Energising the future with low carbon molecules

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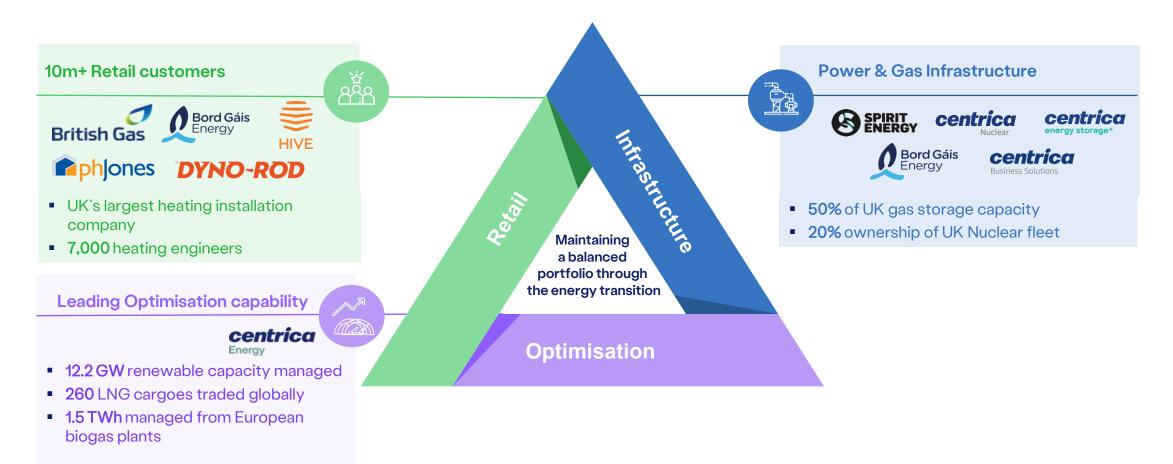


Agenda

- 1. Centrica background
- 2. Centrica's Climate Transition Plan
- 3. The role of biomethane in the Strategy
- 4. Whole system thinking and the role of hydrogen
- 5. Conclusions and takeaways



Centrica is an integrated energy and services company founded on a 200-year heritage of developing assets across the energy value chain



Low carbon molecules are critical to meeting the Climate Transition Plan for Centrica and its customers

Climate Transition Plan: be a net zero business by 2040 and help our customers be net zero by 2050

Net Zero Centrica:

Scope 1 & 2 = 1.5 mtCO₂e

- Reduce our property emissions in the UK
- Grow our **low carbon asset portfolio** (solar, batteries, nuclear, H₂ etc)
- Reduce LNG shipping emissions (low carbon & net zero carbon fuels)

Net Zero Customers:

Scope $3 = 26.5 \,\mathrm{mtCO}_{2} \,\mathrm{e}$

- Roll out energy efficiency and energy management solutions
- Deliver low carbon technologies (EV charging, electrification, H₂ etc)
- Supply energy from renewable assets (RES, biomethane and H₂)

Centrica Group's gas demand:

Easington Terminal



Barrow Terminal



Whitegate CCGT



Brigg Peaker





Additional demand

- Domestic heating
- Planned peaking generation

Centrica's own fuel switching demand is equivalent to 22TWh/year (excluding additional demand)

Biomethane at the heart of Centrica's Net Zero transition

Centrica Energy does not own or operate biomethane plants but provides essential route-to-market services by matching producers to buyers, handling gas shipping and certificate trading and risk management.

Biomethane offtake and route to market services:

- Offering GPAs for the purchase of gas and certificates
- Supply of biomethane to customers, including gas where required.



Centrica's ambition is to trade 6.5TWh/y by 2030 across Europe











Backing BioLNG expansion with Gasrec investment:

- Centrica has invested in Gasrec, a UK developer, owner and operator of bio-LNG fuelling stations to become one of three major shareholders.
- It has 18 stations currently operational.
- Centrica investment will help the construction of new refuelling, to support growing demand from the road transport sector.



