Humber Low Carbon Pipelines Project

Supporting jobs and the decarbonisation of the Humber region

Statutory consultation – online events
16 & 22 November 2022

The presentation will start in a few minutes

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01

Welcome

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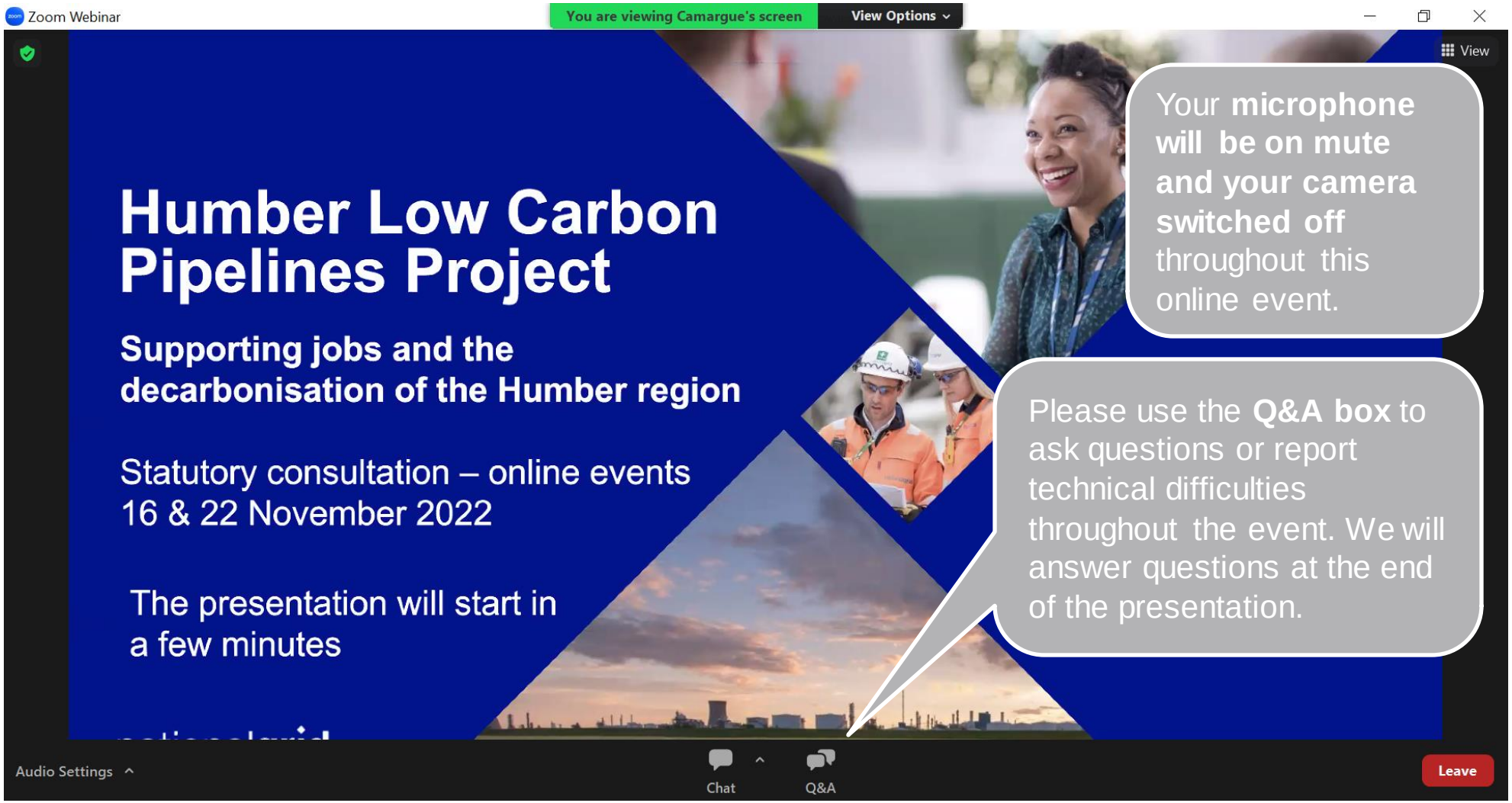
Taking part in today's event



Agenda and purpose

01	Welcome
02	Project context – need and opportunity
03	This consultation
04	The proposed route and above ground installations (AGIs)
05	Environmental considerations
06	Construction process
07	Working with landowners
08	Project timeline
09	Have your say – how to provide feedback
10	Q&A

