



Programme Document

H₂ East Pipeline: Humber to Nottinghamshire

Cadent Gas Ltd (Cadent)

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Acronyms and Abbreviations

ALC	Agricultural Land Classification
ATC	Automatic Traffic Counters
BNG	Biodiversity Net Gain
BVI	Block Valve Installation
CNP	Critical National Priority
DCO	Development Consent Order
ECH ₂	East Coast Hydrogen
EIA	Environmental Impact Assessment
FEED	Front End Engineering Design
HAGI	Hydrogen Above Ground Installation
LLFA	Lead Local Flood Agency
NPS EN-1	Overarching National Policy Statement for Energy (EN-1)
NPS EN-4	National Policy for Natural Gas Supply Infrastructure and Gas and Oil Pipelines
NSIP	Nationally Significant Infrastructure Project
PA2008	Planning Act 2008
PADSS	Principal Areas of Disagreement Summary Statements
PINS	Planning Inspectorate
PMIE	Potential Main Issues for Examination
PPA	Planning Performance Agreement
PROW	Public Rights of Way
SoS	Secretary of State
SPA	Special Protection Area

1 Introduction

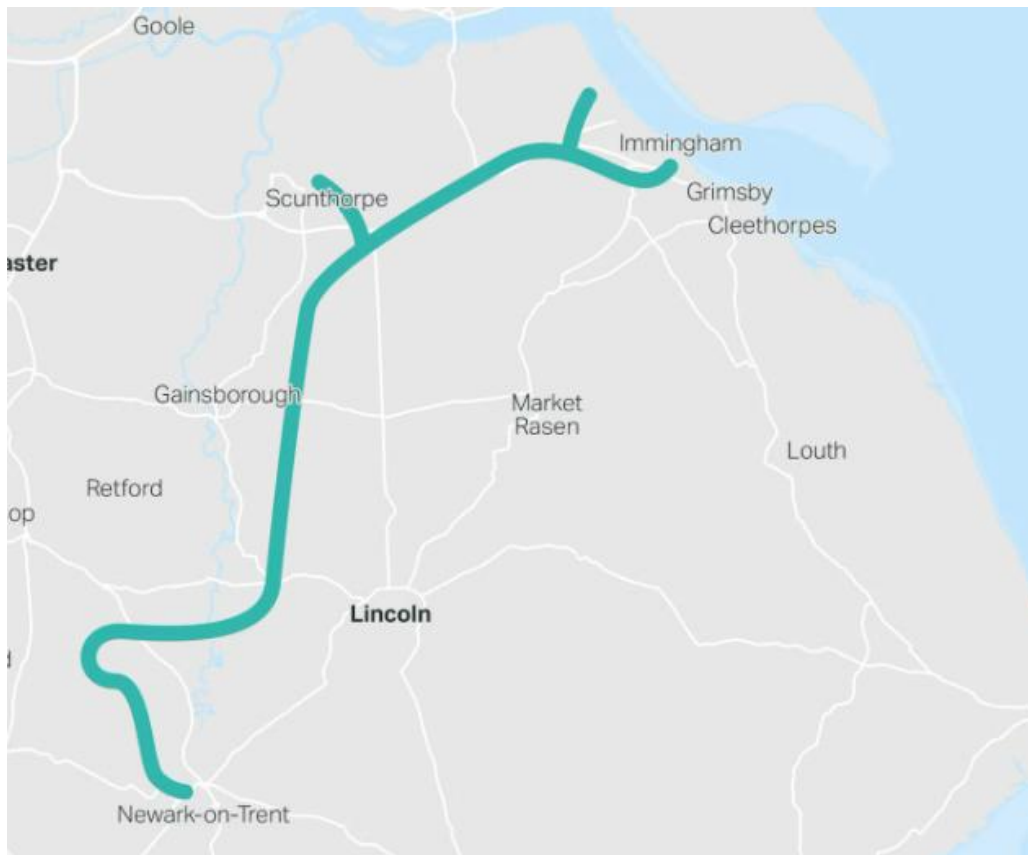
- 1.1.1 Cadent Gas Limited (Cadent) intends to prepare and submit an application for development consent for a hydrogen pipeline and associated above ground infrastructure from the Humber to Nottinghamshire. The Project is called H₂East: Humber to Nottinghamshire (Project). This Programme Document sets out the main steps that Cadent will undertake during the preparation of the application for development consent.
- 1.1.2 The purpose of the Programme Document is to inform the Planning Inspectorate (PINS), stakeholders and the public of the timescales and the key aspects of the proposals in order that their contribution to the pre-application process can be suitably programmed. It also confirms the level of pre-application service requested from PINS. Further details of the purpose of the Programme Document are set out in the Planning Inspectorate's Nationally Significant Infrastructure Projects: 2024 Pre-application Prospectus.¹
- 1.1.3 This version of the Programme Document is being made available for the start on consultation and will be updated as the Project progresses through the pre-application process. The Programme Document is structured as follows:
- Section 2.0 Background to the Project – provides an overview of the proposed Project
 - Section 3.0 Planning Inspectorate Pre-application Service – outlines Cadent's approach to the pre-application service provided by PINS
 - Section 4.0 Pre-application programme – sets out the anticipated programme for the pre-application process
 - Section 5.0 Main Issues for Resolution – sets out the main issues that have been raised by stakeholders to date during the course of the pre-application
 - Section 6.0 Engagement with Statutory Bodies – outlines planned and engagement to date with statutory bodies
 - Section 7.0 Engagement with Local Authorities – outlines planned and engagement to date with local authorities
 - Section 8.0 Pre-application risks – outlines a record of application risks identified to date and what Cadent is doing to address those risks
- 1.1.4 As the Project progresses and as milestones are achieved, this version of the Programme Document will be updated and revised to reflect the status of the matters outlined above.

