UK Government

Cluster Sequencing for Carbon Capture Usage and Storage Deployment: ECC Teesside Selection Process

CCUS Enabled Hydrogen Project Plan

February 2026

Any enquiries regarding this publication should be sent to us at eccteessideselection@energysecurity.gov.uk

Contents

Introduction

The Department for Energy Security and Net Zero (DESNZ) is seeking to fully utilise the capacity of Track-1 Clusters through Build Out processes.

In February 2026, DESNZ launched the East Coast Cluster Selection process with the aim of filling the remaining transport and storage capacity expected to be available in 2032 and contributing to the growing CCUS sector, which is projected to support up to 50,000 jobs and £2.8bn of GVA (2022 prices) annually across the supply chain by 2050.

This document is an Annex to the ECC Teesside Selection Process Application Guidance. The publication of this form accompanies the opening of an application window for Projects and should be read alongside the ECC Teesside Selection Process Application Guidance Document to understand what projects are required to submit and why; the timelines for submitting clarification questions; timelines for submitting the final application forms; and further detail on the assessment process. Note that the caveats and reservations set out in Chapter 2 of the ECC Teesside Selection Process Application Guidance document apply equally here.

This document sets out the questions that CCUS-enabled Hydrogen projects should answer as part of their ECC Teesside Selection Process submission. The information and relevant supporting evidence provided by the capture project within the completed Project Plan will, alongside Hydrogen Cost Assessment Form (Annex B), Financial Statement Form (Annex C), Hydrogen Emissions Calculation (HEC), and Fugitive Hydrogen Emissions Risk Reduction Plan (FHERRP), form the basis of the assessment to determine that a project meets the requirements to be part of the process. This document is an Annex to the ECC Teesside Selection Process Application Guidance Document[1] and should be read alongside it. Please see the ECC Teesside Selection Process Application Guidance Document for further guidance on the assessment process.

The ECC Teesside Selection Process will be run by DESNZ. If applicants have any general questions about the submission process or about filling in any part of the submission documentation, please email queries to ECCTeessideSelection@energysecurity.gov.uk.

[1] https://www.gov.uk/government/publications/carbon-capture-usage-and-storage-ccus-december-2023-statement

Important information regarding this process

- The **deadline for finalised ECC Teesside Selection Process submissions is 23:59 on 10-April-2026.**
- The assessment process will be run fairly, transparently, and objectively in accordance with the published ECC Teesside Selection Process Guidance.
- The project shall ensure that it provides a clear response to every applicable question asked in this form. This should detail both the current status and/or plans with respect to project delivery.
- The information provided within this form will be used throughout the ECC Teesside Selection Process and the negotiations/due diligence phase. Entering a negotiation does not mean that a contract will be awarded. Any decision to award support would only be made subject to the successful completion of any negotiation and due diligence.
- Further timetable details for this process are set out in the ECC Teesside Selection Process Guidance Document.
- DESNZ will not be responsible for any costs incurred in the preparation of any submission, irrespective of whether the capture project is successful in the ECC Teesside Selection Process.
- Projects will need to satisfy the eligibility criteria to be considered in the Deliverability Assessment.
- Cost and Economic Benefits information will also be collected. As part of the deliverability assessment, cost information provided will be evaluated for credibility and will be checked for consistency against the commercial and financial information provided. It will then be used to inform value for money assessment. Economic Benefits data will neither be considered when assessing Projects against the eligibility criteria nor as part of the deliverability assessment. However, capturing the economic benefits of Net Zero is an important priority for UK government and to do this we need to develop robust, resilient, UK supply chains and these outcomes will also be considered within the Value for Money assessment and inform shortlisting. If Applicants proceed to negotiations, HMG may ask the Applicant to submit or publish more detailed plans on supply chains, skills and economic benefits.
- This document, the CCUS Enabled Hydrogen Project Plan, is divided into four sections:
    - Section 1: Applicant Information
    - Section 2: Eligibility, information submitted in this section will be used to determine the initial eligibility of the Hydrogen Project.
    - Section 3: CCUS-Enabled Hydrogen Project Overview, information submitted in this section will be used to improve DESNZ's understanding of the Project and may also be used to inform the Deliverability assessment and subsequent shortlisting process. Compliance with Eligibility criteria must be maintained.
    - Section 4: Deliverability, information submitted in this section will be used to assess the project against the Deliverability criteria set out in the ECC Teesside Selection

Process Guidance document and subsequent shortlisting process. Compliance with Eligibility criteria must be maintained.

Information submitted in response to any part of this application may be used to assess the project projects against the outlined Eligibility and Deliverability criteria. Eligibility and Deliverability will be assessed continuously until FID. Responses in any section may also be used to inform value for money and affordability assessments, and also to evaluate the project's alignment with the CCUS programme and DESNZ's wider strategic goals when shortlisting.

- Alongside the CCUS-Enabled Hydrogen Project Plan the assessment of the Project will be supported by the submission of several forms:
  - Annex B – Hydrogen Cost Assessment Form will be used to collect the cost data for the Hydrogen Project.
  - Annex C - Financial Statement Form will be used to assess the financial and commercial health of participating companies within the Deliverability criterion. This form should be considered supplementary to the questions to assess the Project's deliverability. The figures included in the form should be supported by relevant accounting notes and documentation.
  - Annex D1 & D2 – Economic Benefits Form seeks to understand how key components and services required to deliver the Project will be sourced; how risks that may affect the supply of these key components may be mitigated; and how Projects are engaging with new entrants and small and medium-sized enterprises (SMEs).
  - A Hydrogen Emissions Calculation (HEC) allowing for determination of CO_2e intensity to demonstrate LCHS compliance and a Fugitive Hydrogen Emissions Risk Reduction Plan (FHERRP).
- Across the assessment DESNZ will place significant emphasis on the credibility and consistency of information provided.
- Relevant information provided in the Eligibility and Project Overview section, as well as subsequent engagement, will be used to inform the Deliverability assessment. This is to allow for consistency and credibility checks. Applicants should not use other sections to continue their answers. The word count for each section must be adhered to and any obvious continuation of answers in other sections will be removed.
- After all the Project submissions have been individually assessed for eligibility and deliverability, DESNZ will carry out a shortlisting process, with those projects that have met the required standard to progress. This is to ensure the overall outcome of the process meets the strategic objectives of the ECC Teesside Selection Process and meets the goals of the Department as a whole. The process used for this step is described in Chapters 10 of the ECC Teesside Selection Process Guidance Document.
- We expect to take a more strategic approach to the VfM and shortlisting process for CCUS-enabled hydrogen projects in this ECC Teesside Selection Process. This may include considering how Projects align with broader Government priorities, such as supporting Net Zero and clean power goals, and the objectives of the Modern Industrial

Strategy[2], by helping to decarbonise critical, hard-to-electrify industries. In Section 3: CCUS-Enabled Hydrogen Project Overview, Projects will be able to provide detail on:

  - Their proposed offtakers and;
  - Their proposed plans and ability to explore a role within a future hydrogen network, should one develop in the region.

