

Humber Carbon Capture Pipeline

Programme Document

Document Ref: 10607856-ARC-XX-XX-XX-TC-0001-P1-Programme Document

Revision: V4

FEBRUARY 2025



Humber Carbon Capture Pipeline

Programme Document

Author [REDACTED]

Checker [REDACTED]

Reviewer [REDACTED]

Approver [REDACTED]

Document Ref. 10607856-ARC-XX-XX-XX-TC-0001-P1-Programme Document

Date FEBRUARY 2025

Version Control

Version	Date	Author	Checker	Reviewer	Approver	Changes
1	28/06/24	[REDACTED] [REDACTED]	[REDACTED] [REDACTED]	[REDACTED] [REDACTED]	[REDACTED] [REDACTED]	
2	05/07/24	[REDACTED] [REDACTED]	[REDACTED] [REDACTED]	[REDACTED] [REDACTED]	[REDACTED] [REDACTED]	
3	02/01/25	[REDACTED] [REDACTED]	[REDACTED] [REDACTED]	[REDACTED] [REDACTED]	[REDACTED] [REDACTED]	
4	12/02/25	[REDACTED] [REDACTED]	[REDACTED] [REDACTED]	[REDACTED] [REDACTED]	[REDACTED] [REDACTED]	

Contents

1	Introduction.....	1
2	Project Background.....	2
3	Main Issues for Resolution and How to Address Them	9
4	Engaging with Statutory Consultees and Local Planning Authorities	10
5	Pre-Application Risks and How these will be Tracked and Managed	12

Tables

Table 1 - Key Programme Tasks and Milestones	6
Table 2 - PINS Meeting Programme	8
Table 3 – Emerging Issues for Resolution	9
Table 4 - Emerging Pre-Application Risks	12

1 Introduction

1.1 Purpose and Structure

1.1.1 This iteration of the Programme Document has been prepared by Arcadis Consulting UK Ltd on behalf of Net Zero North Sea Storage Limited (Applicant) as a requirement under the *Nationally Significant Infrastructure Projects: 2024 Pre-Application Prospectus*¹ in respect of the Humber Carbon Capture Pipeline (HCCP) (the Project).

1.1.2 The Programme Document is a 'live' document and will be subject to updates as the Project develops. Updates will be made available on a quarterly basis, and these will be publicised on the Project website².

1.1.3 In accordance with the Government Guidance on the pre-application stage for Nationally Significant Infrastructure Projects (NSIP) this Programme Document sets out the anticipated project timetable and describes the activities necessary for effective pre-application consultation with various parties required under the Planning Act 2008. This document has been prepared in line with the requirements for a Programme Document as set out in the *Nationally Significant Infrastructure Projects: 2024 Pre-application prospectus*. It also confirms the level of pre-application service requested from the Planning Inspectorate (PINS).

1.1.4 This Programme Document is structured as follows:

- Section 2: Background to the Project, including the Project programme;
- Section 3: Main Issues for resolution and how the Project will address these;
- Section 4: Engagement with statutory consultees and Local Authorities; and
- Section 5: Pre-application risks and how these will be managed and tracked.

1.1.5 The Project is at an early stage, accordingly details pertaining to main issues for resolution with consultees and local authorities emerging. Where relevant, these will be captured and reported upon in future iterations of this Programme Document, and in due course iterations shall cross-refer as appropriate to the Statement of Community Consultation once this is in place.

