

Sustainable finance



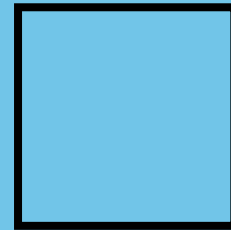
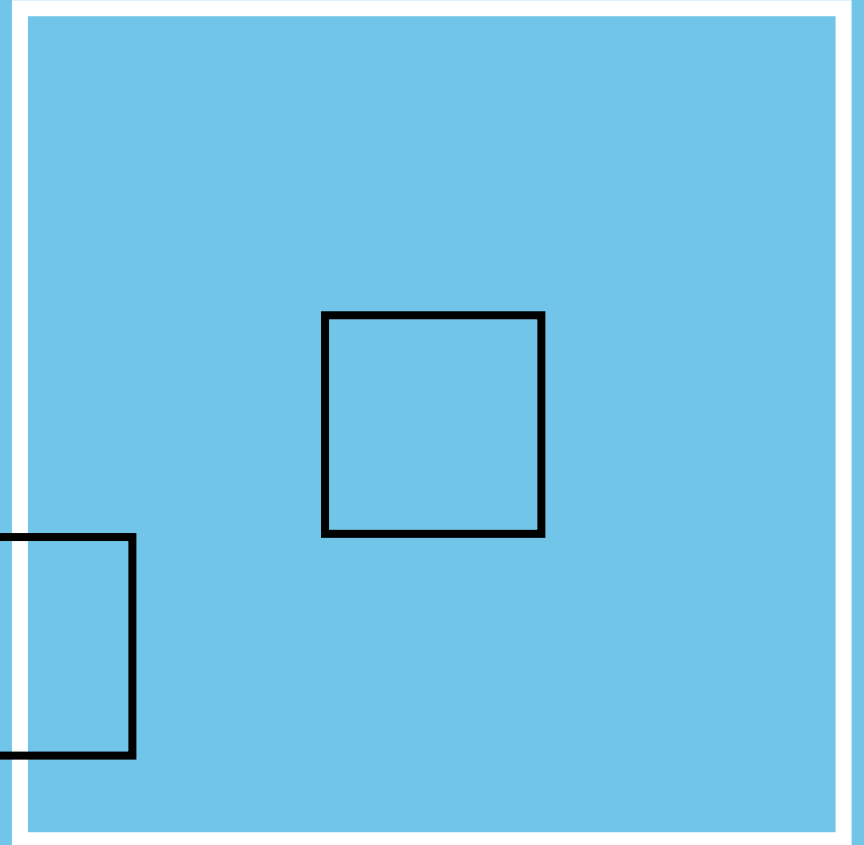
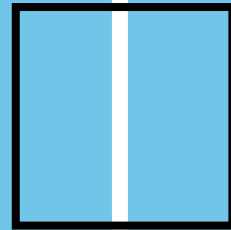
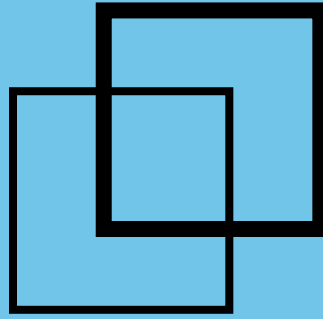
Gordon Bennett

