Department for
Business, Energy
& Industrial Strategy

Net Zero Innovation Portfolio

Industrial Hydrogen Accelerator

Stream 2A Competition Guidance Notes

Feasibility studies on the production and use of hydrogen in industrial applications

SBRI COMPETITION
TRN: 5685/02/2022

27 May 2022 (version 3)

Updates to this Guidance (version 3)	
Update 1, 13 May 2022	We have updated the Competition Guidance notes for Stream 1 and Stream 2A to clarify the position on eligibility of the construction and mining and quarrying sectors. See section 2.2 Project scope (page 17). The new sentence is: *"However, the use of hydrogen for industrial heat in an industrial process (for example industrial boiler/kiln) on a construction, mining or quarrying site is considered an industrial process for the purposes of this competition, and is not excluded on the basis of the sector."*
Update 2, 27 May 2022	Stream 2A Competition Guidance, page 22, has been updated to say: *"To access the IHA Stream 2A online application form, bidders will be required to complete an online Stream 2A Registration Form by 14:00 BST, 9 June 2022"*
Update 3, 27 May 2022	Stream 2A Competition Guidance, page 45, has been updated to add: *"For applicants considering applying to Stream 2A and then Stream 2B for a FEED study, the FEED study can be completed on a hydrogen supply route that would not be operational by January 2025, but we would expect Final Investment Decision (FID) to be taken shortly after the FEED study is complete, with a view to implementing by the end of 2026 to support IHA programme objectives. The FEED study in IHA must be on an innovative end-to-end project."*

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Glossary of terms and definitions

BEIS	Department for Business Energy and Industrial Strategy
Capex	Capital Expenditure
CO2	Carbon Dioxide
CO2e	Carbon Dioxide Equivalent
DNO	Distribution Network Operator
EIR	Environmental Information Regulations (2004)
FAQs	Frequently Asked Questions
FEED	Front-End Engineering Design
FOIA	Freedom of Information Act (2000)
GDPR	General Data Protection Regulations
GHG	Greenhouse Gas
HBM	Hydrogen Business Model
HHV	Higher heating value
IETF	Industrial Energy Transformation Fund
IHA	Industrial Hydrogen Accelerator
IPR	Intellectual Property Rights
KPI	Key Performance Indicator
kt	kilo-tonnes
LCHS	Low Carbon Hydrogen Standard
LHV	Lower Heating Value
M or m	million
MJ	Megajoules
MW	Megawatts
MW_{H2}	MW of hydrogen
MWh	Megawatt-hours
NZHF	Net Zero Hydrogen Fund
NZIP	Net Zero Innovation Portfolio
Opex	Operating Expenditure
RD&D	Research, Development and Demonstration
SBRI	Small Business Research Initiative
SME	Small and Medium Enterprise
TCA	Trade & Cooperation Agreement
TRL	Technology Readiness Level
TWh	Terawatt-hours
UK	United Kingdom
WTO	World Trade Organisation
VAT	Value-Added Tax
yr	year

Please note that references to the "Department" throughout these documents mean The Secretary of State for Business, Energy and Industrial Strategy acting through his/her representatives in the Department for Business Energy & Industrial Strategy (BEIS).

Any reference to “programme” is a reference to the Net Zero Innovation Portfolio: Industrial Hydrogen Accelerator programme, run by the Department for Business Energy and Industrial Strategy (BEIS).

Any reference to “portfolio” is a reference to the Net Zero Innovation Portfolio (NZIP).

Supporting Documents

The following documents support this Competition Guidance and are available within the application form and at the competition website.

- Annex 1B: SBRI Terms and Conditions (Stream 2A)
- Annex 2B: Declarations (Stream 2A)
    - Declaration 1: Statement of non-collusion
    - Declaration 2: Form of Tender
    - Declaration 3: Conflict of Interest
    - Declaration 4: Standard Selection Questionnaire
    - Declaration 5: Code of Practice
    - Declaration 6: The UK General Data Protection Regulation Assurance Questionnaire for Contractors
- Annex 3B: IHA Project Cost Breakdown Form (Stream 2A)
- Annex 4B: Stream 2A Word Version Application Form (to view only, do not submit)
- Annex 5B: Partner Information Form (Stream 2A)

1. Programme Overview

The purpose of this Guidance is to give a comprehensive overview of the Industrial Hydrogen Accelerator (IHA) programme and Stream 2A competition (the competition) and associated procedures for participation. For further information, please also refer to the information and documents on the web page here.

