

# H2East Pipeline: Humber to Nottinghamshire

H2East Pipeline  
Humber to  
Nottinghamshire



## Powering Industry

The H2East Pipeline: Humber to Nottinghamshire is a proposal for a new underground hydrogen pipeline in the east of England.

It would support businesses in Britain's industrial heartland by supplying them with hydrogen, helping to safeguard important industries by building a resilient regional economy that creates and retains jobs.

The project is being developed by Cadent. Cadent brings gas to 11 million homes and businesses throughout the North West, West Midlands, East Midlands, East of England and North London.

The project would lay the foundation for an increase in hydrogen use across the region, connecting major energy-intensive industries with hydrogen production facilities. It will create a catalyst for the UK's hydrogen economy, supporting a cleaner and more prosperous future for generations to come.



**Web:** [h2east.co.uk](https://h2east.co.uk)  
**Email:** [humbertonotts@h2east.co.uk](mailto:humbertonotts@h2east.co.uk)  
**Call:** 0800 188 4479  
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# Hydrogen producers and industrial hydrogen users

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The underground pipeline would play a crucial role in supporting British industry by enabling a transition for sectors that currently rely on natural gas, connecting them directly to a supply of low carbon hydrogen.

The pipeline will connect to newly constructed hydrogen production plants at North Killingholme and High Marnham and distribute the hydrogen to industrial users located near Immingham, Scunthorpe, Kirton and Newark via spurs.

To identify potential hydrogen industrial users, we engaged with current industrial customers to understand hydrogen demand and timescales for transitioning to hydrogen. This informed the identification of the potential hydrogen industrial users listed:

#### Potential industrial hydrogen users:

- British Steel
- British Sugar
- Forterra
- Heidelberg Materials
- Knauf
- Lenzing
- Singleton Birch
- Tayto
- Tronox

#### Potential hydrogen producers:

- HyMarnham Power's Hydrogen Production plant near Newark, currently in construction.
- Uniper's Hydrogen Production Plant in North Killingholme, which has applied for planning permission under the Town and Country Planning Act in 2025.



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# Why hydrogen?

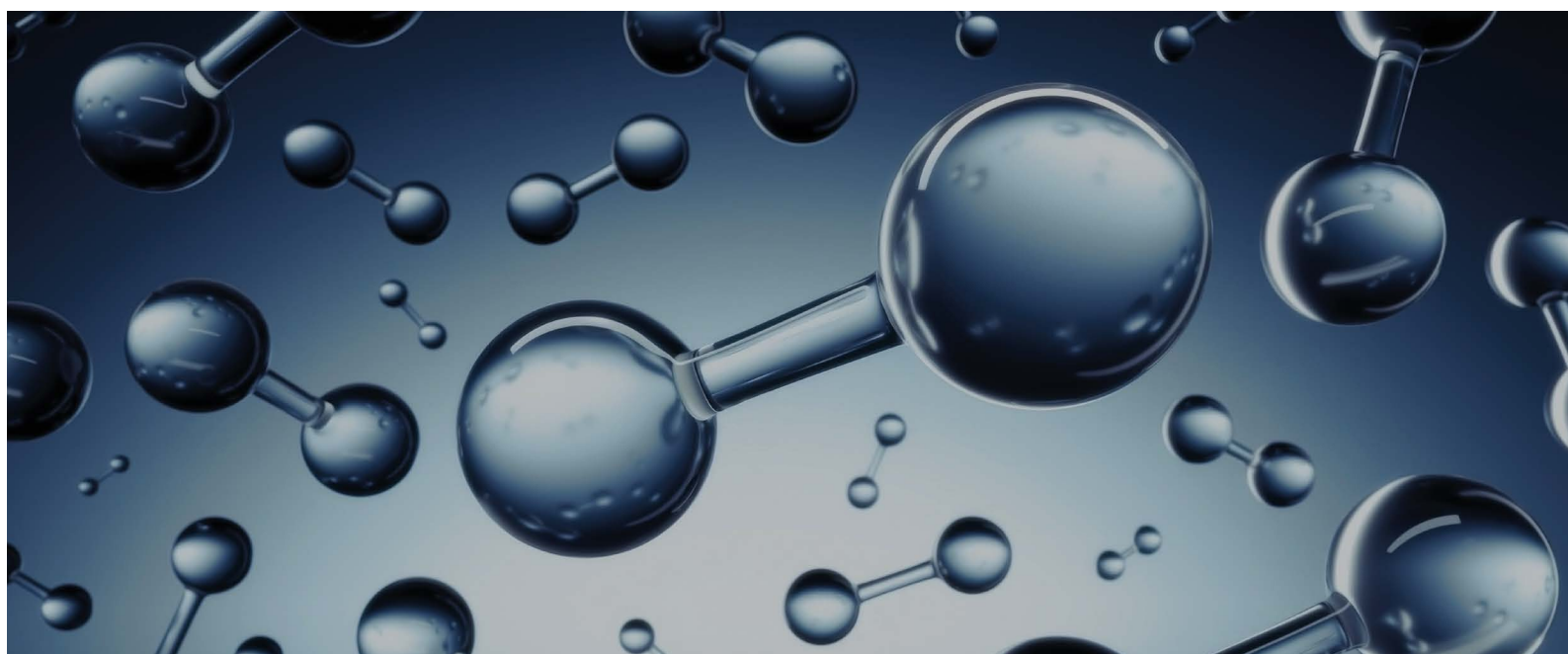
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Hydrogen is a gas which can be used for heat, power and even fuel for large vehicles like HGVs. When it's burned, no carbon emissions are released. Hydrogen holds a lot of energy so it's great for transporting large amounts of energy to where it's needed.