Managing Director, Utility Markets

**CFTC's Energy and Environmental Markets
Advisory Committee**

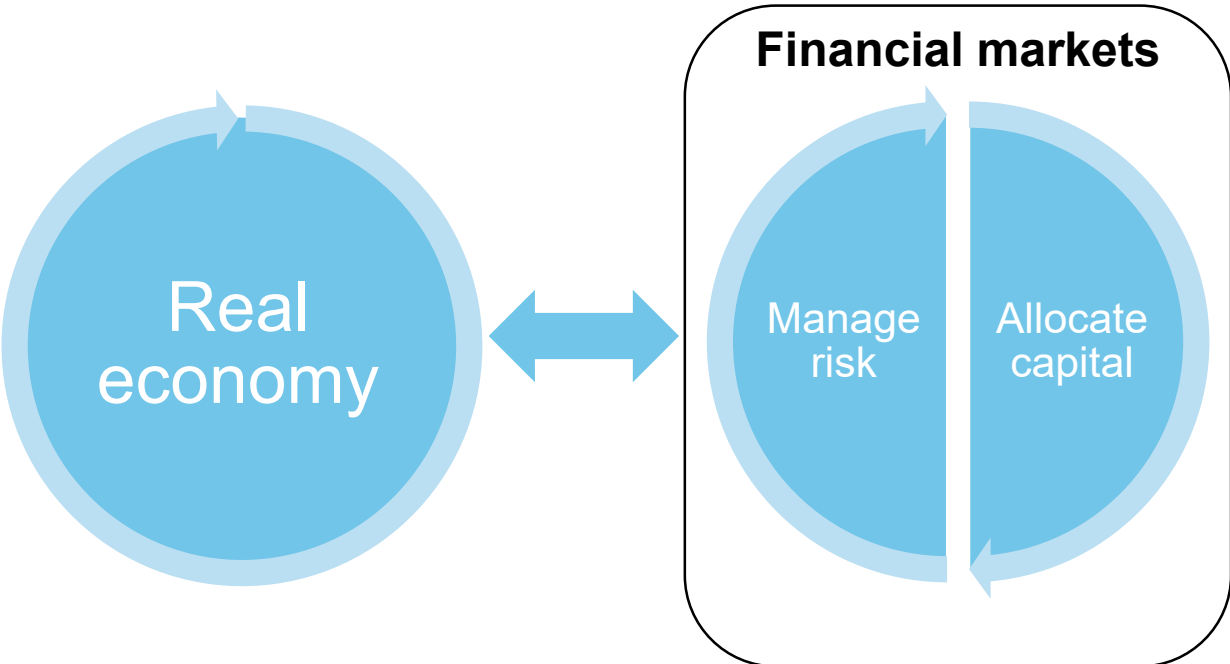
June 3, 2021

Macro themes

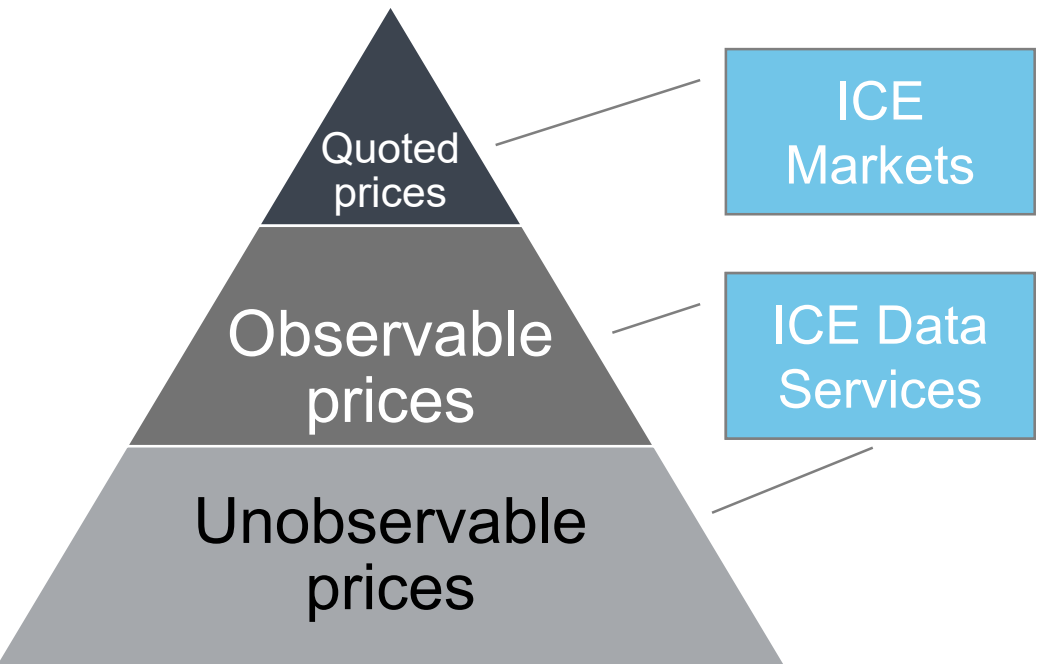


Macro theme - what is finance?

Purpose of financial markets



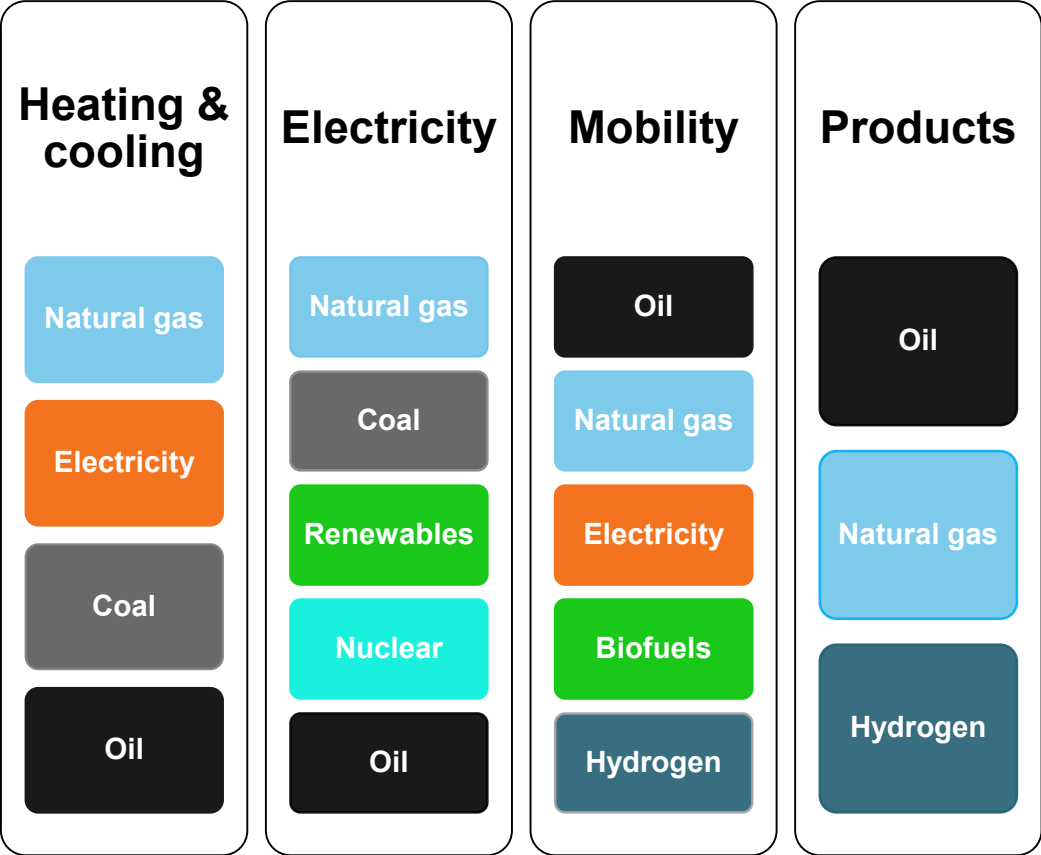
Fair value hierarchy



Macro theme - what is the energy transition?