02

The project

Supporting jobs and the decarbonisation of the Humber region

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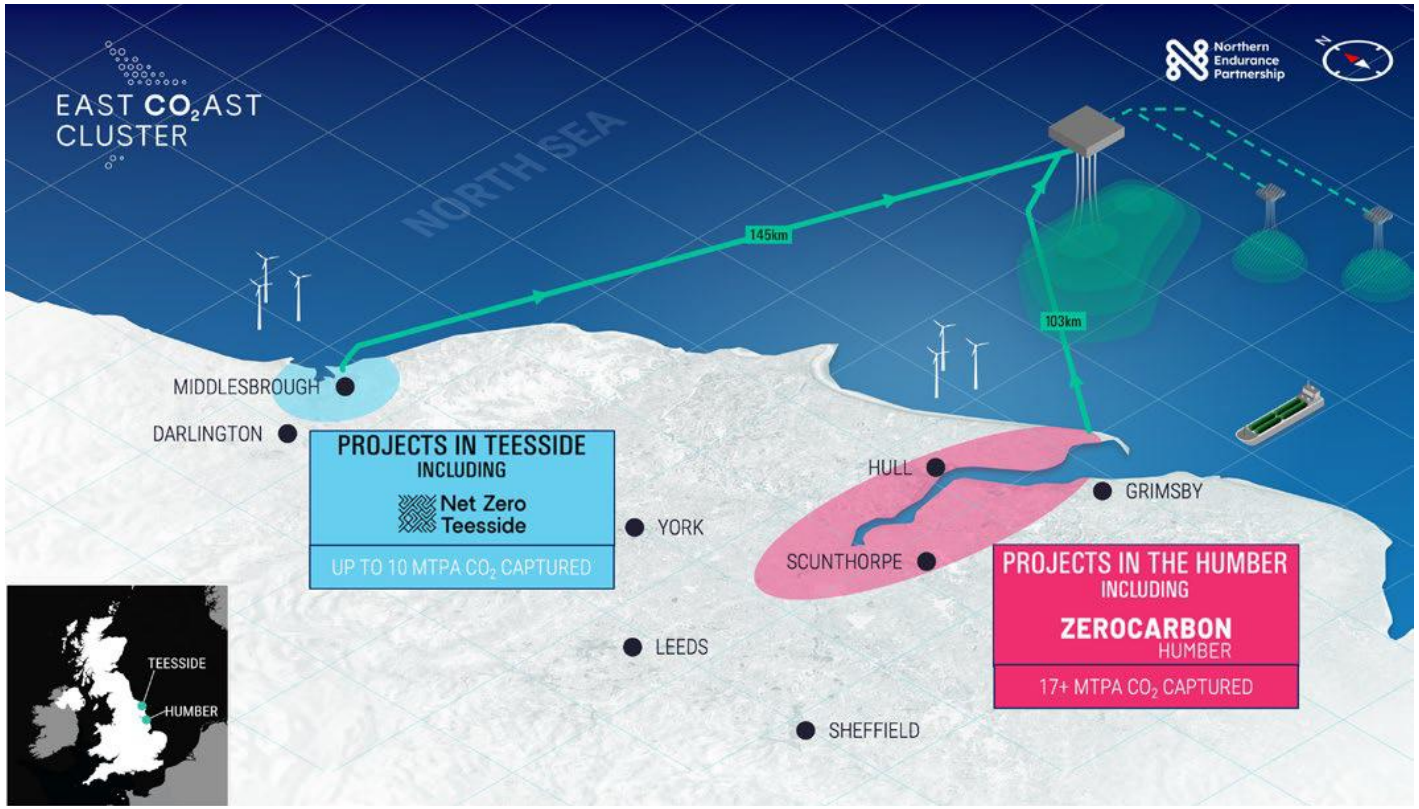
The regional opportunity

- The Humber region is the UK's largest industrial cluster with a rich and diverse industrial and power generation heritage
- By decarbonising its industry, the region can establish itself as a globally competitive, climate friendly hub
- The project will create new **onshore underground pipeline infrastructure**
  - Carbon dioxide
  - Low carbon hydrogen

Working together for net zero

- **Backbone of Zero Carbon Humber**
- **Part of East Coast Cluster** uniting Zero Carbon Humber and Net Zero Teesside with shared infrastructure
  - could **remove almost 50% of UK industrial emissions**
  - **Supports 25,000 jobs a year to 2050**



The technology

- Carbon capture, usage and storage (CCUS) – captures, permanently stores/utilises harmful carbon dioxide emissions
- Hydrogen use by industry in place of fossil fuels to support the lowering of carbon emissions

03

Statutory consultation

31 October – 5 December 2022

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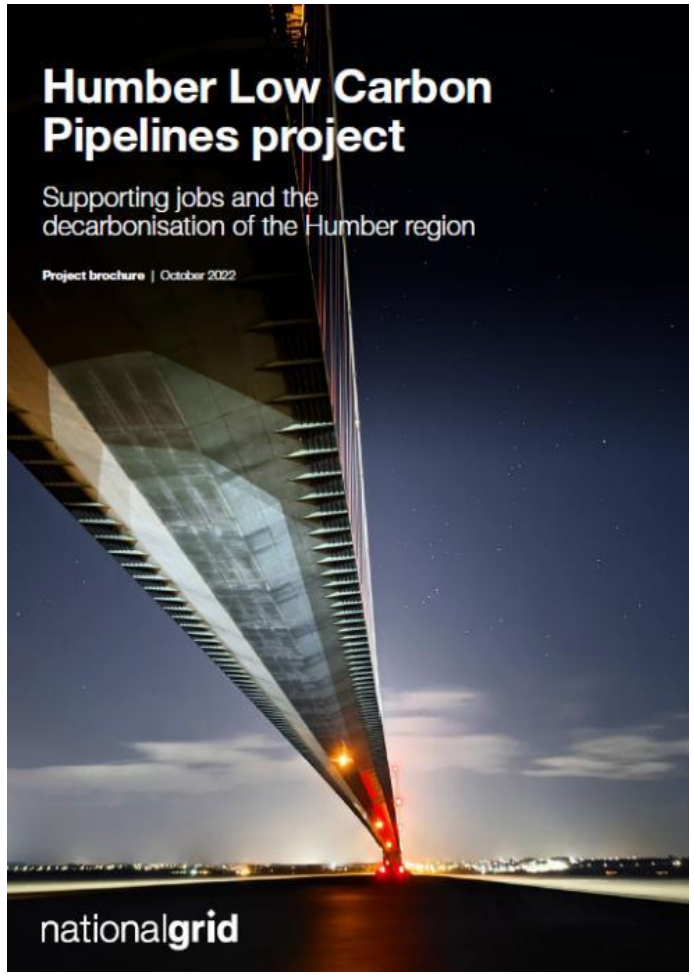
Statutory consultation