1.1. Programme Summary

The Industrial Hydrogen Accelerator (IHA) is an innovation funding programme to support the demonstration of end-to-end industrial fuel switching to hydrogen, through funding provided by the Department for Business, Energy and Industrial Strategy (BEIS). The scope will include the full technology chain, from hydrogen generation and delivery infrastructure through to industrial end-use, including the integration of the components in a single project. The IHA will provide up to £26 million as part of BEIS' £1 billion Net Zero Innovation Portfolio, which aims to accelerate the commercialisation of innovative clean energy technologies and processes through the 2020s and 2030s. Switching industry to lower carbon fuels will be critical for meeting the UK's legally binding commitment to achieve net zero by 2050. This competition guidance document is for Stream 2A feasibility studies, which have been allocated up to £2 million in total. The Stream 2A competition will be followed by a separate competition for Stream 2B, which will provide grant funding for demonstration projects or Front-End Engineering Design (FEED) work. Stream 2B will only be open to successful applicants to the Stream 2A competition. For indicative information regarding the Stream 2B competition, see **Section 8.**

1.2. Programme Structure

The Industrial Hydrogen Accelerator is a £26 million funding programme for projects developing knowledge on the design and implementation of hydrogen systems for industry. The IHA will support projects through providing funding for demonstrators and, where needed, feasibility and FEED studies.

The programme will be delivered through three funding streams, as outlined below (see Figure 1):

Stream 1: Demonstration – Grant (up to £17 million available)
A grant funding competition for demonstration projects with a maximum of £10 million in funding per project; applicants will need to provide match funding. The demonstration projects will construct end-to-end industrial hydrogen systems, from hydrogen production to end-use, to prove their feasibility and provide further evidence on the real-world performance and costs

Stream 2A: Feasibility – Small Business Research Initiative SBRI (up to £2 million available)
A Small Business Research Initiative (SBRI) competition for feasibility studies with a maximum of £400k per study. No match funding is required for this stream. The feasibility studies will explore how systems could be designed and provide information on the technical requirements and costs. Winners will be able to bid for a demonstration/FEED grant, see Stream 2B.

Stream 2B: Demonstration/FEED – Grant (up to £7 million available)
A grant funding competition for demonstration/FEED projects with a maximum of £7 million per project; applicants will need to provide match funding. Open only to projects who have completed feasibility studies in Stream 2A.

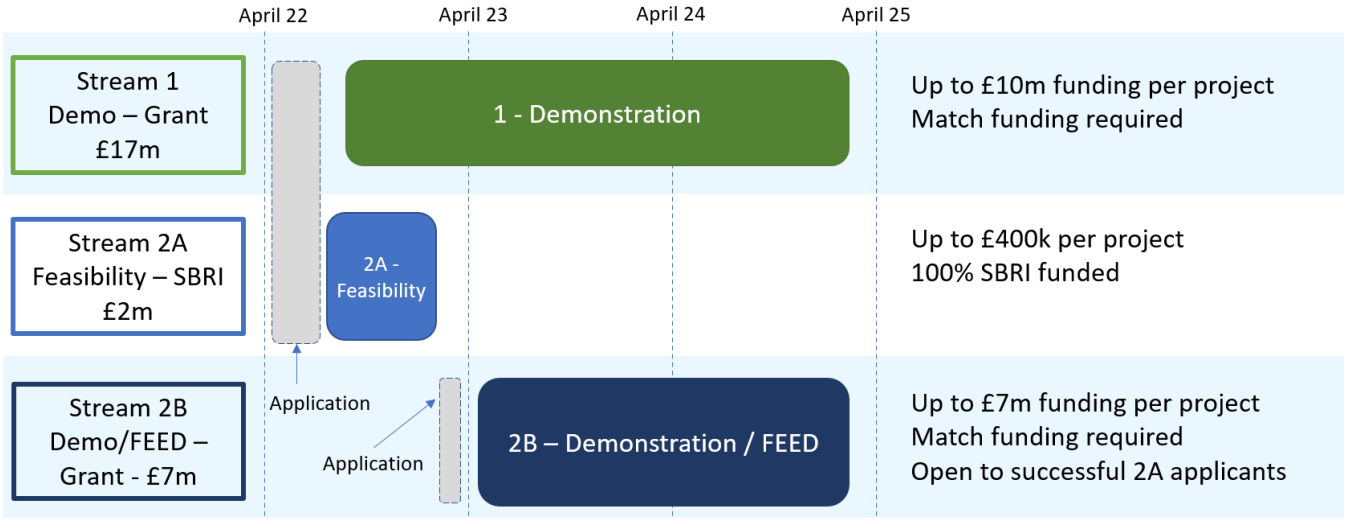

Figure 1 Overview of competition streams

The competition streams will be delivered through two different funding mechanisms, grants and Small Business Research Initiative (SBRI). For more information about the funding available through this competition, see **Section 0**.

This Competition Guidance refers only to Stream 2A. For Guidance notes on Stream 1 (Grants), please visit the programme website. Stream 2B will follow on from Stream 2A and will only be open to applicants who have successfully delivered projects within Stream 2A. For indicative information on Stream 2B please see **Section 8**.