- If Projects pass the deliverability assessment, we may request more detailed information from Projects as part of this shortlisting process.
- DESNZ reserves the right not to accept any submission and reserves the right to cancel the process before it has completed or at any time before any support has been awarded.
- DESNZ reserves the right not to consider a submission further if an applicant fails to disclose information requested.
- Each individual piece of supporting evidence can be referenced multiple times in the CCUS Enabled Hydrogen Project Plan but should be uploaded only once to the portal.
- Please note that the word limit does not cover the references sections. This is so applicants can be specific as to where information can be found in any documents provided. If this section is used to continue answers, the words will be removed before the assessment.

Any information provided above the word limits will be removed before information is provided to assessors and will not count towards the rating. Graphics and diagrams are welcomed and do not count toward the word count. We will remove words in excess of the count from the end of the relevant question or section. This will be completed before the documentation is provided to assessors.

[2] Industrial Strategy - GOV.UK

Disclosure of information

Reasons for decisions on submissions will be recorded at all stages for good administration and to ensure that there is a clear audit trail for all decisions. Administrative records will be maintained for all submissions irrespective of whether they are successful or not.

Please refer to Section 2.2 (Application Process) of the ECC Teesside Selection Process Guidance Document for additional detail on entry into non-disclosure agreements and Chapter 3 Further Considerations) for additional detail on parties involved in the ECC Teesside Selection Process.

All information provided by applicants may be disclosed in accordance with DESNZ's legal obligations (including under the Freedom of Information Act 2000 (FOIA), the Data Protection Act 2018, General Data Protection Regulation (GDPR) and the Environmental Information Regulations 2004 (EIR) in the event that a request for information is received). More information on the FOIA, Data Protection Act 2018, GDPR and EIR (including information on exemptions) can be found at: https://ico.org.uk/for-organisations/

To help DESNZ deal with information requests and without prejudice to the paragraph above, in the box below, please set out the reasons why you consider any specific information should not be disclosed, including (if possible) by reference to the specific exemption contained in the relevant legislation (for example, because disclosure of the information would prejudice your commercial interests under section 43 of the FOIA), explaining why this is the case.

Where appropriate, please also state whether you consider the reason(s) information should not be disclosed by DESNZ only apply for a particular time period. If we receive an information request, we will consider your views as stated on the submission form. However, DESNZ will ultimately decide how to respond to an information request and whether any information should be withheld, subject to the Information Commissioner's Office decision in the event of the requestor appealing the decision.

Please detail what specific information, if any, within this submission should not be disclosed and the reasons why. Please include (if possible) reference to the specific exemption contained in the relevant legislation. *Boxes will expand to content*

Glossary of terms

Table 1 – Acronyms

Acronym	Meaning
BECCS	Bioenergy Carbon Capture & Storage
CAPEX	Capital Expenditure
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
CRI	Commercial Readiness Index
COD	Commercial Operation Date
DCO	Development Consent Order
DPA	Dispatchable Power Agreement
EIR	The Environmental Information Regulations 2004
FID	Final Investment Decision
FEED	Front-End Engineering Design
FHERRP	Fugitive Hydrogen Emissions Risk Reduction Plan
FOIA 2000	The Freedom of Information Act 2000
GDPR	General Data Protection Regulation
GGR	Greenhouse Gas Removal
GHG	Greenhouse Gas
HEC	Hydrogen Emissions Calculation
HHV	Higher Heating Value
HMG	His Majesty's Government
HoT	Heads of Terms
ICC	Industrial Carbon Capture
JV	Joint Venture
ktpa	Kilo-tonnes per annum
LCHA	Low Carbon Hydrogen Agreement
LCHS	Low Carbon Hydrogen Standard

Acronym	Meaning
MJ/kg	Mega-joule per kilogram
MoU	Memorandum of Understanding
MRV	Monitoring, Reporting and Verification
Mtpa	Mega tonnes per annum
NISTA	National Infrastructure and Service Transformation Authority
OCP	Operational Conditions Precedent
OPEX	Operating Expenditure
QCRA	Quantitative Cost Risk Analysis
QSRA	Quantitative Schedule Risk Analysis
RTFO	Renewable Transport Fuel Obligation
SAF	Sustainable Aviation Fuel
SMEs	Small and Medium-Sized Enterprises
TAA	Transition Access Agreement
T1	Track-1
T1X	Track-1 Expansion
tpa	Tonnes per annum
tph	Tonnes per hour
TRL	Technology Readiness Level
T&S	Transport and Storage
T&S Co	Transport and Storage Company
WACC	Weighted average cost of capital

Definitions

Table 2 – Definitions

Term	Definition
Applicant	Legal entity responsible for a project intending to apply for business model support or TAA connection to the CO_2 T&S network and would be taken through to negotiations if successful.
Battery Limit	The geographic boundaries identifying scope of works for process units or the Project.
Biomass-to-Hydrogen project	Hydrogen projects using a feedstock which produces ≥ 90% biogenic CO_2
Biomass Requirements	These are the requirements set out in the Low Carbon Hydrogen Standard (LCHS) intended to mitigate against negative environmental and social consequences that can arise from the sourcing of biomass used as a feedstock, including the Sustainability Criteria, the Minimum Waste and Residue Requirement, and reporting on estimated indirect land-use change emissions. See also the latest version of the UK Low Carbon Hydrogen Standard (LCHS)[3]. for further details of its requirements.
Business Model(s)	Contract mechanisms to support the implementation and operation of CCUS Clusters.
Carbon Intensity	Grammes of CO_2 equivalent per tonne of hydrogen g CO_2e/tonne
CCS or CCUS	Carbon Capture and Storage or Carbon Capture, Usage and Storage
CO_2e	Carbon Dioxide equivalent. The amount of carbon dioxide emission that would cause the same radiative forcing, over a given time horizon, as an emitted amount of greenhouse gases (GHG). As calculated using global warming potential (GWP) values for a 100 year time horizon, relevant to reporting under UNFCCC, published by the IPCC in its Fourth Assessment Report (AR5).

