Appendix A14 – Letters of Support

10 September 2021

[redacted]
Head of Regional Development (East and London)
Cadent Gas Ltd
Ashbrook Court
Coventry
CV7 8PE

Redwood Park Estate
Stallingborough
North East Lincolnshire
DN41 8TH

01469 552828
info@catchuk.org

Dear Sally,

RE: East Coast Hydrogen Project

I am writing to confirm our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks.

The Humber region has the highest level of industrial emissions in the UK and CATCH are a leading partner in the Humber Industrial Cluster Plan project, highlighting the need to decarbonise Humber industrial emissions by 2040. The East Coast Hydrogen project is ideally placed to support industrial decarbonisation in the region and will support the role out of hydrogen into domestic settings, both are essential components of meeting the UKs net zero targets.

There are a number of CATCH members already planning to generate low carbon hydrogen and connect it to some of the biggest emitters. It is recognised that many energy intensive processes cannot simply switch to using electricity to decarbonise and to reach the majority of users, further pipeline connections will be essential. It is increasingly likely that hydrogen will play a part in the decarbonisation of heating, heavy transport and power generation.

CATCH members dominate the industrial footprint at the heart of the East Coast Hydrogen project area and we see its deployment as being hugely beneficial to our region for the following reasons:

- Building new and re-purposing existing pipeline infrastructure in the Humber region will have a positive economic impact, creating regional jobs throughout the hydrogen supply chain. This will support the levelling up agenda, boosting skilled employment where it is needed most.
- The hydrogen network will connect industry in the Humber region to low carbon hydrogen and is a no regrets action for those businesses that simply cannot electrify. Having ready access to low carbon hydrogen in the region will also help attract new businesses.

In support of this proposal, we have committed to helping highlight the project to local stakeholders including CATCH industrial members, supply chains, academia and public sector partners that may have an interest in or benefit from the project.

We wish you all the best for your East Coast Hydrogen project.

Yours faithfully,

[redacted]
CEO/Co Chair HICP

[redacted]
Director of Membership & Low Carbon Strategy

Clean Power Hydrogen Group Limited
Unit D, Spinners Road
Parkside Business Park
Doncaster
DN2 4BI

T: +44 (0)1302 328075
E: info@cph2.com

14th September 2021

[redacted]
Head of Regional Development (East and London)
Cadent
Ashbrook Court
Coventry
CV7 8PE

Dear [redacted]

RE: East Coast Hydrogen Project – Industry Stakeholder

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid, and Northern Gas Networks.

Clean Power Hydrogen (CPH2) is a UK manufacturer of green hydrogen production technology that offers a unique process of generating hydrogen without CO2 emissions. It works by producing hydrogen from water using renewable electricity.

Hydrogen is increasingly becoming recognised as a viable option for heating to meet the 2050 Climate Change Act targets, both by industry and the UK Government. Hydrogen represents an opportunity to decarbonise industry and provide residential consumers with a minimal disruption transition to low carbon heating. As a result of this, we understand the need to develop and build a hydrogen network through the repurposing of existing gas infrastructure and the creation of new gas infrastructure.

Located in Doncaster, we are situated within the Yorkshire & Humber area of the East Coast Hydrogen project and see its deployment as being hugely beneficial to us for the following reasons:

- Enabling us to invest in new buildings, technology, processes, and essentially jobs for the region.
- We can continue to offer our unique and sustainably designed and resourced equipment from 1MegaWatt to 100MegaWatt and more.
- As the market opportunities grow, enabling us to open more manufacturing facilities in more countries and become a dominant producer and exporter, placing CPH2 at the heart of the global decarbonisation strategy.

In support of this proposal, we have committed to working with East Coast Hydrogen to:

- Contribute to the local economy by creating jobs for the local area, projected in the region of 250 within the next two years
- Be seen as a leading contributor to the reduction of harmful emissions with the local region to provide a better environment for now and tomorrow's generations.

We understand that this Letter of Support is not a legally binding contract and is CPH2 expressing an interest which may, in time, lead to a more formal agreement. We wish you all the best for your East Coast Hydrogen project.

[redacted]
Chairman & CEO
Clean Power Hydrogen Group Limited

Derby
Derbyshire
Nottingham
Nottinghamshire

www.d2n2lep.org
Tel: 0115 957 8250

[redacted]
Head of Regional Development (East and London)
Cadent Gas Ltd
Ashbrook Court
Coventry
CV7 8PE

10 August 2021

Dear [redacted]

RE: East Coast Hydrogen Project

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid, and Northern Gas Networks. As the LEP for the Derby, Derbyshire, Nottingham, and Nottinghamshire Region, we are happy to support schemes that will drive sustainable economic prosperity for the region and create local jobs. We are particularly interested in driving low carbon growth and attracting green investment into the region.

Hydrogen is becoming increasingly recognised as one of the most important options for helping to meet the UK's 2050 Climate Change Act targets, both by industry and the UK government. We know that many industries simply can't electrify their processes and switching to low carbon gasses such as hydrogen is critical for decarbonising their operations. There are plans to generate low carbon hydrogen in the Humber region, and on a smaller scale close to East Midlands Airport, but a pipeline network will be essential to move the hydrogen to its point of use, allowing local industry to decarbonise.

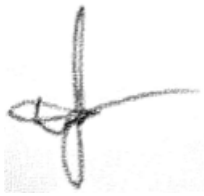
We are situated within the most westerly area of the East Coast Hydrogen project and see its deployment as being hugely beneficial to our region for the following reasons:

- Building new and re-purposing existing pipeline infrastructure in the D2N2 region will have a positive economic impact, creating jobs throughout the hydrogen supply chain. This will support the levelling up agenda, boosting skilled employment where it is needed most.
- The hydrogen network will connect industry in the D2N2 region to low carbon hydrogen and is a no regrets action for those businesses that simply cannot electrify. Having access to low carbon hydrogen in the region will prevent some businesses from being forced to relocate to access the hydrogen that they need to reach Net Zero.

In support of this proposal, we have committed to helping to promote the project to industrial companies that could use low carbon hydrogen as part of their decarbonisation strategy.

We wish you all the best for your East Coast Hydrogen project.

Yours sincerely,



[redacted]
Interim Chief Executive

E: will.morlidge@d2n2lep.org
M: 07817 749907

8 November 2021

[redacted]
Northern Gas Networks
1100 Century Way, Thorpe Park
Leeds, West Yorkshire
LS15 8TU

Dear [redacted]

RE: East Coast Hydrogen Project

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. The East Coast Cluster, enabled by the Northern Endurance Partnership (NEP), unites the Teesside and Humber regions, offering the UK's biggest opportunities to decarbonise industry and kick-start a hydrogen economy.

Hydrogen is becoming increasingly recognised as a viable option for heating to meet the 2050 Climate Change Act targets, both by industry and the UK Government. Hydrogen represents an opportunity to decarbonise industry and provide residential consumers with a minimal disruption transition to low carbon heating. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing gas infrastructure as well as the creation of new gas infrastructure.

The CO_2 transportation and storage infrastructure provided by the Northern Endurance Partnership will be situated across the Teesside and Humber regions which have potential projects to deliver 70% of the UK's hydrogen target for 2030. We therefore see the East Coast Hydrogen project and its deployment as being hugely beneficial to the region with potential for access to the infrastructure provided by NEP.

We understand that this Letter of Support is not a legally binding contract and is the East Coast Cluster expressing an interest which may, in time, lead on to a more formal agreement. We wish you all the best for your East Coast Hydrogen project.

DocuSigned by:
Andy Lane
88FA2A4373FE4E9...

[redacted]
Managing Director – Northern Endurance Partnership

Enertek International

International Consultants in Product
Research, Design, Development
& Certification

Ref: CLN/PAN

08 September 2021

Ms Stella Matthews
Northern Gas Networks

Dear [redacted]

RE: East Coast Hydrogen Project – Industry Stakeholder

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. Enertek International is an independent engineering consultancy specialising in the design, development, certification, and deployment of gas appliances. Enertek is at the forefront of hydrogen appliance development having undertaken sixteen hydrogen product development projects for the BEIS Hy4Heat programme. Five out of the seven appliances installed at HyGrove, in Low Thornley near Gateshead, have been developed by Enertek. The appliances include a hydrogen hob, oven/grill, freestanding cooker and two gas fires, and some of these products will be exhibited at CoP26.

Hydrogen is becoming increasingly recognised as a viable option for heating to meet the 2050 Climate Change Act targets, both by industry and the UK Government. Hydrogen represents an opportunity to decarbonise industry and provide residential consumers with a minimal disruption transition to low carbon heating. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing gas infrastructure as well as the creation of new gas infrastructure.

We are situated in Kingston upon Hull in the heart of the Humber cluster area of the East Coast Hydrogen project and see its deployment as being hugely beneficial to us for the following reasons:

- The creation of jobs in a socially deprived area and a much-needed boost to the regional economy
- The project will significantly reduce carbon emissions in the region

In support of this proposal, we have committed to working with East Coast Hydrogen to:

- Offer our knowledge and expertise on the development of hydrogen appliances
- Offer our knowledge and expertise on the combustion of hydrogen to contribute to making the programme a success.
- Offer our knowledge and expertise on the safe deployment of hydrogen appliances.

We understand that this Letter of Support is not a legally binding contract and is Enertek International Ltd. expressing an interest which may, in time, lead on to a more formal agreement. We wish you all the best for your East Coast Hydrogen project.

Yours sincerely

[redacted] CEng. FIMechE. FEI.
Managing Director - Enertek International Ltd

1 Malmo Road | Sutton Fields T: +44 (0)1482 877500
Kingston upon Hull | HU7 0YF enertekinternational.com
United Kingdom

Registered in England No.2262638
VAT Registration No.500712404

[redacted]
Head of Regional Development (East and London)
Cadent Gas Ltd
Ashbrook Court
Coventry
CV7 8P[redacted]

August 2021

Dear [redacted]

RE: East Coast Hydrogen Project

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. As the LEP for Greater Lincolnshire, it is our role to support schemes that we believe are a priority for driving sustainable economic prosperity for the region and create local jobs. We are particularly interested in driving Green Growth and attracting Green Investment into the region.

Hydrogen is becoming increasingly recognised as a viable option for helping to meet the 2050 Climate Change Act targets, both by industry and the UK government. We know that many industries simply can't electrify their processes and therefore switching to low carbon gasses such as hydrogen is critical for decarbonising their operations. There are plans to generate low carbon hydrogen in the Humber region, and connect it to some of the biggest emitters, but to reach the majority of users and allow local Lincolnshire industry to decarbonise, further pipeline connections will be essential. Furthermore, it's increasingly likely that hydrogen will play a part in the decarbonisation of heating, heavy transport and power generation.

Greater Lincolnshire is situated at the heart of East Coast Hydrogen project area and we see its deployment as being hugely beneficial to our region for the following reasons:

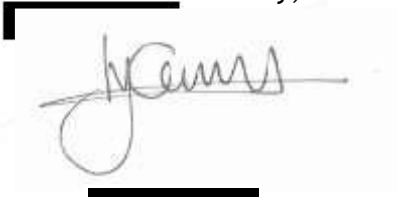
- Building new and re-purposing existing pipeline infrastructure in the Greater Lincolnshire region will have a positive economic impact, creating regional jobs throughout the hydrogen supply chain. This will support the levelling up agenda, boosting skilled employment where it is needed most.
- The hydrogen network will connect industry in the Greater Lincolnshire region to low carbon hydrogen and is a no regrets action for those businesses that simply cannot electrify. Having ready access to low carbon hydrogen in the region will also help attract new businesses.

In support of this proposal we have committed to helping to highlight the project to local stakeholders that may have an interest in or benefit from the project.

We wish you all the best for your East Coast Hydrogen project.

Greater Lincolnshire
Local Enterprise Partnership

Yours sincerely,



[redacted]
Chief Executive
Greater Lincolnshire LEP
07787 508000
[redacted]

Lancaster House, 36 Orchard Street, Lincoln LN1 1XX
T 01522 550540 | E greaterlincslep@lincolnshire.gov.uk
WWW.GREATERLINCOLNSHIRELEP.CO.UK

North East
Local Enterprise Partnership

6th September 2021

Dear [redacted]

RE: East Coast Hydrogen Project

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. The North East LEP is committed to delivering on our Strategic Economic Plan (SEP) which sets out how we intend to deliver 'more and better jobs' in the North East. The SEP identifies areas of the regional economy which are of strategic importance in achieving this aim. Energy is one of these areas, where the North East has significant existing strengths, assets, and growth opportunities.

The LEP's Energy for Growth Strategy details how these energy opportunities in the region can be leveraged to drive growth. This includes key pillars of work around utilising the North East's energy innovation and demonstration assets to showcase solutions to global challenges, and supporting delivery of scaled energy projects within the region.

Following publication of the Hydrogen Strategy, which sets out the approach to developing a low carbon hydrogen sector for the UK, and Hydrogen's inclusion in the Prime Minister's ten point plan, it is an increasingly important option to explore and develop for transport, power and heating as we work towards meeting the 2050 Climate Change Act targets. Low carbon Hydrogen represents an opportunity to decarbonise industry and provide residential consumers with a minimal disruption transition to low carbon heating.