1.3. Purpose

The aim of the programme is to prove the feasibility and viability of hydrogen fuel switching in industrial applications, as well as reducing the cost and risks associated with industrial fuel switching, in order to develop confidence in hydrogen as a solution by 2025. The programme will seek to achieve this aim by providing projects with funding under the SBRI and through grants for innovation projects.

Stream 2A (the competition) is a funding opportunity for feasibility studies. The purpose of the feasibility study is to develop the hydrogen fuel switching system concept and provide evidence to support the demonstration/FEED in Stream 2B. The feasibility study will support the development of the project team's understanding of the core and ancillary technologies, the performance and costs of the technology/system, and the delivery plan for Stream 2B demonstration/FEED. A public report detailing the key findings will be published on the gov.uk website following project completion.

It is a requirement of receiving this funding that projects undertake dissemination activities to share the findings with stakeholders. For more information on the specific requirements, see the **Section 12** of this guidance.

1.4. Programme Objectives

The programme aims to identify, support and then develop credible integrated hydrogen production and fuel switching systems that can bring about a step change in understanding and the rate of future deployment to support the achievement of Net Zero by 2050. It will:

1. Prove the feasibility and provide evidence towards the cost effectiveness of hydrogen fuel switching.
2. Improve project stakeholder understanding of how to design, implement and deliver a hydrogen solution on a specific industrial site.
3. Develop stakeholder knowledge, confidence and awareness of hydrogen end-to-end system solutions in industry.
4. Facilitate the development of new commercial relationships and build market awareness of industry actors.

2. Competition Context and Scope

2.1. Context

UK industrial sectors combined produce 16% (72 Mt CO_2e) of UK emissions[1]. Around half of these emissions are concentrated in industrial clusters[2], with the remainder dispersed. Meeting the Net Zero target requires a near-complete decarbonisation of UK industry. The Committee on Climate Change (CCC) estimated that decarbonising industry will take c. £8 billion public and private investment a year[3].

The Industrial Hydrogen Accelerator programme forms part of the £1billion Net Zero Innovation Portfolio (NZIP), announced in the Prime Minister's 10 Point Plan in Autumn 2020. The NZIP is outlined in the Energy White Paper: Powering our Net-Zero Future and it runs until March 2025, with the aim to accelerate the commercialisation of innovative clean energy technologies and processes through the 2020s and 2030s.

The Net Zero Strategy (2021) states that "Fuel switching to hydrogen is likely to be the least-cost option to decarbonise harder to electrify sites" and that we should explore opportunities for faster decarbonisation of dispersed industrial sites in the 2020s. Testing the feasibility of hydrogen in industrial settings is important because hydrogen and its derivatives can be stored more easily than electricity and could be a complement to renewables, enabling use of lower cost energy. In some cases, where very large electricity connections (or dedicated renewables) are not possible, hydrogen transportation via pipeline may also be more practical and economic. Hydrogen can be combusted in a similar way to natural gas, so is likely to integrate more easily into some existing industrial processes which use natural gas.

The IHA programme supports the Industrial Decarbonisation Strategy (March 2021), which identified that government investment is required to advance the development of low carbon technologies to address the barrier around uncertainties associated with novel technologies for the private sector. The modelling suggests that deep decarbonisation technologies (CCUS and fuel switching) will achieve 28-35 $MtCO_2$/yr abatement by 2050, of which 25-51% is through hydrogen fuel switching. IHA funding will support Action 6.1 of the Industrial Decarbonisation Strategy: to "Support innovation in fuel switching technologies, including low carbon electricity, hydrogen and biomass".

The UK Hydrogen Strategy (August 2021) stated that low carbon hydrogen has a critical role to play in our transition to net zero and set out the ambition to rapidly ramp up production and use of hydrogen over the coming decade. The British Energy Security Strategy (April 2022) doubled our ambition to up to 10 GW (~84 TWh/yr) of low carbon hydrogen production

[1] BEIS, Industrial Decarbonisation Strategy and Final UK greenhouse gas emissions from national statistics: 1990 to 2018: Supplementary tables, 2020
[2] BEIS, 2020 - BEIS analysis of the NZIP model
[3] CCC Net Zero Technical Report, May 2019, p.105. Modelling compares a 'do nothing' scenario with a 'further ambition' scenario (cutting industry emissions to 10 MtCO2e by 2050).

capacity by 2030, subject to affordability and value for money, with at least half of this coming from electrolytic hydrogen. A significant proportion of this hydrogen is expected to be used in industrial applications. The IHA aims to address current technical and commercial barriers and provide the proof of concept needed to underpin the use of hydrogen in industry this decade. The projects will showcase first-of-a-kind blueprints to enable accelerated industrial hydrogen deployment in the late 2020s and support the UK's 2030 10 GW hydrogen production ambition. The evidence generated by the IHA on the use of hydrogen by industrial users would also help inform strategic decisions in 2026 on the role of low carbon hydrogen as a replacement for natural gas in the gas grid, as outlined in the UK Hydrogen Strategy.