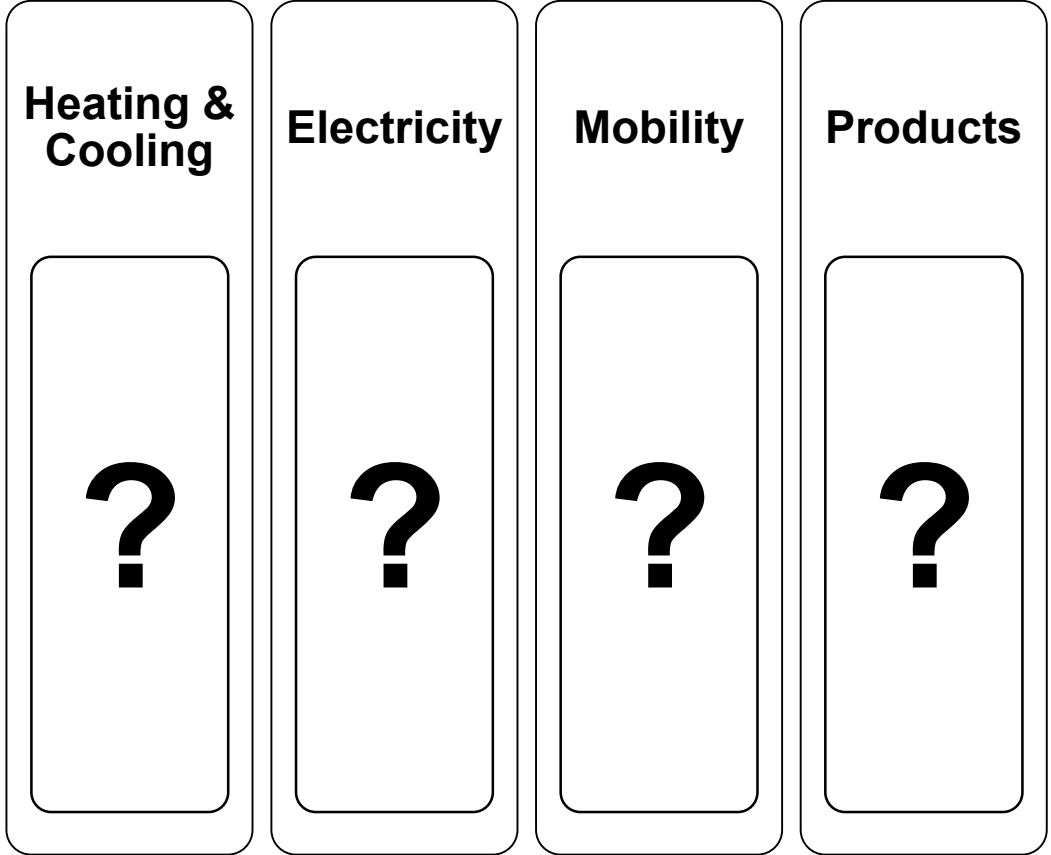
Changing the merit order to meet the goals of the Paris Agreement

Current fuel merit order



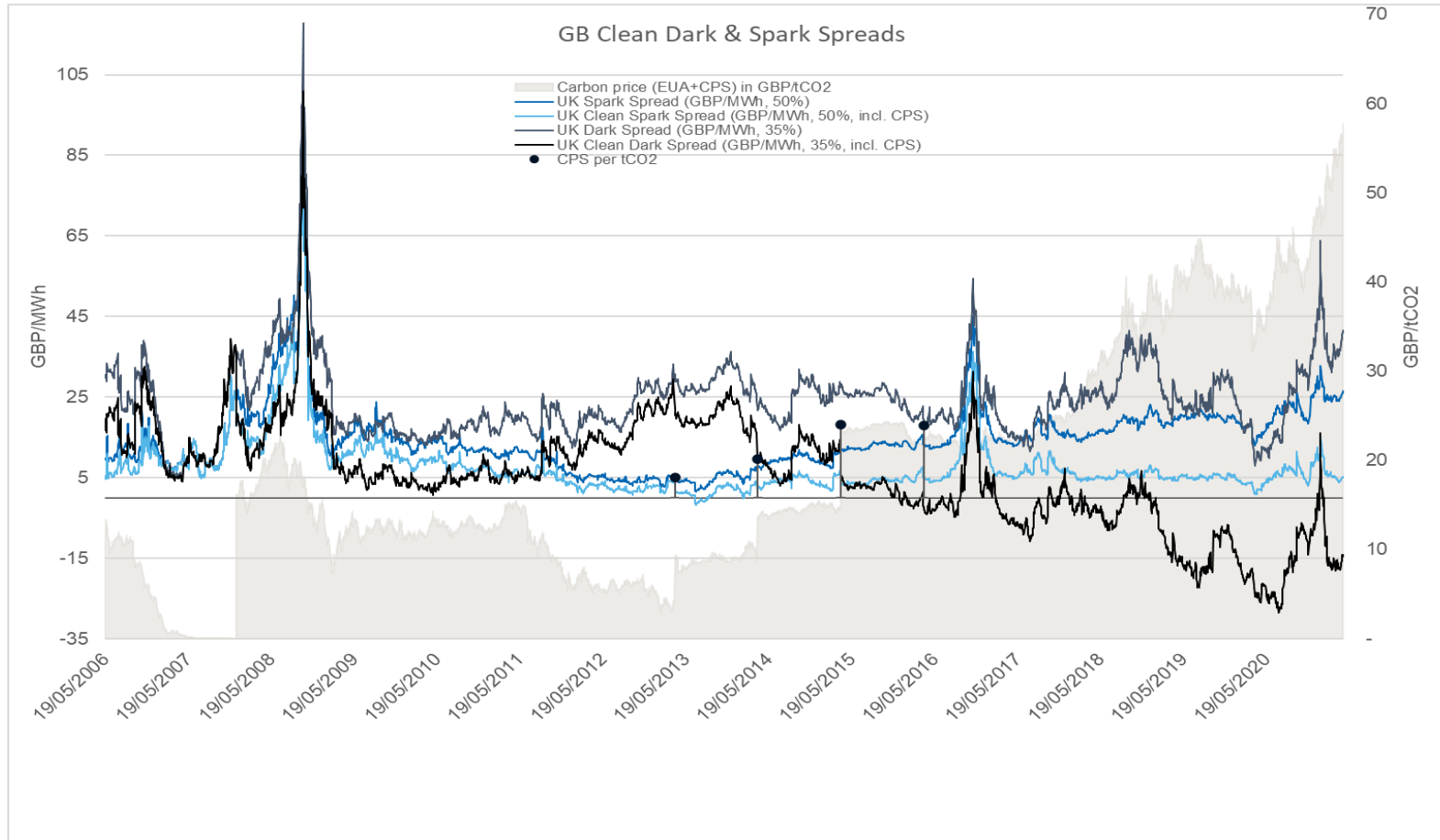
Carbonomics
➔

Future fuel merit order



Carbonomics: UK Case Study

When the price of carbon is taken into account, it is less profitable to produce electricity from both coal and natural gas