The North East LEPs geography sits within the East Coast Hydrogen project area, and the LEP sees the development of this project as valuable and complimentary to our regional strategy:

- The North East LEP convenes the North East Energy Catalyst, uniting the region's energy innovation and demonstration assets. Northern Gas Networks are a partner in the Catalyst and participate in its Hydrogen sub-group, which is determining a hydrogen ambition and project pipeline for the North East
- The North East LEP has supported multiple hydrogen development projects, including through Local Growth Fund and Getting Building Fund grant awards. This includes development of the Customer Energy Village which will help test domestic hydrogen compliant technologies at the Northern Gas Networks InTEGReL site
- The North East LEP is leading a regional discussion with partners on a local area energy planning approach for the North East. Understanding

in detail the plans to develop and build a hydrogen network through the repurposing of existing gas infrastructure as well as the creation of new gas infrastructure will be a critical component of this approach.

Therefore, in support of this proposal we have committed to working with East Coast Hydrogen to:

- Participate in steering groups and project development activity to ensure it is aligned with wider regional work and strategy
- Align the LEP's business growth, investment, innovation, and skills programmes to identify any opportunities to support development of the project and hydrogen sector more widely, which can drive regional growth
- To align the development of the project with wider strategies, networks, and partnership's which the North East LEP is involved in, particularly via the Energy for Growth Programme

Supporting regional partners with key projects and infrastructure developments is crucial to delivering the North East SEP, and maximising these opportunities in the energy sectors, so I am pleased to confirm the North East LEPs support for the East Coast Hydrogen project.

Yours sincerely,

[redacted] Energy Programme Lead, North East LEP

TEES VALLEY COMBINED AUTHORITY | TEES VALLEY MAYOR

20/08/2021

[redacted]

Northern Gas

Dear [redacted]

RE: East Coast Hydrogen Project

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. As the Combined Authority covering Darlington, Hartlepool, Middlesbrough, Redcar & Cleveland and Stockton-on-Tees, our purpose is to drive economic growth across the area. The development of a hydrogen economy is a central to our vision for growth and net zero trajectory for key industries across our region.

Hydrogen is becoming increasingly recognised as a viable option for heling to meet the 2050 Climate Change Act targets, both by industry and the UK government. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing infrastructures as well as creating new pipelines and production facilities. We are situated within the North area of the East Coast Hydrogen project and see its deployment as being a key enabler for significant infrastructure projects within the Tees Valley and unlocking jobs across a range of nationally significant industries.

In support of this proposal we commit to providing offer time to the East Coast Hydrogen Leadership Board.

We wish you all the best for your East Coast Hydrogen project.

Dr [redacted]

Group Director of Skills & Education

Cavendish House, Teesdale Business Park,
Stockton-on-Tees, Tees Valley, TS17 6QY
Switchboard: 01642 524400
www.teesvalley-ca.gov.uk

TeesValleyCA

VAILLANT GROUP

17th September 2021

[redacted]
Northern Gas Networks
1st Floor Citypoint,
65 Haymarket Terrace,
Edinburgh,
Scotland, EH12 5HD

Dear [redacted]

RE: East Coast Hydrogen Project – Industry Stakeholder

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. Vaillant Group, as a current manufacturer of gas boilers in the UK, is preparing its product portfolio for the future, developing hydrogen fired gas boilers and hydrogen ready boilers for future production in our manufacturing facility in Belper, Derbyshire.

Hydrogen is becoming increasingly recognised as a viable option for heating to meet the 2050 Climate Change Act targets, both by industry and the UK Government. Hydrogen represents an opportunity to decarbonise industry and provide residential consumers with a minimal disruption transition to low carbon heating. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing gas infrastructure as well as the creation of new gas infrastructure.

We are situated within the East Midlands area of the East Coast Hydrogen project and see its deployment as being hugely beneficial to us for the following reasons:

- Vaillant will be supporting the rollout of hydrogen for home heating with supply of hydrogen ready boilers and hydrogen boilers through the decade. The East coast hydrogen project helps facilitate this process
- Vaillant will be providing training and upskilling for the installation, commissioning and servicing of hydrogen appliances at its Centres of Excellence in Belper but also at CoE's in Leeds and Sunderland. East Coast hydrogen will enhance the ability to train Engineers easily with mains supply of hydrogen.

In support of this proposal we have committed to working with East Coast Hydrogen to:

- Provide early trial hydrogen appliances for demonstration trials at identified sites.
- Ensure support for the planning of extended field trials as part of subsequent village and town trials as we move through the decade, in the East Coast Hydrogen project

Vaillant GmbH · Berghauser Strasse 40 · 42859 Remscheid · Germany · main phone no. +49 2191 18-0 · Telefax +49 2191 18-2810 · www.vaillant-group.com
Ltd. company · Registered office: Remscheid · Registry court: Amtsgericht Wuppertal HRB 11775
Managing Directors: Dr.-Ing. Norbert Schiedeck (CEO), Dr Stefan Borchers, Dr Andree Groos · Chairman of the Supervisory Board: Dr Matthias Blaum
Commerzbank Remscheid (code 340 400 49) account no. 621 833 300 · IBAN DE67 3404 0049 0621 8333 00 · BIC-Code COBADEFF340 · USt-IdNr. DE 811142240

We understand that this Letter of Support is not a legally binding contract and is Vaillant Group U.K. expressing an interest which may, in time, lead on to a more formal agreement. We wish you all the best for your East Coast Hydrogen project.

S. Keeth

[redacted]
Director of External Affairs
Vaillant Group U.K. Ltd

West Yorkshire Combined Authority

Wellington House
40-50 Wellington Street
LEEDS
LS1 2DE

[redacted]
Head of Stakeholder Relations
Northern Gas Networks
17 September 2021

Dear [redacted]

RE: East Coast Hydrogen Project – Industry Stakeholder

I hope all is going well for you at Northern Gas Networks. I am writing to express our interest in the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks.

The West Yorkshire Combined Authority (Combined Authority) want our region to be recognised globally as a strong, successful economy where everyone can build great businesses, careers and lives.
The Mayor of West Yorkshire and Combined Authority are working alongside a wide range of partners to ensure the region is a net zero carbon economy by 2038 at the latest, with significant progress by 2030. This ambition builds on work between partners to reduce carbon emissions, transition to clean, smart and flexible energy systems and the opportunities presented by the unique assets our region has in the form of low carbon energy like hydrogen.
Hydrogen is becoming increasingly recognised as a viable option for heating to meet the UK's 2050 Climate Change Act targets, both by industry and the UK Government. Hydrogen represents an opportunity to decarbonise industry and provides residential consumers with options for low carbon heating. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing as well as the creation of new gas infrastructure.

We are situated within the West Yorkshire area of the East Coast Hydrogen project and see its deployment as being hugely beneficial to us for the following reasons:

- Advance the Combined Authorities understanding of the role of hydrogen in West Yorkshire's carbon emissions reduction pathways evidence base.

- The role the hydrogen sector can play in creating good green jobs for the people of West Yorkshire, with the the sector play its part in reskilling and upskilling people so they are able to inclusively benefit from the transition to a decarbonised and sustainable region.

In support of this proposal we have committed to working with East Coast Hydrogen to:

- Ensure West Yorkshire's strategic priorities are recognised by, and support the objectives of, the project.

- Provide West Yorkshire policy advice, intelligence and public data in support of the project.

We understand that this Letter of Support is not a legally binding contract and is the West Yorkshire Combined Authority expressing an interest. We wish you all the best for your East Coast Hydrogen project.

[redacted] – Managing Director
West Yorkshire Combined Authority

Gateshead Council

My Ref: East Coast Hydrogen
Your Ref: East Coast Hydrogen

Date: 11th January 2024

To whom it may concern,

I am currently the Service Director of Energy & Design at Gateshead Council and I am writing to fully support this application for East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks.

Gateshead Council are significant supporters of net zero in the North East, having significantly invested in the Gateshead District Energy Scheme, connecting business', private households and social housing to greatly reduce carbon emissions from heat, with the aim to become zero carbon by 2030.

Hydrogen is becoming increasingly recognised as a viable option for meeting the 2050 Climate Change Act targets, both by industry and the UK government. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing infrastructures as well as creating new pipelines and production facilities.

We are situated within the centre of Gateshead's town centre, north of the East Coast Hydrogen project and see its deployment as being hugely beneficial to us for the following reasons:

- Reducing the need for traditional gas within the District Energy System,
- Further reduce carbon emissions in the District Energy Scheme by including hydrogen as a fuel source versus traditional gas,
- Incorporating alternative technologies within the District Energy Scheme to support energy security.

I fully support this bid to enable us to engage our residents with zero carbon heat.

If you have any queries about the contents of this letter, please can contact via telephone number 0191 433 3000. You can also contact by e-mail at EnergyServices@gateshead.gov.uk.

Gateshead Council, Civic Centre, Regent Street, Gateshead NE8 1HH

Tel: 0191 433 3000 • www.gateshead.gov.uk

Group Director, Peter Udall, Economy, Innovation and Growth

We wish you all the best for your East Coast Hydrogen project.

Yours….

[redacted]
Energy & Design
Economy Innovation & Growth

Gateshead Council, Civic Centre, Regent Street, Gateshead NE8 1HH
Tel: 0191 433 3000 • www.gateshead.gov.uk
Group Director, Peter Udall, Economy, Innovation and Growth

A Member of The Linde Group

The Priestley Centre
The Surrey Research Park
Guildford
GU2 7XY

[redacted]
Hydrogen Development Manager
Northern Gas Networks
Thorpe Park Business Park
Colton
Leeds
LS15 8TU

24th August 2021

Dear [redacted]

RE: East Coast Hydrogen Project – Hydrogen Producer

I am writing to express BOC's support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. BOC is the leading industrial gases company in the UK and a member of the global industrial gases and engineering company, Linde PLC.

Hydrogen is becoming increasingly recognised as a viable option for heating to meet the 2050 Climate Change Act targets, both by industry and the UK Government. Hydrogen represents an opportunity to decarbonise industry and provide residential consumers with a minimal disruption transition to low carbon heating. As a result of this BOC understands the need to develop and build a hydrogen network through the repurposing of existing gas infrastructure as well as the creation of new gas infrastructure.

BOC has significant operations in both Teesside and the Humber (Scunthorpe and Immingham) regions of the East Coast Hydrogen project and see its deployment as being critical to facilitate the decarbonisation of our operations and those of our key customers in the region.

In support of this proposal we are open to exploring ways in which BOC can contribute to the successful development and delivery of the project. This may include developing new blue and green hydrogen production facilities, the distribution and storage of clean hydrogen and the deployment of technologies that enable industrial operators to switch to a clean hydrogen fuel or feedstock. Furthermore, BOC can support the evaluation of synergies with hydrogen as a transport fuel and the associated vehicle refuelling technology and infrastructure.

BOC understands that this Letter of Support is not legally binding and is solely an expression of interest to participate in the project which may, in time, lead to a more formal agreement. I wish you all the best for your East Coast Hydrogen project.

Yours sincerely,

[redacted]

[redacted]
Director of Business Development & On-site Accounts

BP Exploration Operating Company Ltd
Chertsey Road
Sunbury on Thames
Middlesex
TW 16 7LN

24th August 2021

FOR THE ATTENTION OF:

[redacted]
Head of Programme Management, H21 Project Director
Northern Gas Networks
1100 Century Way, Thorpe Park Business Park, Colton,
Leeds, LS15 8TU

RE: East Coast Hydrogen Project – Hydrogen Producer Teesside

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks ("**NGN**").

In March 2021 bp announced that we are developing H2Teesside; a blue hydrogen project which aims to produce up to 1GW of clean hydrogen (20% of the UK's hydrogen target) by 2029 with estimated investment of ~£1bn. bp submitted H2Teesside application as a primary emitter into the Northern Endurance Partnership ("**NEP**") led phase 1 submission for the BEIS CCUS cluster sequencing process.

bp is actively developing both blue and green hydrogen production in Teesside. The produced clean hydrogen will provide clean energy to industry, residential homes, transport as well as supporting the production of sustainable fuels in the region. H2Teesside will play an essential role in decarbonization of UK industry in the Teesside area and Northeast England, contributing to the green industrial revolution as set out in the UK government's ten-point plan.

This letter of support is to confirm that bp have been in close collaboration with NGN following the signing an MoU in January 2021 with intention to jointly explore opportunities for (i) hydrogen blending into NGN's network with long-term view to convert to 100% H2 network (ii) the storage of hydrogen (iii) trialling hydrogen for heating at Teesside, initially at a village size before scaling up to town and city size trials. The East Coast Hydrogen project represents an opportunity to decarbonise industry and provide residential consumers with a minimal disruption transition to low carbon heating.

bp's strategy is to deliver energy solutions to our customers. Hydrogen distribution is a key challenge for the development of a successful hydrogen economy and the development of a safe and reliable hydrogen distribution network will support scale up of bp's H2 production in Teesside and enabling deep decarbonization of the UK economy.

bp sees great value in the realization of East Coast Hydrogen project and hereby expresses its support. If you would like to have further clarifications regarding the Letter of Support, please contact: Martin Forman (email: martin.forman@uk.bp.com tel: +442034018254).

