## Carbon Capture Utilisation & Storage Case Study

## BECCS at Drax drax



1. Flue gas pre-treatment 2. Absorber 3. Solvent heat exchangers 4. Solvent regeneration 5. Solvent storage 6. Compression and processing 7. Waste water treatment 8. Steam supply from exsiting boiler

Drax plans to develop the UK's first Bioenergy with Carbon Capture and Storage (BECCS) project at the Drax Power Station by installing carbon capture technology on two of the four biomass-fired generating units. BECCS will enable us to capture up to 95% of carbon dioxide emitted during electricity generation, permanently removing more carbon dioxide (CO<sub>2</sub>) from the atmosphere than is produced throughout the process - delivering up to 8 MtCO<sub>2</sub> of negative emissions per year. BECCS is the next stage in Drax's decarbonisation journey which began with the conversion of four power generating units from coal to sustainable biomass.



Deliver 40% of UK negative emissions by 2050 from BECCS



Remove up to 8 million tonnes of CO₂ per year



Be the most cost effective way to meet CB5 & CB6



**Create & Protect** over 10,000 jobs in Humber

2030 2018 2019 2027 2024 2029 First company to Construction of 1st BECCS unit 2nd BECCS unit Conversion of 4 BECCS installed on announce BECCS begins at Drax online, delivering online, site now two biomass units

power-generating units from coal to sustainable biomass - Europe's largest decarbonisation project.

ambition to be carbon negative by 2030

Power Station

the largest CCS project in the world

captures a total of 8 Mt of CO<sub>2</sub> per year

and Drax Group becomes a carbon negative company, realising it carbon negative ambition