¹ <https://www.gov.uk/guidance/nationally-significant-infrastructure-projects-2024-pre-application-prospectus>

² www.nephccp.co.uk

2 Project Background

- 2.1.1 The UK Government has set legally binding net-zero greenhouse gas emissions targets. These include an amendment to the Climate Change Act 2008 to commit the UK to achieving net-zero by 2050.
- 2.1.2 The East Coast Cluster (ECC), which serves the industrial powerhouse regions of Teesside and the Humber, has been selected as one of the first two carbon capture and storage (CCS) clusters to be taken forward by the UK Government. It includes a diverse mix of projects, including industrial carbon capture, low-carbon hydrogen production, negative emissions power, and power with carbon capture. These technologies are essential for the UK to meet its net zero targets; both regions would also benefit from an influx of green jobs, skills development and supply chain benefits.
- 2.1.3 The Applicant (as part of the Northern Endurance Partnership (NEP)) would be the carbon dioxide transportation and storage infrastructure provider for the ECC.
- 2.1.4 The NEP is an independent joint venture (IJV) with shareholders made up from bp, Equinor and TotalEnergies and was formed to develop the carbon dioxide transportation and storage infrastructure to serve a diverse range of industries in the Teesside and Humber regions.
- 2.1.5 The Project is an important part of NEP's end-to-end carbon dioxide transportation and storage infrastructure network, which enables the ECC.
- 2.1.6 The objective of the Project is to deliver a new onshore pipeline network to transport captured carbon dioxide from industrial facilities in the Humber region to the coast near Easington. At this point, the Project interfaces with an offshore pipeline (to be consented separately) that would deliver the continuation of the carbon dioxide transportation pipeline to secure subsea storage. The offshore pipeline, infrastructure and storage are all subject to separate applications for consent / licence under the respective offshore oil and gas regulatory framework.
- 2.1.7 National Grid Ventures was previously part of the NEP and promoted the Humber Low Carbon Pipelines (HLCP) project, which proposed developing hydrogen and carbon dioxide pipelines between Drax in North Yorkshire to the coast north of Easington in East Riding of Yorkshire, with associated above ground installations. The HLCP project undertook EIA Scoping in April 2022 and Statutory Consultation in October 2022. The HLCP project is no longer progressing, and National Grid Ventures has since left the NEP. The Project is different to HLCP, notably as only carbon dioxide would be transported, however there are some similarities in the

route. The Project has taken into account feedback that was previously received by National Grid Ventures during the consultations on the HLCP project. The Applicant is the promoter entity for NEP for the Project and is taking forward the HCCP Project.

2.1.8 Industry in the area is already actively planning for the implementation of CCS. Drax Power Limited secured Development Consent on 16 January 2024 from the Secretary of State for the Drax Bioenergy with Carbon Capture and Storage Project. Planning applications for post-combustion carbon dioxide capture plants were submitted to North Lincolnshire Council in March 2023 by Phillips 66 Limited and VPI Immingham, as part of the Humber Zero Project. Equinor secured planning permission from East Riding of Yorkshire Council for their H2H Saltend 600 Megawatt low carbon hydrogen production plan. An application for the Viking Carbon Capture and Storage project was submitted to PINS in November 2023. This project comprises a 55.5km long pipeline which will transport CO² from the Immingham industrial area to the Theddlethorpe area on the Lincolnshire Coast where it will connect into the existing Lincolnshire Offshore Gas Gathering System pipeline. In addition, SSE Thermal secured Development Consent in December 2022 for the Keadby 3 Carbon Capture project.

2.2 The Project

2.2.1 The Project comprises an onshore underground pipeline and associated above ground installations (AGIs) and a Pump Facility to transport carbon dioxide from industry and power generation facilities with carbon capture in the Humber region (to be selected by UK Government as part of the CCS process) between Drax (in North Yorkshire) and Easington on the coast (within East Riding of Yorkshire), to connect with a secure offshore storage in the North Sea (with the offshore storage and associated transportation pipeline subject to separate consent).

2.2.2 The proposed pipeline (excluding connections to carbon capture projects) would be approximately 90km long. The current basis of design stipulates that the pipeline would have a nominal diameter of up to 660 mm (26"). Pipeline connections to individual carbon capture projects will be of varying diameters.