Yours sincerely,

[redacted]
VP Hydrogen Market Development

Centrica plc
Millstream
Maidenhead Rd
Windsor
SL4 5GD
www.centrica.com

[redacted]
National Grid House,
Warwick Technology Park,
Gallows Hill,
Warwick
CV34 6DA

10 September 2021

Dear Alastair,

RE: East Coast Hydrogen Project – Industry Stakeholder

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks.

Centrica plc is a leading energy services and solutions provider founded on a 200-year heritage of serving people. We serve around 10 million customers across the UK, Ireland and continental Europe through brands such as British Gas, supported by over 9,000 highly trained engineers and technicians. We recognise the urgent need to make net zero a reality and have accelerated our commitment to be net zero by 2045. We are further committed to supporting our customers to be net zero by 2050.

Hydrogen is becoming increasingly recognised as an essential part of the energy mix to meet the 2050 Climate Change Act targets, both by industry and the UK Government. Hydrogen represents an opportunity to decarbonise industry and provide residential consumers with a minimal disruption transition to low carbon heating. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing gas infrastructure as well as the creation of new gas infrastructure.

Centrica Storage Ltd is situated within the Humber region of the East Coast Hydrogen project and sees its deployment as being hugely beneficial for the following reasons:

- Producing hydrogen at scale will require hydrogen storage facilities to manage the inevitable fluctuations in production, particularly for 'green' hydrogen generated by renewable energy sources and consumption, due to seasonality in demand. Converting the Rough gas field into a major hydrogen-ready storage facility can help meet this need at the lowest cost.
- We believe that an investment in Rough, to redevelop into a major hydrogen-ready storage facility represents a fantastic opportunity to help lay the foundations of the hydrogen economy and meet government's objective of decarbonising GB's gas supplies and support the green industrial revolution. There would also be significant technical and environmental advantages associated with repurposing the existing infrastructure, and geographical advantages associated with Rough's location offshore within a nascent hydrogen hub zone and close to offshore wind capacity off the North East coast.
- A repurposed Rough has the potential to provide a world first 100% hydrogen storage facility with a flexible storage capacity between 1 to 9TWh. This compares to existing operating salt caverns in GB that in aggregate can only deliver around 2.8TWh if converted.

- Aurora Energy Research's 'Hydrogen for a Net Zero GB' report concludes that 19TWh of centralised salt cavern storage might be required by 2050[1]. Rough therefore has the potential to store half of UK's 2050 hydrogen storage requirement. Having this storage capacity within the East Coast would make the cluster strategically important within the UK, providing significant storage capacity to support future expansions into the wider UK network.
- We believe that to develop the UK's hydrogen storage requirement with minimised cost and risk, storage should be developed in the following prioritised order;
    1. Existing salt caverns (Up to 2.8TWh)
    2. Existing reservoir Gas storage facilities, only Rough existing in UK (9TWh)
    3. New infrastructure (7.2TWh)
- Investments in new salt caverns to provide hydrogen storage are a possibility, along with investments into new geologically suitable gas storage sites (reservoirs and salt strata), however these options are limited and unproven for gas storage in the UK. Such new infrastructure investments would be relatively extremely expensive with protracted implementation timelines, compared to an investment in Rough. They would also attract far more complex infrastructure planning and their associated development would be higher risk compared to repurposing Rough. Rough represents a low regrets investment option, utilising a proven, depleted and high capacity gas storage reservoir. We believe therefore Rough should be developed prior to developing new storage infrastructure.
- Investment in Rough would additionally de-risk the East Coast's Endurance field CO_2 store, during its first few years of planned operation, by providing an additional CO_2 storage route. Rough has the possibility to utilise CO_2 as cushion (pressurisation) gas within the Rough reservoir prior to the injection of hydrogen gas for storage.

In support of this proposal we have committed to working with East Coast Hydrogen to:

- Help lay the foundations of the hydrogen economy to put us on track to meet the Government's objective of meeting net zero in 2050 and reduce the cost of the energy transition to consumers.
- An investment in Rough would also play a role in helping in the government's ambition to 'level up' the economy. We expect that the project would create over 2,000 jobs in the Humber region during construction (c.1,000 at Easington and offshore, and c.1,000 in the local area), and a further 350 direct jobs during operations (e.g. office and terminal based, and operations offshore). We would anticipate around 2,000 further jobs would be created in the wider supply chain.

We understand that this Letter of Support is not a legally binding contract and is Centrica plc expressing an interest which may, in time, lead on to a more formal agreement. We wish you all the best for your East Coast Hydrogen project.

Signature

[redacted]

Managing Director, Centrica Storage Ltd.

[1] BEIS, UK hydrogen strategy

DelpHYnus

02 November 2021

[redacted]
c/o Neptune Energy
16 North Esplanade West
Aberdeen
AB11 5RJ

Dear Mr. [redacted]

RE: East Coast Hydrogen Project – Hydrogen Producer

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. DelpHYnus is a blue hydrogen development proposed by Neptune Energy as cluster lead and its partners.

Hydrogen is becoming increasingly recognised as a viable option for heating to meet the 2050 Climate Change Act targets, both by industry and the UK Government. Hydrogen represents an opportunity to decarbonise industry and provide residential consumers with a minimal disruption transition to low carbon heating. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing gas infrastructure as well as the creation of new gas infrastructure.

The proposed location of our project is situated in East Lincolnshire at the former Theddlethorpe Gas Terminal, approximately 20 km southeast of the Humber River and area of the East Coast Hydrogen project. We see its deployment as being hugely beneficial to us for the following reasons:

- We intend producing nearly 2 GW of hydrogen where there could be a linkage between East Coast Hydrogen transport infrastructure and blue hydrogen production at the proposed Theddlethorpe New Energy Park
- Potential for DelpHYnus to work with East Coast Hydrogen to supply hydrogen to the Humberside and Teesside industrial clusters, in addition to direct blend into the national transmission network
- Knowledge sharing and collaboration on the technical aspects of developing blue hydrogen production and CO_2 capture, transport and storage at scale

In support of this proposal, we have committed to working with East Coast Hydrogen to:

- Determine how the planned 2 GW of hydrogen production from DelpHYnus could feed into an East Coast Hydrogen transport network
- Develop the supply chain for hydrogen within the East Coast Hydrogen region
- Contribute to the development of the skills and expertise needed to support a new hydrogen industry in the UK

We understand that this Letter of Support is not a legally binding contract and is DelpHYnus expressing an interest which may, in time, lead on to a more formal agreement. We wish you all the best for your East Coast Hydrogen project.

Signed

[redacted]

On behalf of DelpHYnus partners

Eco Energy World

19/08/2021

[redacted]
Warwick Technology Park, Gallows Hill, Warwick CV34 6DA

Dear [redacted]

RE: East Coast Hydrogen Project – Hydrogen Producer

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. Eco Energy World are developing solar projects across the UK with potential to produce green hydrogen.

Hydrogen is becoming increasingly recognised as a viable option for heating to meet the 2050 Climate Change Act targets, both by industry and the UK Government. Hydrogen represents an opportunity to decarbonise industry and provide residential consumers with a minimal disruption transition to low carbon heating. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing gas infrastructure as well as the creation of new gas infrastructure.

We have several projects planned in areas such as Leeds, Scarborough and Middlesbrough which are in the area of the East Coast Hydrogen project and see its deployment as being hugely beneficial to us for the following reasons:

- Some of our solar projects are constrained on capacity by the electricity grid connection. Hydrogen production could allow us to scale up the solar capacity, utilise all the land available and drive more value. The East Coast Hydrogen project could create a reliable hydrogen demand (the gas grid), which would allow this scale up and would reduce the risk hydrogen production development

In support of this proposal we have committed to working with East Coast Hydrogen to:

- Scope out the potential to produce hydrogen at our solar sites and inject it into the gas grid

We understand that this Letter of Support is not a legally binding contract and is Eco Energy World expressing an interest which may, in time, lead on to a more formal agreement. We wish you all the best for your East Coast Hydrogen project.

[redacted]
Eco Energy World

EQUANS
EMPOWERING TRANSITIONS

PART OF THE ENGIE GROUP

[redacted]
Northern Gas Networks
1100 Century Way,
Thorpe Park Business Park,
Colton, Leeds LS15 8TU

1 September 2021

Dear [redacted]

RE: East Coast Hydrogen Project

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. EQUANS purpose is to support our customers in transitioning to a net zero energy system and for our industrial customers in particular, hydrogen will play an increasingly important role in decarbonising their operations. As the UK's largest district energy business we also see hydrogen being key to the future decarbonisation of heat networks. As a result of this we understand the need to develop and build hydrogen networks through the repurposing of existing gas infrastructure as well as the creation of new gas infrastructure.

We have operations throughout the East Coast region, including long term partnerships with local authorities in Teesside and Lincolnshire and an embedded industrial CHP asset in the Humber region. We are also involved in the North West Industrial Decarbonisation Roadmap alongside Cadent and others, where we are leading on the green hydrogen production workstream. We are also working closely with Cadent on a Smart Local Energy Systems project in the West Midlands.

EQUANS' interest and expertise is in identifying viable hydrogen use cases across the industrial and heat sectors, commercialising these with partners and integrating the necessary production and storage solutions and plant and process modifications at our customers' sites. The development of an East Coast Hydrogen network would provide scale and resilience, enabling customers to transition to hydrogen with greater confidence.

In support of this proposal we would be pleased to explore how we might work with the East Coast Hydrogen project partners to:

- identify the optimal industrial and heat use cases;
- explore the role of green hydrogen production;
- map demand clusters

This Letter of Support is not intended to be legally binding and is EQAUNS expressing an interest which may, in time, lead on to a more formal agreement.

We wish you all the best for your East Coast Hydrogen project.

Yours Sincerely,

[redacted]
Director M&A and Investment
+44 7970 137202
ben.watts@engie.com

[redacted]
Northern Gas Networks
110 Century Way
Colton, Leeds
United Kingdom

19-Aug-2021

Dear [redacted],

RE: East Coast Hydrogen Project – Equinor New Energy Limited, Letter of Support

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. Equinor is a global energy company and a major energy supplier and developer in the UK including development of hydrogen and carbon capture and storage solutions in the Humber and Teesside.

Hydrogen is becoming increasingly recognised as a viable option for heating to meet the 2050 Climate Change Act targets, both by industry and the UK Government. Hydrogen represents an opportunity to decarbonise industry and provide residential consumers with a minimal disruption transition to low carbon heating. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing gas infrastructure as well as the creation of new gas infrastructure.

Equinor's hydrogen development projects are currently situated within the Humber area of the East Coast Hydrogen project. We see the deployment of a hydrogen network as being beneficial for the following reasons:

- The East Coast Hydrogen project will enable decarbonisation of the heating sector, a sector today accounting for about 37% of total UK carbon emissions, and will enable further progression of the hydrogen economy in the UK.
- Hydrogen to heat represents a major opportunity for the United Kingdom to build up hydrogen production capacity and capabilities for decarbonisation of multiple sectors, optimisation of production, distribution and increased flexibilities due to seasonal and predictable demand.

In support of this proposal we are working to:

- Develop hydrogen production projects in the Humber with an ambition for producing 1.8 GW low-carbon hydrogen by 2030 and a wider project pipeline in the United Kingdom of 14 GW, supporting the energy transition while growing and retaining high-skilled jobs in the region.

We understand that this Letter of Support is not a legally binding contract and is Equinor New Energy Limited expressing its support and interest. We wish you all the best for your East Coast Hydrogen project.

Yours sincerely,

H[redacted]
Vice president, Low carbon technology
Equinor

Equinor New Energy Limited
Registered number
6824625

Office address
One Kingdom Street
London, W2 6BD

Telephone
+47 48022458

www.equinor.com

HiiROC Limited
303 National Avenue
Hull
HU5 4JB
18/03/2024

[redacted]
Northern Gas Networks
1100 Century Way
Leeds
LS15 8TU

Dea[redacted]

RE: East Coast Hydrogen Project – Hydrogen Producer

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. HiiROC is leveraging leading edge plasma technology to create zero emission hydrogen from hydrocarbons, we are a rapidly growing business with commercial units set to be deployed from Q3 2022 onwards. As a technology that uses hydrocarbons, we are well linked to Energy Futures and the Energy Transition here in the UK.

Hydrogen is becoming increasingly recognised as a viable option for heating to meet the 2050 Climate Change Act targets, both by industry and the UK Government. Hydrogen represents an opportunity to decarbonise industry and provide residential consumers with a minimal disruption transition to low carbon heating. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing gas infrastructure as well as the creation of new gas infrastructure.