¹ [Nationally Significant Infrastructure Projects: 2024 Pre-application Prospectus - GOV.UK](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/115444/nationally-significant-infrastructure-projects-2024-pre-application-prospectus.pdf)

2 Background to the project

- 2.1.1 The H2East: Humber to Nottinghamshire Project is being developed by Cadent. Cadent is the largest UK gas distributor managing over 82,000 miles of gas pipes, transporting gas to homes and industry across the East Midlands, West Midlands, North West, East of England, South Yorkshire and North London. Further details on Cadent can be found at www.cadentgas.com.
- 2.1.2 The Project forms part of a wider programme called East Coast Hydrogen (ECH₂), which has been developed by Cadent, along with National Gas and Northern Gas Networks. ECH₂ aims to identify and deliver the network infrastructure required to support the deployment of low-carbon hydrogen, which is needed to meet UK Government legally binding targets of achieving net-zero greenhouse gas emissions by 2050. Cadent's role, as part of ECH₂, is to develop proposals for hydrogen infrastructure south of the Humber and to deliver hydrogen to existing industrial customers, initially focused on those with the highest demand.
- 2.1.3 The Project intends to deliver a new 100% low carbon hydrogen pipeline from hydrogen production in North Killingholme on the Humber and High Marnham in Nottinghamshire to industrial users across North Lincolnshire and Nottinghamshire. The pipeline will be buried underground but will require several Hydrogen Above Ground Installations (HAGI) and Block Valve Installations (BVI). The Project is illustrated in Figure 2.-1.

Figure 2.-1 Illustration of the Project location



2.1.4 Wider aspirations for the how the Project could fit into a network of hydrogen pipelines across the East Midlands is illustrated in Figure 2-2.

Figure 2-2 Wider hydrogen pipeline network aspirations



2.1.5 Further information regarding the Project can be found at www.h2east.co.uk.

2.1.6 The Project is expected to constitute a Nationally Significant Infrastructure Project (NSIP) and, therefore, require Development Consent as required by the Planning Act 2008 (PA2008). Section 14 of the PA2008 lists the type of projects that are classed as a NSIP. The definition that aligns closest to the Project is Section 14(1) f which is for ‘the construction of a pipe-line by a gas transporter.’ Cadent has written to the SoS under Section 35 of the PA2008 requesting a direction that the Project requires development consent under Section 14(1) of the PA2008.

2.1.7 The pre-application phase of the Project will involve the development of the pipeline route, the siting of the HAGI and BVI infrastructure, areas for environmental mitigation and enhancement, areas for temporary construction (e.g., compounds, haul roads, crossing works) and potential alterations to highway access points to the Project. Cadent intends to consult widely with stakeholders (e.g., statutory consultees, planning authorities, landowners and the public) on the Project and will take appropriate feedback into account when developing the design. Additionally, Cadent is undertaking an Environmental Impact Assessment, the results of which will also feedback into

the project design. An Environmental Statement will accompany the application for development consent.

- 2.1.8 The application for development consent will be submitted to PINS who will appoint an inspector/s forming the Examining Authority to consider the application and make a recommendation to the SoS. The SoS will determine the application in line with the policy requirements set out within the Overarching National Policy Statement for Energy (EN-1)², a Local Impact Report produced by the local authorities, and any other matters the SoS considers important and relevant. The National Policy Statement (NPS) EN-1 sets out the policy tests that an energy NSIP project must meet in order to be granted consent. NPS EN-1 also clearly states that low carbon hydrogen infrastructure is Critical National Priority (CNP) infrastructure.
- 2.1.9 The Project will also consider the requirements of the NPS for Natural Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4). EN-4 confirms that, although it has statutory effect only for natural gas and oil pipelines, its guidance may be useful in identifying impacts and considerations relevant to pipelines transporting other substances, such as hydrogen. Of particular relevance in EN-4, the Project will draw upon the guidance relating to site and route selection, pipeline safety, and the interaction of pipeline infrastructure with environmental constraints.

