downside will hinge on weather and wind availability



Source: ICIS, ICE

2. LNG winter supplies to Europe



- Bearish potential for East
 Asia on mild winter
 forecasts for Japan and
 new supplies to be brought
 online at Australia's
 Prelude and Ichthys
 projects in upcoming
 months
- New production plants scheduled for Q4 '18 at US Sabine Pass Train 5 and Corpus Christi Train 1 as well as Russia's Yamal Train 3
- New supplies to reach
 Gate (NL) from Peru on 15
 October
- Supplies into Europe expected from US, Yamal as hub prices tighten spread against EAX.
- Fewer reloads/re-exports from Europe to Asia
- Some upside expected from India
- Uncertainty over US LNG supplies to China amid tariff wars.



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TTF prices include M+2 and M+3 to align with the mid-month changes in EAX prices. Source: ICIS

3. Winter weather outlook for Europe

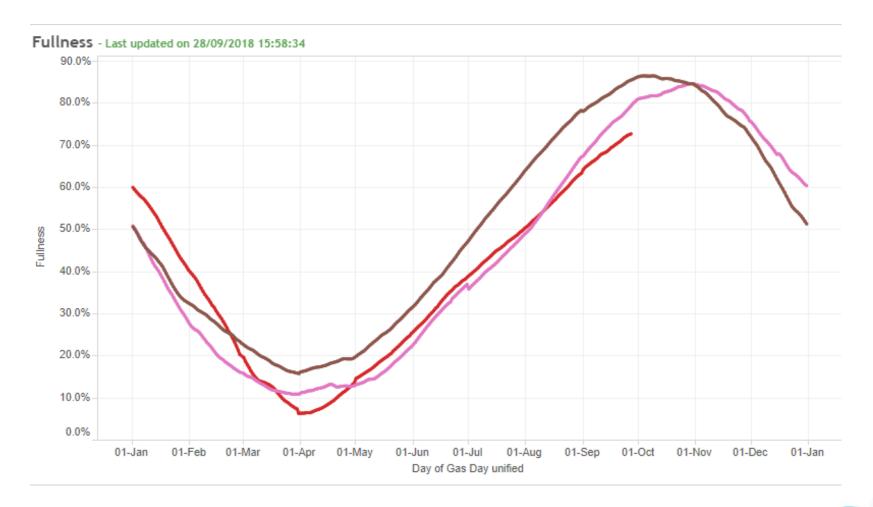
The Weather Company forecast (02.10.2018)

- Central Europe will be in the "battle zone" between the high pressure to the northwest and low pressure to the southeast.
- That should mean enhanced intra-seasonal volatility, with some weeks quite cold when the high pressure "wins out" and other weeks warm and wet when the low pressure expands northward a bit.
- In aggregate, it should result in near-normal temperatures and precipitation for the winter as a whole.





4. CEE gas supply outlook - storage





CEE – country-specific factors

Germany, NCG



- Storage 69% full, 7% down yoy
- Could export to NL if TTF prices at premium
- 30% of German households reliant on Groningen L-gas supplies

Slovakia



- Storage 64% full, 17% down yoy
- German demand likely to impact
 Slovak and Czech supplies/prices
- Could be impacted by high demand
 in Ukraine

Chemicals Energy Fertilizers Prices | News | Analysis | Consulting

Austria, VTP



- Storage 67% full, 7% down yoy
- Could start exporting natural gas to German, spread switches to Austrian discount
- Austria typically imports gas from Germany

Hungary, MGP



- Storage 62% full, unchanged yoy
- Has 1.2bcm of strategic reserves
- Exports more expensive because
 of winter transmission tariff

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6. Factors to monitor

- EAX/TTF hub spread could determine the level of LNG imports this winter
- Groningen winter production (Dutch government decisions expected in October/November)
- Winter weather
- Wind production







Thank you!

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