We are situated within the Humber cluster in Hull with 2 facilities in central Hull, and 2 further potential sites in the pipeline (one on the coast at Easington). So, we are perfectly positioned for the East Coast Hydrogen project and see its deployment as being hugely beneficial to us for the following reasons:

- The project will bring additional funding to the area, and attract a pool of technically skilled workers to the area
- The positioning of the project will help firmly establish the area as a national ‘centre’ for hydrogen production, which in turn will undoubtably add further clients and hydrogen opportunities to HiiROC

In support of this proposal, we have committed to working with East Coast Hydrogen to:

- Build significant zero emission hydrogen production in the area
- Invest extensively in assembly and testing facilities
- Enhance local socioeconomic factors by employing a large workforce, and upskilling them even further

We understand that this Letter of Support is not a legally binding contract and is HiiROC LTD expressing an interest which may, in time, lead on to a more formal agreement. We wish you all the best for your East Coast Hydrogen

[redacted]
CEO, HiiROC LTD

3 September 2021

To whom it may concern

RE: East Coast Hydrogen Project – Hydrogen Producer

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks.

ITM Power plc manufactures integrated hydrogen energy solutions for electricity grid balancing, energy storage and the production of renewable hydrogen for transport, renewable heat and chemicals.

Hydrogen is becoming increasingly recognised as a viable option for producing heat to meet the 2050 Climate Change Act targets, both by industry and the UK Government. Hydrogen represents an opportunity to decarbonise industry and provide residential consumers with a minimal disruption transition to low carbon heating. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing gas infrastructure as well as the creation of new gas infrastructure.

ITM Power's Gigafactory is based in Sheffield, within the East coast region, and has the capacity to manufacture 1GW of electrolyser equipment per annum.

Electrolysers provide a means for achieving the long-term storage of renewable energy, a vital development towards the government's target of fully decarbonising the UK energy system. ITM Power has a strong interest in supporting this initiative to develop the local market for its electrolysers, for the following reasons:

- Expand its manufacturing presence in Sheffield, along with the associated supply chain, with economic benefits to the East coast region.
- Facilitate growth in east coast offshore wind deployment through renewable energy storage via electrolysers embedded in gas networks, so that green hydrogen can be used for decarbonising transport, industrial processes and heat.

In support of this proposal we have committed to working with East Coast Hydrogen to:

- Collaborate in the feasibility studies and work with Cadent, National Grid and Northern Gas Networks in optimising the business case for electrolsyser deployment, and cross sector applications for green hydrogen.
- Meet demand for UK manufactured electrolysers in order to accomplish the decarbonisation demands associated with the timeline for achieving net zero.

We understand that this Letter of Support is not a legally binding contract and ITM Power is expressing an interest which may, in time, lead on to a more formal agreement. We wish you all the best for your East Coast Hydrogen project.

Yours faithfully

D
CEO, ITM Power plc

Kellas Midstream Limited
7th Floor
The Silver Fin Building
455 Union Street
Aberdeen AB11 6DB

T: +44 (0)1224 084520
F: +44 (0)1224 583755
www.kellasmidstream.com

[redacted]
1100 Century Way
Thorpe Park Business Park
Colton
Leeds LS15 8TU

25 August 2021

Dear [redacted]

RE: East Coast Hydrogen Project – Hydrogen Producer

I am writing to express our support in principle for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. Kellas Midstream Limited ("**Kellas**") believe that blue hydrogen will play a major part in the transition to net zero and are currently targeting investment in a 1GW blue hydrogen facility on Teesside.

Hydrogen is becoming increasingly recognised as a viable option for heating to meet the 2050 Climate Change Act targets, both by industry and the UK Government. Hydrogen represents an opportunity to decarbonise industry and provide residential consumers with a minimal disruption transition to low carbon heating. As a result of this, we understand the need to develop and build a hydrogen network through the repurposing of existing gas infrastructure as well as the creation of new gas infrastructure.

Kellas' existing CATS terminal and proposed blue hydrogen facility are situated within the Teesside area of the East Coast Hydrogen project. We see its deployment as being hugely beneficial for the following reasons:

- A reliable network is needed to convey hydrogen to local industrial sites in Teesside who are looking to fuel switch from natural gas to low carbon hydrogen.
- Commercial and domestic customers will benefit from increasing quantities of hydrogen in the network.
- The blue hydrogen facility is a significant infrastructure project that will create hundreds of construction roles over a three-year development period as well as long term plant operation roles for at least 25 years

In support of this proposal we have committed in principle to working with East Coast Hydrogen to:

- Study the demand for hydrogen from industrial, commercial, and domestic customers in the region.
- Evaluate the connection of a 1GW blue hydrogen facility into the gas distribution system.

This Letter of Support is not a legally binding contract and imposes no obligations on Kellas or any member of its group. This letter is simply an expression of interest and support by Kellas based on its current intentions and knowledge which may, in time, lead on to a formal legally binding agreement.

The/...

The contents of this letter are confidential to Kellas and this letter and/or any of its contents are not to be shared with or quoted to any person without the prior consent of Kellas (which will not be unreasonably withheld or delayed and may be given by email).

We wish you all the best for your East Coast Hydrogen project.

Yours sincerely,

[redacted]

Kellas Midstream Limited

[redacted]
Head of Regional Development (East and London)
Cadent Gas Ltd
Ashbrook Court
Coventry
CV7 8PE

10 September 2021

Dear [redacted]

In support of Cadent, National Grid and Northern Gas Networks East Coast Hydrogen Project

On behalf of the Midlands Engine Partnership, I am pleased to confirm our support for the East Coast Hydrogen project.

The Midlands is at the forefront of delivering world-leading innovation that has driven significant progress in reducing carbon emissions and delivering economic, social and environmental benefits for our region's places, businesses and communities.

Midlands Engine partners are committed to taking urgent action, together, galvanising our efforts at pace to shape our green future, as shown in our Ten Point Plan for Green Growth in the Midlands Engine: an ambitious and ground-breaking plan that will benefit every part of our region and accelerate the whole country's path to net zero.

One of the key themes in the Ten Point Plan is our national leadership in pioneering, commercialising and delivering low carbon hydrogen solutions. Hydrogen is becoming increasingly recognised, both by industry and the Government, as crucial to helping meet 2050 Climate Change Act targets. There are plans to generate low carbon hydrogen in the Humber region and connect it to some of the biggest emitters, but to reach the majority of industrial sites and allow local industry to decarbonise, further pipeline connections will be essential. It is also increasingly likely that hydrogen will play a part in the decarbonisation of heating, heavy transport and power generation.

The Midlands Engine Partnership spans the heart of the UK and takes in the East Midlands and Greater Lincolnshire region. This includes the South Humber Bank, which is a key focus for industrial decarbonisation and one of the two main hydrogen production centres in the East Coast Hydrogen Project. Building new and re-purposing existing pipeline infrastructure in the region would support economic activity in the area and create exceptional opportunities for growth and levelling up.

I look forward to this project coming to fruition as we continue to mobilise across our region and partnership - acting now on the exceptional opportunities presented by hydrogen as part of the shift to a low carbon economy.

Yours sincerely,

Executive Director, Midlands Engine

Shell New Energies UK Ltd
Shell Centre
London SE1 7NA
United Kingdom
Tel +44 (0)20 7934 7900
Internet http://www.shell.com

[redacted]
Northern Gas Networks,
1100 Century Way,
Thorpe Park Business Park,
Leeds,
LS15 8TU
23 August 2021

Dear Mr [redacted]

I am writing on behalf of Shell to confirm our support for the proposed East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks

Hydrogen is becoming increasingly recognised as a viable option for heating to meet the 2050 Climate Change Act targets, both by industry and the UK Government. Hydrogen represents an opportunity to decarbonise industry and provide residential consumers with a minimal disruption transition to low carbon heating. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing gas infrastructure as well as the creation of new gas infrastructure.

Over the past 20 years Shell has embarked on several initiatives to encourage the adoption of hydrogen as an energy carrier. Shell is a founding member of the Hydrogen Council, comprising energy companies, OEMs and technology partners with a collective pledge to accelerate investment in the development and commercialisation of the hydrogen and fuel cell sectors. In the U.K. Shell's commitment is further demonstrated through the opening of hydrogen refuelling stations at Cobham and Beaconsfield as well as participation in the Acorn, Humber and Cavendish Hydrogen Industrial Clusters.

Yours Sincerely,

[redacted]

VP Renewables & Energy Solutions Europe
Shell Renewables and Energy Solutions

Siemens Energy
C A Parsons Works,
Shields Rd,
Newcastle upon Tyne
NE6 2UT

[redacted]

Hydrogen Development Manager

Northern Gas Networks

Name Matthew Knight
Department Head of Market Development

Phone
Fax
Mobile +44 7808 824992
Mail matthew.knight@siemens-energy.com

Your letter of
Our reference

Date 24th August 2021

Dear [redacted]

Letter of Support for the East Coast Hydrogen Project – Industry Stakeholder

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks.

Why is Siemens Energy interested in hydrogen?

Hydrogen will be a vital part of delivering the UK's commitment to net zero greenhouse gas emissions by 2050. Siemens Energy is working on a range of relevant technologies involving production, handling and use of hydrogen. For a flourishing hydrogen economy, hydrogen needs to be widely available with resilient supply routes. We therefore understand the need to develop and build a hydrogen network through the repurposing of existing gas infrastructure as well as the creation of new gas infrastructure.

Who is Siemens Energy?

Siemens Energy is an energy technology company providing a range of generation, transmission and compression equipment, solutions and services to the electricity, oil, gas, and process industries. Part of this portfolio is electrolysers to produce hydrogen.

We have a UK workforce of over 3,400. We are developing our hydrogen centre of competence at our site in Newcastle, where we already manufacture hydrogen power units.

We support our customers to deliver the energy transition to net zero and are committed to net zero in our own operations by 2030. This will include use of alternative fuels like hydrogen to power and test our equipment.

Siemens Energy was spun out of Siemens AG in 2020 and is now a separately listed company.

How will we support the east Coast hydrogen project?

In support of this proposal, we have committed to working with East Coast Hydrogen on concepts for hydrogen production, compression and use.

We understand that this Letter of Support is not a legally binding contract and Siemens Energy is expressing an interest which may, in time, lead on to a more formal agreement.

We wish you all the best for your East Coast Hydrogen project.

Yours sincerely,

Head of Market Development
Siemens Energy UK

–

[redacted]
Head of Regional Development (East and London)
Cadent
Ashbrook Court
Coventry
CV7 8PE

Uniper Hydrogen UK Limited
Compton House
2300 The Crescent
Birmingham Business Park
Birmingham B37 7YE
www.uniper.energy

Registered in
England and Wales
Company No 09513014

Registered Office:
Compton House
2300 The Crescent
Birmingham Business Park
Birmingham B37 7YE

East Coast Hydrogen project – hydrogen producer
November 2, 2021

Dear [redacted]

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. Uniper is an international energy company with around 12,000 employees in more than 40 countries. The company plans to make its power generation CO2-neutral in Europe by 2035. As a pioneer in the field of hydrogen, Uniper has set itself the target of operating worldwide along the entire value chain in the future and implementing projects that will make hydrogen the mainstay of the future energy supply.

Hydrogen represents an opportunity to decarbonise industry and provide residential consumers with a minimal disruption transition to low carbon heating. To realise this we recognise the need to develop and build a hydrogen network through the repurposing of existing gas infrastructure as well as the creation of new gas infrastructure.

Uniper's Killingholme power station is situated within the Humber cluster area of the East Coast Hydrogen project and we see the project as being hugely beneficial to:

- to support realising a regional and, in time, national hydrogen network and market.

In support of this proposal we have committed to working with East Coast Hydrogen to:

- assess how Uniper's development plans for up to 720MW of blue and 100MW green hydrogen production at our Killingholme site can interface with re-purposed gas, or new hydrogen, network assets.

We understand that this Letter of Support is not a legally binding contract and is Uniper expressing an interest which may, in time, lead on to a more formal agreement. We wish you all the best for your East Coast Hydrogen project.

Yours sincerely

[redacted]
Business Development Manager
Uniper Hydrogen UK Limited

Unit A4 Marston Gate,
Stirling Road,
Swindon
EC4A 3EB

7th November 2023

[redacted]
Energy Futures Project Co-ordinator
Northern Gas Networks

Dear [redacted]

RE: East Coast Hydrogen Project

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. Advanced Biofuel Solutions Ltd ("ABSL") is a global leader in the conversion of household waste into advanced biofuels using its RadGas technology. We are currently hot commissioning a RadGas commercial demonstration plant in Swindon that will convert one tonne per hour of waste wood into 3MWh of syngas. ABSL is also completing front-end engineering and design for a plant that will convert waste wood into hydrogen gas and carbon dioxide in the Protos Energy Park in Cheshire, and is seeking a site in Teesside to develop a similar project.

Hydrogen is becoming increasingly recognised as a viable option for meeting the 2050 Climate Change Act targets, both by industry and the UK government. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing infrastructures as well as creating new pipelines and production facilities. As stated above, we are seeking a project site in the Teesside area of the East Coast Hydrogen project and see its deployment as being hugely beneficial to us for the following reasons:

- It would provide a hydrogen distribution network to transport ABSL's hydrogen to a commercial offtaker in the North East; and
- It would help to build a hydrogen economy in the North East, where there is already substantial industrial development, in a convenient location close to the East Coast Cluster to further assist with the UK's decarbonisation goals.