² <https://assets.publishing.service.gov.uk/media/65bbfbdc709fe1000f637052/overarching-nps-for-energy-en1.pdf>

3 The Planning Inspectorate's pre-application service

- 3.1.1 The Project has registered for the Tier 1 Basic level of service from PINS at this early stage in the Project. This will be reviewed as the Project progresses and if considered appropriate Cadent will opt to move onto Tier 2 Standard at a later date.
- 3.1.2 Although the Project is opting for Tier 1 Basic, the Project will provide several supplementary components listed in the PINS Pre-application Prospectus. At the current time these will include:
- Use of pre-application Principal Areas of Disagreement Summary Statements (PADSS) informed by Issues Trackers shared and agreed with consultees;
 - Production of a Policy Compliance Document outlining how the Project complies with policy; and
 - Production of a Design Approach Document outlining the good design principles adopted by the Project.

4 The pre-application programme

- 4.1.1 The Project was launched on 12 January 2026 and the application for development consent is anticipated to be made in Q4 2028, depending on further information from Government. The pre-application phase is currently planned as follows:
- Q1/Q2 2026: Consultation and EIA Scoping, comprising:
 - Public exhibitions and consultation materials;
 - Presentation of strategic options and corridor routing preference along with alternatives investigated in the form of a Design Evolution Report;
 - Agree scope of environmental surveys and studies through an EIA Scoping Report and following consultation with statutory consultees;
 - Q2 2026 – Q4 2027: EIA field surveys, Project design evolution and EIA assessment;
 - Q3 to Q4 2026 – Ground Investigation campaign;
 - Q1 2026 to Q4 2027 – Front End Engineering Design (FEED);
 - Q1/Q2 2028: Further consultation on the Project, comprising:
 - Public exhibitions and consultation materials;
 - Updated Project design information presenting details of pipeline routing and HAGI locations in an update to the Design Evolution Report;
 - Results of environmental assessments and mitigation proposals;
 - Engagement on findings and mitigation proposals with stakeholders;
 - Q4 2028: Submission of development consent application.
- 4.1.2 Further programme information will be provided in updates to this Programme Document.
- 4.1.3 The Project has engaged with PINS as follows:
- Inception meeting undertaken on 10 February 2026 to introduce the Project and agree the tier level of service;
 - EIA Scoping Report submitted to PINS in early March 2026 to obtain a Scoping Opinion; and
 - Project update meetings with PINS scheduled for 3 times per year, as per PINS pre-application basic service tier.
- 4.1.4 Additionally, the Project will consult with statutory bodies and local authorities, the details of which are set out in Section 6 and 7 respectively.
- 4.1.5 As previously set out, an EIA will be undertaken and submitted with the application for development consent. An overview of the studies being carried out, subject to EIA Scoping Opinion and consultation with local authorities and key consultees include:

- Ecology – winter bird surveys started for parts of the Project in proximity to the Humber Estuary Special Protection Area (SPA) in October 2025 and will continue through winter 25/26 and winter 26/27. UK Habitat, BNG surveys and protected species surveys will be conducted between April 2026 and October 2027;
 - Traffic and Transport - including Transport Assessment and private rights of way (PRoW) assessment. Traffic counts (including speed survey) on the local highway network in the form of Automatic Traffic Counters (ATCs) on highway links and PROW usage surveys will be undertaken in 2026. Traffic surveys will avoid key holiday periods such as seasonal holidays;
 - Landscape and Visual - which will focus primarily on the HAGI developments and will include viewpoint photography taken during the winter of 2026/27;
 - Archaeology and Heritage - including detailed desk-based investigations and potentially a programme of archaeological surveys within 2026 and 2027;
 - Noise - which will conduct baseline noise surveys at noise sensitive receptors near to HAGI locations during 2026;
 - Air Quality – no surveys are anticipated at this time;
 - Geology and Ground Conditions - which will conduct targeted site walkovers during 2026;
 - Soils and Agriculture - which will conduct a soils survey and Agricultural Land Classification (ALC) during 2026 based on an approach to be agreed with Natural England;
 - Flooding and Water Quality - which will involve walkover surveys during 2026;
 - Socio-Economic – no surveys are anticipated at this time;
 - Climate Change and Greenhouse Gas Assessment – no surveys are anticipated at this time; and
 - Major Accidents and Disasters – no surveys are anticipated at this time.
- 4.1.6 Studies will also include the preparation of information to inform a Habitat Regulations Assessment and will include the following steps:
- Initial view of European habitats sites and the potential for likely significant effects to be presented in the EIA Scoping Report;
 - Engagement with Natural England through 2026 and 2027 as survey findings are reviewed and the project design refined;
 - Draft screening provided for review by Natural England; and
 - Final Screening and Appropriate Assessment (if required), with DCO submission.