Hydrogen at the scale required has to be made either through electrolysis or through the reformation of methane. Both methods can keep carbon emissions to a minimum so the hydrogen produced meets the government standard for the 'low carbon hydrogen' Cadent will transport.

Hydrogen is a great fuel for industry, it can deliver high grade heat to meet industrial energy demands. Electricity cannot easily do this in all circumstances, without a significant amount of infrastructure, meaning that hydrogen is needed in our energy mix to keep businesses that are reliant on gas, operating in the UK for years to come.



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# What is H2East's pipeline route corridor?

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The proposed route corridor represents the area currently being considered for the construction of an underground hydrogen pipeline. At this stage, the corridor is wide as we are evaluating different pipeline route options. The corridor will be reduced following discussions with landowners, community/stakeholder feedback and further technical assessments.

The pipeline is currently expected to have a diameter which ranges between 4 and 42 inches, depending on its function and a construction corridor of up to 50 metres. In a number of locations we may need a pipeline spur to connect hydrogen industrial users. The spurs are typically smaller in diameter than the main pipeline.

Along the route we will also need above ground infrastructure at certain points to help us check and monitor the pipeline.

We are not able to use existing gas pipelines to transport hydrogen as part of this project as the Cadent pipelines in the area are still required to transport natural gas, are not located in the right place or they are not of a suitable size to meet future hydrogen needs.

Environmental surveys are being undertaken within the route corridor to inform our understanding of local surroundings and conditions.

This process will ensure that any potential environmental or socioeconomic impacts are identified and assessed.