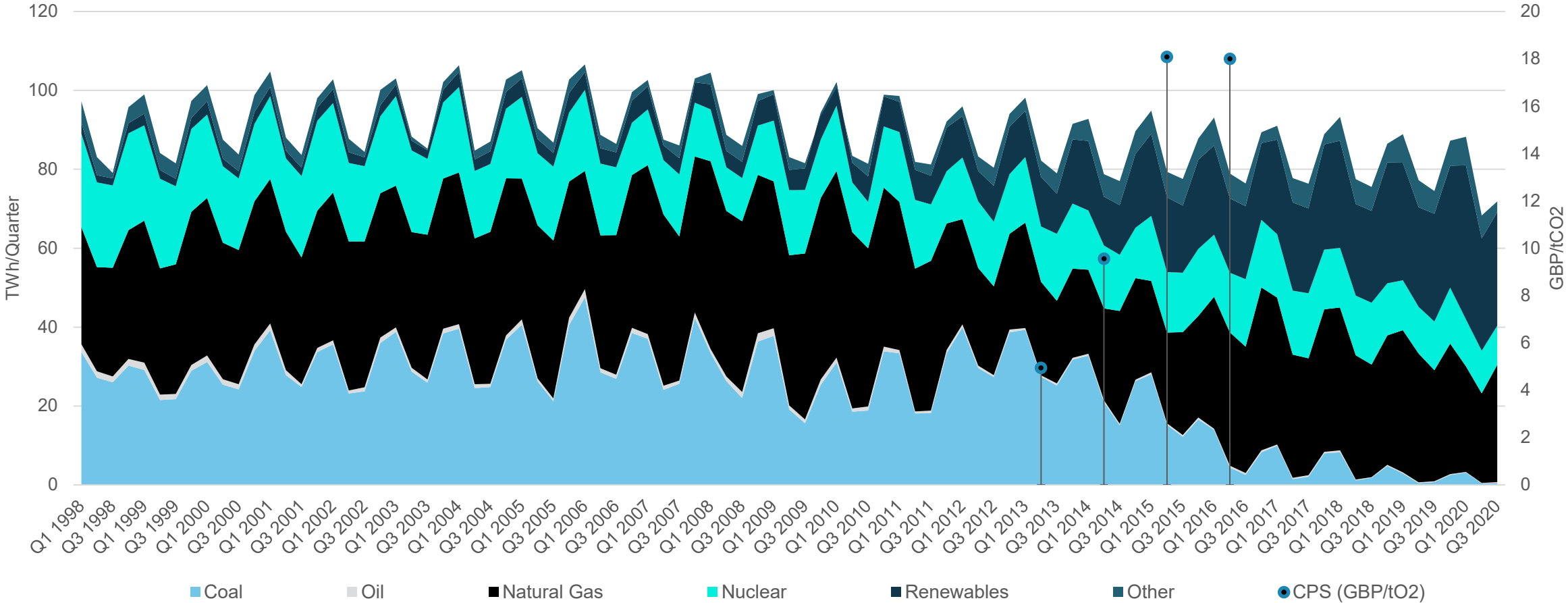


- Applying a cost of carbon can lead to a shift in the fuel merit order
 - In the first half of 2020, electricity generated from renewables exceeded fossil fuels, for the first time in the EU
 - Renewables generated 40% of the EU's electricity, fossil fuels generated 34%
 - The use of coal dropped 32%
- This will help to achieve the goals of the Paris Agreement

Carbonomics: UK Case Study Outcome

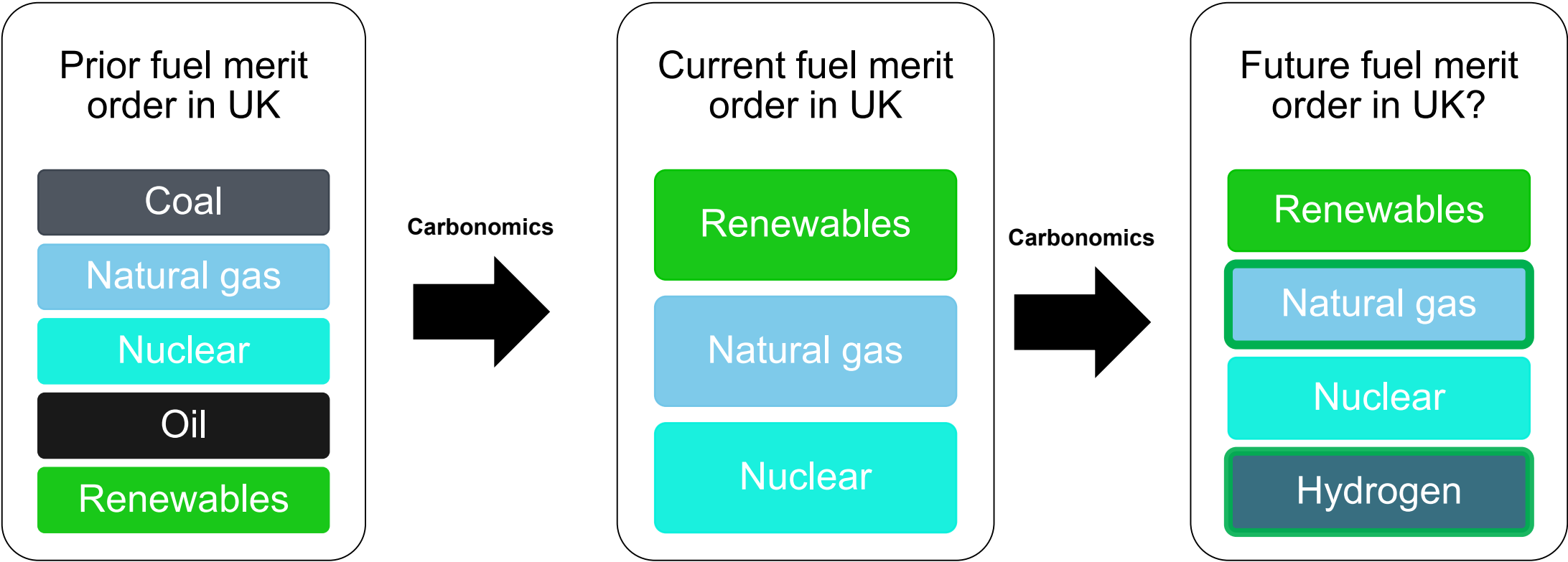
Coal is removed from merit order of electricity generation