The Industrial Hydrogen Accelerator programme builds on the BEIS Energy Innovation Portfolio Industrial Fuel Switching and Low Carbon Hydrogen Supply innovation programmes, which ran from 2015 to 2022. The programmes supported feasibility studies and demonstration projects on low carbon industrial equipment and hydrogen generation technologies respectively. The findings from the projects can be found on the competition websites and may be useful to inform IHA projects. The IHA aims to bring together hydrogen generation and end-use technologies into a complete system.

2.2. Project Scope

The Industrial Hydrogen Accelerator programme is looking to fund innovation in end-to-end hydrogen fuel switching in industrial applications. The Stream 2A competition is looking to fund feasibility studies, which will develop further evidence on the proposed Stream 2B demonstrator/FEED projects. The competition will support pre-commercial feasibility activity but will not support commercial operation.

Innovation: The end-to-end industrial hydrogen system will likely be made up of multiple component technologies (e.g. electrolyser/reformer, delivery pipework, furnace/burner), some of which may be more mature than others. Projects must be able to justify that the full solution/system and/or specific technologies within it are innovative and unproven prior to launch. There are no eligibility stipulations over the TRLs of the technologies; individual components are permitted to be mature/commercially available. However, applicants should bear in mind that projects where all component technologies are currently commercially available are unlikely to score highly unless there is significant innovation in the technology integration / system configuration. Conversely, projects where multiple component technologies in the system are low TRL may present a high risk to successful project completion. We welcome innovative solutions which use synergies between components of the system to improve energy or resource efficiency or reduce costs.

End-to-end: Projects must include hydrogen generation, hydrogen delivery infrastructure and industrial end-use in a robust chain as a single project. For the purposes of this competition, a robust chain means a full system configuration that could reasonably be used long term on a commercial basis; projects must justify this in their application. The hydrogen generation and end-use do **not** need to be co-located on the same site, although a greater distance may lead to more complex arrangements.

For Stream 2A, every aspect of the proposed feasibility study must be fully funded by the IHA as this is a requirement of SBRI funding.

For Stream 2B, not all aspects of the end-to-end demonstrator/FEED must be funded through the IHA, but any other public funding to be used for any aspects of the project not funded through the IHA must be declared in the application form. If projects rely on other sources of funding for the demonstration/FEED to go ahead, this funding must already be secured and evidenced at the point of application to Stream 2B; hence Stream 2A applicants are encouraged to consider the timing of funding stream award to ensure this can be achieved. If using public funding, applicants must also provide at application stage evidence that the granting authority gives consent for the funding to be used for the desired purpose alongside IHA funding. Please note that all forms of public funding (whether received through the IHA competition or elsewhere) will count towards the public funding intensities set for the programme (see **Section 8.8**). If considering the use of non-IHA public funds within their projects, applicants are further advised to consult the specific rules associated with the receipt of that funding.

Component(s) of the end-to-end chain could pre-exist, but no retrospective work will be funded. For example, the solar PV and electrolyser could already exist, and the application could be for a hydrogen delivery system and innovative industrial end-use equipment to complete the chain.

Energy/feedstock inputs: The project may include low carbon energy/feedstock generation or sourcing as an input to the hydrogen generation process, where this enables the project and is not the main focus of the project. Non-exhaustive examples include a dedicated on-site wind turbine, electricity connection to a local solar farm, electricity grid connection or bioenergy processing. Capital costs associated with the energy/feedstock inputs and energy supply infrastructure to the hydrogen generation are in scope but may not be the focus of the project or the funding. Note that for mature (high TRL) technologies and processes, BEIS can only provide funding towards the reasonable 'cost of use' of capital assets for the demonstrator, excluding the residual value at the end of the demonstration period. Feasibility studies for electrolyser projects should provide assurances that any potential constraints (i.e., local grid capacity) on electricity supply will be overcome. While primary energy generation is supported, it is not a requirement under the end-to-end criteria.

Hydrogen generation: The IHA programme is technology agnostic and does not directly exclude any hydrogen generation technology types. Applicants must confirm the hydrogen generation technology can be operational by January 2025 and will be low carbon by 2030 (for anticipated demonstration projects in Stream 2B). Projects will score more highly if the hydrogen generation technology used in the Stream 2B demonstrator meets the Draft Low Carbon Hydrogen Standard (LCHS). In their application to demonstration/FEED Stream 2B, projects will need to calculate the anticipated carbon intensity in $gCO_2e/MJ_{H2,LHV}$ using the LCHS methodology. Where possible, applicants should demonstrate compliance with the LCHS threshold of 20 $gCO_2e/MJ_{H2,LHV}$, as well as the other LCHS requirements.