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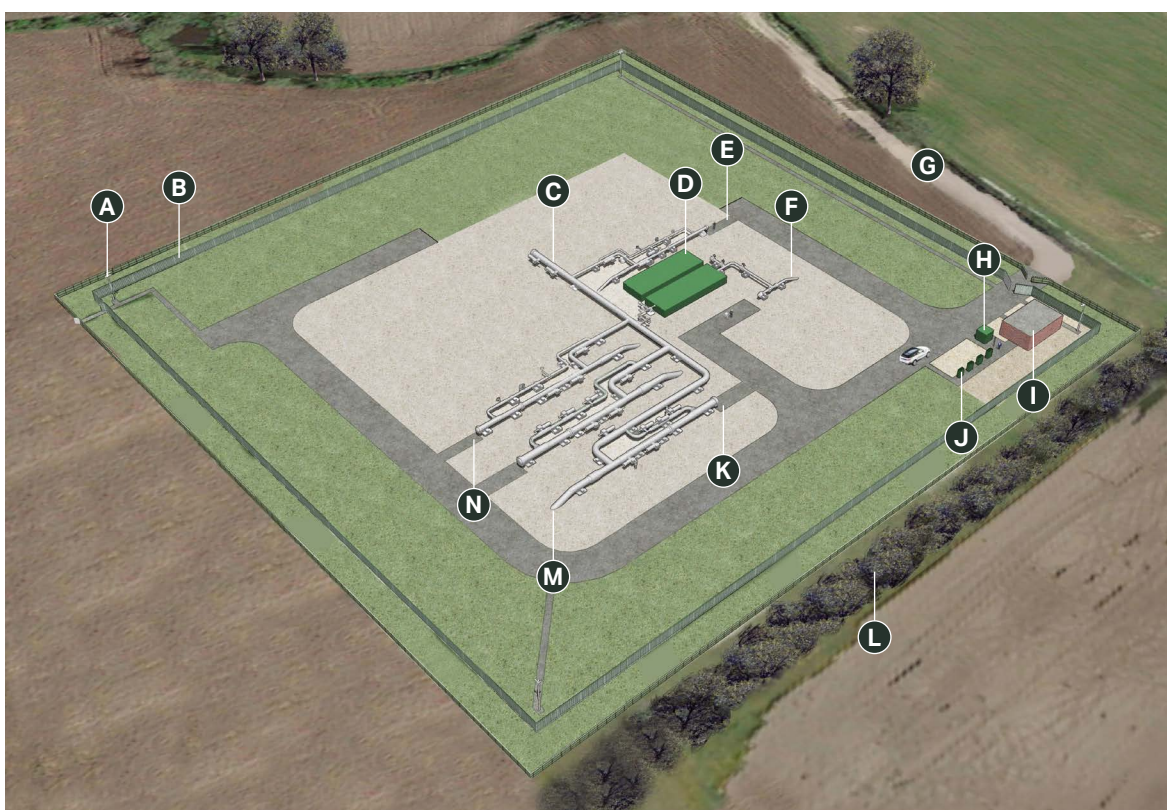
# Above Ground Infrastructure



The majority of our pipeline will be underground. However, we will need Hydrogen Above Ground Installations (HAGIs) at certain locations along the pipeline.

HAGIs allow us to control the flow and pressure of hydrogen. They also enable inspection and routine maintenance of the pipeline. HAGIs will also act as the connection points between the pipeline network, potential hydrogen producers and industrial users.

HAGIs usually include a range of above ground equipment and structures. These structures are expected to be up to four metres in height, subject to final design. The sites will be protected by security fencing with CCTV and a gate allowing access (the height of the CCTV masts may be greater than 4m).



- A. Outer timber post and rail fence
- B. Inner metal security fence
- C. Above ground piping / headers
- D. Pressure reduction skids (design tbc)
- E. Inspection facilities
- F. Outgoing pipelines
- G. Access track
- H. Temporary generator
- I. Local Equipment Room (LER) includes instrument and control kiosk (design tbc)
- J. EV charging points
- K. Inspection facilities
- L. Hedgerow reinforced with new planting
- M. Incoming pipelines
- N. Inspection facilities