[3] https://www.gov.uk/government/publications/uk-low-carbon-hydrogen-standard-emissions-reporting-and-sustainability-criteria

Cluster	Transportation and storage network (incorporating the onshore and offshore network and offshore storage facility) and an associated carbon capture projects.
Commercial Operation Date (COD)	The date the project is confirmed to meet the Operational Conditions Precedent (OCP). We define operational as the hydrogen production facility being fully commissioned, connected to the CO_2 T&S Network to enable the export of CO_2 emissions and capable of producing hydrogen that is LCHS compliant.
Cross Chain	All elements of the Project including development, delivery and operation of all capture projects as well as Onshore, Offshore and storage infrastructure.
Hydrogen Production Plant	CCUS-enabled facility producing low carbon hydrogen.
Hydrogen Production	CCUS-enabled hydrogen production.
Hydrogen Project	Project to develop, construct and commission a new build CCUS-enabled Hydrogen Production Plant and where applicable, any associated hydrogen infrastructure. Existing hydrogen production plant proposing to retro-fit carbon capture, provided that the proposal is to carry out works to increase the capacity of the facility.
Levelised Cost of Hydrogen	Calculation to consider overall cost of hydrogen production.
Mitigation	Mitigation refers to actions taken to reduce the overall risk either pre- or post-event.
Offshore	The offshore element of the CO_2 transportation network up to the point where CO_2 enters the geological Storage. *Note: This excludes shipping transportation.*
Onshore	The onshore element of the CO_2 transportation network which may include intermediate CO_2 storage for T&S operational purposes. Note this excludes non-pipeline transportation.
Operational Conditions Precedent	The Operational Conditions Precedent (OCPs) are a set of requirements a Project must demonstrate to the appropriate counterparty to prove that they have commissioned their facility and are ready for commercial operations. The OCP requirements are outlined in the relevant business model Terms and Conditions.
Project	Power CCUS, ICC including Waste ICC, Hydrogen, GGRs or pBECCS production facility – including carbon dioxide emission source(s) targeted for abatement –

	development and its associated CO_2 capture facilities, that will be assessed in the ECC Teesside Selection Process.
Storage	Geological store for the captured CO_2 from the end of the injection well.
Submission	The total submission submitted by the Project including the Project Plan and associated Annexes.
Technology Readiness Level	Technology readiness levels are an indication of the maturity stage of development of a technology on its way to being developed for an application or product.
T&S Co	Transport and Storage Company is a licensed company operating and maintaining a T&S Network (T&S Operator)
CO_2 Transport & Storage Network (T&S Network)	The network consisting (wholly or mainly) of: • pipelines used for the transportation of captured carbon dioxide from one capture plant to a storage facility or to or from any T&S Network; or • routes used for the transportation of captured carbon dioxide from one capture plant to a storage site or to or from any T&S Network; and • storage site for the geological storage of carbon dioxide.
H_2 Transport & Storage Network (T&S Network)	The network consisting (wholly or mainly) of: • pipelines used for the transportation of hydrogen from any production plant to a storage facility, to or from any T&S Network, or to multiple users; or • routes used for the transportation of hydrogen from any production plant to a storage site, to or from any T&S Network, or to multiple users; and • storage site for the storage of hydrogen.
Transition Access Agreement Users	This has the meaning given to it in Chapter 4 of the ECC Teesside Selection Process – Application Guidance.
Waste-to-Hydrogen project	Hydrogen projects using an eligible waste feedstock which produces under 90% biogenic CO_2

Units

Where possible please use units of measurement defined by the International System of Units (SI) within your answers. For example:

- Electrical Power: MW
- Thermal Power: MW
- Gas Power: MW – Gross Calorific Value basis
- Gas calorific value: MJ/kg – Gross Calorific Value basis

The below exceptions to SI units should be used due to industrial conventions.

- CO_2 flow rate: mass basis – tonnes per annum, (tpa, ktpa or Mtpa) for annual average or total annual flow rate. Instantaneous or peak flow rates should be provided in tonnes per hour (tph)
- Energy: Watt Hours (MWh, GWh)
- Temperature: Degrees Celsius (^oC)
- Gas Flow Rates: standard volume basis – Sm^3/h (kSm^3/h)

1. Applicant information

Completed versions of this document, Hydrogen Cost Assessment Form (Annex B), Financial Statement Form (Annex C), Economic Benefits Forms (Annexes D1 & D2), HEC and the FHERRP are to be uploaded to the individual SharePoint site alongside any supporting evidence.

2. Eligibility

Eligibility Criteria are fully described in the ECC Teesside Selection Process Guidance Document.

Eligibility will be checked against the evidence submitted within this section, Section 3, and Section 4. Applicants will be notified via email on whether or not they have met the eligibility criteria. Only eligible Projects will progress to the next stage where they will progress to the Deliverability Assessment.

Please confirm and evidence how the CCUS-Enabled Hydrogen Project meets the Eligibility Criteria and provide appropriate supporting evidence for the following requirements.

The Applicant must be incorporated and registered in the UK (250 words)

Supporting evidence is expected to include a UK company registration number demonstrating that the Applicant is incorporated and registered in the UK.

Evidence:

Document reference	Document name	Relevant page/section

Must be able to demonstrate direct, onshore, pipeline access to the Northern Endurance Partnership East Coast Cluster, with no intermediate non-pipeline transportation of CO_2 (250 words)

Evidence of access to a T&S Network should include as a minimum:

- an MOU with the T&S Co;
- a high-level pipeline connection study including routing of intermediate pipelines or pipework to connect to the T&S Network.

The connection study need not be detailed for this eligibility criterion but must identify onshore, direct, pipeline route options between the project site and connection point to the T&S Network. Further detail, if available, would be beneficial for the Deliverability assessment question 4.8.

Evidence:

Document reference	Document name	Relevant page/section

Must be able to be operational no later than the end of December 2032 (250 words)

Supporting evidence is expected to include a project schedule at minimum.

We define operational as the hydrogen production facility being fully commissioned, connected to the CO_2 T&S Network to enable the export of CO_2 emissions and can produce hydrogen that is LCHS compliant. At the assessment stage, we will consider the Project's schedule and proposed completion date. If the Project enters into a Business Model contract, it must demonstrate that it is operational to receive Business Model payments. To do this, the Project must satisfy the Operational Conditions Precedents (OCPs) or relevant performance requirements set out in the business model terms and conditions, subject to any additional contractual obligations, to achieve its COD.

Evidence:

Document reference	Document name	Relevant page/section

Must be located in the United Kingdom (100 words)

Supporting evidence could include a site layout or map or location plan, including postcode.

Evidence:

Document reference	Document name	Relevant page/section

A new build CCUS-enabled hydrogen production plant, excluding Biomass-to-Hydrogen projects[4], or an existing hydrogen production plant proposing to retrofit carbon capture, provided that works to increase the capacity of the facility are also included in the proposal.

(250 words)

The CCUS-enabled hydrogen plant must be a new build, where both hydrogen production and capture units are constructed. Alternatively, proof must be provided of plans to retrofit carbon capture to a grey H_2 plant and details of the proposed works to increase the capacity of the facility.

Supporting evidence could include a basis of design, process summary or other engineering study showing the technology and configuration.

Evidence:

Document reference	Document name	Relevant page/section

Must be capable of meeting the requirements of the Low Carbon Hydrogen Standard (LCHS) (250 words)

The CCUS-enabled hydrogen Project must be designed to be capable of meeting the requirements of the latest version of the UK Low Carbon Hydrogen Standard (LCHS)[4], including the Biomass Requirements. For the purposes of eligibility for this round, this is Version 4 of the LCHS and the accompanying LCHS Data Annex, published in January 2026.

[4] UK Low Carbon Hydrogen Standard - GOV.UK

All Projects (new-builds or an existing plant proposing to retrofit carbon capture) must apply the latest Data Annex immediately upon its publication.