If the Stream 2B demonstration/FEED project cannot show full compliance with the LCHS, they will need to:

a) calculate the anticipated carbon intensity of the hydrogen in $gCO_2e/MJ_{H2,LHV}$ using the LCHS methodology, for the demonstrator phase and where relevant longer term
b) justify why the project provides significant value to the establishment of low carbon infrastructure and the objectives of the IHA programme

Further guidance is available in the Low Carbon Hydrogen Standard documents. Please note that projects which do not comply with the LCHS are unlikely to be eligible to receive Hydrogen Business Model revenue support.

Other hydrogen carriers and hydrogen blends: Other hydrogen carriers, such as ammonia, may be included, but must justify that their use is widely applicable to UK industry and fully compatible with a net zero future. They must be produced from hydrogen which meets the criteria outlined above. Carbon-based synthetic fuels, such as synthetic methanol or methane, are not eligible for this competition. Hydrogen blends are acceptable if the hydrogen component is low carbon, projects can be justified as innovative in their production or end-use, are widely applicable to UK industry and compatible with a net zero future.

Hydrogen delivery infrastructure: Projects will likely include hydrogen delivery infrastructure, such as pipework, storage and control systems. Innovation in these components is also welcome. However, delivery infrastructure which is not innovative must not but the focus of the project or the funding requested in the application. Delivery infrastructure should be a configuration that could be used long term, and projects will score higher if it is relevant and applicable to wider hydrogen roll-out and other industrial sites.

Hydrogen end-use: The core hydrogen end-use must be for an industrial process under industrial operational conditions (but these could be simulated at a pilot facility). Non-exhaustive examples include the use of hydrogen in furnaces, kilns, dryers and steam boilers to replace fossil fuels. Hydrogen can be used as a feedstock and/or reductant; however, projects will score higher if the knowledge gained is widely applicable to UK industry, so projects would need to justify the applicability of the knowledge gained across other industrial sectors.

Operational costs: operational costs will only be covered where essential for the Stream 2B demonstration to meet its objectives. The trial period is indicatively expected to be around 2 months, although longer trial periods are welcome.

Multiple offtakers: The programme will allow projects which include multiple offtakers for the low carbon hydrogen. However, the core hydrogen end-use must be for industrial processes and a minimum of 50% of the hydrogen generated in the demonstration project in the timeframe of this competition funding must be used for the core industrial application(s). If any portion of the hydrogen is used for non-industrial end-use applications, BEIS will not provide funding for those end-uses or for the relevant portion of the hydrogen generation and delivery assets.

Project scale: We indicatively expect Stream 1 and Stream 2B demonstration/FEED projects to be of the order 1-10 MW (~1-7 $MW_{H2,HHV}$ equivalent); this is an indicative guide and not an eligibility criterion, so projects of any scale are eligible. However, considering the existence of Research, Development and Demonstration (RD&D) projects below 1 MW already in the UK, a project of this scale may be less likely to offer the level of knowledge-gain necessary at an industrial scale to score highly on the relevant assessment criteria.

Long-term plan: The IHA programme covers funding for feasibility and demonstration/FEED activities. However, it is important for BEIS to maximise the value and impact of these projects.

Proposed projects will therefore score better where the assets and knowledge will be used beyond the demonstration period to develop further evidence on industrial use of hydrogen. For example, subject to successful demonstration, the hydrogen generation and end-use assets could continue to be used commercially in the industrial setting they were built in, which could provide additional evidence on long-term operation of hydrogen equipment and systems. Alternatively, the assets could be repurposed for future innovation activities.

Projects will be required to ensure that knowledge gained during Stream 2A and 2B is widely disseminated, such as through events and reports. Projects will be required to demonstrate their plans for such activities at application stage. We also encourage projects to use the knowledge gained to support further RD&D and deployment activities after the funded project is complete.

Location: Over 50% of the project work (by value) should be conducted in the UK and the Stream 2B demonstration (where relevant) must be located in the UK. There are no regional restrictions within the UK on where projects can be located. This includes (but is not limited to) industrial clusters, projects in dispersed industrial sites and in pilot facilities replicating industrial conditions. Projects may have hydrogen generation co-located with renewable energy inputs and/or with industrial sites, or at more centralised facilities where relevant.

Exclusions: Funding will not be provided for:

- Systems/solutions which are already **commercially or widely deployed** in the UK for industrial applications.
- Individual technologies or components being demonstrated in isolation are not eligible to apply for the fund, only complete end-to-end solutions. For example, a project to develop an electrolyser technology alone is not eligible.
- Hydrogen generation systems that will not be operational by January 2025 and low carbon by 2030.
- Hydrogen based power generation is not considered an industrial application unless the generator / CHP is integral to the industrial site / process, such as industrial sites which use the majority of the heat and power from a CHP unit. This must be justified in the application. A hydrogen based power generation technology, such as gas turbine, which is used primarily to provide mechanical work in an industrial process that previously used fossil fuels is eligible. A hydrogen based power generation technology which is

newly built on an industrial site to supply a site electricity demand which was previously supplied from the electricity grid is not eligible. Hydrogen-based power generation primarily for grid export is not considered an industrial process under this competition.