Illustrative HAGI layout



Example of equipment used at HAGIs

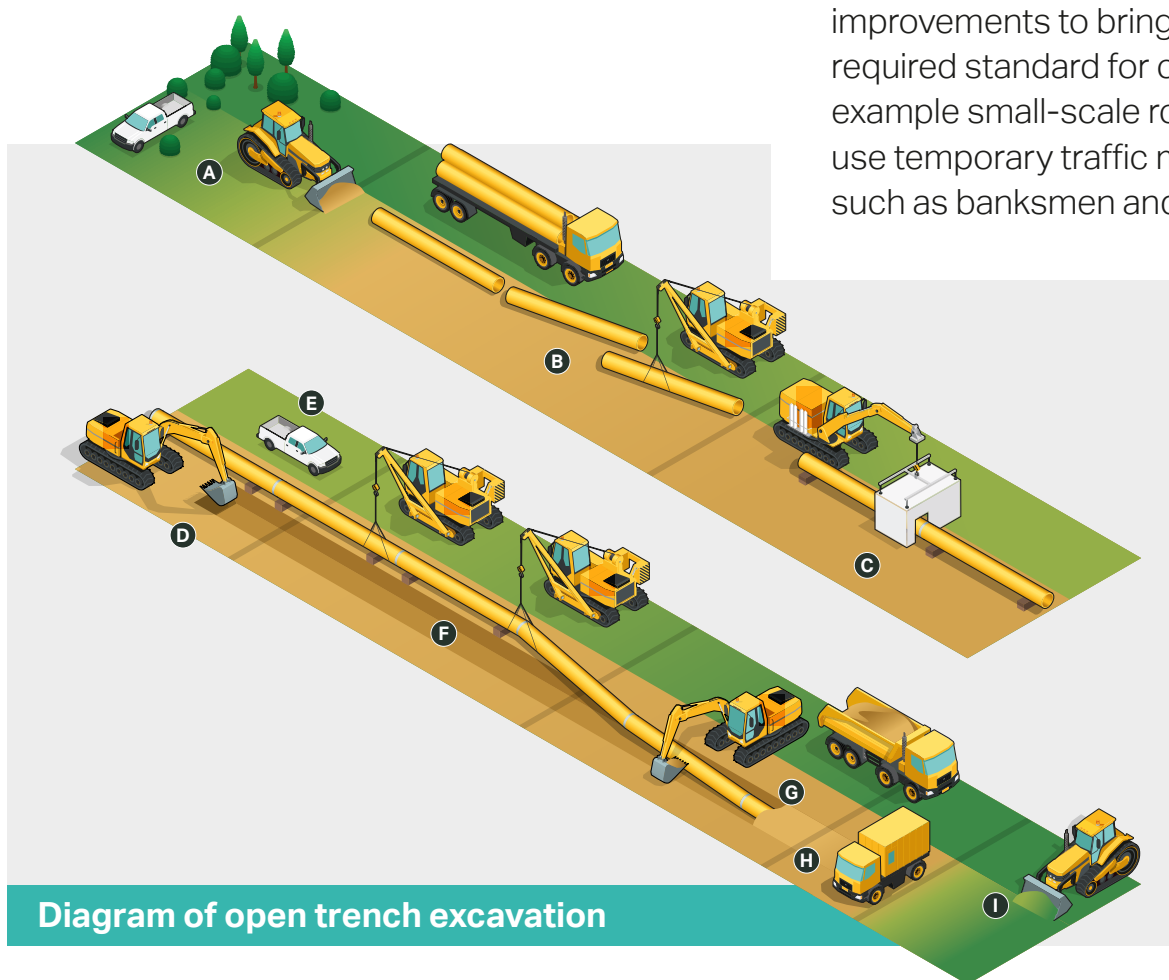


Cadent is an experienced and trusted operator of gas pipelines. We will make use of our construction experience and maintenance knowledge to help us develop the project effectively.