- **Monday 31 October – 8.59am on Monday 5 December 2022**
- We are inviting people to comment on the proposed route alignment as well as:
  - Above ground installations (AGIs)
  - The potential impact of the project during construction, operation and decommissioning
  - The Preliminary Environmental Information Report (PEIR)
  - Our proposals for the project as a whole
- **Consultation closes at 8.59am on 5 December 2022** – please submit your feedback by then



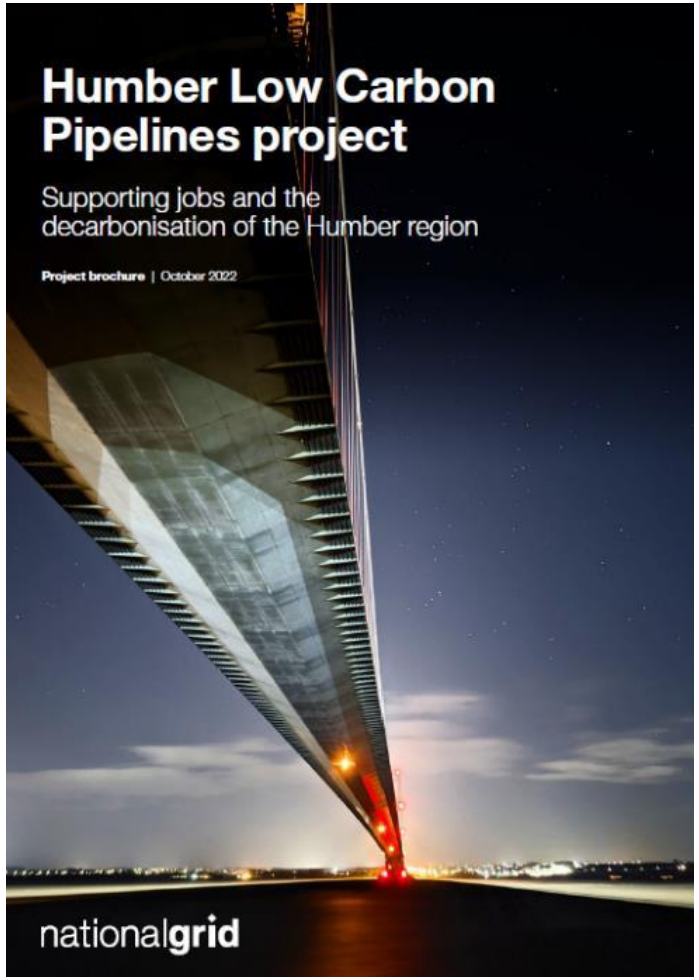
Statutory consultation

- **Publicity**
- **10 public drop-in events**
  - Along the route
  - Weekday and weekend
- **Two online events**
- **Reference locations**
- **Project website** – with all documents available to download and digital feedback form
- **Contact points** – email, freephone, freepost
- **Please provide feedback in writing**
- All feedback will be recorded, considered and reported in the Consultation Report

Key materials

- Project brochure
- Map packs
- The Preliminary Environmental Information Report (PEIR)
- Non-technical summary of the PEIR
- Feedback form
- Statement of Community Consultation (SOCC)
- **All materials are available on the project website or on request from the project team**

Consultation closes at 8.59am on 5 December 2022 – please submit your feedback by then



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The proposals

Proposed route and above ground installations (AGIs)

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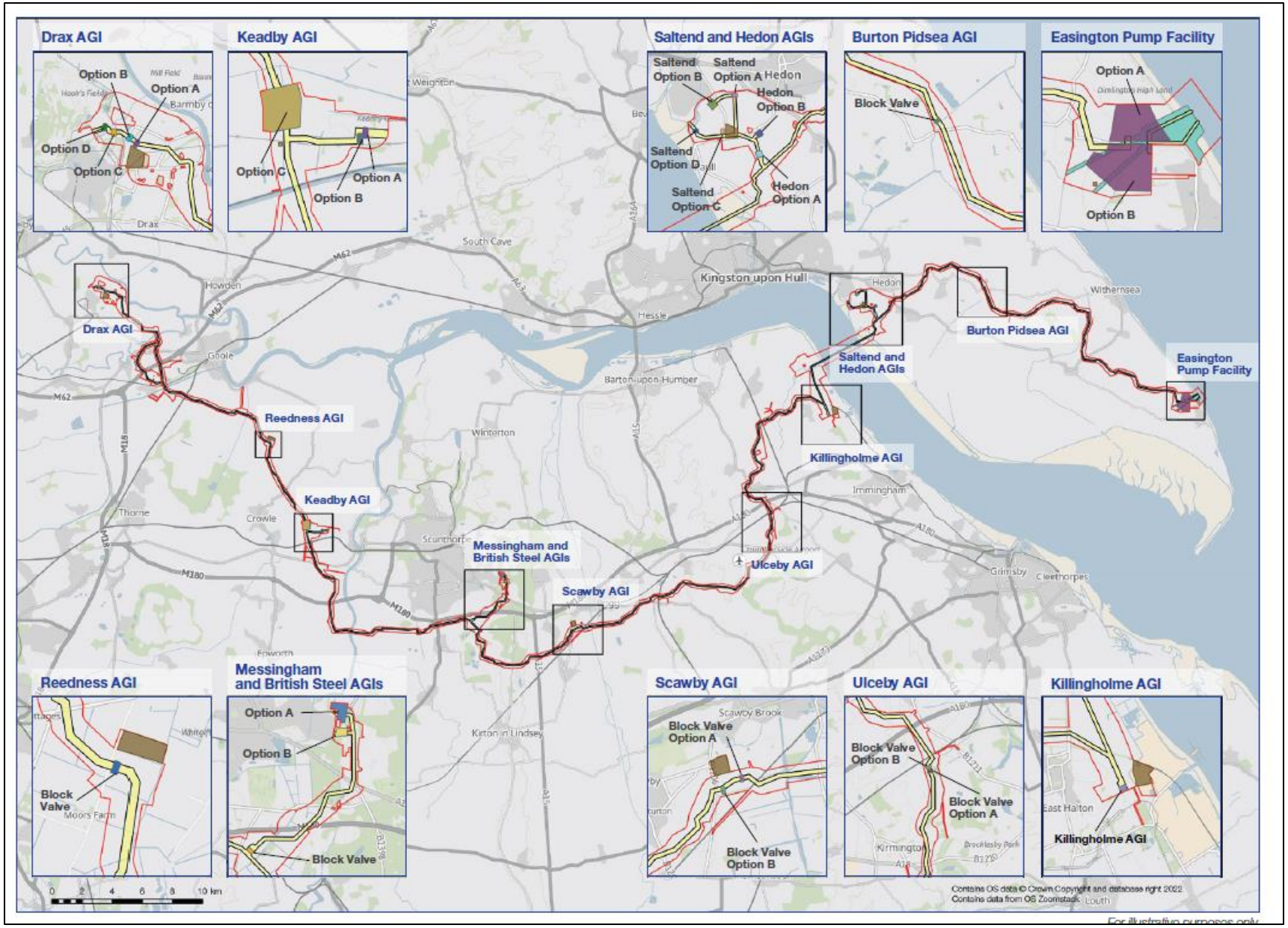
An overview

