

**HyNet North West
Hydrogen Pipeline**

Delivering clean growth

Cadent
Your Gas Network

HyNet North West Hydrogen Pipeline Project

Cadent Ltd

Preliminary Environmental Information Report

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1. Introduction

1.1 Introduction to the Preliminary Environmental Information Report

- 1.1.1 This Preliminary Environmental Information Report (PEIR) is the written output of the Environmental Impact Assessment (EIA) undertaken to date for the HyNet North West Hydrogen Pipeline Project (here after referred to as ‘the Project’) which is proposal by Cadent Gas Ltd (hereafter ‘the Applicant’). Although preliminary, the findings of the assessment are set out within this report to allow an informed view to be developed of the Project that is being promoted and the assessment approach that has been undertaken. This report will also allow preliminary conclusions to be drawn on the likely significant effects of the Project and the environmental measures proposed.
- 1.1.2 The requirement to consult on Preliminary Environmental Information is set out in The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017¹ (the ‘EIA Regulations’). Regulation 12(1)(b) requires the Applicant to set out in a Statement of Community Consultation (SoCC) prepared under section 47 of the Planning Act 2008², how it “*intends to publicise and consult on preliminary environmental information*” (where the proposed development is ‘EIA development’ (Section 1.3)). In accordance with section 47(7) of the Planning Act 2008, the Applicant is required to carry out consultation in accordance with the SoCC.
- 1.1.3 Preliminary environmental information is defined in Regulation 12(2) of the EIA Regulations¹ as “*information referred to in regulation 14(2) which (a) has been compiled by the applicant; and (b) is reasonably required for the consultation bodies to develop an informed view of the likely significant environmental effects of the development (and of any associated development)*”.
- 1.1.4 By providing a preliminary view of the assessment’s findings, the PEIR allows an informed view to be made of the Project’s likely significant effects identified to date, to support consultation. The PEIR has regard to the preliminary stage in the design process and has taken into account the currently-known complexities of the Project and the receiving environment.
- 1.1.5 This PEIR has been prepared for the purposes of statutory consultation prior to submission of an application for development consent and associated Environmental Statement (ES). The purpose of this document is to enable members of the public, consultation bodies and other stakeholders to develop an

¹ UK Government (2017). The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. (Online) Available at:

<https://www.legislation.gov.uk/ukxi/2017/572/contents/made> (Accessed February 2022).

² UK Government (2008). Planning Act 2008. (Online) Available at:

<https://www.legislation.gov.uk/ukpga/2008/29/contents> (Accessed February 2022).

informed view of the likely significant effects, as identified at this stage, and comment on particular aspects of interest.

- 1.1.6 Consultation feedback will inform the ongoing development of the Project. The design of the Project and therefore the assessment of its effects will continue to evolve in response to consultation, and as further baseline information becomes available. As such, information on the likely significant effects (material to the decision-making process) may change. However, the baseline information presented in the PEIR is considered to be sufficient to inform the preliminary assessment of the Project at this stage and is further informed by the judgement of specialists undertaking the environmental studies.

1.2 Overview of the Project

- 1.2.1 The Project is a proposal to construct and operate the UK's first 100 percent hydrogen pipeline network at scale. It will deliver hydrogen – a low carbon energy source – to multiple industrial users and power generators, plus potential blending points to accommodate the use of a mix of hydrogen and natural gas into the existing gas network.
- 1.2.2 The Project is part of the wider 'HyNet North West' programme that will produce, store and distribute hydrogen as well as capture and store carbon from industry in the North West of England and North Wales. This concept has the potential to reduce carbon dioxide emissions by millions of tonnes every year by 2030 – the equivalent of taking millions cars off the road. By enabling a fuel transition to hydrogen, HyNet North West will create and maintain thousands of local jobs, enabling long-term sustainability for businesses and supporting financial security for communities across the region.
- 1.2.3 The Project includes the construction, operation and maintenance of up to 125km of new pipeline to distribute hydrogen to industry and for blending with the gas network in the North West, and a number of Hydrogen Above Ground Installations (HAGIs) (including Block Valves as described in **Chapter 2: The Project**) required to control the flow and pressure of hydrogen at key points along the proposed pipeline.
- 1.2.4 The Project would connect to the Hydrogen Production Plant at the Essar Stanlow site as the source of hydrogen for onward distribution to the Network. The pipeline would continue to the Central Hub at the centre of the Network, which serves as the connection and onward distribution point to the South, East and North corridors, which would extend to locations near Middlewich, Irlam and St. Helens respectively. The location of the Project is illustrated by the Preliminary Order Limits in **Figure 1.1**.
- 1.2.5 The proposed key components of the Project are shown in **Figure 1.2** and can be summarised as follows:
- Hydrogen Pipeline Network (HPN) across the North West region:
 - ▶ West Corridor: Stanlow Hydrogen Production Plant (HPP) to Central Hub HAGI, incorporating Rocksavage HAGI (two routeing options currently under consideration around the Hover Force Outdoor Activity Centre, and two

options south-east of the Rocksavage HAGI); spurs to customers at Interger, Rocksavage; and The Heath Industrial and Business Park via Runcorn HAGI (two routeing options currently under consideration).