Supporting evidence must include the completed Hydrogen Emissions Calculation (HEC) form, demonstrating that the Project is likely to meet the LCHS including the emissions threshold of 20gCO_2e/MJLHV H_2 with supporting evidence, and any relevant Biomass Requirements with relevant supportive evidence for the Biomass Requirements. Projects must complete one HEC for each of the first three years of operation.

Projects must also provide a Fugitive Hydrogen Emission Risk Reduction Plan, in accordance with the LCHS's Conditions of Standard Compliance, demonstrating how fugitive hydrogen emissions at the production plant will be minimised. Projects must detail the sources of emissions and their expected rate of fugitive hydrogen losses in kg H_2/year, with justifications of estimates, measurement, and a proposed monitoring methodology.

Evidence:

Document reference	Document name	Relevant page/section

Must meet additional waste feedstock specific criteria (250 words)

Where relevant, Waste-to-Hydrogen projects must use an eligible feedstock.

If utilising feedstocks not directly derived from fossil sources, applicants must demonstrate that less than 90% of the CO_2 generated shall be of biogenic origin[5] and to be eligible it must meet relevant sustainability requirements.

Facilities must also process at least one of the following feedstocks:

- Municipal Waste[6],
- Commercial and Industrial Waste[7],
- Clinical Waste[8], and/or
- Hazardous Waste[9].

[5] Using a feedstock composition which will produce > 90% biogenic CO_2 is considered Biomass-to-Hydrogen and should apply through the GGR pathway.
[6] Household waste and waste of a similar composition from other sources.
[7] Waste from commercial and industrial activities.
[8] Waste produced from healthcare or similar activities.
[9] Waste containing substances harmful to humans or the environment such as chemicals or asbestos: https://www.gov.uk/dispose-hazardous-waste.

Any waste feedstock used must be appropriate for use in the waste management facility type in line with the priority order of the Waste Hierarchy[10] and environmental permit expectations.

Evidence is expected to include anticipated biogenic and fossil CO_2 proportions generated for each year of the contract, the basis of design or process description. Further supporting evidence could include a list of intended waste codes, an environmental permit or evidence of a plan to obtain an environmental permit, supply chain reports, waste supply agreements, or feedstock analysis, or a description of why the project plan complies with the Waste Hierarchy.

Evidence:

Document reference	Document name	Relevant page/section

Must utilise a core hydrogen production technology which has been tested in a commercial environment, with a Technology Readiness Level (TRL) of 7 or above (250 words)

Supporting evidence shall include TRL justifications, details of reference projects and/or pilot/demonstration scale testing.

Evidence:

Document reference	Document name	Relevant page/section

Must have identified and engaged with at least one Qualifying Offtaker (250 words)

Supporting evidence is expected to include memoranda of understanding, letters of intent, or commercial agreements from eligible offtakers.

[10] The Waste Hierarchy can be viewed here: https://www.legislation.gov.uk/uksi/2011/988/contents/made

Evidence:

Document reference	Document name	Relevant page/section

3. CCUS-Enabled Hydrogen Project Overview

3.1 Project Overview

3.1.1 CCUS-Enabled Hydrogen Project Description (2000 words)

The description of the CCUS-Enabled Hydrogen Project should include reference to appropriate supporting information to include but not limited to the following:

- Details of the type of hydrogen production plant, the source(s) of the CO_2 stream for capture, proposed capture plant, CO_2 treatment, any CO_2 or H_2 storage, any CO_2 or H_2 compression facilities.

- A description of the hydrogen production process including:
  - Any additional power / thermal energy requirements,
  - Hydrogen average and design flow rates, and the minimum turndown
  - Expected reliability and availability, if known
  - Proposed technology type (including the extent to which this is a firm position)
- The feedstock source for hydrogen production, e.g., National Gas transmission system.
- The hydrogen production technology provider, if known, and CO_2 capture technology process and provider, if known, if separate to the hydrogen production process, or shortlists of potential suppliers (including the extent to which this is a firm position).
- Clear diagram(s) / schematic(s) of the CCUS-Enabled Hydrogen Project.
- Details of the Facility interface connections, H_2 T&S transmission/distribution network connection point (if applicable), connection point to the CO_2 T&S Network, connection point to the gas and electricity networks (or source of other feedstock), water intake. Including whether the facility is dependent on, integrated with, or provides support or products to other local industrial plant(s).
- A description of plans for storage of hydrogen, if relevant.

- Maps showing the location of the CCUS-Enabled Hydrogen Project, including but not necessarily limited to its location in relation to the CO_2 T&S Network, grid connection point, gas network connection point, and other relevant local industrial plant(s).
- Current state of development of the project (e.g., FEED, complete %), and when FID is programmed / anticipated for the total facility including hydrogen production and capture elements of the plant.
- Include details of any engineering work completed and the status of ongoing work.
- The design life of the CCUS-Enabled Hydrogen Project, including the capture facility and overall plant life.
- The CO_2 capture efficiency and carbon emissions intensity of hydrogen at maximum production capacity operation.
- The captured and uncaptured CO_2 sources across the whole operational site, including anticipated annual CO_2 volumes and the instantaneous CO_2 volumes produced during operation at maximum capacity. Please include the assumptions for load factor which inform the profile of captured volumes.
- A process description of the proposed CO_2 capture technology, including details of power and thermal energy requirements during start-up and normal operation of the plant (including the extent to which this is a firm position).
- An explanation of whether the project will capture and store biogenic emissions and if the project will generate negative emissions.
- Whether CO_2 export to CO_2 users (CCU) is expected alongside transport and storage. For Projects looking to implement a combination of CCU and CCS, please include the estimated percentage of CO_2 stored from the Project's captured CO_2 volumes per year for the duration of the contract length.
    - To what extent the CCUS-Enabled Hydrogen Project is dependent on third party agreements (e.g., fuel supply, grid connection, offtaker(s)) to be able to confirm programme delivery dates and volume certainties for both hydrogen production and captured CO_2?
- Anticipated hydrogen production volumes, production profile, how this matches offtaker demand, and production efficiency.
- The transport solution to supply hydrogen to the offtakers.

References to supporting documentation for Section 3.1.1		
Document reference	Document name	Relevant page/section

3.2 CCUS-Enabled Hydrogen Project status and key metrics (250 words)

Please fill in the metrics within the table below. Any additional graphs to summarise the hydrogen production and captured CO_2 profiles would be beneficial. Please also refer to Annex B3 Hydrogen Cost Assessment Form. Where metrics are repeated across annexes it is expected that the same figures and methodologies should be used.