- Construct and operate two onshore pipelines
- Drax to Easington
- Above ground installations (AGIs)
- Route split into five sections
  - Drax to Keadby
  - Keadby to Scunthorpe
  - Scunthorpe to Killingholme
  - Killingholme to Hedon
  - Hedon to Easington

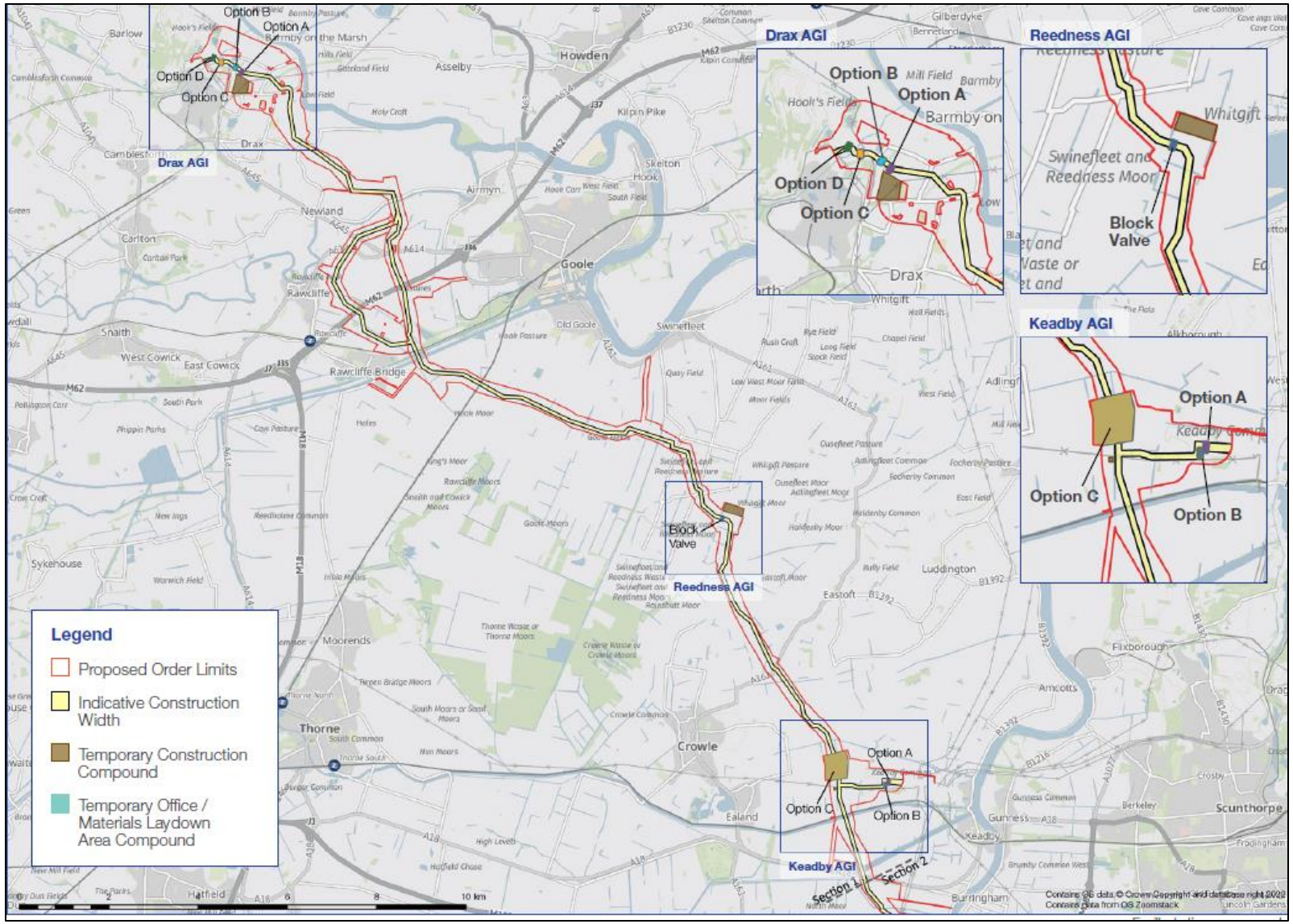
See brochure or maps pack



Section 1: Drax to Keadby

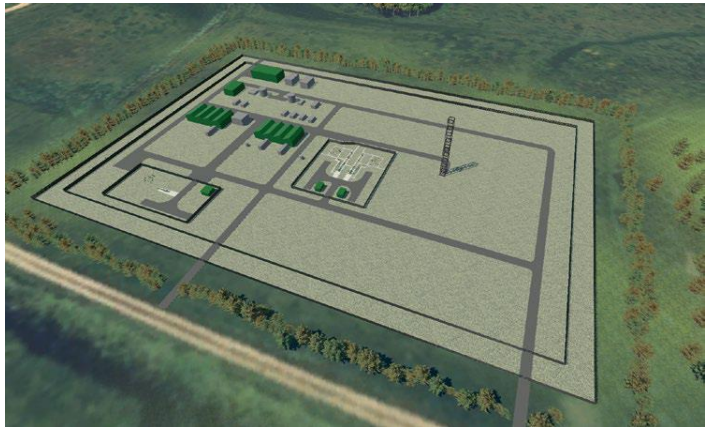
- Order limits
- Indicative construction width
- Drax AGI (PIG Trap)
- Reedness AGI
- Keadby AGI

See brochure or maps pack for further details on all five sections



Above ground installations (AGIs)

- Required at intervals along the route
- Provided to ensure safe and efficient operation of the pipelines and facilitate inspection and maintenance