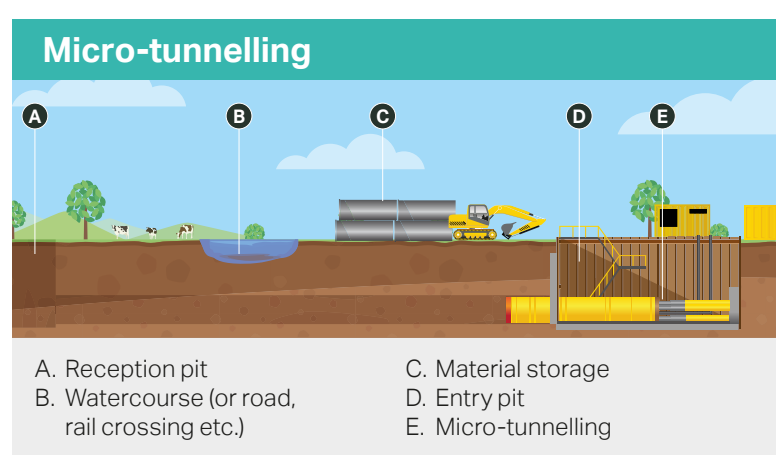
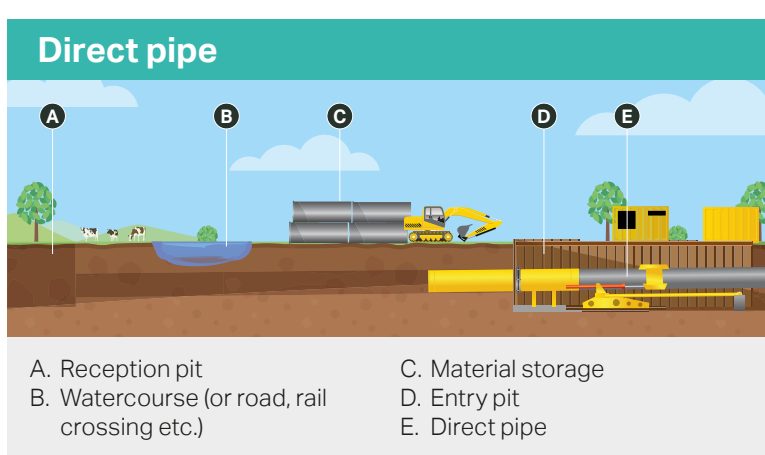
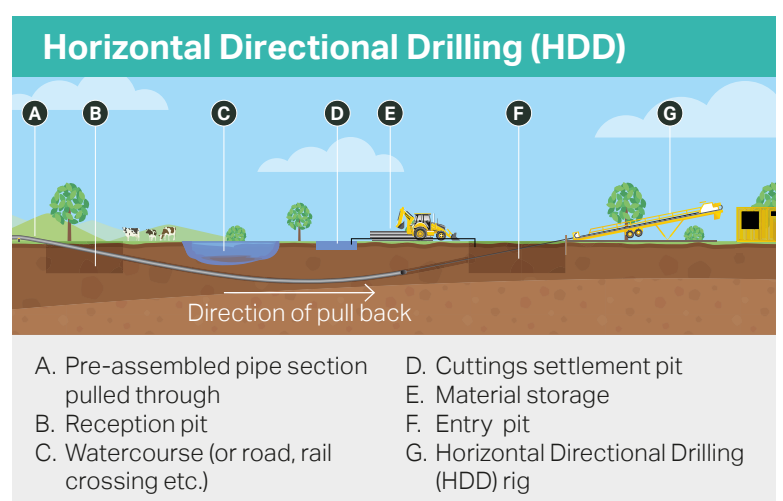
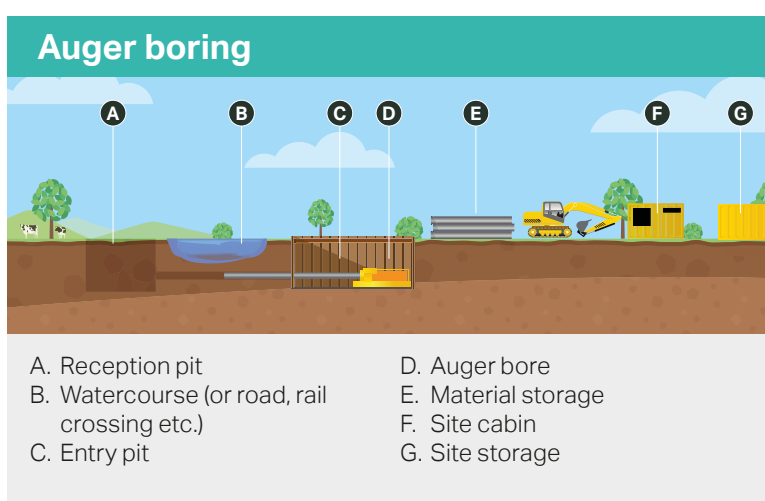
The pipeline will be constructed using predominantly open trench techniques. Where it is not possible or practical to use open trench pipeline construction, such as crossing existing infrastructure like roads, railways and waterways, trenchless crossing techniques will be used.