Metric	Value
Final Investment Decision date	
Commercial Operation Date	
Plant Design Life	
Design/Typical CO_2 Flow Rate to T&S Network. (tph)	
Peak CO_2 Flow Rate to T&S Network. (tph)	
Expected average CO_2 Rate to T&S Network. (Mtpa)	
CCUS-Enabled Hydrogen Project carbon intensity (gCO_2e/MWh (HHV))	

Overall capital costs (£m – real – define base year)	
Annual average operational costs (£m – real – define base year)	
Total stored volumes of CO_2 to end of 2050 ($MtCO_2$)	
Total produced hydrogen volumes to end of 2050 (GWh (HHV))	
Maximum Hydrogen plant output capacity (MW (H_2 HHV))	
Design CO_2 Capture Rate (%) The maximum instantaneous design capture rate, i.e., the percentage of CO_2 emissions captured from the specific emissions streams that the capture technology is applied to, which is expected to be continuously achievable by the facility for extended periods, i.e., during normal steady state operation.	

3. 3 Expansion Phases

This section is to describe whether there is planned follow on development of CCUS-enabled hydrogen production at the site, beyond the currently described project. Such projects would be assessed outside of this current ECC Teesside Selection Process, but it is useful to understand the context and intentions for the site.

3.3.1 Expansion of CCUS-Enabled Hydrogen Project (750 words)

Please provide a concise description of additional stages of development of the CCUS-Enabled Hydrogen Project whether this be multiple staged hydrogen production units, applying capture to additional CO_2 sources within the CCUS-Enabled Hydrogen Project site, or any proposed plans and ability to explore a role within a future hydrogen network, should one develop in the region. Please include a description of the uncertainty around these future phases in terms of execution, offtake market, volumes, costs and capture efficiency. Only the phase that will be operational by 2032 shall be considered within this application for support via this ECC Teesside Selection Process. Additional support and access to the CO_2 T&S network may be possible and available in the future for the additional phases described herein.

References to supporting documentation for Section 3.3.1		
Document reference	Document name	Relevant page/section

3.4 Hydrogen Offtakers (750 words per offtaker)

Please describe the hydrogen offtakers, including the route to end use if this involves more than one party. Please describe any dependencies they have on the hydrogen plant including (please note this is not an exhaustive list and projects should include any additional information they consider relevant):

1. A description of who the hydrogen offtakers are, including where they are, and what their product/service is.
2. The hydrogen offtakers' demand profile, including any variation or seasonality, and how this matches the supply profile and both the maximum and minimum production capacities.
3. The purpose of the hydrogen supplied and whether it is displacing an existing fuel or feedstock demand or creating a new demand. If displacing existing demand, what fuel is being displaced and what quantity, and what is the offtakers' rationale for pursuing hydrogen as a decarbonisation pathway over others.
4. The current status and progress made to date on developing contractual and commercial agreement, and the physical supply arrangements, between the hydrogen producer and the offtaker(s), including evidence of offtaker engagement. This should include technical and commercial details on all offtaker(s) requirements.
5. A detailed description of outstanding work required to secure all contractual and commercial agreements, complete all physical supply arrangements and any risk and critical dependencies being managed to avoid delays.
6. Any additional development required for any offtaker to receive and use the hydrogen, the engineering completed to date, the status of ongoing work and any technology risk in the design of the development.
7. Details of planning and consenting required for the hydrogen transport to, and/or development required by, any offtaker in order to receive and use the hydrogen.

8. If not already answered in items 6 & 7, the offtakers' proposed plans and ability to explore a role within a future hydrogen network, should one develop in the region and reliance thereon.
9. At least one of the proposed, viable offtakers must be a qualifying offtaker to meet eligibility requirements.

Supporting evidence is expected to include letters of support, memoranda of understanding, letters of intent, or commercial agreements from offtakers.

References to supporting documentation for Section 3.4		
Document reference	Document name	Relevant page/section

3.5 Feedstocks and Energy – Commercial and physical supply arrangements (500 words per supply)

Please describe plans to source feedstock(s) and meet energy demands required to produce the proposed hydrogen production volumes. Cover both commercial and physical supply arrangements, including an overview of the current status of development and the robustness of these plans to enable successful project delivery to be achieved.

Please provide details on the following:

1. A description of all feedstock and energy needed to produce the planned production volumes (for example, water, waste, biomass, steam, electricity, and/or natural gas);
2. A detailed description of the development progress made to date to finalise all contractual/commercial agreements and all physical and technical supply arrangements;
3. A detailed plan of all future work required to secure feedstock(s) in line with the proposed COD and any risk and critical dependencies being managed to avoid delays.

Supporting evidence could include letters of support, memoranda of understanding, letters of intent, or commercial agreements from suppliers.

References to supporting documentation for Section 3.5		
Document reference	Document name	Relevant page/section

4. Deliverability

4.1. Organisational and Technical Maturity

4.1.1 Organisational structure – company level (750 words)

What is the company structure? Please provide a chart which positions the project vehicle within any wider company structure, highlighting the following information for each entity within the structure:

1. Primary activity and location
2. Ownership (including details of any stock market listings)
3. Where within the company/group structure will key investment decisions be taken.
4. If a new legal entity is to be created for the purpose of this Project, where in the company/group structure this will sit and the expected timing of its incorporation.

Please provide a capability statement, which shall include:

1. Relevant corporate experience, including if available:
    a. Ongoing plant operations
    b. Recent major investments at process facilities (including EPC management)
    c. Managing joint ventures (including information sharing between partners)
    d. Experience navigating the UK regulatory regime
2. Identification of personnel with key roles and responsibilities and their relevant experience.
3. Brief details of the company's approach to ensuring Corporate Governance best practice.

Please provide details of the ultimate beneficial owner of the corporate group, as well as the details of any shareholder (or group of related shareholders) owning more than 5% of the group's equity capital.

References to supporting documentation for Section 4.1.1		
Document reference	Document name	Relevant page/section

4.1.2. Organisational structure and governance – project level (750 words)

Please describe the organisational structure at a project level, including how the delivery of the Project will be managed. Where possible, provide evidence of the experience of key personnel which shall include CVs/ Career statements for, but not necessarily limited to:

- Project manager / director
- Financial lead
- Lead engineer(s)
- Any construction, commissioning, and operational lead(s)

Where capability gaps exist, please provide the approach to securing them. For key personnel that are not yet in post, as well as temporary work scopes/roles, please provide details of recruitment plans/strategies.

Please describe the status of any commercial agreements between parties within the delivery structure alongside plans to progress future agreements, including key milestones and any dependencies.

Please also provide details of any new legal entity to be created for the purpose of this Project. Where relevant please include any anticipated joint venture arrangements or agreements alongside the activities and associated timeline to finalise any joint venture arrangements.

Please describe the capability of the project developers and governance arrangements.

References to supporting documentation for Section 4.1.2		
Document reference	Document name	Relevant page/section

4.1.3. Technical Maturity

Please describe the level of project engineering definition providing the studies completed as evidence. With reference to the schedule, describe the studies to be completed and, where identified, who will complete them.