2.2.3 Development Consent will be sought to authorise the following development:

- An underground onshore pipeline system to transport carbon dioxide from industrial and power sector carbon capture projects (to be selected by DESNZ through their cluster sequencing programme) in the Humber area. Currently it is envisaged that connections to individual carbon capture sites will be drawn to their boundary fence;
- A pipeline crossing beneath the Humber Estuary and River Trent;

- A number of AGIs with the following types proposed:
 - Inlet AGI – would serve as the connection point from the Carbon Capture Projects to the pipeline. These facilities would contain equipment for remote monitoring of the pipeline system and would also contain equipment to launch/receive a Pipeline Inspection Gauge (PIG) which is used to internally clean, gauge and inspect the pipeline.
 - Junction AGI – would connect a spur line to the main pipeline. These facilities would contain equipment to launch/receive a PIG for inspection of the spur line. Some Junction AGI would also contain the necessary equipment to launch / receive PIG on the main pipeline.
 - Block Valve Stations AGI – would allow the isolation and monitoring of the pipeline. These would include buried pipeline valves and a small section of above ground pipework. In addition, a Block Valve Station would include an electrical and instrumentation unit.
- A Pump Facility north of Easington in the East Riding of Yorkshire. The Pump Facility would be located near to the proposed landfall point – where the onshore and offshore pipeline consents would interact; and
- Other ancillary works.

2.2.4 The Project will involve a crossing of the River Humber and a crossing of the River Trent at a point where the river is tidal. Accordingly, a Marine Licence may be required from the Marine Management Organisation (MMO). If required a provision will be included within the application for Development Consent, deeming a marine licence to have been issued under Part 4 of the Marine and Coastal Access Act 2009.

2.2.5 In addition to applying for a deemed Marine Licence, among other necessary consents and approvals, the developers will obtain relevant lease agreement(s) from the Crown Estate.

2.2.6 The Project falls within the administrative boundaries of the following local authorities:

- North Yorkshire Council
- East Riding of Yorkshire Council
- North Lincolnshire Council
- North East Lincolnshire Council

2.2.7 The Project would have an interface with the offshore pipeline (to be consented separately) that would deliver the continuation of the carbon dioxide transportation pipeline to secure subsea storage. The offshore pipeline, infrastructure and subsea

storage are all subject to separate applications for consent / licence under the respective offshore oil and gas regulations.

2.3 Planning Act 2008

2.3.1 The Project is defined as an NSIP under Section 14(1)(g) and Section 21(1) of the Planning Act 2008). The Project meets the criteria of Section 16 of the Planning Act 2008 and is therefore an NSIP requiring an application to be made for development consent.

2.4 Pre-Application Service from the Planning Inspectorate.

2.4.1 For the Project the Applicant requested the **Tier 2 Standard** pre-application service tier and this was accepted by PINS.

2.4.2 Due to the scale of the Project, and as extensive compulsory acquisition may be needed, the Applicant did not consider Tier 1 (Basic) or Tier 3 (Enhanced) to be appropriate.

2.5 Project Programme

2.5.1 Table 1 provides an overview of key current programme dates. Any changes to these dates will be communicated to PINS and captured within updates to this Programme Document.

Table 1 - Key Programme Tasks and Milestones

Timescale	Key Deliverables / Actions
Q2 2024 - complete	Introductory engagement with Host Authorities, PINS and other stakeholders. Then ongoing through DCO development.
Q3 2024 - complete	Non-Statutory Consultation ran from the 9 July to 20 August 2024 – further details of the outcomes of this non-statutory consultation were provided to PINS in the Project Update Meeting – 14 November 2024
Q4 2024 - complete	Further engagement with PINS along with further updates to Host Authorities (including to discuss PPA) and statutory consultees.
Q1 2025 - complete	Submit Environmental Impact Assessment (EIA) Scoping Opinion request to PINS
Q1 2025 - complete	Receipt of EIA Scoping Opinion
Q1 2025	Preparation of Statement of Community Consultation
Q1 2025	Statement of Community Consultation shared with Host Authorities for comment. 28 days have been programmed for feedback.
Q1/2 2025	Review of feedback on Statement of Community Consultation
Q2/3 2025	Statutory Consultation Please note that the programme assumes that a further statutory consultation will not be required.