We will continue to survey the areas where construction may take place and work closely with local highway authorities to ensure that any roads we plan to use are suitable and safe for all road users.

If the proposals are approved, we may carry out improvements to bring certain roads up to the required standard for construction traffic, for example small-scale road widening. We may also use temporary traffic management measures, such as banksmen and temporary traffic lights.



- A. Surveying and clearing of site
- B. Laying out pipe sections, cold bending
- C. Welding pipe sections together
- D. Digging pipeline trench
- E. Construction inspection
- F. Lowering pipe into trench
- G. Backfilling trench and pipeline
- H. Hydrotesting pipeline
- I. Site restoration



These graphics are for indicative purposes only and not to scale.

# Indicative Map of the Project Area

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## Where will the underground pipeline be located?

The underground pipeline would come from hydrogen producers and travel through Lincolnshire and Nottinghamshire to numerous potential hydrogen industrial users along the route.

The image shows the project area in red plus future stages.

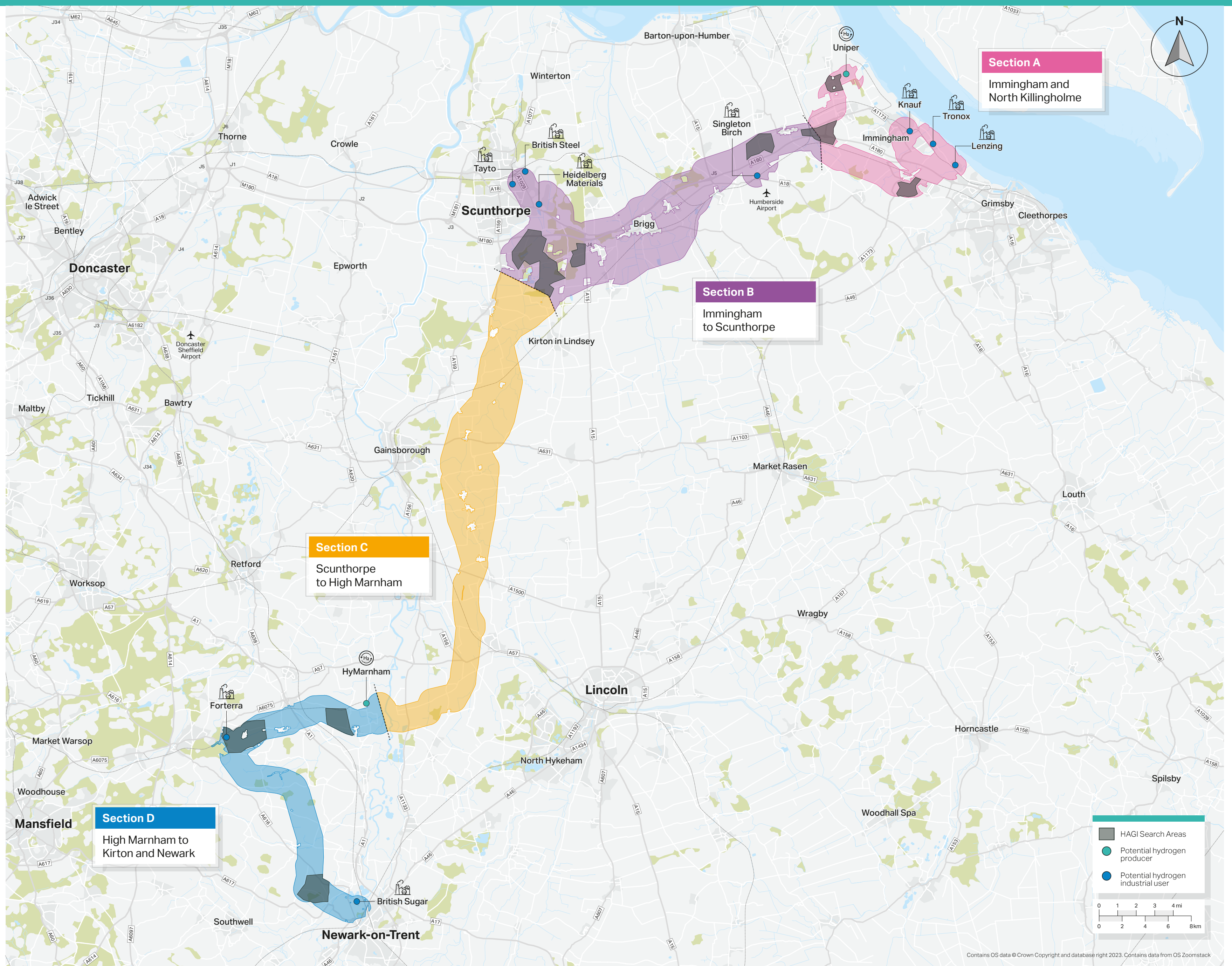


\*An offtaker is an organisation who would use the hydrogen from the pipeline, such as steel, chemical and food producers.

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# Overview of proposed underground pipeline route