Please describe the project and provide supporting information detailing the following:

1. The location and layout of the project, clearly identifying related facilities and required third party connections;
2. Process description with schematics or process flow diagrams, including plans to meet CO_2 & H_2 product specifications;
3. Engagement with the supply chain to date including technology providers, contractors (tier 1 contractors or beyond), equipment suppliers, consultants and external advisors, and planned future engagement;
4. Maturity of the supply chain for this type of project;

- Access to intellectual property and demonstration of the technologies at scale for both components and system with evidence of the operating record of the technologies (e.g., duration in service);

5. The hydrogen production rate and volumes anticipated, CO_2 capture quantities anticipated, capture rate, energy efficiency and any associated emissions;
6. The status of required land, access and third-party connections required to deliver the project such as electricity, fuel, or water.

Note; there is a separate section covering the CO_2 T&S network connection.

Please describe the technology readiness level[11] (TRL) and commercial readiness index[12] (CRI) level of the selected hydrogen production and carbon capture technologies with supporting evidence such as TRL or CRI justifications, reference projects and pilot/demonstration scale testing. Section 7.2 of the ECC Teesside Selection Process Application Guidance sets out a table with TRL definitions.

[11] For the definition of TRL please refer to the Definitions in Table 2 of this document.
[12] For CRI definitions please refer to https://arena.gov.au/assets/2014/02/Commercial-Readiness-Index.pdf

Supporting evidence could include engineering studies, drawings, calculations, assessment of supply chain capability and capacity, supply chain agreements, licensing agreements, technology references and operating records, TRL and CRI studies, land agreements, third-party connections agreements or applications.

References to supporting documentation for Section 4.1.3		
Document reference	Document name	Relevant page/section

4.2. Project Programme (1000 words)

Please provide an integrated schedule for the CCUS-Enabled Hydrogen Project. This should be at least Level 2 detail, fully logic linked, identify the critical path and include any float. This should show when the CCUS-Enabled Hydrogen Project comes online, and any key milestones such as: planning, consents, decisions gates, long lead equipment items, water treatment and sourcing, T&S, oxygen, gas and electricity grid connections, FID, COD, etc. This should also show progress to date against the stated Project schedule, with documentation and engineering information provided to demonstrate that the CCUS-Enabled Hydrogen Project is progressing to plan.

The schedule must be provided in both pdf and native file format - Primavera P6 (XER) or MS Project (XML/MSP).

Please provide a concise description of the schedule's critical path with reference to important parts of the schedule that the critical path is dependent on.

Please describe the development of the business plan and how this relates to other key activities in the programme including securing intellectual property rights, finance and supply chain and any additional services you may be providing.

We recognise different projects are at varying degrees of development, so please provide the greatest level of detail currently available that is supportable with evidence.

Please describe areas of uncertainty in the schedule: if possible, please present the Base schedule with uncertainty ranges around individual activities and identify the key risks that could expand these ranges further. Describe how the values used were estimated, with reference to supply chain engagement, industry databases, or experience used.

Reference to separate 'What if' scenarios or quantitative schedule risk analysis of the schedules would be beneficial to increase confidence of deliverability within a given time.

Supporting evidence is expected to include a project schedule (at least Level 2), and could include 'What if' scenarios or quantitative schedule risk analysis.

References to supporting documentation for Section 4.2		
Document reference	Document name	Relevant page/section

4.3 Planning and Consents (750 words)

With reference to the schedule, please provide a description of the planning and consents required for the Project and the route to securing those consents. This is expected to include planning consents and environmental permit(s). It would be beneficial to demonstrate evidence of engagement with the relevant planning and permitting authorities and their feedback, or expert advice on the most appropriate approach to planning and permitting. This should include engagement with advisory bodies which may influence planning and consenting processes (e.g., Natural England, NatureScot, etc.), not just the authorities and regulatory bodies themselves.

Please ensure that you highlight areas of risk and uncertainty surrounding planning and consents that could increase the durations or require design modifications to achieve approvals.

Please include a concise description of the arrangements for any specific planning consent for additional hydrogen T&S/distribution infrastructure if separate to the Project planning consent.

Reference to a separate Planning and Consents Register would be helpful, as would any evidence of engagement with statutory bodies or preparation work for applications. We would anticipate planning and consent risk being an intrinsic element of the Project risk register.

Supporting evidence could include Planning and Consents Register, planning applications, engagement with planning and permitting authorities, and specialist consenting advice.

References to supporting documentation for Section 4.3		
Document reference	Document name	Relevant page/section

4.4 Risk Management (1000 words)

Please provide a concise description of all the major risks to the CCUS-Enabled Hydrogen Project and how they are going to be mitigated. It would be beneficial to evidence the risk management approach with a risk management plan or reference to company procedures in compliance with industry standards such as ISO 31000. Additionally provide a description of how significant residual risks will be escalated, tracked and managed (e.g., accept, transfer, insure, etc.).

The separation of development, construction and operation phase risks would be preferable.

The risk registers should include:

- Risks for all elements of the Project and downstream chain risks, including interface risks and details on risk owners,
- Mitigations (e.g., eliminate, reduce, transfer, insurance, etc.) and how they will be managed alongside estimated mitigation costs and post mitigation residual risks,
- Identification of risks that cannot be transferred to contractors or insurers or others,

- Probability estimates both pre and post mitigation,
- Three-point (high, low and most likely) impact estimates for cost and schedule impacts for both pre and post mitigation,
- Identification of any schedule activities that are impacted by the occurrence of each risk, also detailing the magnitude of the impact,
- Activity IDs included in the risk register,
- Any significant residual safety risks,
- Highlight Project innovation risks and mitigations.

Below are examples of key risks that may need to be considered in relation to the CCUS-Enabled Hydrogen Project (noting that this is not an exhaustive list of possible risks and that certain market and cross chain risks are addressed in the draft LCHA[13]).

Development risks, including:

1. If existing assets cannot be re-used after further assessment
2. Delays in obtaining planning consents and permits or any required licence, land access or connection agreements

- Changes to CO_2 product quality specifications and/or any other conflict with the published CCS Network Code.

Construction and commissioning risks, including:

3. Contractor interfaces
4. Insolvency of key suppliers
5. Supply chain delays and delivery delay of critical equipment items

- Workforce / key skills availability

6. Commissioning dependencies including unavailability of downstream T&S

Operational risks, including:

7. Limited design and operational experience of type of plant
8. Underperformance of capture plant, increasing vented volumes of CO_2
9. Low availability/high downtime of capture plant, increasing vented volumes of CO_2 and resulting in greater intermittency
10. Higher than expected energy consumption, increasing Opex and reducing net export MW
11. For pre- or post-combustion capture, higher than expected solvent consumption, increasing Opex

- High emissions of pollutants (e.g., nitrogen compounds)

[13] Applicants should familiarise themselves with the LCHA dated December 2024[13] and the contractual requirements that may need to be fulfilled, noting that changes are expected to be made between allocation rounds. Projects may contact the HPBM Team (hydrogen.businessmodels@energysecurity.gov.uk) to request the latest draft version of the LCHA applicable to CCUS-enabled hydrogen projects.