5 Main issues for resolution

- 5.1.1 Table 5-1 in this section sets out the main issues identified by the Project during the pre-application stage and the actions to be taken to address those issues.
- 5.1.2 At this early stage of the Project, a limited number of issues have been identified following early engagement with Natural England, Environment Agency (see Section 6) and local authorities (see Section 7). The Project can confirm that it will provide a statement of the Potential Main Issues for Examination (PMIE) for submission with the application for development consent.

Table 5-1 Main Issues Identified by the Project

Topic	Description of Issues	Management of Issue
Cumulative effects of NSIP projects/large schemes	Need to clearly understand other NSIP projects/ large schemes coming forward and timelines so that cumulative effects are considered adequately. Cumulative issues likely to include impact on workforce where other projects working to similar timeframes	Provide clarity on other NSIP projects/large schemes and how the Project fits in with other low carbon-hydrogen projects in the region Gather details and fully consider other NSIP projects in cumulative assessments

6 Engaging with statutory bodies

6.1.1 The Project intends to consult with a wide range of statutory bodies as outlined in Table 6-1. The Project will keep this list of consultees under review.

Table 6-1 Statutory bodies to be consulted by environmental topic

Topic	Relevant Stakeholders
Landscape and Visual Impact	Natural England, Historic England
Noise and Vibration	Public Health England
Ecology and Biodiversity	Natural England, Environment Agency
Hydrology and Water Resources	Environment Agency, Drainage Boards
Soil and Agriculture	Environment Agency, Natural England
Geology and Ground Conditions	Environment Agency, Mining Remediation Authority
Cultural Heritage and Archaeology	Historic England
Traffic and Transport	National Highways
Socio-Economics	Sports England, local economic organisations
Air Quality	Environment Agency

6.1.2 At this early stage of the Project, introductory meetings have taken place with Natural England (11 December 2025) and Environment Agency (18 December 2025). Monthly meetings are planned to be undertaken with Natural England and Environment Agency, and Issue Trackers will record specific issues for discussion and resolution. Meetings with additional consultees are to be set up as we go through the process. These Issue Trackers will be used to inform the PADSS that the consultees will submit to the Examining Authority during Examination. Key issues will be recorded as we go through the development process.

6.1.3 It is expected that the Project will also engage in regular consultation with the following statutory bodies and would look to produce pre-application PADSS:

- Historic England
- National Highways
- Network Rail

- Canal and Rivers Trust
- Internal Drainage Boards
- Mining Remediation Authority (if required)

6.1.4 The frequency of meetings with these statutory bodies is still to be determined.

7 Engaging with local authorities

- 7.1.1 The Project intersects with the administrative areas of the following local authorities:
- North East Lincolnshire Unitary Authority
 - North Lincolnshire Unitary Authority
 - Lincolnshire County Council
 - West Lindsey District Council
 - Newark and Sherwood District Council
 - Nottinghamshire County Council
 - Bassetlaw District Council
- 7.1.2 Introductory meetings with LPAs have provided an overview of the Project, details on work to date ie design and an outline of the pre-application programme. Discussions were also held with regards to entering into a Planning Performance Agreement (PPA) with the local authorities. Details of potential PPAs are being drawn up. It is intended to hold bi-monthly meetings with local authorities with a view to holding joint meetings with all local authorities.
- 7.1.3 As the Project progresses it may be necessary to hold several different meetings, the details of which will be updated in further iterations of the Programme Document. Potential meetings could include:
- Meetings with planning case officers
 - Technical meetings with local authority specialists (see Table 7.1)
 - Multi-authority topic meetings to agree on key issues such as landscape, traffic and heritage
- 7.1.4 In the same way as for statutory bodies, the Project will manage Issues Trackers with the local authorities, which will feed into PADSS for the local authorities to submit to the Examining Authority during Examination.
- 7.1.5 The Project will consult the local authorities on a range of topics, as outlined within Table 7-1. This list will be kept under review as the Project progresses.

Table 7-1 Local authority officers to be consulted

Topic	Relevant Stakeholders
Landscape and Visual Impact	Local authority Landscape Advisor
Noise and Vibration	Environmental Health Officer
Ecology and Biodiversity	Local authority Ecologist

Topic	Relevant Stakeholders
Hydrology and Water Resources	Lead Local Flood Authority (LLFA)
Traffic and Transport	Highways Authority, Local Planning Authority Transport Planners
Geology and Ground Conditions	Local authority Environmental Pollution team
Cultural Heritage and Archaeology	County Archaeologist and Conservation Officers

8 Pre-application risks

- 8.1.1 This section will record any pre-application risks associated with the Project. At this early stage of the Project there are no recorded risks.