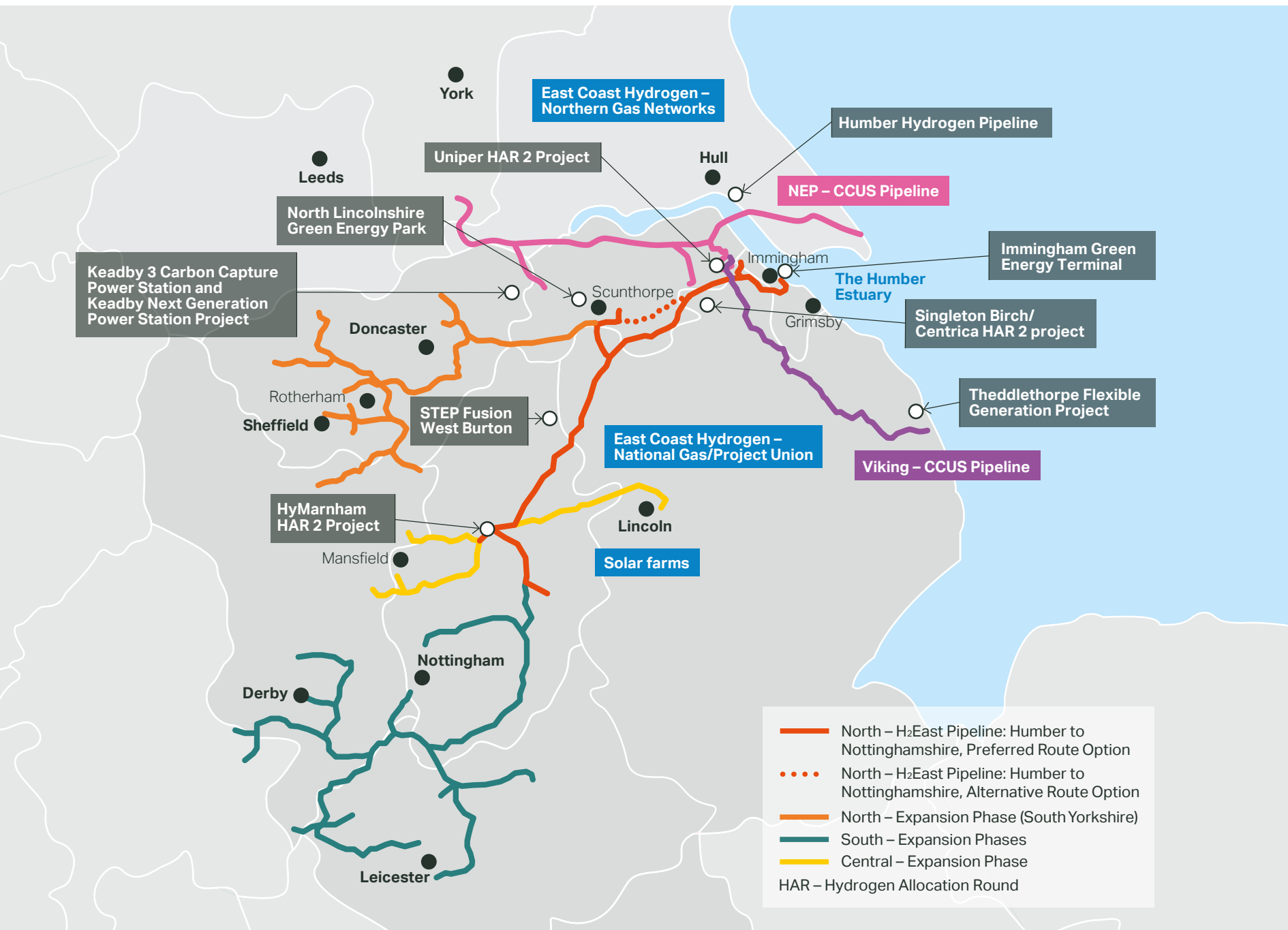


# Map of key energy projects in the area under development

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This map shows the H<sub>2</sub>East Pipeline route and other energy projects under development in the region. Together, these initiatives would safeguard our important industries, building a resilient regional economy encouraging investment, creating and retaining jobs.



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# Project benefits

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The project will lay the foundation for an increase in hydrogen use across the region, connecting major energy-intensive industries with hydrogen production facilities from the Humber to Nottinghamshire. It creates a catalyst for the UK's hydrogen economy, supporting a cleaner and more prosperous future for generations to come.

The pipeline would enable manufacturers of steel, chemicals, bricks, and food to switch from methane/natural gas to low-carbon hydrogen, keeping British industry alive and accelerating industrial decarbonisation.

H<sub>2</sub>East Pipeline: Humber to Nottinghamshire would bring many benefits including:

- Safeguarding British manufacturing
- Encouraging inward investment
- Decarbonising energy-intensive industries
- Job retention across the Humber, Lincolnshire and Nottinghamshire
- Supporting the development of new skills in the hydrogen sector.



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# Have your say

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## Here's how you can submit your feedback today

We believe it's important to involve the people who live and work in the area as we continue to develop our plans. We're here to listen and answer any questions you may have. The project is at an early stage in its development so we may need to come back to you with further information at a later point.

### You can provide your feedback by:



Emailing your comments to:  