- **4 different types:**
  - Pipeline inspection gauge (PIG Trap)
  - Block valve
  - Multi junction
  - Pump facility
- Vent stacks
- Inviting feedback on AGI siting options

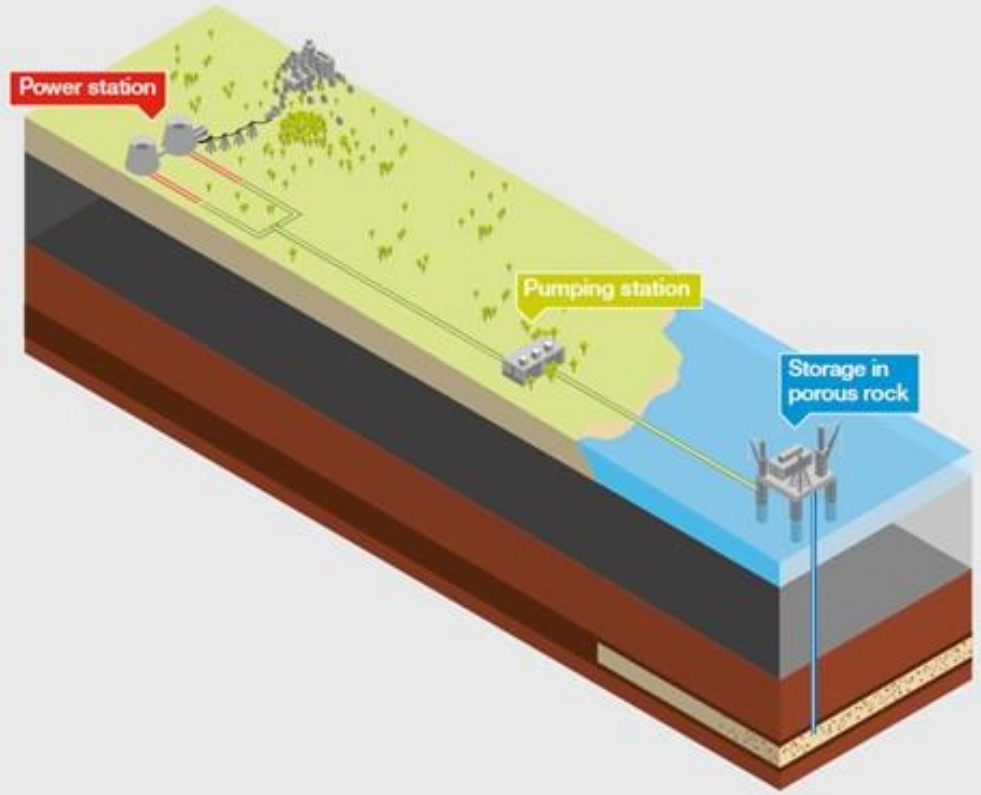


Images are illustrative only

Coast and offshore

- At the pump facility located at the coast, the carbon dioxide pressure will be increased
- The carbon dioxide will then be transported offshore to the storage site, Endurance, for safe storage
- Carbon dioxide will be stored at 1,020m below the seabed surface
- Offshore infrastructure is separate to this onshore pipelines project. It is being taken forward by BP as a separate project, as part of the NEP