Timescale

Key Deliverables / Actions

Q1 2026	<p>Draft documents (standard tier service). Draft documentation will be provided to PINS for review³, to potentially include:</p> <ul style="list-style-type: none">• Draft DCO, including draft Protective Provisions and potential draft deemed marine licence;• Draft DCO Explanatory Memorandum;• Draft sample Works Plans and Land Plans;• Draft Consultation Report including section 42 consultee list;• Draft EIA project description chapter(s);• Draft Planning Statement;• Draft Book of Reference;• Draft Statement of Reasons; and• Draft Funding Statement <p>Six weeks has been programmed for feedback. It is proposed that a staggered submission review process is progressed and will be agreed with PINS</p>
Q1 2026	Adequacy of Consultation Milestone
Q4 2026	DCO Submission DCO Acceptance
Q4 2026	Completion of Pre-Examination Period
Q3 2027	Examination Complete
Q4 2027	Recommendation to Secretary of State
Q1 2028	Secretary of State Decision

³ The following DCO documentation will be subject to iterative review by relevant statutory bodies, host authorities and other interested parties and will be recorded as part of the Evidence Plan process if deemed required:

- Draft EIA Technical Topic Chapters, supporting appendices and other documents such as the outline Construction Environmental Management Plan, Landscape and Ecological Management Plan, Construction Traffic Management Plan;
- Draft Habitat Regulation Assessment documentation

2.6 PINS Meeting Programme

2.6.1 Table 2 provides an overview of proposed engagement with PINS. Future dates for meetings are yet to be agreed. Any changes will be communicated and agreed with PINS and captured within this 'Live' Programme Document.

2.6.2 Proposed requirements for further meetings such as PINS attendance at Evidence Plan Meetings are still in development and will be communicated and agreed with PINS and captured within this 'Live' Programme Document.

Table 2 - PINS Meeting Programme

Date	PINS Meeting
18 April 2024	Project Inception Meeting
14 November 2024	Project Update Meeting
20 March 2025	Post-Scoping and approach to PEIR meeting
Q2 2025- date to be agreed	Placeholder(s) for Evidence Plan Meetings should these be deemed required, subject to outcomes of EIA Scoping Opinion – 6 weeks' notice to be provided to PINS if required
Q2 2025- date to be agreed	Draft Statement of Community Consultation meeting and pre-section 42 consultation meeting
Q3 2025 - date to be agreed	Post-section 42 consultation meeting
Q4 2025- date to be agreed	Draft documents approach meeting
Q1/Q2 2026- date to be agreed	Draft documents feedback meeting
Q3 2026- date to be agreed	Pre-Submission Meeting

3 Main Issues for Resolution and How to Address Them

3.1 Introduction

3.1.1 The Project is currently at an early stage of development with non-statutory consultation having been completed in August 2024. Table 3 below captures the emerging main themes and issues arising from the non-statutory consultation and ongoing engagement.

Table 3 – Emerging Issues for Resolution

Issue	Description of Issue	Activities to be undertaken to Resolve Issue
1	Concern from local communities about the impact of construction traffic.	The Applicant is looking at a range of options for how traffic impacts can be best reduced and managed. A detailed traffic study has been commissioned to look at a range of alternative options for construction traffic access and to consider the suitability of local roads. At Scoping Stage the draft order limits retain flexibility for various options. The Applicant will be engaging further with Highways England, the relevant Councils and Parish Councils.
2	Concern around disruption to communities and properties	The Order Limits avoid properties and communities and pass largely through agricultural land. The ongoing iterative design process will continue to consider interactions and avoid/mitigate where possible.
3	Interaction with existing and proposed utilities along the proposed route	Identification of these locations and potential works along with early engagement with statutory undertakers on draft Protective Provisions.
4	Impact on agricultural land and landholdings	The Project team is working closely with landowners to understand implications and consider mitigation.
5	Concern that works may impact drainage or cause flooding	The Applicant is undertaking a detailed land drainage study and will look carefully at how to reduce and minimise the impacts on drainage and of flooding.