- ▶ North Corridor: Central Hub HAGI to St Helens HAGI, incorporating HAGIs at Higher Walton and Clock Face; spurs to customers at Solvay, Warrington and Ingevity, Warrington (shared single connection); Novelis, Warrington; NGF Europe Ltd., Clock Face; NSG Pilkington Greengate Works, St Helens; and Glass Futures, St Helens.
- ▶ East Corridor: Central Hub HAGI to Partington HAGI, incorporating a HAGI at Warburton and Block Valve near Sworton Heath (three options currently under consideration); spurs to Cadent AGI, Warbuton; and customers at SAICA, Partington; Partington Cadent AGI; Basell Polyolefins, Partington; and Carrington Power Station, Carrington.
- ▶ South Corridor: Central Hub HAGI to Hydrogen Storage Facility at salt caverns located north of Middlewich (four routeing options currently under consideration), incorporating a Block Valve (five options currently under consideration); spur to Tata Chemicals, Winnington.

1.2.6 A full description of the Project is provided in **Chapter 2: The Project**.

1.2.7 The Project would be defined as a Nationally Significant Infrastructure Project (NSIP) under Part 14(1)(f) ('the construction of a pipe-line by a gas transporter') of the Planning Act 2008² (as amended) if it blended gas into the existing gas network. However, given ongoing regulatory uncertainty as to whether the Project will include blending into the gas network Cadent has obtained a section 35 direction dated 05 July 2022 from the Secretary of State for Business, Energy and Industrial Strategy confirming that the Project (save for the pipeline spurs) is of national significance and is to be treated as development for which development consent is required. The Applicant intends to submit an application for an order granting development consent for the Project pursuant to the Planning Act 2008; this application is likely to include the pipeline spurs as associated development. The application will comprise details of all development proposals and will be accompanied by an ES conforming to the EIA Regulations.

1.3 The need for an Environmental Impact Assessment

1.3.1 EIA is a process required by UK law which brings together information about the likely significant effects of a development. The legal basis for EIA arises from the EIA Regulations which were made to implement European Community Directive 85/337/EEC³ (the 'EIA Directive') prior to the UK leaving the EU. The EIA Regulations, which set out the procedures to be followed in relation to EIAs undertaken for NSIPs in England and Wales, continue to have effect notwithstanding the UK's departure from the EU.

³ European Commission (1985). Council directive of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment. (Online) Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31985L0337&from=EN> (Accessed February 2022).

- 1.3.2 EIA is mandatory for development projects defined under Schedule 1. Those development projects defined in Schedule 2 only require EIA if they are likely to have significant effects on the environment by virtue of their nature, size or location.
- 1.3.3 The Project falls within the provisions of Schedule 1 (16)(a)¹ as the pipeline for transporting hydrogen gas has a diameter of more than 800 millimetres and a length of more than 40km. An EIA will therefore be prepared, and in line with Regulation 8(1)(b) of the EIA Regulations, the Applicant hereby provides notice that the application for a DCO will be accompanied by an ES.

1.4 The Applicant and the EIA team

The Applicant

- 1.4.1 Cadent Gas Limited (The Applicant) owns, operates, and maintains the gas distribution network serving 11 million homes and businesses throughout the North West, West Midlands, East Midlands, South Yorkshire, East of England and North London. In line with this role, Cadent is responsible for the following activities:
- Looking after the main gas pipe that supplies larger areas, as well as the smaller pipes branching off from it that takes gas to homes and businesses.
 - Maintaining, repairing, and replacing gas pipes to ensure the safe and reliable flow of gas now and long into the future.
 - Managing the National Gas Emergency Service for all gas customers in the UK. If something goes wrong, Cadent is the first point of call to make sure it is dealt with calmly, quickly and safely.
 - Connecting homes and renewable gas suppliers to its network.
 - Working with local businesses to expand and develop its network.
 - Providing extra care for those who might need it in a gas emergency.
- 1.4.2 Cadent does not produce gas and does not own the gas that flows through its pipes. It is solely responsible for its transportation and distribution.

The EIA team

- 1.4.3 Regulation 14(4) of the EIA Regulations requires that an ES should be prepared by 'competent experts' and that the ES is accompanied by a statement outlining the relevant expertise or qualifications of such experts.
- 1.4.4 This report and the EIA for the Project are being undertaken by suitably qualified and experienced specialists (competent experts). This report has been produced and co-ordinated by environmental consultants who are members of the Institute of Environmental Management and Assessment's (IEMA) EIA Quality Mark scheme. The Quality Mark requires its members to provide evidence of their EIA activities and adhere to certain commitments set out by IEMA. IEMA carry out an independent audit of those commitments each year by reviewing the ESs produced by Quality Mark members.

- 1.4.5 Competent experts have also been responsible for preparing aspect specific chapters of this report and further details of their expertise and qualifications are provided in **Appendix 1A**.

1.5 Structure of the PEIR

- 1.5.1 The PEIR comprises 4 volumes:

- Volume 1 is a Non-Technical Summary (NTS), which is also available as a standalone document.
- Volume 2 (i.e. this volume) is sub-divided into the following chapters:
 - ▶ **Chapter 2** provides a detailed description of the Project.
 - ▶ **Chapter 3** details the approach and methodology that has been adopted in preparing the PEIR.
 - ▶ **Chapter 4** provides an overview of the legislation and policies that are relevant to the PEIR as well as an overview of the consultation and engagement undertaken and planned.
 - ▶ **Chapters 5 to 18** set out the technical assessments for the environmental topics that need to be considered in the PEIR.
 - ▶ **Chapter 19** then discusses the intra-project cumulative effects of the Project.
- Volume 3 contains the appendices referred to in the PEIR.
- Volume 4 contains the figures referred to in the aforementioned volumes.

- 1.5.2 A glossary of technical terms and abbreviations list are provided as **Appendix 1B** and **Appendix 1C** of the PEIR in Volume 3.

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