Images are illustrative only



05

Environmental considerations

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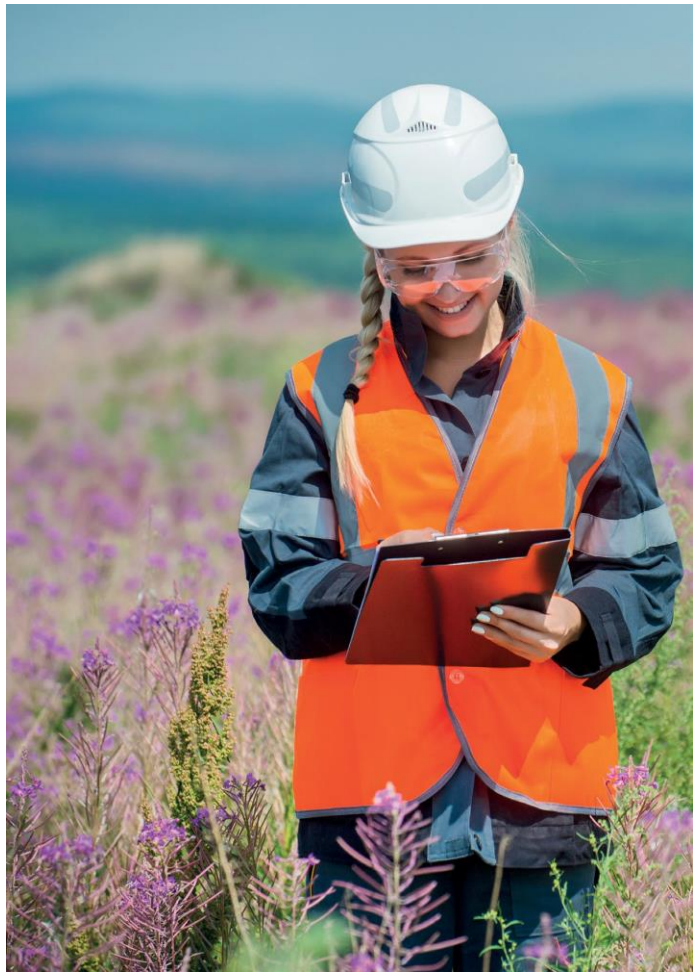
Environmental considerations

- **National Grid has conducted extensive assessments of the potential impacts including:**
- Route selection
- Mitigation and management
- Published a full non-technical summary and detailed Preliminary Environmental Information Report (PEIR)
- Highlighted a range of potential impacts – including agriculture, air quality, biodiversity, noise, traffic, heritage and land drainage
- **Opportunity to comment on biodiversity net gains**



06

Construction process

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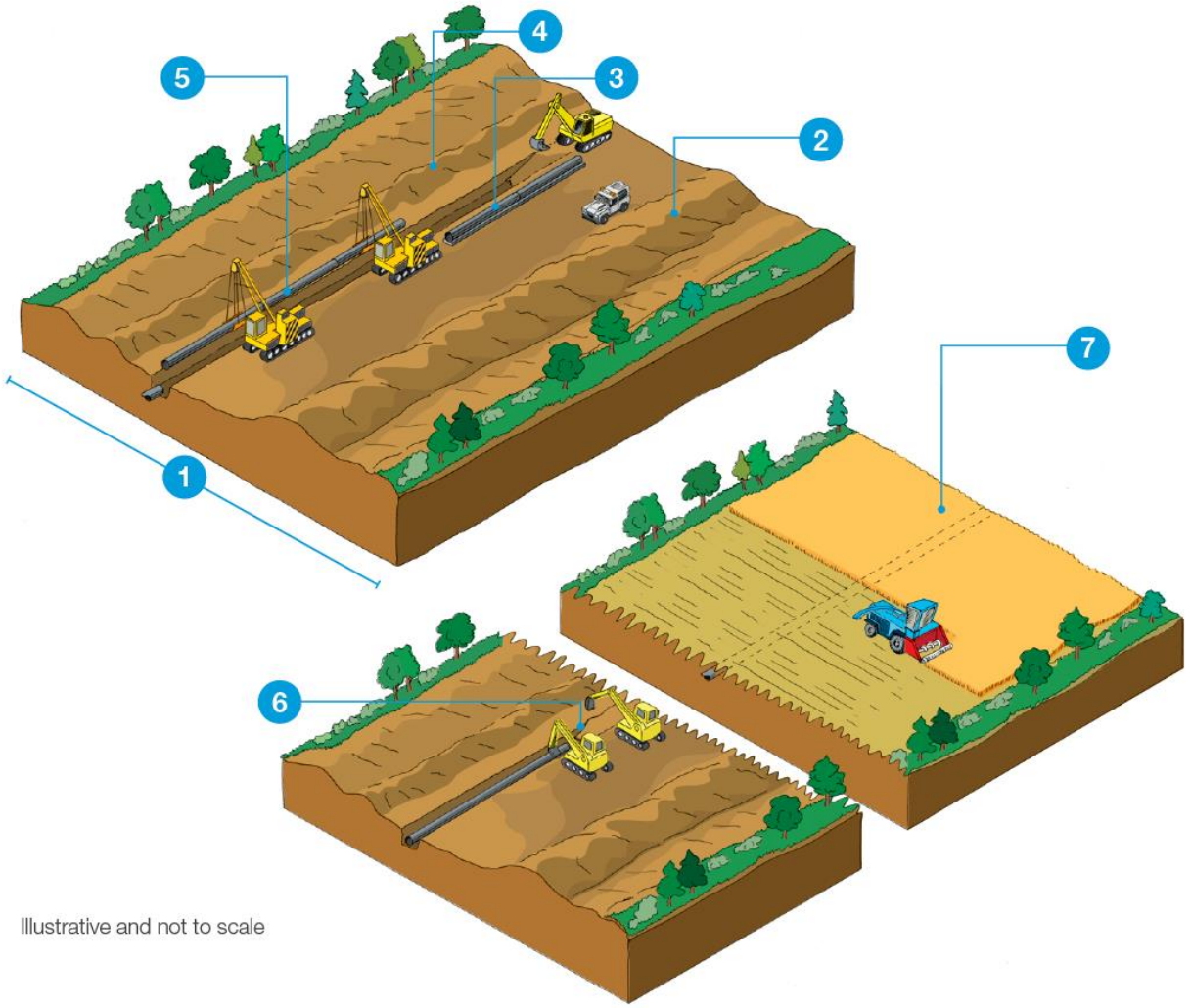
Constructing an onshore underground pipeline



Illustrative and not to scale

National Grid has extensive expertise in designing, building and operating safe and effective high-pressure gas pipelines

This is an illustrative diagram showing the construction process of an onshore pipeline. Please note, this image is based on a single pipeline. The Humber Low Carbon Pipelines project will involve two pipelines and will take a similar approach.