4 Engaging with Statutory Consultees and Local Planning Authorities

Stakeholder Engagement Overview

Local Authorities

4.1.1 The Project directly routes through four local authorities, referred to as host authorities:

- North Yorkshire Council;
- East Riding of Yorkshire Council;
- North Lincolnshire Council; and
- North East Lincolnshire Council.

4.1.2 The Project has introduced the scope and high-level design to the host authorities and has established protocols for ongoing engagement. Discussions are now starting to focus on specific technical issues such as heritage. The Project is currently reviewing draft PPAs with a view to entering into these where required.

4.1.3 Going forward the Project team aims to engage proactively throughout the pre-application stage with the host authorities via:

- Regular meetings with planning case officers;
- Technical meetings, as required with technical specialists across a range of EIA disciplines to discuss EIA approach, survey requirements and assessment methodologies;
- Thematic workshops (multi authority/cross boundary where required) to seek agreement on key issues such as heritage or landscape;
- Facilitation of inputs to and review of the draft Statement of Community Consultation (SoCC);
- Facilitation of inputs to and review of the draft DCO and associated requirements; and
- Discussions regarding the potential use of Section 106 agreements.

4.1.4 This engagement will take place on an ongoing basis but with a particular focus around:

- Pre-EIA scoping stage (already taken place at the date of this document);
- Post-EIA scoping opinion;
- Pre-Preliminary Environmental Information Report (PEIR);
- Post-PEIR; and

- Submission of DCO application accompanied with Environmental Statement

Statutory bodies

4.1.5 In addition to engagement with the host authorities, the Project is proactively engaging with the statutory environmental bodies (Natural England, Historic England, the Environment Agency and the Marine Management Organisation). As the Project moves forward engagement will also extend to other organisations such as Internal Drainage Boards, National Highways, Network Rail, utility companies, and local interest groups such as the local Wildlife Trusts. Where appropriate, these organisations may also be invited to thematic groups meetings alongside LPA representatives.

5 Pre-Application Risks and How these will be Tracked and Managed

5.1.1 The Guidance asks that the Programme Document identifies risks to achievement of the pre-application stage and the process by which these risks are tracked and managed.

5.1.2 As outlined within the introductory text and at Section 3, the Project is at an early stage of development with non-statutory consultation completed in August 2024. Table 4 below captures emerging themes and risks and outlines how these will be tracked and managed.

Table 4 - Emerging Pre-Application Risks

Risk	Description of Risk	Tracking and Managing Risk
Land Access	Accessing land for surveys in a timely manner	Dalcour McLaren have been appointed to act as Land Agent for the Project. All interactions with landowners are logged and recorded.
Resourcing	Lack of sufficient resource/capacity within stakeholder organisations to engage in detail	The level of support and engagement each host authority or stakeholder organisations can provide will be monitored. Advisory agreements are already in place with some organisations and PPAs are currently being negotiated with host authorities.
Connected projects/emitters	The Project is awaiting further guidance from the Department of Energy Security and Net Zero on the connections the pipeline is required to provide to carbon capture projects.	The Applicant is seeking to maintain a dialogue so that any changes are understood quickly.

Risk	Description of Risk	Tracking and Managing Risk
Protective Provisions	Length of time to undertake detailed discussions and in principle agreement prior to submission of the DCO	Identification of interactions already underway via the design process with early engagement to begin in Q1 2025
Crown Estate lease agreements	Length of time to undertake detailed discussions and in principle agreement on any lease prior to submission of the DCO	Early engagement through Applicant's land agents has begun

EAST  AST CLUSTER



**Northern
Endurance
Partnership**

Humber
Carbon Capture
Pipeline