- End-use of hydrogen for building space and hot water heating, however large, is not considered an industrial process. Equally, use of hydrogen for district heating for domestic, commercial and/or industrial building heat is also not considered an industrial process under this competition. Using a share of the hydrogen generated for such an application is permissible but these costs are ineligible (see multiple offtakers point above).
- End-use of hydrogen for transport applications (including shipping) or other mobile applications, such as Non-Road Mobile Machinery (e.g. forklifts), is not considered an industrial process under this competition. Using a share of the hydrogen generated for such an application is permissible but these costs are ineligible (see multiple offtakers point above).
- Construction and mining and quarrying activities are not considered industry for the purposes of this competition, as these are supported through the BEIS Red Diesel Replacement programme. However, the use of hydrogen for industrial heat in an industrial process (e.g. industrial boiler/kiln) on a construction, mining or quarrying site is considered an industrial process for the purposes of this competition, and is not excluded on the basis of the sector.
- Projects focussed on energy and resource efficiency or fuel switching to electricity, biomass, waste or other non-hydrogen based fuels are excluded. Note that hydrogen fuel switching projects are still eligible and encouraged if they improve the energy/resource efficiency of the process. Note also that ammonia may be eligible (see above) but carbon-based synthetic fuels are not eligible.

2.3. Other funding and support

A summary of the BEIS hydrogen funding landscape for 2022 and 2023 can be downloaded here.

Net Zero Hydrogen Fund (NZHF): The Net Zero Hydrogen Fund will provide up to £240 million in capital funding to support the development and construction of new low carbon hydrogen production plants. The aim of the NZHF is to support at-scale deployment of new low carbon hydrogen production projects during the 2020s. Projects must be TRL 7+ for permanent deployment, and end-use of the hydrogen is not included in the scope of funding.

Hydrogen Business Model (HBM): The hydrogen business model will provide revenue support to producers to overcome the operating cost gap between low carbon hydrogen and high carbon counterfactual fuels. The HBM will stimulate private investment in new low carbon hydrogen production, by delivering revenue support funded by the Industrial Decarbonisation and Hydrogen Revenue Support (IDHRS) scheme.

A joint HBM / NZHF electrolytic allocation round (Strand 3, under consultation) is expected to open for applications in summer 2022, with contracts signed no later than December 2023. BEIS have also announced a second joint allocation round opening in 2023. Note that although these are joint HBM / NZHF rounds, applicants can apply for HBM **revenue support only**, or they can apply for joint HBM revenue support and capex support through the NZHF. IHA projects seeking operational funding for the hydrogen generation asset could apply to Strand 3 if they meet the eligibility requirements. Given IHA projects will need to have committed funding before HBM support is awarded, projects cannot rely on this source of funding to complete the IHA proposed demonstration/FEED scope. The Strand 3 minded to position is that the minimum hydrogen production capacity threshold will be 5 MW.

A project cannot apply to both the NZHF and the IHA for capital funding at the same time; the project must select the more appropriate source of capital funding. If a project is unsuccessful in the IHA programme, it can apply to a later round of the NZHF if it meets the eligibility requirements, once the project has further developed the required evidence.

Industrial Energy Transformation Fund (IETF): The Industrial Energy Transformation Fund (IETF)[4] supports the development and deployment of technologies that enable businesses with high energy use to transition to a low carbon future. The IETF provides up to £30 million/ project capital (capex) co-funding for feasibility, engineering studies & deployment. The IETF provides funding for on-site industrial fuel switching (excluding hydrogen generation), that is TRL7+ for permanent deployment. Projects should select the IHA or IETF based on which is a better fit for the project characteristics. If a project is very uncertain which fund they are better suited to, they can contact the relevant teams. If a project is confident they are eligible for both funds, they may apply to both, but must declare this on the application forms and will not be awarded both sets of funding.

Industrial Fuel Switching (IFS): The £55 million Industrial Fuel Switching competition supports innovation in the development of pre-commercial fuel switch and fuel switch enabling technology for the industrial sector, to help industry switch from high to lower carbon fuels. Funding will be awarded through Small Business Research Initiative (SBRI) contracts, providing 100% funding for pre-commercial solutions. The IFS Phase 2 aims to open for applications in autumn 2022 for the phase 2 demonstrator projects, and will be open to new applicants. Projects which are currently funded under the IFS Phase 1 feasibility funding could apply to IHA Stream 1 demonstrator; projects should consider whether they will have sufficient evidence to develop a strong application before the deadline. If there is overlap in timeframes of funded activities (i.e. in autumn 2022), milestones will be developed accordingly and no activities will be funded twice.