In support of this proposal we have committed to develop a plant that will convert 120,000 tonnes of waste wood per annum into 315 GWh per annum of biohydrogen while capturing 150,000 tonnes per annum of carbon dioxide.

We wish you all the best for your East Coast Hydrogen project.

Kind regards,

[redacted]
CEO – Advanced Biofuel Solutions Ltd.

PROVIDING ENERGY. IMPROVING LIVES.

17 January 2022

National Grid PLC
National Grid House
Warwick Technology Park
Gallows Hill
Warwick CV34 6DA

Attention: Alistair Grundy, Hydrogen Development Engineer
Delivery: E-mail

Dear [redacted]

RE: East Coast Hydrogen Project – Industry Stakeholder

I am writing to express our support for the East Coast Hydrogen project (ECH) that is being undertaken by Cadent, National Grid and Northern Gas Networks. Within the same area, Phillips 66 Limited is planning for a lower carbon future for the Humber Refinery.

Phillips 66 Limited understands that hydrogen is being recognised as a viable option for heating to meet the Climate Change Act's 2050 targets, both by industry and the UK Government. Phillips 66 Limited also understands that hydrogen represents an opportunity to reduce industry's greenhouse gas emissions and provide residential consumers with a minimally disrupted transition to low greenhouse gas emissions heating. As a result, we understand the need to develop and build a hydrogen network through repurposing existing gas infrastructure and creating new gas infrastructure.

The Humber Refinery is situated within the Northern Lincolnshire area of the East Coast Hydrogen project and see its deployment as being hugely beneficial to Phillips 66 Limited for the following reasons:

- Hydrogen is an important product already being produced at Humber Refinery for the desulphurisation of fuels and for use as a heating gas within Humber Refinery;
- Significant synergies between ECH with Humber Zero and Gigastack projects.

In support of this proposal, we are committed to working with East Coast Hydrogen by:

- Contributing our expertise and capabilities to support ECH;
- Integrate, where feasible, with Humber Refinery's hydrogen projects.

This Letter of Support is not a legally binding contract and Phillips 66 Limited is expressing an interest which may or may not, in time, lead on to a more formal agreement. We wish you all the best for your East Coast Hydrogen project.

Yours sincerely

Signature

[redacted]

Manager, Emerging Energy (Europe)
For and on behalf of Phillips 66 Limited

PHILLIPS 66

PROVIDING ENERGY. IMPROVING LIVES.

17 January 2022

National Grid PLC
National Grid House
Warwick Technology Park
Gallows Hill
Warwick CV34 6DA

Attention: [redacted] Hydrogen Development Engineer
Delivery: E-mail

Dear Alastair,

RE: East Coast Hydrogen Project – Industry Stakeholder

I am writing to express our support for the East Coast Hydrogen project (ECH) that is being undertaken by Cadent, National Grid and Northern Gas Networks. Within the same area, Phillips 66 Limited is planning for a lower carbon future for the Humber Refinery.

Phillips 66 Limited understands that hydrogen is being recognised as a viable option for heating to meet the Climate Change Act's 2050 targets, both by industry and the UK Government. Phillips 66 Limited also understands that hydrogen represents an opportunity to reduce industry's greenhouse gas emissions and provide residential consumers with a minimally disrupted transition to low greenhouse gas emissions heating. As a result, we understand the need to develop and build a hydrogen network through repurposing existing gas infrastructure and creating new gas infrastructure.

The Humber Refinery is situated within the Northern Lincolnshire area of the East Coast Hydrogen project and see its deployment as being hugely beneficial to Phillips 66 Limited for the following reasons:

- Hydrogen is an important product already being produced at Humber Refinery for the desulphurisation of fuels and for use as a heating gas within Humber Refinery;
- Significant synergies between ECH with Humber Zero and Gigastack projects.

In support of this proposal, we are committed to working with East Coast Hydrogen by:

- Contributing our expertise and capabilities to support ECH;
- Integrate, where feasible, with Humber Refinery's hydrogen projects.

This Letter of Support is not a legally binding contract and Phillips 66 Limited is expressing an interest which may or may not, in time, lead on to a more formal agreement. We wish you all the best for your East Coast Hydrogen project.

Yours sincerely

Signature

[redacted]

Manager, Emerging Energy (Europe)
For and on behalf of Phillips 66 Limited

1100 Century Way
Thorpe Park Business Park
Colton, Leeds
LS15 8TU
enquiries@n-genenergy.com

Mr [redacted]

Northern Gas Networks
Thorpe Park Business Park
1100 Century Way
Leeds
LS15 8TU
25/10/2023

RE: East Coast Hydrogen Project

Dear Mr [redacted]

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. N-Gen Energy Solutions Limited is a hydrogen development company created to build, own and operate a 250MW portfolio of commercially viable hydrogen production, storage and transportation assets across the UK by 2028; thus, deploying energy-based solutions to engage and influence policy makers on the business case for hydrogen and the associated policy options.

Hydrogen is becoming increasingly recognised as a viable option for meeting the 2050 Climate Change Act targets, both by industry and the UK government. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing infrastructures as well as creating new pipelines and production facilities. We operate across the UK including within the entirety of the East Coast Hydrogen project and see its deployment as being hugely beneficial to us for the following reasons:

- Facilitate the distribution of hydrogen via blending or otherwise from a number of production sources to off-takers in areas located away from major hydrogen production centres.

In support of this proposal, we have committed to communicating to our stakeholders and clients the progress, positive impact and benefits of the East Coast Hydrogen project and sharing details of any planned hydrogen production, storage or transportation facilities.

We wish you all the best for your East Coast Hydrogen project.

Kind regards,

[redacted]
Managing Director

N-Gen Energy Solutions Limited.

[redacted]
Northern Gas Networks
110 Century Way
Colton, Leeds
United Kingdom

19-Aug-2021

Dear [redacted]

RE: East Coast Hydrogen Project – Equinor New Energy Limited, Letter of Support

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. Equinor is a global energy company and a major energy supplier and developer in the UK including development of hydrogen and carbon capture and storage solutions in the Humber and Teesside.

Hydrogen is becoming increasingly recognised as a viable option for heating to meet the 2050 Climate Change Act targets, both by industry and the UK Government. Hydrogen represents an opportunity to decarbonise industry and provide residential consumers with a minimal disruption transition to low carbon heating. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing gas infrastructure as well as the creation of new gas infrastructure.

Equinor's hydrogen development projects are currently situated within the Humber area of the East Coast Hydrogen project. We see the deployment of a hydrogen network as being beneficial for the following reasons:

- The East Coast Hydrogen project will enable decarbonisation of the heating sector, a sector today accounting for about 37% of total UK carbon emissions, and will enable further progression of the hydrogen economy in the UK.
- Hydrogen to heat represents a major opportunity for the United Kingdom to build up hydrogen production capacity and capabilities for decarbonisation of multiple sectors, optimisation of production, distribution and increased flexibilities due to seasonal and predictable demand.

In support of this proposal we are working to:

- Develop hydrogen production projects in the Humber with an ambition for producing 1.8 GW low-carbon hydrogen by 2030 and a wider project pipeline in the United Kingdom of 14 GW, supporting the energy transition while growing and retaining high-skilled jobs in the region.

We understand that this Letter of Support is not a legally binding contract and is Equinor New Energy Limited expressing its support and interest. We wish you all the best for your East Coast Hydrogen project.

Yours sincerely,

[redacted]
Vice president, Low carbon technology
Equinor

Equinor New Energy Limited
Registered number
6824625

Office address
One Kingdom Street
London, W2 6BD

Telephone
+47 48022458

www.equinor.com

FAO:
[redacted]
Hydrogen Development Manager
Northern Gas Networks
1100 Century Way
Thorpe Park Business Park
Colton
Leeds
LS15 8TU

26th August 2021

Dear Northern Gas Networks,

RE: East Coast Hydrogen Project – Industry Stakeholder

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. Navigator Terminals is an independent, UK based Chemicals, Energy and Fuels storage and infrastructure partner, with over 1.28 million cubic metres of storage capacity. Previously Vopak; Navigator was formed in 2016 and operates four upper tier COMAH terminals with deep sea jetties, each strategically located in major UK ports and serving key demand centres within the UK.
Our four terminals are Thames (Essex, London), Windmill (Barry, South Wales), North Tees and Seal Sands (both Teesside). Across these locations we offer our customers a unique partnership, underpinned by our company values and with a shared goal of a more sustainable world.

Since formation, Navigator Terminals has invested more than £90m In Capex, shared equally between maintaining best in class, technology driven terminals, and executing step outgrowth projects on upper tier COMAH sites, utilising our in-house specialist project team.

Hydrogen is becoming increasingly recognised as a viable option for heating to meet the 2050 Climate Change Act targets, both by industry and the UK Government. Hydrogen represents an opportunity to decarbonise industry and provide residential consumers with a minimal disruption transition to low carbon heating. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing gas infrastructure as well as the creation of new gas infrastructure.

Navigator Terminals operates two upper tier COMAH sites on Teesside, Seal Sands and North Tees, within the area of the East Coast Hydrogen project and see its deployment as being hugely beneficial to us for the following reasons:

- Navigator Terminals Is currently executing an ambitious diversification and growth strategy, focused on the Energy Transition, Sustainability, and the Circular Economy.
- Hydrogen is a key to Navigator Terminals growth, and we welcome the opportunity to study the import, storage, blending and export of future energy carriers.

Navigator Terminals Seal Sands Limited

Oliver Road, West Thurrock, Grays, Essex, RM20 3ED
T +44 (0)1708 863 399 F +44 (0)1708 683 700 W Navigatorterminals.com

Navigator Terminals Seal Sands Ltd. Registered No. 00829104

- The East Coast Hydrogen Projects offers another opportunity to invest in our business in the North East of England, creating a long future for the company, and more high skilled, well paid jobs in the North East of England
- Navigator Terminals is actively seeking opportunities to build new assets across the UK. The East Coast Hydrogen project has the potential to provide those opportunities

In support of this proposal, we have committed to working with East Coast Hydrogen to:

- Navigator Terminals will assist with specialist storage and handling expertise, based on our experience of above and underground storage
- Navigator Terminals will advise on its access to critical infrastructure and assets that would enable the project (pipelines, storage, and import/export facilities)
- Navigator Terminals will offer information on its own available development land, which is located at Teesside, and is within the existing Navigator Terminals site boundary.
- Navigator Terminals will allow use of the company logo in publications in support of the East Coast Hydrogen project

We understand that this Letter of Support is not a legally binding contract and is in Navigator Terminals interest, which may, in time, lead on to a more formal agreement. We wish you all the best for your East Coast Hydrogen project.

[redacted]
Chief Executive Officer
Navigator Terminals ltd

[redacted]
Commercial Director
Navigator Terminals ltd

[redacted]

[redacted]
North East Terminal Manager
Navigator Terminals ltd

[redacted]
Energy Transition Manager
Navigator Terminals ltd

[redacted]

Navigator Terminals Seal Sands Limited

Oliver Road, West Thurrock, Grays, Essex, RM20 3ED
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Navigator Terminals Seal Sands Ltd. Registered No. 00829104

22 August 2023

[redacted]
Northern Gas Networks

Dear Tim,
RE: East Coast Hydrogen Project

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. Mercia Power, Ltd, builds, owns and operates natural gas reciprocating engines across 40 sites with a combined capacity of over 260 MW. We specialise in the provision of flexible power response services to the GB Electricity Grid and other UK power market participants, helping to balance the supply of renewable energy with demand. The Group operates advanced power stations that quickly respond when supply from renewables is low, providing energy to communities and ensuring that they have continuous power. Additionally, we have begun the process of diversifying our portfolio through energy storage projects, such as batteries, with the goal of providing a full flexible power service to the grid. We are also interesting to continue our ability to generate power but are increasingly aware of the need to find alternatives to fossil fuel sources.

Hydrogen is becoming increasingly recognised as a viable option for meeting the 2050 Climate Change Act targets, both by industry and the UK government. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing infrastructures as well as creating new pipelines and production facilities. We operate nearly 30 small power stations along the proposed East Coast Hydrogen route between Leeds and Derby and see its deployment as being hugely beneficial to us for the following reasons:

- **The East Coast Hydrogen project helps us build certainty of a fuel supply for the future of our sites**
- **This certainty will help us plan the next evolution of plant for our sites, working on getting 100% Hydrogen ready engines in place to ensure we're still able to supply electricity to support GB energy security as we transition to a Net Zero future.**

In support of this proposal, we have committed to fully exploring the opportunities for Hydrogen use on our sites and will be advocates to the relevant bodies of the future of Hydrogen to Power uses, such as leverages our industrial memberships and stakeholder relationships with the Department for Energy Security and Net Zero.

We wish you all the best for your East Coast Hydrogen project.

