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EOSDATA - LEBA

# THE ROLE OF DATA IN DECARBONISATION

# BIG PICTURE

- ✗ Green House Gas emissions reduced by 34% by 2020; 80% by 2050 in Climate Change Act 2008, now proposed to 100% by 2050
- ✗ Electricity generation forms the most important part of the process of decarbonisation
- ✗ Sustainable decarbonisation of the economy is a crucial aspect of the UK's commitment to mitigating climate change
- ✗ Clean Growth Strategy – Renewable energy an opportunity & may be considered the most important

# BIG PICTURE

- ✗ Track rates of Carbonisation – no measurement = no strategy = no action
- ✗ Track various sectors – understand overall contribution factors
- ✗ Track emissions in gigatons vs pledges, policy scenarios and legislation
- ✗ The UK has been a leader in legislating long-term climate mitigation targets and crucially setting a binding institutional and reporting framework to ensure that carbon budgets are adhered to but this only be measured by data and science led initiatives
- ✗ Data will dictate

# DATA DICTATES...

- ✗ Data being thrown about in the very topical "Climate Change" debate
- ✗ Most famous recent data conversation on decarbonisation – Greta Thunberg said:
  - UK overstated its 42% stated reduction in greenhouse gases from its target to cut 80% of emissions from 1990 levels by 2050
  - Greta said true reduction is only 10% when including international aviation, shipping & imports....but these aren't included in agreed emissions data submission to the UN under the Kyoto Protocol
  - Data semantics?

# DATA DELIVERS...

- ✗ The Target is to move from a current average of 500g of CO<sub>2</sub> equivalent per kilowatt hour (CO<sub>2</sub>e/kWh) to less than 50g CO<sub>2</sub>e/kWh by 2050
- ✗ Need low or even zero carbon-emitting power plants
- ✗ How – initiatives to set targets on Green House Gas (GHG) reductions and decarbonisation emissions across companies not just sectors
- ✗ Science & data led move from sector-wide pathways to company specific pathways
- ✗ Can set the target but must provide evidence on how these are met
- ✗ Will have to be done through verifiable quantitative and qualitative data measurement









# LONDON ENERGY BROKERS' ASSOCIATION – LEBA

- ✗ Independent industry body formed in 2003
- ✗ Represents interests of Energy Brokers
- ✗ LEBA Ltd – Market Data Division
- ✗ Offers unique set of transactions-based indices
- ✗ Evolved to become global pricing benchmarks for energy

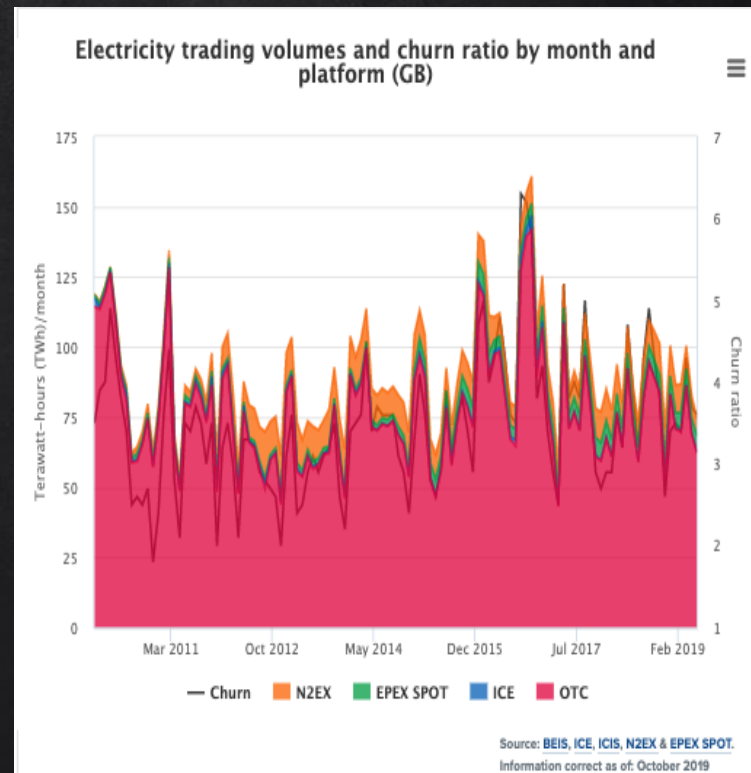
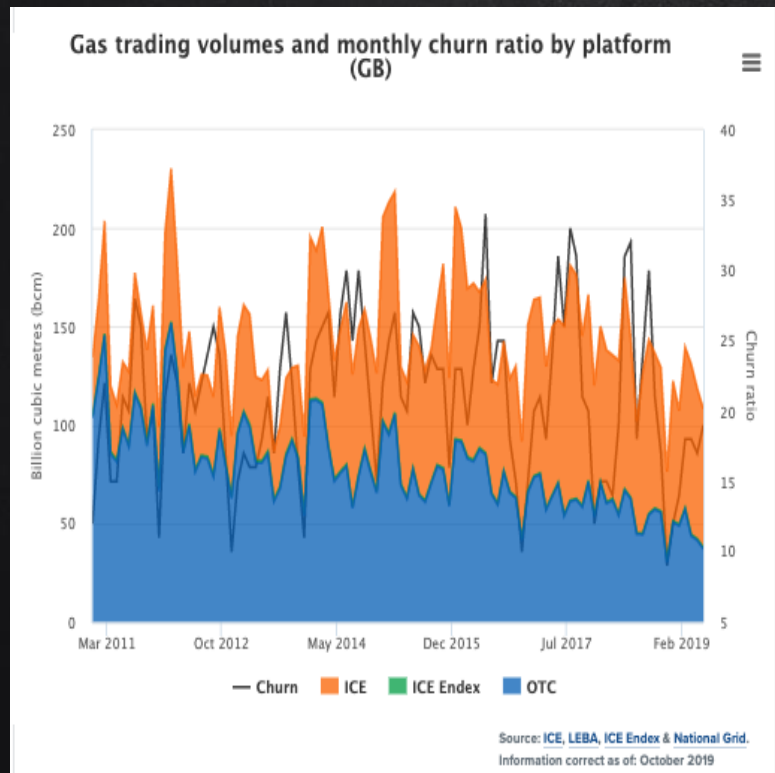
# LEBA DATA

## DESKTOP (END-USER) & APPLICATION DATA LICENCE

-  UK POWER PROMPT & FORWARD DATA
-  EUROPEAN GAS PROMPT & FORWARD DATA
-  UK GAS INDICES (NBP)
-  EUROPEAN POWER INDICES
-  CARBON EUA AND CER INDICES
-  COAL INDICATIONS



# GB OTC & EXCHANGE TRADING VOLUMES – GAS & ELECTRICITY



# EU OTC & EXCHANGE MARKET SHARE – GAS

August 2019

Emissions

Aug-19: 643 million mt



Coal

Aug-19 : 109 million mt



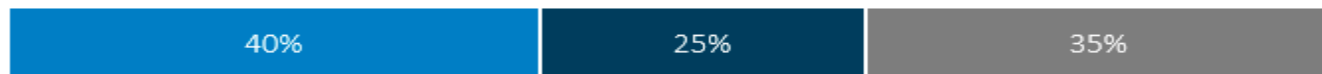
UK Gas

Aug-19 : 864 TWh



Euro Power

Aug-19 : 771 TWh



Euro Gas

Aug-19 : 3,307 TWh



UK Power

Aug-19 : 74 TWh



■ Broker Bilateral ■ Broker Cleared ■ Exchange Executed