1 First, the working width – the total area within which construction work will take place – is marked out.

2 Next, the topsoil is carefully stripped and stored next to the pipeline route.

3 The pipeline is delivered in short lengths and placed on supports. These short lengths of pipeline are welded together into longer sections called 'strings'.

4 The pipeline trench is dug, with the excavated material being stored separately from the topsoil on the opposite side of the trench.

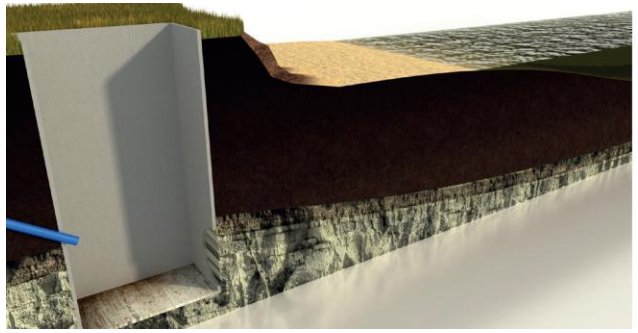
5 The pipeline 'strings' are lowered into the trench using special vehicles called 'side booms' and welded to the pipeline already laid.

6 The trench is filled in using the previously excavated material and the topsoil is replaced.

7 Once the land above the pipeline has been fully reinstated, it can be returned to its previous use, for example farming.

Constructing an onshore underground pipeline

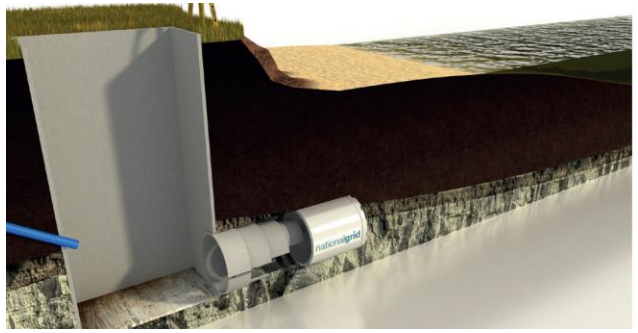
Going under the Humber



Shaft construction

Shafts are built on either side of the river.

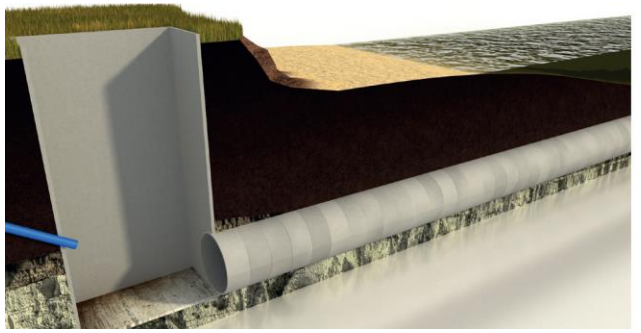
These can be vertical or sloped, depending on geological and engineering considerations.



Tunnel boring

A tunnel bore machine digs the tunnel beneath the river.

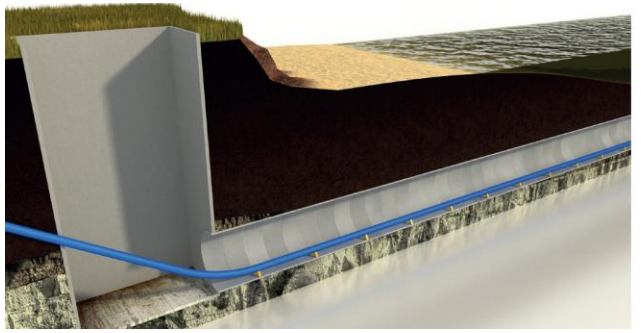
This can bore through anything from hard rock to sand.



Concrete lining

The tunnel is lined with concrete segments as it is dug.

The excavated material is transported for use or disposal away from the site. We are investigating options for its reuse.



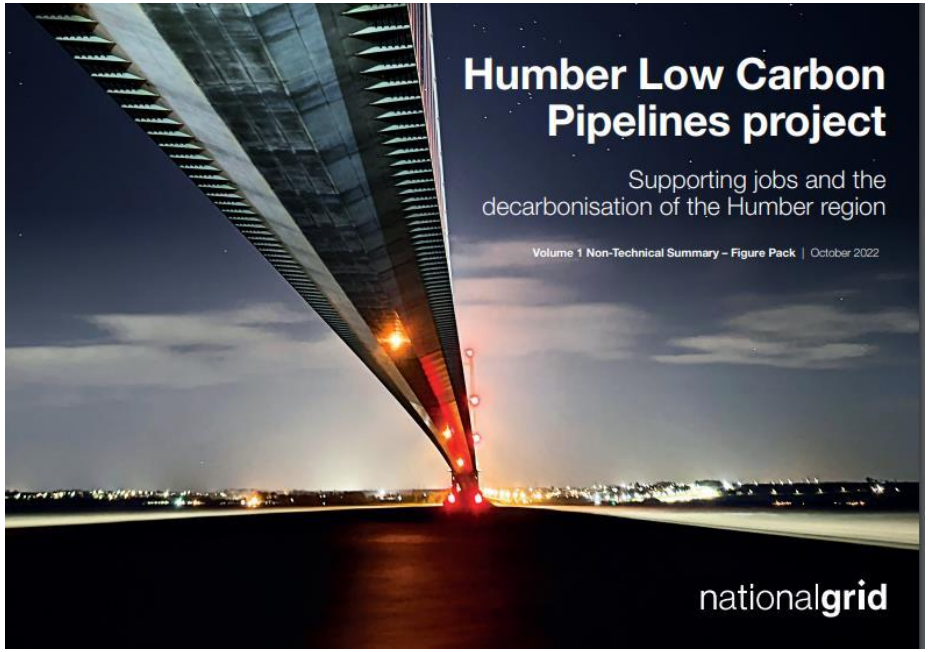
String fabrication and pipeline pulling

The pipeline is pulled through the tunnel from the surface in 'strings' – long, welded sections of pipe assembled on-site on one side of the river.