GB Electricity generation mix by fuel source



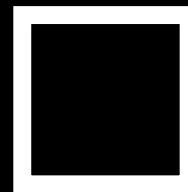
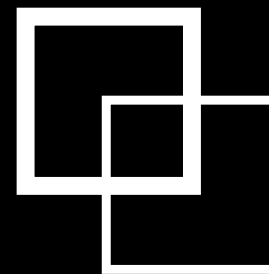
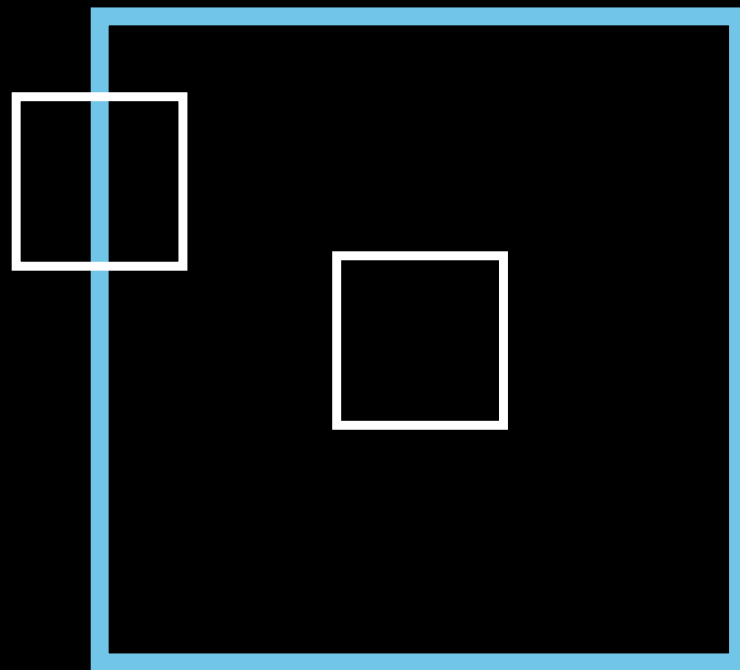
Macro theme - what is the energy transition?

Changing the electricity merit order to meet the goals of the Paris Agreement



 Carbon footprint is zero (or net zero by removal/avoidance) through Offset (Nature or Industrial)