Other public funding: Projects receiving other public funds (whether received from BEIS or any other UK or non-UK public funding) may still apply to the IHA. However, all forms of public funding will count towards the public funding limits and grant intensities set for the programme in Stream 1 and Stream 2B. For example, if a large organisation is eligible for 40% grant funding, the total public funding from all sources cannot exceed 40% of the project cost. If the

[4] Projects in Scotland should refer to the Scottish IETF

other funding is required for the IHA project to progress, funding must be confirmed at the point of the IHA demonstrator/FEED application, and there must be no overlap in the scope of the costs covered. If considering the use of non-IHA public funds within their projects, applicants are further advised to consult the specific rules associated with the receipt of that funding. Note that Ofgem funding is considered public funding.

Breakthrough Energy Catalyst (BEC)

For projects looking for investment, there are a number of opportunities available, one of which is the Breakthrough Energy Catalyst. In 2021 the Prime Minister and Bill Gates announced a new 10-year partnership to accelerate the commercialisation of technologies which will reduce fossil fuel use in:

- Sustainable Aviation Fuel (SAF) production
- Low carbon hydrogen production
- Direct Air Capture (DAC) of GHG (CO2, methane etc.) using industrial processes
- Long Duration Energy Storage

Each party aims to mobilise about £200 million of funding for near commercial scale UK projects. The UK Government will continue to fund projects through existing and planned schemes, such as the IHA, and will work with other similar partnerships.

Projects considering applying to the IHA competition might benefit from a discussion with the Breakthrough Energy Catalyst during the feasibility stage, as it offers the opportunity for match funding which may be suitable for your demonstration project. More information can be found here.

2.4. Environment and Safety Considerations

Applicants will be required to consider the environmental and safety impact of their solution and the regulations which must be adhered to.

The Environment Agency is the principal regulator on environmental matters in England. The environmental regulators for Scotland, Wales and Northern Ireland are the Scottish Environment Protection Agency (SEPA), Natural Resources Wales (NRW) and the Northern Ireland Environment Agency (NIEA) respectively. We strongly encourage applicants to consider the possible environmental impacts of proposed projects, and ways to minimise any negative impacts, as early as possible. For example, emissions and air pollution, water use, waste, use of scarce materials, noise and visual. During your feasibility study, please read and follow the regulatory guidance relevant to your technologies; some useful links and further guidance is found in Appendix 4: Environment and safety resources.

Air Quality: Applications to the competition should demonstrate that they have considered the impacts of the fuels and processes associated with their project and the targeted technology on air quality, including within their local area. Applicants must prove that they have taken steps that meet (ideally go over and above) existing local and national air quality regulations, to

reduce emissions and mitigate impacts that are damaging to air quality. The response should also provide assurance that there is scope for the project/technology to be compliant with more stringent air quality regulations, which may be a requirement in future.

Where relevant, applications should pay attention to the damaging air pollutants that the UK currently has national emission reduction commitments for, including:

- fine particulate matter (PM2.5),
- ammonia (NH_3),
- nitrogen oxides (NOx),
- sulphur dioxide (SO_2), and
- non-methane volatile organic compounds (NMVOCs).

The gov.uk website provides guidance on air quality, including information on national and local regulations. As air quality is a devolved matter, regulations may vary amongst the devolved administrations.

Fugitive Hydrogen Emissions: Hydrogen itself can lead to global warming, with early research suggesting its Global Warming Potential is around 11±5 (see Fugitive Hydrogen Emissions study and Atmospheric Implications of Hydrogen study). Applicants to the Stream 2B demonstrator/FEED competition should show that they have considered the level of fugitive hydrogen emissions (e.g. during start-up, shutdown and abnormal operation), throughout the technology chain / system, and made efforts to minimise these. Successful demonstration projects will also be expected to work with BEIS and BEIS contractors to monitor fugitive hydrogen emissions; IHA applicants are not required to incorporate this in their costing or planning at this stage.

Safety: The safe demonstration of hydrogen is one of the most important aspects of this competition. Due to the relatively innovative nature of hydrogen use in many settings, the design and installation standards are not as well developed as those for natural gas and LPG. However, the principles of the handling of hydrogen as an industrial gas are well known. IGEM has published the IGEM/H/1 standard and is updating IGEM/SR/25 and IHA applicants are expected to follow these where appropriate. The British Compressed Gases Association also provides detailed guidance. The primary regulations that will govern the handling of Hydrogen and the associated infrastructure are DSEAR (Dangerous Substances and Explosive Atmospheres Regulations), COMAH (Control of Major Accident Hazards) and PER (Pressure Equipment Regulations). The controlled quantity of Hydrogen for The Planning (Hazardous Substances) Regulations 2015 is 2 Tonnes. Hydrogen is a named dangerous substance under COMAH regulations. The threshold quantities are 5 Tonnes (lower tier) and 50 Tonnes (upper tier); more information can be found here. In the medium term the Health and Safety Executive (HSE) will regulate hydrogen under the Health and Safety at Work Act (HSWA) 1974, and will expect organisations to adopt both the principles and details (where appropriate) of the GS(M)R 1996 and the GS(I&U)R 1998. This means in practice the direct involvement of the HSE in relatively small and simple hydrogen installations is likely to be modest. For more information on safety expectations of IHA Stream 2B demonstrator projects see the IHA Stream 1 guidance.

