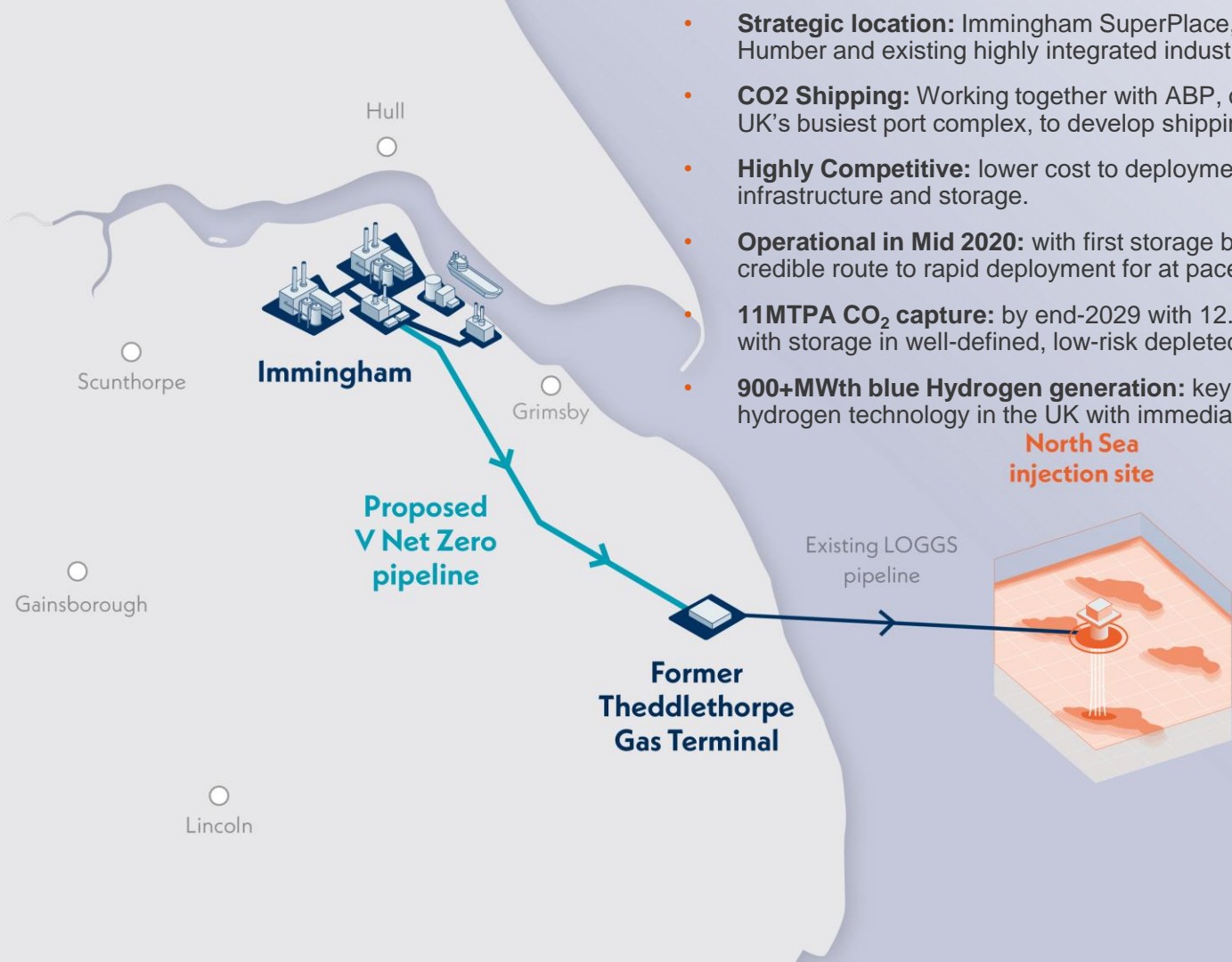




Capacity Development within Clusters

Harbour Energy – V Net Zero





- **Strategic location:** Immingham SuperPlace, south of the Humber and existing highly integrated industrial cluster.
- **CO₂ Shipping:** Working together with ABP, owners of the UK's busiest port complex, to develop shipping potential.
- **Highly Competitive:** lower cost to deployment by reusing key infrastructure and storage.
- **Operational in Mid 2020:** with first storage by 2027 and credible route to rapid deployment for at pace capture.
- **11MTPA CO₂ capture:** by end-2029 with 12.5MTPA by 2033, with storage in well-defined, low-risk depleted gas reservoirs.
- **900+MWth blue Hydrogen generation:** key enabler of hydrogen technology in the UK with immediate offtake.