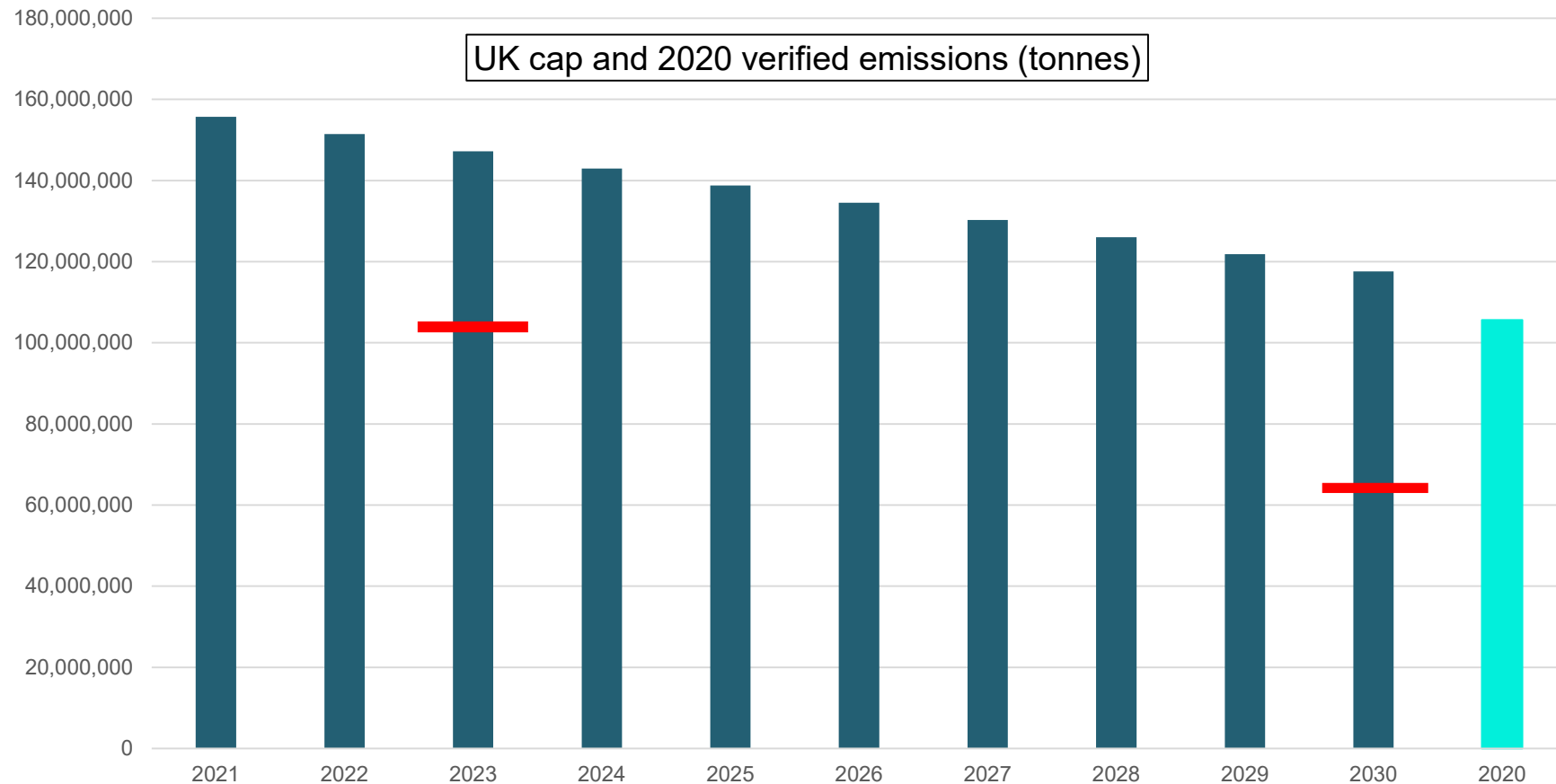
UK ETS



UK ETS

The Greenhouse Gas Emissions Trading Scheme Order 2020

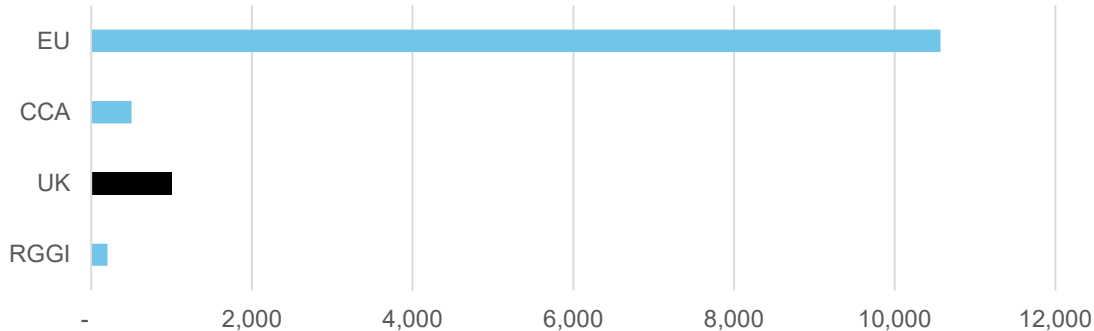
- Cap is 5% less than the applicable cap would've been under the EU ETS
- Cap is higher than the 2020 provisional emissions estimate under the ETS
- Cap is before the recent announcement to reduce emissions to 78% of 1990 levels by 2035
- Cap consultation due 3rd/4th quarter 2021



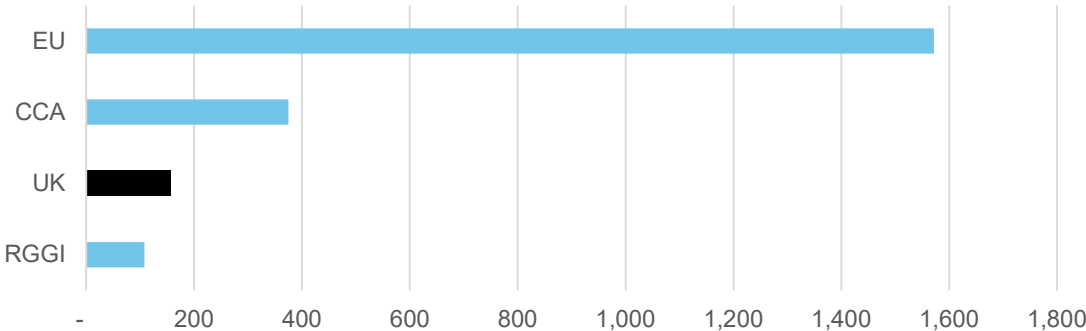
Source:
The Greenhouse Gas Emissions Trading Scheme Order 2020
EU Emissions Trading System (ETS) data viewer, European Environment Agency

Benchmarking the UK ETS

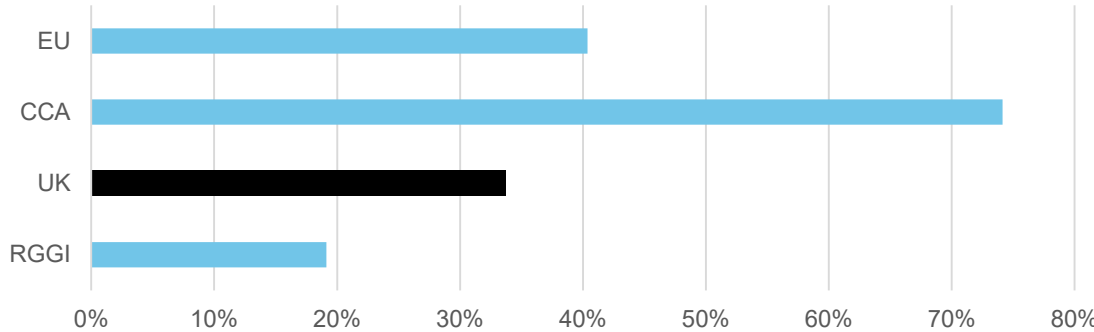
Installations



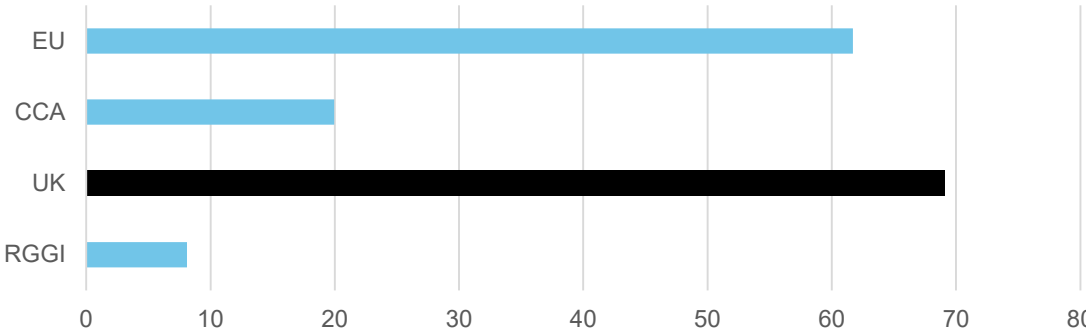
Cap (MtCO2e)