Kind regards,

[redacted]
Chief Executive Officer

Honeywell International Inc.
Honeywell House, Skimped Hill Lane
Bracknell, Berkshire RG12 1EB
United Kingdom
Phone 44-1483-304-848
Fax 44-1483-304-863
www.honeywell.com

January 12th, 2021

Dear Ms [redacted]

RE: East Coast Hydrogen Project – Industry Stakeholder

To paraphrase the words of Mr. Butterworth of National Grid, we recognize that this shift to the future of energy is more than just a project, it is an endeavour, and it is in this spirit that we are writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks.

Why Hydrogen:
We have observed that Hydrogen is becoming increasingly recognised as a viable option for heating to help meet the 2050 Climate Change Act[1] targets, both by industry and the UK Government. Hydrogen represents an opportunity to help reduce carbon intensity for industry and provide residential consumers with a minimal disruption transition to lower carbon heating, from the current unabated energy sources.[2] As a result of this we understand the value of developing and building a hydrogen network through the repurposing of existing gas infrastructure[3] as well as the creation of new gas infrastructure. [4, 5]

Why Honeywell:
Honeywell is an active participant in the burgeoning Hydrogen economy in several areas, and the breadth of our business means that we are ideally positioned to not only understand, the full Hydrogen and Carbon Dioxide value chains, we are also able apply the following solutions aimed at sustainability across multiple industries and areas:

- Honeywell UOP is the inventor and one of the industry leaders in pressure swing adsorption (PSA) Hydrogen purification technology, as well as a leading innovator in various technologies that can be applied to decarbonization such as carbon capture and hydrogen technologies. As an R&D powerhouse and one of the largest process licensing organizations in the world, Honeywell UOP is continuing to develop technology for use across the Hydrogen economy: Carbon capture, low carbon intensity[2] Hydrogen production, Hydrogen transportation, Hydrogen purification, and Hydrogen combustion.
- Honeywell Process Solutions provides solutions for controls and safety of all kinds of process, pipeline facilities in the world. Always the innovator in the market, our most recent advances include fully remote, multi-party capable controls and full control centres. Safety, physical security, personal gas safety, mobile worker solutions and advanced cyber security all within the same technology environment means cost effective technology that remains productive in use. The commercial complexity of Carbon Dioxide allocation, balancing and fiscal reporting is something we know well from similar domains. Honeywell's business

[1] Climate Change Act of 2008 (https://www.legislation.gov.uk/ukpga/2008/27/pdfs/ukpga_20080027_en.pdf)
[2] Hydrogen Council, Decarbonization Pathways, 2020 (https://hydrogencouncil.com/en/hydrogen-decarbonization-pathways/)
[3] UK: https://hydeploy.co.uk/ ; https://hynet.co.uk/ and US: https://www.nrel.gov/docs/fy13osti/51995.pdf
[4] East Coast Hydrogen, Feasibility Study Report, 2021 (https://bit.ly/31fuAyP)
[5] BEIS, UK Hydrogen Strategy, 2021 (https://www.gov.uk/government/publications/uk-hydrogen-strategy)

injection stations / skids of Biogas into gas grids at many stations in Europe (more than 250) provides a basis for our work towards injection stations for Hydrogen into gas grids. Consulting at concept and FEED stage, along with Digitization solutions on top of critical controls and safety complete our scope of activity.

Local and Global:

We have a global presence, however, specifically also have a strong presence in the United Kingdom, with one of our major offices being in Bracknell, with several other facilities across the United Kingdom. Our local footprint and broad customer base in the United Kingdom and specifically also in the east coast area, provides us with the unique perspective that the East Coast Hydrogen project's deployment will be largely beneficial to the industries as well as the region as a whole for the following reasons:

- East Coast Hydrogen will provide a key starting point to support decarbonisation of hard to abate industry and domestic heating in the east coast region, as well as the rest of the United Kingdom.
- We believe that together with other Hydrogen initiatives, East Coast Hydrogen can serve as a catalyst for the Hydrogen economy, and ultimately be the basis of progressively more technology developments and applications geared toward sustainability.
- Also, East Coast Hydrogen can, while supporting above mentioned sustainability drivers, be a one of the key enablers of the transition toward a NetZero energy sector, as outlined by BEIS in the UK Hydrogen strategy[6], in a way that ensures energy supply security, economic growth, and minimum disruptions to consumers.
- For Honeywell and our customer base in the region, the initiative is anticipated to support economically and technically sound carbon reduction of industry and provide industry in the region the mechanism to pivot toward more sustainable business.

Honeywell and East Coast Hydrogen are contemplating working together in the following ways, amongst others:

Honeywell has been a driving force behind energy transition technology developments for years and can contribute holistically across the H2 value chain of East Coast Hydrogen to support all stakeholders.

- **Production –** Carbon capture; Hydrogen purification; emissions management – including tracking and allocation of Carbon Dioxide in multiparty environments; real-time control of complex, multiparty facilities, remotely or locally; renewable integration; supporting power storage systems.
- **Distribution & Storage –** Grid injection / blending; purification; emissions management; measurement of all real time parameters – including fast capture of gas quality to support Hydrogen tracking and allocation; and remote health and performance management of key equipment such as compressors.
- **Consumption –** Industrial Hydrogen blending; deblending solutions applied to both NTS and point of use applications to delink grid blending from user constraints; emission management; Fiscal grade metering (including skids) of material flows, including of Hydrogen and Carbon Dioxide; and Hydrogen combustion technology to enable end users to easily plan for transition to any blend of Hydrogen and Natural Gas.

[6] BEIS, UK Hydrogen Strategy, 2021 (https://www.gov.uk/government/publications/uk-hydrogen-strategy)

Honeywell has the capabilities to support East Coast Hydrogen in developing a thought leadership position with regard to the full scope of the project, including but not limited to supporting East Coast Hydrogen in conference and white papers.

We understand that this Letter of Support is not a legally binding contract or commitment and represents Honeywell expressing an interest which may, in time, lead on to one or more formal agreements. We wish you all the best for your East Coast Hydrogen project and look forward to the potential pursuit of this endeavour with you.

VP and General Manager
Honeywell UOP

VP and General Manager
Honeywell Process Solution

BRITISH ceramic CONFEDERATION

Federation House, Station Road, Stoke-on-Trent. ST4 2SA
Tel: (01782) 744631 Fax: (01782) 744102
E-mail: bcc@ceramfed.co.uk
www.ceramfed.co.uk

9th September 2021

[redacted]
National Grid
Warwick Technology Park
Gallows Hill
Warwick
CV34 6DA

East Coast Hydrogen Project

Dear [redacted]

Ceramics is a vital foundation industry, making a variety of products including bricks, refractories and technical ceramics. The British Ceramic Confederation's membership ranges from single manufacturing site SMEs (75%) to larger UK-based / multi-national organisations operating multiple sites. The UK sector (including suppliers) directly employs 17,500 people and generated annual sales of £1.6bn, of which over £500 million are exports. The industry is energy-intensive, but not energy-inefficient, with energy and climate costs making up to 35% of total production costs and natural gas making up 85% of the sector's energy mix.

I am writing to express our in-principle support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. BCC's members are across the UK, with a concentration of businesses in North Staffordshire, but some are located within the East Coast area. Our sites are all on the distribution network.

For the ceramics industry the route to net zero may involve hydrogen, electrification, CCUS and biofuels. However, the technologies require varying degrees of policy and technical developments to enable their cost-effective deployment. Hydrogen, as a gaseous replacement for natural gas, has the most potential, but also many challenges as well.

Thus, we understand the need to develop and build a hydrogen network through the repurposing of existing gas infrastructure as well as the creation of new gas infrastructure. However, it is also vital that National Grid, distribution operators and others engage with manufacturing industries and support their work in understanding whether hydrogen can work on their sites to make

BCC is happy to engage with National Grid and Distribution Operators as necessary to support the East Coast Hydrogen project.

We wish you all the best for the East Coast Hydrogen project.

Yours sincerely

[redacted]
Energy and Innovation Manager
British Ceramic Confederation

Vitol Group
Nova South
160 Victoria Street
London
United Kingdom
T +44 (0)20 7973 4200
F +44 (0)20 7824 8239

National Grid Carbon Limited (NG)
1-3 Strand
London
WC2N 5EH
19 May 2020

RE: East Coast Hydrogen Project – Hydrogen Producer

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. Humber Zero is a large-scale decarbonisation project aiming to capture and avoid up to 8 million tonnes per annum of CO2 per annum at the Immingham industrial site. It will deploy both post combustion carbon capture technology and produce up to 800MWth of hydrogen as a means to decarbonise both VPI's 1240 MW combines heat and power plant, and the two adjacent refineries at Immingham.

Hydrogen is increasingly recognised as a viable option for heating to meet the 2050 Climate Change Act targets, both by industry and the UK Government. Hydrogen represents an opportunity to decarbonise industry and provide residential consumers with a minimal disruption transition to low carbon heating. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing gas infrastructure as well as the creation of new gas infrastructure.

We are situated within the Immingham area of the East Coast Hydrogen project and see its deployment as being hugely beneficial to us for the following reasons:

- It provides an option for future hydrogen production expansion, stimulating the wider hydrogen economy;
- It will provide for greater employment opportunities in the region, helping to expand on our goal to create/safeguard over 20,000 local jobs.

We understand that this Letter of Support is not a legally binding contract and is Humber Zero expressing an interest which may, in time, lead on to a more formal agreement. We wish you all the best in progressing and delivering this important project.

Yours sincerely,

[redacted]

VPI Project Director, Humber Zero

26/08/2021
[redacted]
Northern Gas Networks

Dear [redacted]

RE: East Coast Hydrogen Project – Industry Stakeholder

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks.

Sembcorp Energy UK (SEUK) are a leading provider of sustainable solutions supporting the UK's transition to Net Zero.

With an energy generation and battery storage portfolio of nearly 1GW in operation, our expertise helps major energy users and suppliers improve their efficiency, profitability, and sustainability, while supporting the growth of renewables and strengthening the UK's electricity system.

Our Wilton International site on Teesside sits within a hub of decarbonisation innovation. At the site, we provide energy-intensive industrial businesses with combined heat and power (CHP) via our private wire network that supplies electricity generated by gas and biomass.

SEUK are collaborating with 8 Rivers Capital to potentially develop the UK's first NET Power station at SEUK's Wilton International site on Teesside. The Whitetail Clean Energy project (Whitetail) is expected to produce about 300 megawatts (MW) of clean, efficient, low-cost electricity, with potential expansion options in the future.

Sembcorp is fully committed to decarbonising the Wilton International site and to supporting the local and global journey to Net Zero. This year we are developing our Decarbonisation Strategy and hydrogen will be a key consideration. We recognise that hydrogen is likely to be a key piece of the decarbonisation solution and have signed a Memorandum of Understanding with BP to understand the potential for switching to hydrogen produced by the H2Teesside project.

We are situated within the Teesside area of the East Coast Hydrogen project and see its deployment as being hugely beneficial to us for the following reasons:

- Gaining understanding of the potential for hydrogen at Wilton International – both in terms of decarbonising our own operations and our customers' and in how we support wider UK decarbonisation.

In support of this proposal we have committed to working with East Coast Hydrogen to:

- Feed in the implications of emerging plans on project Whitetail and any other projects that emerge from our decarbonisation strategy.

- Share information on the potential for hydrogen storage in our salt caverns (providing a technical assessment of their repurposing can be completed).

We understand that this Letter of Support is not a legally binding contract and is expressing an interest which may, in time, lead on to a more formal agreement. We wish you all the best for your East Coast Hydrogen project.

Commercial Director
Sembcorp Energy UK

TOYOTA

TOYOTA MOTOR MANUFACTURING (UK) LTD

Burnaston, Derbyshire,
East Midlands,
DE1 9TA, United Kingdom
T 01332 282121 - F 01332 282801

5th November 2021

[redacted]
Head of Regional Development (East and London)
Cadent
Ashbrook Court
Coventry
CV7 8PE

Dear [redacted]

RE: East Coast Hydrogen Project – Industry Stakeholder

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks.

Toyota has a long history in delivering products and more recently services that support the reduction in carbon. Our hybrid electric models have significantly contributed to the reduction of CO2 emissions and in parallel we have been pioneering hydrogen powered mobility solutions. This culminated in the launch of our mass market vehicle, the Mirai in 2015. We have since launched the second generation and in addition are starting to deliver fuel cell technology in buses, fork-lift trucks, boats, trucks and stationary power sources.

Hydrogen is becoming increasingly recognised as a key part of the energy mix required to meet the 2050 Climate Change Act targets, both by industry and the UK Government. Hydrogen represents an opportunity to decarbonise industry and provide residential consumers with a minimal disruption transition to low carbon heating. From Toyota's perspective, we also see hydrogen not only as a means to decarbonise transport but as a method to contribute to the decarbonising of society as a whole. Its ability to act as an energy vector allows hydrogen to be used in many applications; it can be from various sources; and is transportable and storable. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing gas infrastructure as well as the creation of new gas infrastructure.