12. Low availability/high downtime of Hydrogen Plant
13. Low load factor for the hydrogen plant
14. Delays or cancellations of downstream projects – stranded asset risk
15. Closure/bankruptcy of T&S – leaving capture plant as stranded asset
16. Underperformance of Hydrogen Plant, reducing volumes of produced hydrogen
17. Fluctuations in the demand for hydrogen from offtakers

Overarching or general risks, including:

18. Force majeure events
19. Regulatory risks for new technology or processes, for example, hydrogen – natural gas blending or other novel processes
20. Limited design experience, codes and standards for hydrogen distribution and storage or blending with natural gas

To increase our understanding of the Project and its credibility, the inclusion of an opportunity register alongside the risk register would be beneficial for the assessment.

A quantitative risk assessment for cost and schedule where available would be beneficial to evidence confidence in the estimates.

Supporting evidence is expected to include a risk register and could include an opportunity register, quantitative risk assessment for cost and schedule, and risk management plan or risk procedures.

References to supporting documentation for Section 4.4		
Document reference	Document name	Relevant page/section

4.5 Health and Safety (1000 words)

Please provide a concise description of the work that has been performed to identify and mitigate additional Health and Safety risks specific to the Hydrogen Project, beyond those anticipated for any industrial/infrastructure project. Describe the work performed to demonstrate that all residual project and Health and Safety risks to staff, contractors and the local population during project development, execution, operational and post-cessation phases are as low as reasonably practicable. Supporting evidence of risk analyses or process hazard reviews would be beneficial.

Please also describe the systems, processes, and governance in place for Health & Safety Management.

Supporting evidence could include relevant sections of a project health and safety policy.

References to supporting documentation for Section 4.5		
Document reference	Document name	Relevant page/section

4.6 Project Controls & Cost Management

This section looks at the approaches and methods the project has and will be undertaking to control project development. Supporting Evidence would be expected in the project execution plan.

4.6.1. Project Execution (1000 words)

In this section, please describe how the CCUS Enabled Hydrogen Project intends to execute the project stage gates.

Please provide a construction plan and a concise explanation of any aspects of the project execution that apply novel construction / installation techniques, as well as those units considered to be of greatest challenge.

Provide a preliminary commissioning Plan, including any risks and uncertainties identified for the commissioning & start-up phase of the Project. How is the project planning to ensure that equipment is robustly tested for service and ready for handover without unduly threatening integrity.

Demonstrate how operations and maintenance are inputting into the project execution, to ensure that the plant being developed is fit to operate for the contract lifespan, and appropriately considers human factors.

Additionally, please provide a concise description of the Management of Change process to be followed through project progression including how the following change (& no change) impacts will be assessed and considered:

- Impacts to Costs.
- Impacts to HSE Risks.
- Impacts to Schedule.

Along with how disputes might be resolved with stakeholders over changes or issues.

References to supporting documentation for Section 4.6.1		
Document reference	Document name	Relevant page/section

4.6.2. Procurement Strategy (750 words)

Please provide a concise outline of the proposed approach to contracting strategy and procurement:

1. Proposed work package structure, with procurement and contracting structure(s).
2. Proposed approach for transparent and competitive procurement, demonstrating value for money throughout supply chain.
3. Proposed approach to managing and sharing construction risk throughout the supply chain (e.g., labour costs, weather risk, etc.)
4. The team structure which will efficiently procure and manage all contracts for the duration of the project.
5. The quality controls/ assurance used to ensure deliverables of the required standard.

Supporting evidence for proposed approach might be included in project execution plan, and contract map.

Supporting evidence could include relevant sections of a project health and safety policy.

References to supporting documentation for Section 4.6.2		
Document reference	Document name	Relevant page/section

4.6.3. Engineering for Value (500 words)

Please discuss the project's approach to rationalising the facility design and avoiding overengineering. Assurance should be provided that where more complex and costly options are pursued, these are appropriately justified, with reference to appropriate studies (e.g., reliability, safety/other risk, technology readiness). We would expect to see examples including:

- Process simplification workshops / studies,
- A Value Engineering or Opportunities Register (with appropriate action tracking),
- Rationalisation of non-standard equipment,
- Competitive engineering designs,
- Decision papers and methodology.

References to supporting documentation for Section 4.6.3		
Document reference	Document name	Relevant page/section

4.7. Financial and Commercial

This section aims to understand the financial and commercial health of all the companies involved in the development of the CCUS Enabled Hydrogen Project and the proposed financing plan for the CCUS Enabled Hydrogen Project.

Each company participating in the development of the CCUS Enabled Hydrogen Project must provide an individual response to this section. To support this assessment, please submit:

- A completed Financial Statement Form (Annex C), and
- Associated financial documents as requested in Annex C,
- for each company-level response on business plan and financial health.

These company-level responses should be submitted alongside the overarching Project Plan and financing plan.

4.7.1.A - Business plan and financial health – company level (750 words)

Note: Each company participating in the development of the CCUS-Enabled Hydrogen Project must provide a response. Multiple responses (A, B, C, etc.) may be necessary if the CCUS-Enabled Hydrogen Project is being developed in partnership.

Please describe the following:

- How your company business plans and industrial output have been impacted by recent significant events since the start of 2020, e.g., COVID-19 and Ukraine War supply chain shocks.
- What is the outlook for the company out to 2032? Your answer should include, but not be limited to, a description of, and rationale for, expected trends in revenue, overheads and profitability, plus a comparison of these to the historical period.
- Describe how the Project aligns with the company's overall strategic ambitions in the UK to 2032 and beyond.

Please provide copies of the latest two sets of audited accounts, any accompanying reports, management accounts covering the remainder of the current financial year, and forecast financial accounts covering the remainder of the current financial year and a further ten years for the following companies where applicable:

1. The company or companies operating the Project,
2. The company or companies financing the Project,
3. The company or companies responsible for key investment decisions in relation to this Project,
4. The group parent company or companies (e.g., consolidated accounts) and ultimate parent. For the avoidance of doubt, the group parent should be regarded as the largest group in which the accounts of the companies operating and/or financing the Project are consolidated.

In support of these accounts and reports for the above entities, please include key assumptions underlying financial forecasts.

Please confirm that accounts for the above entities have not received a qualified audit report in any of the previous five years. Highlight any areas of material uncertainty raised by auditors in this period.

Please confirm if the corporate group currently has any financial obligation to HMG and provide details where applicable.

References to supporting documentation for Section 4.7.1 A		
Document reference	Document name	Relevant page/section

4.7.2.B - Business plan and financial health – company level (750 words)

Note: Each company participating in the development of an individual T&S or project must provide a response. Multiple responses may be necessary where projects are being developed in partnership.

Please see Section 4.7.1 A for further details.

References to supporting documentation for Section 4.7.2 B		
Document reference	Document name	Relevant page/section

4.7.3.C - Business plan and financial health – company level (750 words)

Note: Each company participating in the development of an individual T&S or project must provide a response. Multiple responses may be necessary where projects are being developed in partnership.

Please see Section 4.7.1 A for further details.

References to supporting documentation for Section 4.7.3 C		
Document reference	Document name	Relevant page/section

4.7.4.D - Business plan and financial health – company level (750 words)

Note: Each company participating in the development of an individual T&S or project must provide a response. Multiple responses may be necessary where projects are being developed in partnership.