North Sea injection site

Existing LOGGS pipeline

Former Theddlethorpe Gas Terminal

Proposed V Net Zero pipeline

Immingham

Hull

Scunthorpe

Gainsborough

Lincoln

Grimsby

Storage – Refilling Depleted Gas Reservoirs

Key site selection criteria:

1. Robust Containment

- Proven presence of regional SuperSeal
- Sealed by high strength, thick layer of salt

2. Management of Legacy Wells

- Unique knowledge as P&A Operator
- Detailed risk assessment for each well

3. Material Storage Volume

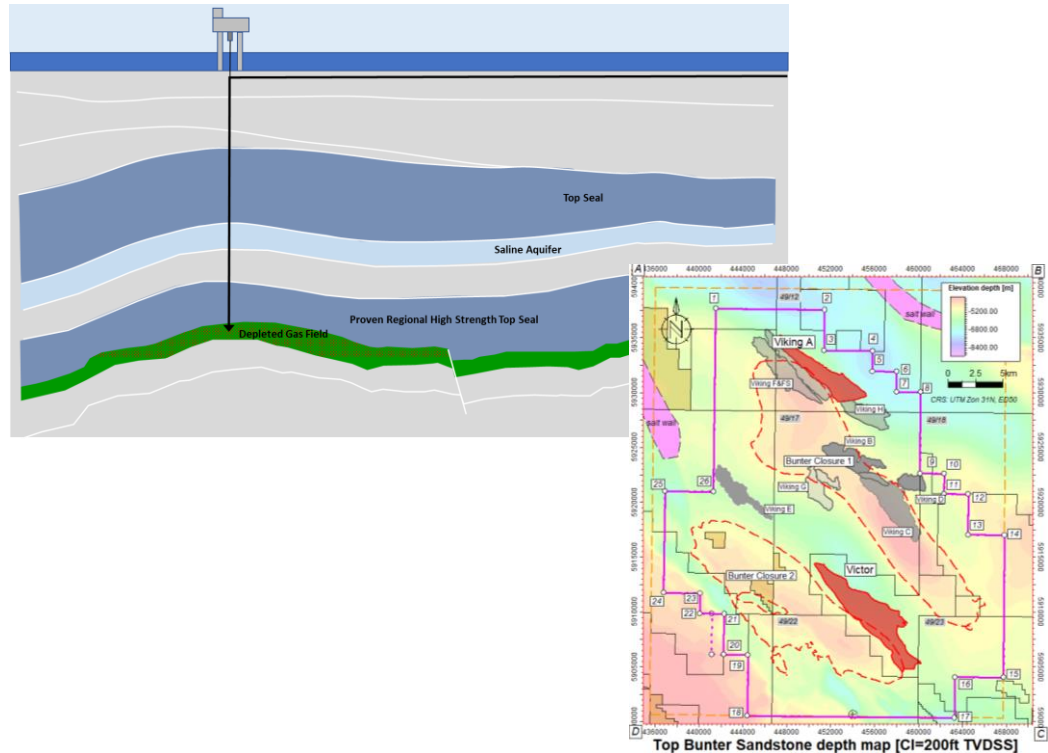
- Known multi-TCF gas produced
- Benefits from 50-yr+ legacy dataset

4. Injectivity & CO2 Rate

- Low compression needed, depleted fields
- Management of early-life low temperature

5. Scalability & Flexibility

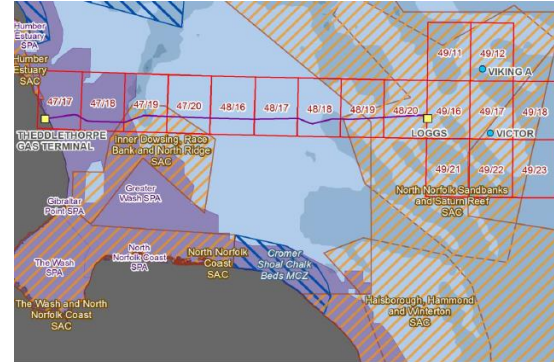
- Multiple depleted gas fields in licence area
- Flexibility on injection well drill timing



Storage – Refilling Depleted Gas Reservoirs

Reuse of LOGGS pipeline, 36” trunkline

- Reuse : Recent inspection & robust material assessment
- Capacity : Greater than 30MTPA of CO2 in dense phase
- Environmental Impact : Does not require new shore crossing
- Deployment : Lowers cost & schedule to 1st injection as in-place
- Operation : Deep technical integration on inlet specification control



Installation of New Infrastructure – V Net Zero Pipeline

- New Install : High-capacity 53km onshore pipeline
- Design : New pipeline designed for dense phase CO2
- Planning : Development Consent Order process commenced
- Public : Seek a transparent and robust consultation process
- Regional : Creates opportunity for inter-connected CO2 network





Contact details

Andrew Hood

andrew.hood@chrysaor.com

01224 205455

Harbour Energy, Rubislaw House, Aberdeen

[V Net Zero Project](#) | [Harbour Energy](#) | [Harbour Energy](#)