Coverage



Price (US\$)

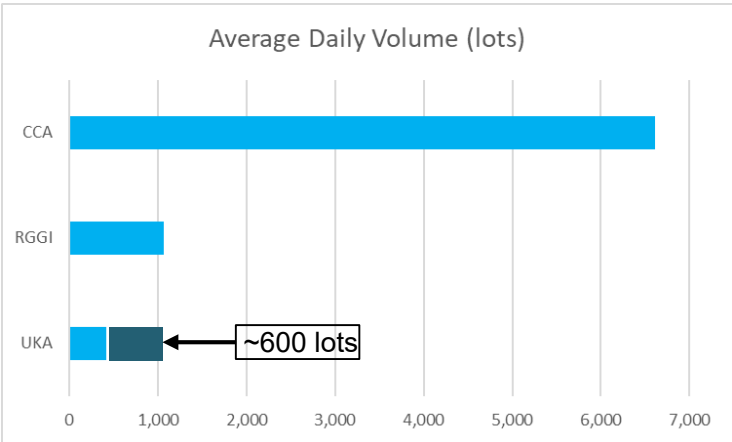
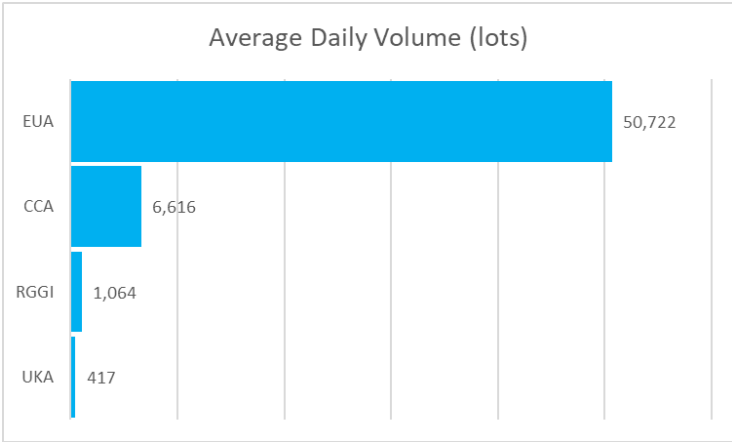


Source:
International Carbon Action Partnership



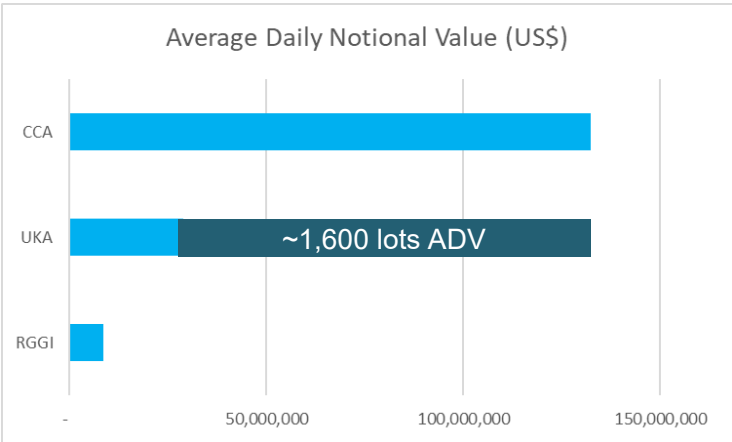
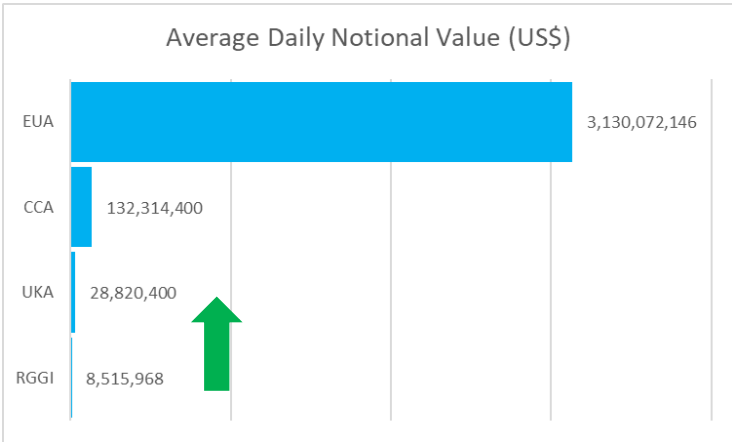
Benchmarking the UK ETS