Once complete, the tunnel shafts are filled and the land reinstated as close to its original condition as practical.

Construction routes and impacts on roads

- Part of this consultation
- Construction vehicles will use pre-agreed routes, typically avoiding villages, high streets and single lane roads
- *Non-Technical Summary – Figure pack*
  - Preliminary construction routes
  - Emerging construction routes
- Working with county/unitary authorities, parish councils and others to mitigate/manage
- During operation there will be very little traffic associated with the pipelines



07

Working with landowners

Presented by Dalcour Maclaren

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Working with landowners, occupiers and affected parties

- Our commitment
- Identifying and engaging with landowners and others
- Mainly agricultural land
- Biodiversity
- Process managed by Dalcour Maclaren on behalf of National Grid
  - Phone: 01869 629007
  - Email: HLCP@Dalcourmaclaren.com

08

Project timeline

Planning process

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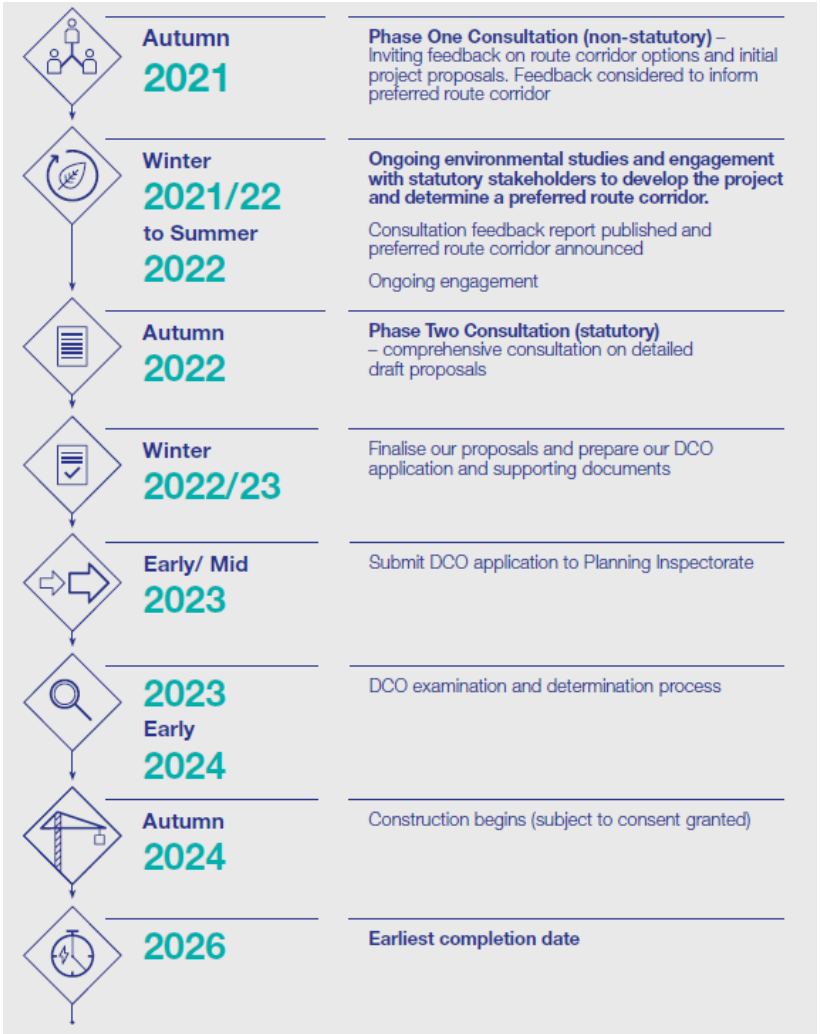
The planning process and timeline

- The project is a nationally significant infrastructure project (NSIP)
- It will be determined by the UK Government
- We will submit a 'Development Consent Order' to the Planning Inspectorate (PINS)
- PINS will examine the application and make a recommendation to the Secretary of State who will make the final decision
- Local councils, communities and others have a very important role to play in this pre-application period and can take part in examination



09

Have your say

How to provide feedback

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How to provide feedback

Ways to submit your feedback

- **Online:** visit nationalgrid.com/humberpipelines and complete a digital feedback form
- **Email:** HumberLowCarbon@nationalgrid.com
- **Post:** write to us at FREEPOST HLCP NATIONAL GRID (we can send you a hard copy feedback form in the post if you require)

Key information

- All copies of our consultation materials are available on our website
- **Consultation feedback must be received by 8.59am on 5 December 2022.**
- All feedback will be recorded and considered, with changes made to the plans where appropriate. This will be reported in the Consultation Report.
- If you have any questions, please contact us (via freephone on 0800 860 6255 or via email)

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Questions?

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Thank you

nationalgrid.com/humberpipelines

Email: HumberLowCarbon@nationalgrid.com
Phone: 0800 860 6255
Freepost: FREEPOST HLCP NATIONAL GRID

Consultation closes at 8.59am on 5 December – please send us your feedback by then

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