Working with FTI, Centrica developed a whole energy system view, integrating electricity, gas and hydrogen and this has informed our strategy

The model enabled analysis of the effects of the hydrogen economy developments on the energy system & consumers

European gas European & nodal model GB electricity model Power generation to drive gas demand Cost of gas to affect merit order and prices Cost of H2 to Assessment of substitutability affect merit Cost of gas if relevant order and to affect blue prices H₂ production Renewable Whole-systems generation to model affect green H2 production

Extent of electrification

displacing gas / H₂

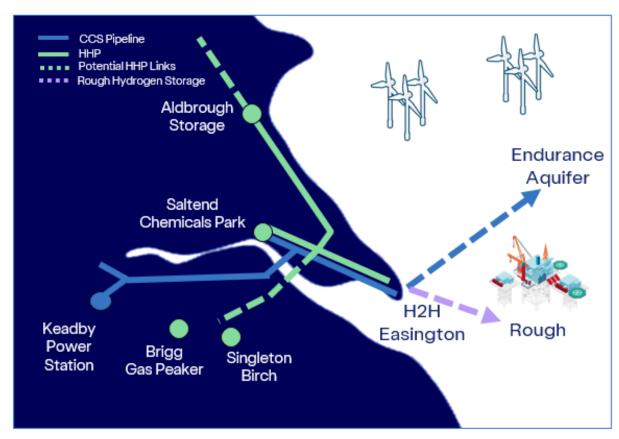
GB H₂ model

Demonstrating the importance of the Humber, it highlighted that:

- In an energy system increasingly dependent on volatile, renewables, hydrogen has a vital supporting role, keeping the system in balance.
- 2. Both blue and green hydrogen will be needed. Blue provides low cost, low carbon hydrogen near-term and helps underpin new regional carbon capture and hydrogen transmission networks.
- 3. H₂ transmission pipelines & large-scale storage is essential for green hydrogen cost reduction and can unlock Hydrogen-to-Power (H2P) scalability.

Government's revised hydrogen strategy will acknowledge the importance of a whole systems approach. However, to deliver the full benefits, a clear pipeline scale up plan is needed, alongside a mechanism in place to unlock surplus constrained offshore wind.

Centrica's hydrogen vision starts in the Humber, with the hydrogen pipeline and builds on whole systems thinking to maximise benefits and reduce costs.



Working with partners, together these projects will help to reduce foundation industry emissions, enhance energy security, lower hydrogen costs through infrastructure integration, and deliver a value for money solution for consumers.

Hydrogen Transport

Developing the 45km Humber Hydrogen Pipeline to connect production, storage, and end-use sectors at Aldbrough, Saltend and Easington, Unlocking regional decarbonisation and enabling national network build out.

Hydrogen Storage

Repurposing the Rough gas field into one of the UK's first large-scale hydrogen storage facilities with up to 16TWh H2 storage potential, providing essential system flexibility and seasonal resilience.

Hydrogen Production

Building on HAR2 learnings at Singleton Birch, to build large-scale, low carbon hydrogen production at Easington using both blue (1.2GW) and green (1GW) pathways to support industrial decarbonisation and H2P system-balancing at Saltend and Aldbrough.

Hydrogen Power

Demonstrating the potential of clean, dispatchable hydrogen-fired power at Brigg Peaking Plant to support grid stability. HiiROC blending trial into the peaking plant was completed Q3 25. Transmission (NTS) blending trial with National Gas due Q4 25.

Conclusions

- Low-carbon molecules (hydrogen & biomethane) are essential to Centrica's Climate Transition Plan and UK's net zero goals.
- Hydrogen is key for clean energy flexibility, industrial decarbonisation, and long-duration storage.
- The Humber region is critical for scaling hydrogen infrastructure, leveraging existing assets and offshore wind.
- Pipelines and storage are key to drawing investment, delivering energy system benefits and bringing down hydrogen costs.
- Significant economic opportunity: Jobs, investment, and UK leadership in hydrogen and biomethane supply chains.
- Government must maintain momentum in implementing business models across the value chain, provides clear guidance on upcoming allocation rounds, with a clear vision for infrastructure scale up.



Thank you

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