Auction and first day of trading 19th May 2021



Auction 1 – 19th May

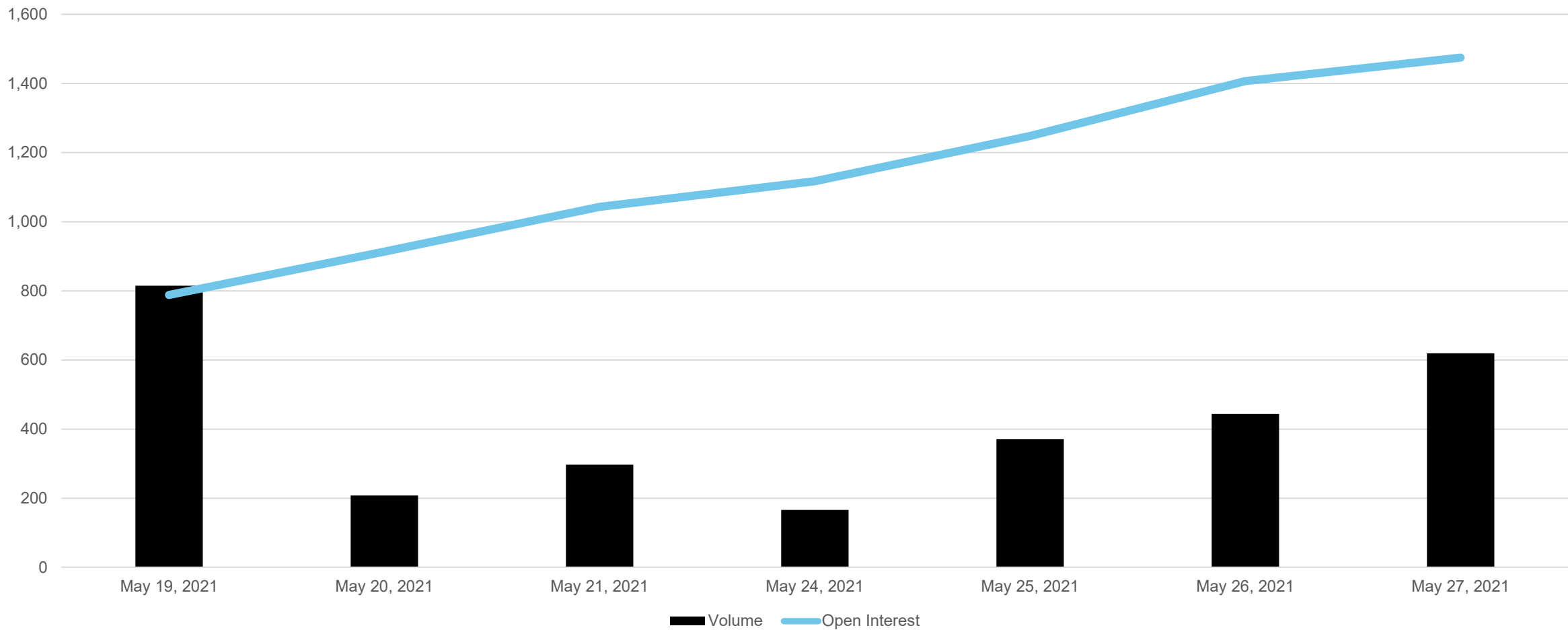
- 6 Million allowances sold at Auction at £43.99 per tonne raising over £266 Million
 - Trading at a premium to EUAs
- Over 29 Million allowances bid for giving a cover ratio of nearly 5 times
- 14 successful bidders



Auction 2 – 2 June

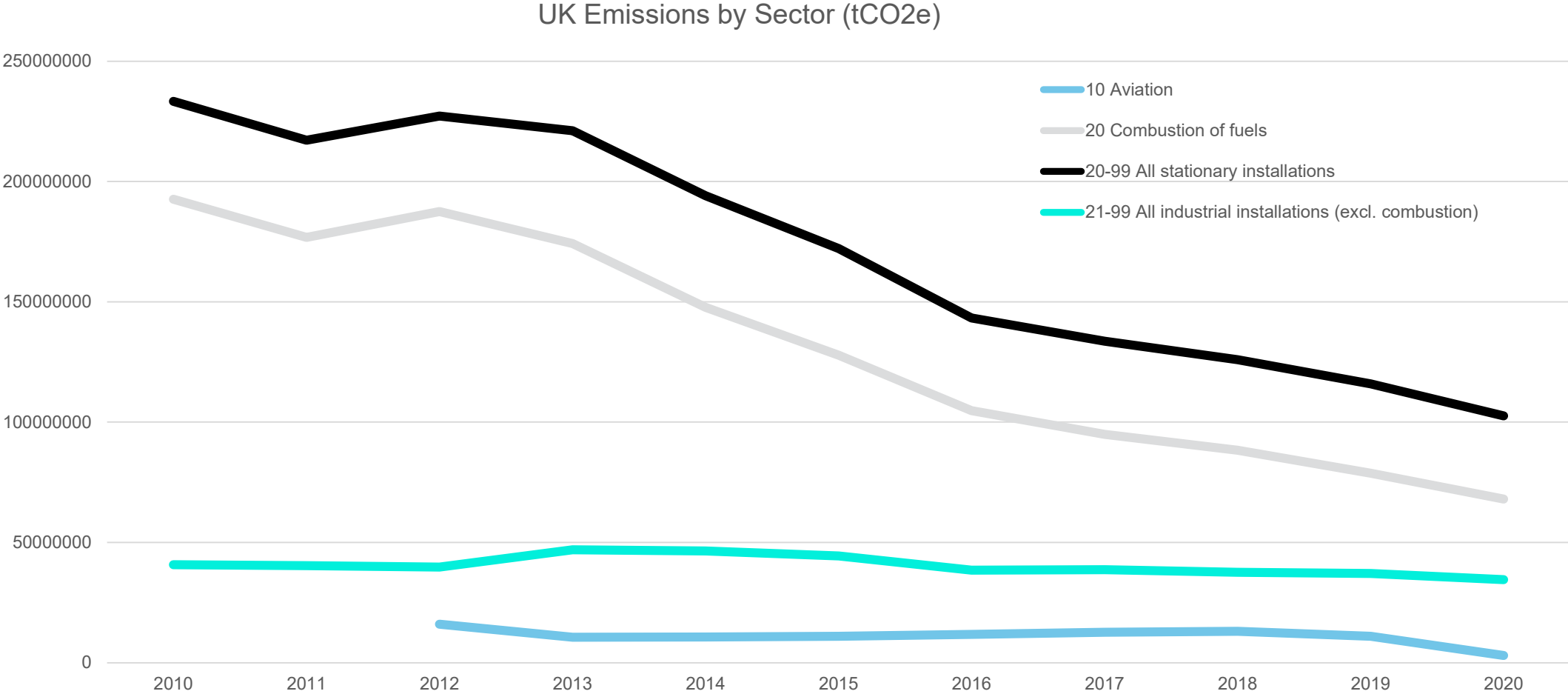
- 6 Million allowances sold at Auction at £44.75 per tonne raising over £271 Million
 - Trading at a premium to EUAs
- Over 22 Million allowances bid for giving a cover ratio of over 3.5 times
- 14 successful bidders

Trading activity and open interest since launch



Carbonomics

Test of policy post coal to natural gas switching in electricity generation



Source:
EU Emissions Trading System (ETS) data viewer, European Environment Agency

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