Toyota's UK vehicle manufacturing site is situated in Burnaston, South Derbyshire and as such perfectly located to investigate the opportunities that the East Coast Hydrogen project could bring to the area. We see its deployment as being hugely beneficial to us for the following reasons:

- Opportunity to investigate the use of grid hydrogen within a number of our industrial processes
- The ability to have on-stream hydrogen allowing for the further development of hydrogen clusters linked both to industry, logistics and transport within the region.

In support of this proposal we have committed to working with East Coast Hydrogen to:

- Establish a potential baseload requirement for hydrogen subject to a detailed feasibility study related to the suitability within our industrial applications
- Support the wider proliferation of hydrogen within a number of regional projects in which we are involved
- Promote skills associated with the requirements of work within the hydrogen economy and its technology through training at our academy.

We understand that this Letter of Support is not a legally binding contract and is Toyota Motor Manufacturing (UK) Ltd expressing an interest which may, in time, lead on to a more formal agreement. We wish you all the best for your East Coast Hydrogen project.

Yours sincerely

Managing Director - Toyota Manufacturing (UK) Ltd

TRITON POWER

Saltend Cogeneration Company Limited
Saltend Power Station
Saltend, Hedon Road, Hull HU12 8GA - UK
Tel. +44 (0)1482 895500 Fax +44 (0)1482 895529

www.tritonpower.co.uk

[redacted]
Northern Gas Networks,
1100 Century Way,
Thorpe Business Park, Colton,
Leeds, LS15 8TU

9th September 2021

Dear [redacted]

RE: East Coast Hydrogen Project – Industry Stakeholder

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. Triton Power's Saltend Power Station is a 1200MW CCGT (Combined Cycle Gas Turbine) CHP (Combined Heat & Power) power station located on the Humber Estuary in East Yorkshire. The station provides power to the UK electricity market, and power and steam to the adjacent Saltend Chemicals Park.

Hydrogen is becoming increasingly recognised as a viable option to meet the 2050 Climate Change Act targets, both by industry and the UK Government. Hydrogen represents an opportunity to decarbonise industry and power generation. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing gas infrastructure as well as the creation of new gas infrastructure.

Our vision is to be the first hydrogen fueled gas turbine in the UK. We have partnered with Equinor's H2H Saltend project, which aims to be the UK's first blue hydrogen production facility in the UK, to provide low carbon hydrogen to the Saltend Power Station. The turbines installed at Saltend Power Station are Mitsubishi Power M701F models and Mitsubishi Power is currently undertaking the conversion to hydrogen of Vattenfall's Magnum plant, in the Netherlands.

Due to our location in the Humber, we see the potential of the East Coast Hydrogen project and its deployment as being hugely beneficial to us for the following reasons:

- The interconnection of hydrogen production and storage would provide an opportunity for increased resilience within a hydrogen system and support effective scaling of a hydrogen economy.
- The provision of infrastructure to support a diverse set of off-takers to enable the blue hydrogen production to run at baseload to achieve efficient hydrogen production.

In support of this proposal we have committed to working with East Coast Hydrogen to:

- Provide information relating to our conversion strategy and implementation plans.
- Provide data, where appropriate, on our planned investments and contribution to skills.
- Continue to work with stakeholders in the Humber on broader hydrogen strategy.

We understand that this Letter of Support is not a legally binding contract and is Triton Power expressing an interest which may, in time, lead on to a more formal agreement. We wish you all the best for your East Coast Hydrogen project.

Yours sincerely

[redacted]
Chief Executive Officer
Triton Power

27/09/2023

Naylor Drainage LTD
Clough Green
Cawthorne
Barnsley
S75 4AD

Dear Northern Gas Networks ,

RE: East Coast Hydrogen Project

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. As a relatively large consumer of natural gas, the success of this project would provide us with the means to decarbonise and would contribute to our Net Zero commitments.

Hydrogen is becoming increasingly recognised as a viable option for meeting the 2050 Climate Change Act targets, both by industry and the UK government. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing infrastructures as well as creating new pipelines and production facilities. We are situated within the Northern area of the East Coast Hydrogen project and see its deployment as being hugely beneficial to us for the following reasons:

- **Would enable our organisation to decarbonise, providing the means to achieve Net Zero by 2050 as per organisational commitments.**
- **Would improve customer base and enhance CSR as a result of switching to hydrogen.**

In support of this proposal we have committed to exploring the opportunities for Hydrogen use on our sites and will be advocates to the relevant bodies of the future of Hydrogen to Power uses.

We wish you all the best for your East Coast Hydrogen project.

Signed

[redacted]

EHS Officer

31/10/23

[redacted]
Nufarm UK Limited,
Wyke Lane,
Wyke,
Bradford,
BD12 9EJ

Dear [redacted]

RE: East Coast Hydrogen Project

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. Nufarm are embarking on a journey to decarbonise the Wyke site and this project will enable the initial major steps to be taken.

Hydrogen is becoming increasingly recognised as a viable option for meeting the 2050 Climate Change Act targets, both by industry and the UK government. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing infrastructures as well as creating new pipelines and production facilities. We are situated within the West Yorkshire area of the East Coast Hydrogen project and see its deployment as being hugely beneficial to us for the following reasons:

- **This will eventually decarbonise the site steam / heat generation.**
- **Allow for the prioritisation of alternative energy solutions on site to deliver our other decarbonisation Projects.**
- **Our plan is to increase production over the next 7 years without this project we would not be able to make the necessary improvements.**

In support of this proposal, we are fully committed to exploring the opportunities for hydrogen use on the Wyke site and will be advocates to the relevant bodies and other industrial users of the future of an integrated hydrogen network

We wish you all the best for your East Coast Hydrogen project.

[redacted]
Sustainability Project Lead

Ms [redacted]
Northern Gas Networks

13th July 2022

H+H
PARTNERS IN WALL BUILDING

H+H UK Limited
Heck Lane
Pollington, Goole
East Yorkshire DN14 0BA

+44 (0)1405 861212 Telephone

www.hhcelcon.co.uk

Dear [redacted]

RE: East Coast Hydrogen Project – Industry Stakeholder

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. H+H has been identified by Cadent as a large gas user in East Yorkshire. H+H is currently working through their net-zero strategy, and this Hydrogen project will play a significant role in that.

Hydrogen is becoming increasingly recognised as a viable option for heating to meet the 2050 Climate Change Act targets, both by industry and the UK Government. Hydrogen represents an opportunity to decarbonise industry and provide residential consumers with a minimal disruption transition to low carbon heating. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing gas infrastructure as well as the creation of new gas infrastructure.

We are situated within Pollington, Goole, identified within the stage 2 area of the East Coast Hydrogen project and see its deployment as being hugely beneficial to us for the following reason:

- It will allow a significant reduction in H+H's scope 2 emissions, with both hybrid and 100% Hydrogen mixes are acceptable to H+H.

In support of this proposal we have committed to working with East Coast Hydrogen to:

- Provisionally allow both hybrid and 100% Hydrogen supply to the H+H Pollington site.
- Engage in a collaborative manner with East Coast Hydrogen.
- Explore and actively engage with the timeframe of this project.

We understand that this Letter of Support is not a legally binding contract and is H+H UK Limited expressing an interest which may, in time, lead on to a more formal agreement. We wish you all the best for your East Coast Hydrogen project.

[redacted]

Operations Director
H+H UK Limited

Registered office:
H+H UK Limited
Celcon House
Ightham, Sevenoaks
Kent TN15 9HZ
Registered in England
No. 247647

Innovia Films
Lowther R&D Centre, West Road
Wigton, Cumbria, CA7 9XX
United Kingdom
T +44 (0) 1697 342281
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6th June 2022

[redacted]
Hydrogen Development Manager
1100 Century Way
Thorpe Park Business Park
Colton
Leeds
LS15 8TU

Dear [redacted]

RE: East Coast Hydrogen Project – Industry Stakeholder

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. As a significant user of natural gas within the region contemplated by this change, we are keen to be involved in the discussions.

Hydrogen is becoming increasingly recognised as a viable option for heating to meet the 2050 Climate Change Act targets, both by industry and the UK Government. Hydrogen represents an opportunity to decarbonise industry and provide residential consumers with a minimal disruption transition to low carbon heating. As a result of this, we understand the need to develop and build a hydrogen network through the repurposing of existing gas infrastructure as well as the creation of new gas infrastructure.

We are situated within the NGN/Phase 3/4 area of the East Coast Hydrogen project in the town of Wigton, Cumbria, on the west coast of England. We see its deployment as being potentially beneficial to us for the following reasons:

- Providing a solution to the site's need for heat and steam, significantly reducing carbon emissions.
- Allowing us to develop more detailed Carbon Roadmap options for business heat.

In support of this proposal, we have committed to working with East Coast Hydrogen to:

- Understand the impacts of the proposals and provide industry feedback and support where possible.

We understand that this Letter of Support is not a legally binding contract and is Innovia Films Ltd expressing an interest which may, in time, lead to a more formal agreement.

We wish you all the best for your East Coast Hydrogen project.

Energy Manager
Innovia Films Ltd

CRANSWICK plc
Great British Taste

10th May 2022

[redacted]
Northern Gas Networks

Dear [redacted]

RE: East Coast Hydrogen Project – Industry Stakeholder

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. We see ourselves as one of the world's most responsible food producers, Therefore the choice is a simple one for us at Cranswick. We do not want to be part of the problem – we want to be part of the solution. We want to inspire positive change and lead the way so that others can follow.
Hydrogen is becoming increasingly recognised as a viable option for heating to meet the 2050 Climate Change Act targets, both by industry and the UK Government. Hydrogen represents an opportunity to decarbonise industry and provide residential consumers with a minimal disruption transition to low carbon heating. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing gas infrastructure as well as the creation of new gas infrastructure.

We are situated predominantly in the north and have 7 sites within the Hull/Humber region of the East Coast Hydrogen project and see its deployment as being hugely beneficial to us for the following reasons:

- We are committed to reducing our carbon footprint
- We would like to remain at the forefront of our industry

In support of this proposal we have committed to working with East Coast Hydrogen to:

- Utilisation of our relationships with the wider industry and sector affiliations within food and farming.

We understand that this Letter of Support is not a legally binding contract and is Cranswick PLC expressing an interest which may, in time, lead on to a more formal agreement. We wish you all the best for your East Coast Hydrogen project.

[redacted]
Cranswick PLC

[redacted]
Head of Regional Development (East and London)
Cadent
Pilot Way
Ansty Park
Coventry
CV7 9JU

7th March 2022

Dear [redacted]

RE: East Coast Hydrogen Project – Industry Stakeholder

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. In Liberty Steel we have a stated vision to become carbon neutral across our group, globally by 2030. In the UK this means we will need to exploit an emerging hydrogen network to replace natural gas in our processes.

Hydrogen is becoming increasingly recognised as a viable option for heating to meet the 2050 Climate Change Act targets, both by industry and the UK Government. Hydrogen represents an opportunity to decarbonise industry and provide residential consumers with a minimal disruption transition to low carbon heating. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing gas infrastructure as well as the creation of new gas infrastructure.

We are situated within the South Yorkshire area in relation to the East Coast Hydrogen project area i.e. Rotherham / Sheffield area and see its deployment as being hugely beneficial to us for the following reasons:

- Decarbonisation of Process Heat. Our use of methane in the steelmaking and downstream re-heating of steel and heat treatment of steel contributes 50% of our CO2 emissions. Therefore to achieve our net-zero strategy we need access to competitively priced green hydrogen.

- Access to Hydrogen at 'Dispersed sites' as we are not part of an Industrial Cluster.

- Enabling leadership in the low carbon transition to assist our customers in achieving their goals.

In support of this proposal we have committed to working with East Coast Hydrogen to:

LIBERTY Speciality Steels
PO Box 50, Aldwarke Lane,
Rotherham, S60 1DW, United Kingdom

T +44 (0) 7808 654809
E ed.heath-whyte@libertysteelgroup.com
www.libertysteelgroup.com/uk

MEMBER OF GFG ALLIANCE

Registered office: Liberty Speciality Steels, 7 Fox Valley Way, Stocksbridge, Sheffield, S36 2JA, United Kingdom
Registered in England and Wales No. 10491177

- Developing our roadmap to Carbon Neutrality by 2030 considering the phasing of the East Coast Hydrogen network to enable planning of supply of hydrogen to our sites.

- Assist in understanding of hydrogen use in the Steel Sector.

- Development of suitable hydrogen pilot projects for Steel Sector processes.

We understand that this Letter of Support is not a legally binding contract and is Liberty Steel expressing an interest which may, in time, lead on to a more formal agreement. We look forward to working with you on the advancement of the East Coast Hydrogen project.

Yours sincerely

Head of Environment and Sustainability

Syngenta
PO Box A38
Huddersfield
West Yorkshire HD2 1FF
United Kingdom
www.syngenta.com

Tel: 07841493549
Anssar.Khan@syngenta.com

29th September 2023

Dear [redacted]

RE: East Coast Hydrogen Project

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. We see this project as a key technology breakthrough with the potential to accelerate the reduction of the carbon intensity of our operations.