**humbertonotts@h2east.co.uk**



Writing your comments to:  
**Freepost H2 EAST HN**  
(No postage required)



Calling us on: **0800 188 4479**  
(Monday to Friday, 9am to 5:30pm)

## Landowners

The land agent team on H2East Pipeline: Humber to Nottinghamshire is led by Fisher German LLP. Fisher German is a specialist property consultant providing land agency services in connection with this project.

If you are a landowner, occupier or person with an interest in land and would like to get in touch with Fisher German, contact details are in the box to the right.

### Contact:



Email:  
**humbertonotts@fishergerman.co.uk**



Call: **0800 65 22 101**

### For confidential support, contact Shout

If you are anxious or stressed about our pipeline project, our partnership with Shout offers 24/7, free, confidential text support from a trained advisor.

Know someone who could benefit from this service?

Text **PIPELINE** to **85258**.

For more information about our partnership and the help available to you, visit **[www.giveusashout.org/](http://www.giveusashout.org/)**

Please note that Shout do not hold any project information but are able to provide wider wellbeing support.

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**85258**

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# Next steps

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Your feedback will help us shape our plans as we develop our proposals. We will continue discussions with landowners and stakeholders throughout the process. We will be undertaking surveys as well as technical and environmental assessments along the proposed route to develop and inform our plans ahead of submitting our application for development consent in 2028.

## Contact us

### Visit our website:



[h2east.co.uk](https://h2east.co.uk)

### Email your comments to:



[humbertonotts@h2east.co.uk](mailto:humbertonotts@h2east.co.uk)

### Write to us at:



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