Please see Section 4.7.1 A for further details.

References to supporting documentation for Section 4.7.4 D		
Document reference	Document name	Relevant page/section

4.7.5.E - Business plan and financial health – company level (750 words)

Note: Each company participating in the development of an individual T&S or project must provide a response. Multiple responses may be necessary where projects are being developed in partnership.

Please see Section 4.7.1 A for further details. If additional rows are needed, please insert them into the table below.

Supporting evidence is expected to include audited accounts, any accompanying reports, management accounts as described in Section 4.7.1 A.

References to supporting documentation for Section 4.7.5 E		
Document reference	Document name	Relevant page/section

4.7.6.- Financing plan – Project level (1000 words)

Note: In the event of multiple participants in a project, we would expect to see a single overarching financing plan and for it to be clear how each participant fits into that.

Please describe the proposed financing arrangements for progressing the Project. Applicants will be required to show that they have the appropriate financial support to be operational or can present a detailed & credible plan for how they intend to obtain the finances necessary to fund their project at its current expected cost. TAA Projects must provide details of sufficient alternative sources of support (e.g., public funding or private investment) and/or revenue, and provide supporting evidence.

Your response should distinguish between different stages of the Project and explain what is needed to achieve a final investment decision. Within your answer, please provide the timeline, dependencies, key risks and mitigations for the financing process. Please also detail the assumptions underpinning the financing plan including key ratios.

- If the Project will be financed by intragroup financing or external debt arrangements that already exist, then please provide a summary of those arrangements. Your summary of the debt arrangements should reference any factors that are material to the financing e.g., headroom, duration, security, and covenants.

- If new capital needs to be raised then set out the type and amount of finance anticipated, the level of market engagement that has taken place, feedback received, as well as the activities and timescale needed to secure the financing. Please provide any previous experience of bank launches and the current strategy of any future launch.

Please summarise the status of key agreements needed to realise the Project and the plans to finalise them e.g., shareholder/sponsor documents, loan and security documents, and Project documents. Please include demonstration of any (not necessarily committed) interest from providers of capital and any status of discussions. Supporting evidence may include letters of support, memoranda of understanding, letters of intent, or commercial agreements from financiers.

Evidence of risk mitigation for the financing process may include plans in the event of a change in market conditions or original funding plans e.g., scenario analysis completed on alternative funding routes.

References to supporting documentation for Section 4.7.6		
Document reference	Document name	Relevant page/section

4.7.7.– Other Subsidy Support (250 words)

If applicable, does your project intend to make use of other allowed subsidy support mechanisms, i.e., Renewable Transport Fuel Obligation (RTFO) and/or Sustainable Aviation Fuel Mandate (SAFM) support? If your Project relies on RTFO and/or SAFM you must provide evidence that confirms that the portion of fuel being claimed against the RTFO/SAFM may be eligible for RTFO/SAFM support.

Supporting evidence on RFTO/SAFM support includes, at a minimum, documentation outlining how the Project meets the requirements of the RTFO/SAFM. Evidence can also include early engagement with the RTFO/SAFM Administrator regarding the Project (e.g., email chains) or a provisional letter from the RTFO/SAFM Administrator confirming that, in principle, Renewable Transport Fuel Certificates (RTFCs)/SAF Mandate Certificates are eligible to be issued in respect of the hydrogen produced by the project.

References to supporting documentation for Section 4.7.7		
Document reference	Document name	Relevant page/section

4.7.8.– CO_2 T&S Dependencies (1000 words)

Please explain the implications, both financial and deliverability, for your project from the following scenarios:

- T&S commissioning delay (3 months, 6 months, 1 year)
- T&S constraint leading to 50% registered capacity (1 month, 3 months, 6 months)
- T&S outage (3 months, 6 months, 1 year)
- Unplanned T&S closure / decommissioning (include any risk of stranded asset)

Evidence is expected to include inclusion of detailed items in the submitted risk register, aligned with the summaries above.

References to supporting documentation for Section 4.7.8		
Document reference	Document name	Relevant page/section

4.7.9.– Transition Access Agreement (TAA) Dependencies (500 words) – TAA users ONLY

We are minded not to provide ongoing revenue support to TAA in relation to T&S Charges.

However, where T&S Charges support is essential for projects to sign a TAA, and that this need is clearly evidenced, DESNZ is considering providing limited support in relation to T&S Charges on a case-by-case basis.

Applicants seeking indicative T&S fees should contact the ECC T&S Co (NEP), directly. NEP can provide a range of indicative T&S fees to support your application.

Under the RAB, where there is underutilisation of the network, CO_2 T&S charges are expected to increase proportionally, up to a mutualisation cap. Please provide implications, both financial and deliverability, for your projects in the following simplified scenarios:

- For 1/5/10 years T&S charges twice as high as expected
- For 1/5/10 years T&S charges four times higher than expected

Please clearly indicate tolerance for T&S charge variability and impact on project business model.

References to supporting documentation for Section 4.7.9		
Document reference	Document name	Relevant page/section

4.8 T&S Network Connection (1000 words)

Please describe the connection between the Project and the T&S network. This should include:

- The battery limits of the Project, the intended interface point where responsibility for the connection is assumed, custody transfer of the captured CO_2 will take place, and the eventual ownership and operational boundaries;
- The intermediate pipework, including any longer distance spur pipelines, in private land or pipelines in public land to connect to the T&S network, major crossings;
    - Confirmation of familiarity with the published CCS Network Code and acknowledgement of the processes defined therein.
    - Evidence of engagement with the T&S Co, including agreements in place.
- Evidence of engagement with land holders and/or a plan to secure access rights.
- A schedule of T&S spur development.

The information to answer this section could come from collaboration with the T&S Co or a high-level route options study by the applicant.

Please describe quality controls and required processing for the CO_2 entering the T&S network and how this meets the T&S specification. Please describe how the engineering solution is aligned to meet the T&S CO_2 specification (including impurity thresholds and measurement frequencies) and what measures are in place to detect off-spec CO_2 formation and prevent any from entering the T&S network.

Please describe the intended operating regime for the capture plant export to the T&S and any measures planned to manage intermittency or operability of the T&S network. In evidence, please provide a table showing total annual mass flow rate, average mass flow rate, and peak flow rate of CO_2 to the T&S network and the expected CO_2 percentage (on a mass basis) in the CO_2 rich export stream.

Supporting evidence is expected to include:

- Evidence of engagement, and any agreements in place, with the relevant transport and storage company (T&S Co),
- Engineering or routing studies for the T&S connection,
- Annual mass flow rate of CO_2 and CO_2 percentage (mass basis) in the CO_2 rich export stream,
- Evidence of T&S CO_2 specification compliance,
- Diagrams showing battery limits and the intended interface point,
- Any land agreements, and
- Any planned delivery schedule.

References to supporting documentation for Section 4.8		
Document reference	Document name	Relevant page/section

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