Hydrogen is becoming increasingly recognised as a viable option for meeting the 2050 Climate Change Act targets, both by industry and the UK government. As a result of this, we understand the need to develop and build a hydrogen network through the repurposing of existing infrastructures as well as creating new pipelines and production facilities. We are situated within the West area of the East Coast Hydrogen project and see its deployment as being hugely beneficial to us for the following reasons:

- Creates the conditions for our combined heat & power plant to produce low or zero-carbon energy (electrical and thermal). This in turn decarbonises both Syngenta and 3rd manufacturing process carried out from the site.

In support of this proposal, we have committed to participate in a feasibility study to explore options to replace the current gas-fired CHP turbine with one fuelled by hydrogen.

We wish you all the best for your East Coast Hydrogen project.

Yours sincerely

[redacted]
Strategic Projects Manager

04/05/2022

[redacted]
Pilot Way
Ansty Park
Coventry
CV7 9JU

RE: East Coast Hydrogen Project – Industry Stakeholder

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. Aggregate Industries is currently a large industrial user of hydrocarbon fuels and is looking to include hydrogen within its fuel mix to decarbonise transport and heat within its operations.

Hydrogen is becoming increasingly recognised as a viable option for heating to meet the 2050 Climate Change Act targets, both by industry and the UK Government. Hydrogen represents an opportunity to decarbonise industry and provide residential consumers with a minimal disruption transition to low carbon heating. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing gas infrastructure as well as the creation of new gas infrastructure.

We have sites across the UK including asphalt plants across the east of England, a cement plant on the south edge of the Peak District and head offices in Leicester. We see the East Coast Hydrogen project as being hugely beneficial to us for the following reasons:

- Provision of low cost, low carbon hydrogen to sites that currently use natural gas within our estate across the east of England
- Potential supply of hydrogen to our large asphalt plant near Leicester
- The wider CCUS applications that the project will help support, enabling our cement plant to store carbon dioxide it captures in the future.

In support of this proposal we have committed to working with East Coast Hydrogen to:

- Provide potential sites that have large, industrial uses for hydrogen

We understand that this Letter of Support is not a legally binding contract and is Aggregate Industries expressing an interest which may, in time, lead on to a more formal agreement. We wish you all the best for your East Coast Hydrogen project.

[redacted]
Energy and Carbon Manager
Aggregate Industries

AGGREGATE INDUSTRIES UK LIMITED
Bardon Hall, Copt Oak Road, Markfield,
Leicestershire, LE67 9PJ, United Kingdom
Telephone +44 (0)1530 816600
Facsimile +44 (0)1530 816666
www.aggregate.com

British Glass

[redacted]
1100 Century Way,
Thorpe Park Business Park,
Colton, Leeds
LS15 8TU

18 October 2023

Dear Chris,

East Coast Hydrogen Project

I am writing to express our support for the East Coast Hydrogen project that Cadent, National Grid and Northern Gas Networks are undertaking. British Glass is the trade federation for the UK Glass sector and our members are gas-intensive but are committed to reducing carbon emissions. Hydrogen will be one of the key fuels that enable our members to decarbonise their process.

Hydrogen is becoming increasingly recognised as a viable option for meeting the 2050 Climate Change Act targets, both by industry and the UK government. As a result of this, we understand the need to develop and build a hydrogen network through the repurposing of existing infrastructures as well as creating new pipelines and production facilities. Are members are situated in **Knottingley (3 sites), Leeds, Goole, Eggborough and then some sites in the Cadent area to the south of the** East Coast Hydrogen project and see its deployment as being hugely beneficial to us for the following reasons:

- It will allow our members to connect to the hydrogen network decarbonising their process and support the UK target of Net Zero by 2050.
- It will give dispersed (non-cluster) sites access to Hydrogen on a similar timeline to the clusters which is vital to ensure no competitive advantage.

In support of this proposal, we have committed to working with Northern Gas Networks and to engaging our members to support this project through to delivery.

We wish you all the best for your East Coast Hydrogen project.

Yours sincerely

[redacted]
Chief Executive
British Glass

British Glass
9 Churchill Way, Chapeltown, Sheffield, South Yorkshire, S35 2PY. UK.
Tel: +44 (0) 114 290 1850, Fax: +44 (0) 114 290 1851
www.britglass.org.uk

Greencore

21 December 2023

[redacted]
Hydrogen Project Manager
Northern Gas Networks
1100 Century Way,
Thorpe Park Business Park,
Colton,
Leeds
LS15 8TU

Dear [redacted]

RE: East Coast Hydrogen Project

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. As discussed at our recent meeting, our organisation, Greencore, is a food manufacturer with premises in the East Coast Hydrogen project area and with a sustainability plan which requires significant reduction in carbon emissions associated with the burning of fossil fuels, e.g. in cooking and steam raising.

Hydrogen is becoming increasingly recognised as a viable option for meeting the 2050 Climate Change Act targets, both by industry and the UK government. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing infrastructures as well as creating new pipelines and production facilities. We are situated within the **south, north central and east area of the East Coast Hydrogen** project and see its deployment as being hugely beneficial to us for the following reasons:

- Our net zero plans and Science Based target commitment mean that we are exploring all avenues relating to a reduction of carbon associated with our operations and feel that hydrogen is likely to be a part of our transition to low carbon manufacture.
- The future availability of green and blue hydrogen near some of our manufacturing sites will assist us in drawing up our medium to long-term plans for reduction of natural gas and associated carbon emissions.
- We would like to explore whether hydrogen will become a cost-effective fuel for operating our fleet.

In support of this proposal we have committed to joining the consortium as an industry member.

We wish you all the best for your East Coast Hydrogen project.

[redacted]
Greencore – Energy Plan Owner

I'Anson
Quality Feeds

29/02/24

[redacted]
I'Anson Bros Ltd
The Mill
Thorpe road
Masham
Ripon
North Yorks
HG4 4JB

Dear [redacted]

RE: East Coast Hydrogen Project

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks.

Hydrogen is becoming increasingly recognised as a viable option for meeting the 2050 Climate Change Act targets, both by industry and the UK government. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing infrastructures as well as creating new pipelines and production facilities. Based in North Yorkshire, we are situated within the Northern Gas Networks area of the East Coast Hydrogen project and see its deployment as being hugely beneficial to us for the following reasons:

- **To be a leader in a new green energy project**
- **Contribute to the carbon reduction of the food chain.**

In support of this proposal we have committed to investigate and develop new manufacturing techniques.

We wish you all the best for your East Coast Hydrogen project.

Kind regards [redacted]

Universal Feed UFAS Assurance Scheme

I'Anson Bros Ltd.
The Mill, Thorpe Road, Masham, Ripon, North Yorkshire HG4 4JB
Tel: (01765) 689332 Fax: (01765) 689161
Email: enquiries@ianson.co.uk Web: www.ianson.co.uk

22 August 2023

[redacted]
Northern Gas Networks
Dear [redacted]
RE: East Coast Hydrogen Project

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. Mercia Power, Ltd, builds, owns and operates natural gas reciprocating engines across 40 sites with a combined capacity of over 260 MW. We specialise in the provision of flexible power response services to the GB Electricity Grid and other UK power market participants, helping to balance the supply of renewable energy with demand. The Group operates advanced power stations that quickly respond when supply from renewables is low, providing energy to communities and ensuring that they have continuous power. Additionally, we have begun the process of diversifying our portfolio through energy storage projects, such as batteries, with the goal of providing a full flexible power service to the grid. We are also interesting to continue our ability to generate power but are increasingly aware of the need to find alternatives to fossil fuel sources.

Hydrogen is becoming increasingly recognised as a viable option for meeting the 2050 Climate Change Act targets, both by industry and the UK government. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing infrastructures as well as creating new pipelines and production facilities. We operate nearly 30 small power stations along the proposed East Coast Hydrogen route between Leeds and Derby and see its deployment as being hugely beneficial to us for the following reasons:

- **The East Coast Hydrogen project helps us build certainty of a fuel supply for the future of our sites**
- **This certainty will help us plan the next evolution of plant for our sites, working on getting 100% Hydrogen ready engines in place to ensure we're still able to supply electricity to support GB energy security as we transition to a Net Zero future.**

In support of this proposal, we have committed to fully exploring the opportunities for Hydrogen use on our sites and will be advocates to the relevant bodies of the future of Hydrogen to Power uses, such as leverages our industrial memberships and stakeholder relationships with the Department for Energy Security and Net Zero.

We wish you all the best for your East Coast Hydrogen project.

Kind regards,

[redacted]
Chief Executive Officer

Ripon Select Foods Limited
Food Ingredient Manufacturers

Dallamires Way North, Ripon, North Yorkshire. HG4 1TL
Tel: +44 (0)1765 601711 Fax: +44 (0)1765 607481 Email: ingredients@rsf.co.uk Web: www.rsf.co.uk

06 March 2024

Ms [redacted]
Northern Gas Networks
1100 Century Way
Thorpe Park Business Park
Colton
Leeds
LS15 8TU

Dear [redacted]

RE: East Coast Hydrogen Project

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. Based in North Yorkshire, Ripon Select Foods Limited is a successful family-owned and run business, manufacturing dried food ingredients. Sustainability has become an important part of our business strategy. By using greener energy sources we will be able to reduce our carbon footprint and hit our industry target of net zero by 2040.

Hydrogen is becoming increasingly recognised as a viable option for meeting the 2050 Climate Change Act targets, both by industry and the UK government. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing infrastructures as well as creating new pipelines and production facilities. We are situated in North Yorkshire, within the central area of the East Coast Hydrogen project, and see its deployment as being hugely beneficial to us for the following reasons:

- RSF use a high capacity of gas in our manufacturing processes, where electrification is not a suitable alternative option. Changing to hydrogen from natural gas will significantly reduce our carbon emissions and help meet our industry's net zero target.
- RSF operate our own transport fleet, that deliver all over the UK. A local source of hydrogen would allow investment in greener vehicles and local deliveries to be carried out with low emissions. Further nationwide hydrogen sources in the future would ensure all deliveries are made with low emissions.

In support of this proposal we have committed to actively research changes that need to be made to our manufacturing machinery that currently use natural gas as a fuel, research into hydrogen fuelled HGV's and vehicles, and to invest in these changes or newer machinery/transport that can utilise hydrogen as a fuel in the near future.

We wish you all the best for your East Coast Hydrogen project.

[redacted]

Joint Managing Director

Calbee
Group UK Ltd

29th January 2024

[redacted]

Calbee Group UK Ltd
Duncombe Street,
Bradford,
BD8 9AJ

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks. At Calbee Group UK Seabrook's we are a reasonable sized user of natural gas and are keen to seek alternatives when it comes to energy supplies.

Hydrogen is becoming increasingly recognised as a viable option for meeting the 2050 Climate Change Act targets, both by industry and the UK government. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing infrastructures as well as creating new pipelines and production facilities. We are situated within the network catchment area in relation to the East Coast Hydrogen project area of Bradford west Yorkshire and see its deployment as being hugely beneficial to us for the following reasons:

- Provide us with a sustainable energy source alternative to natural gas.
- This may help with our carbon reduction.
- Hopefully provide us with a greener alternative energy source.

We wish you all the best for your East Coast Hydrogen project.

For and on behalf of Calbee Group UK Ltd
Yours sincerely,

[redacted]

Group Projects and CI Engineering Manager

Email address: *tommyb@clabeegroupuk.com*

Wienerberger

7th March 2024

[redacted]
Northern Gas Networks

Dear [redacted]

RE: East Coast Hydrogen Project

I am writing to express our support for the East Coast Hydrogen project that is being undertaken by Cadent, National Grid and Northern Gas Networks.

As a responsible producer of building solutions Wienerberger Ltd are actively looking for tools to support our ambitious decarbonisation programme.

Hydrogen is becoming increasingly recognised as a viable option for meeting the 2050 Climate Change Act targets, both by industry and the UK government. As a result of this we understand the need to develop and build a hydrogen network through the repurposing of existing infrastructures as well as creating new pipelines and production facilities.

We are situated across the UK and within the East Coast Hydrogen region and see its vision as being hugely beneficial for the following reasons:

- The UK as a whole must accept the challenge to decarbonise.
- The decarbonisation effort must be very well coordinated across regions.
- Our processes can be adapted to use hydrogen as a "carbon free" fuel with less disruption than with some other alternatives.

In support of this proposal we have committed to:

- Share potential demand details for a well-developed hydrogen network
- Develop our people and processes to manage a new fuel opportunity
- Preserve and enhance employment possibilities in the region
- Engage with the Consortium with the aim of collaboratively building the Hydrogen Economy in the region.
- Permit the use of our logo on East Coast Hydrogen consortium materials and collateral.

We understand that this Letter of Support is not a legally binding contract and is Wienerberger Ltd expressing an interest which may, in time, lead on to a more formal agreement.

We wish you all the best for your East Coast Hydrogen project.

[redacted]

Head of Thermal Process and Projects - Wienerberger Ltd