3. Competition Timetable, Application and Assessment Process

3.1. Competition Timetable

Stream 2A is a feasibility study phase, where projects are required to conduct a feasibility study for their end-to-end system, with a view to apply to and deliver Stream 2B, where, if successful, they will build and demonstrate their system in a relevant or operational environment. Stream 2A and Stream 2B will be run as separate funding competitions. Stream 2B will only be open to applicants who delivered a feasibility study as part of Stream 2A.

Indicative key dates applicable to Stream 2A of the competition are shown below. Please note BEIS reserves the right to vary these dates.

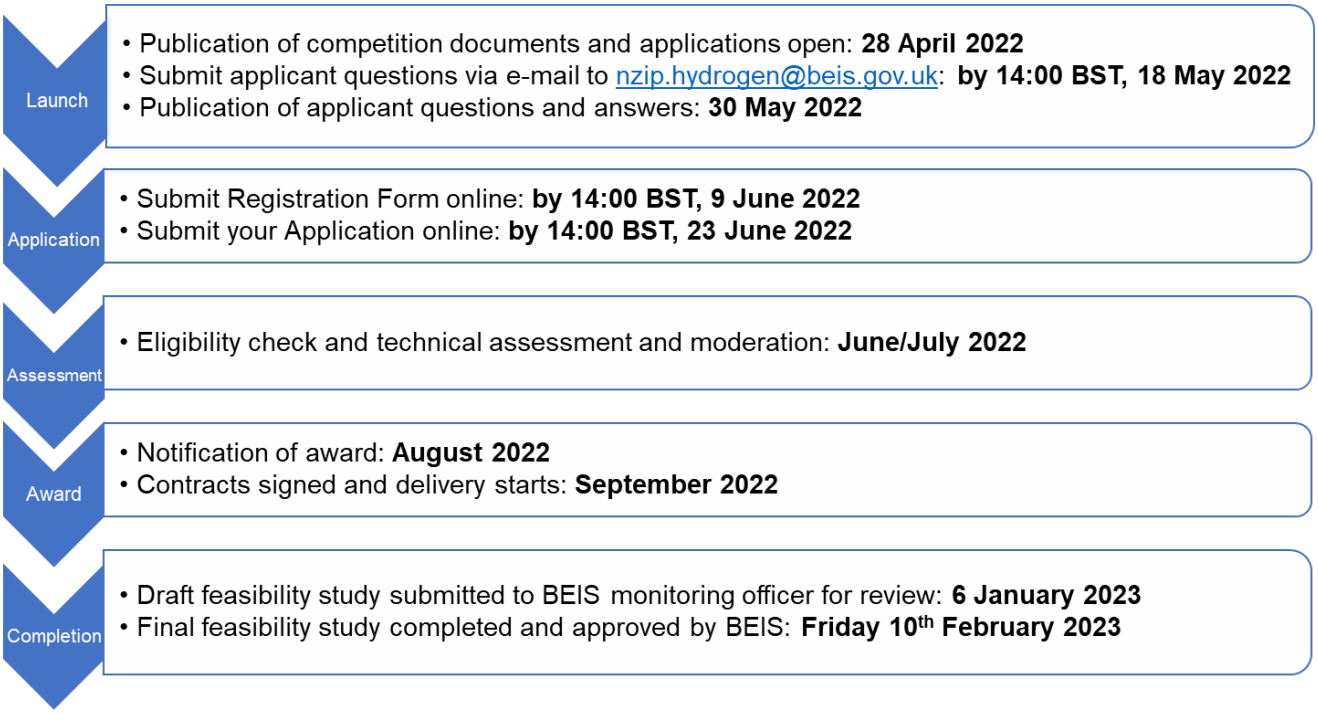

Figure 2 Stream 2A Timeline

3.2. How to Apply

Please make sure you have read this guidance before starting your application.

To apply to the IHA Stream 2A competition, bidders must complete the IHA Stream 2A online application form. An offline copy of the application form is available on the competition website for reference and to support the development of application content prior to using the application system.

To access the IHA Stream 2A online application form, bidders will be required to complete an online Stream 2A Registration Form by 14:00 BST, 9 June 2022, following which a password will be provided in a confirmation email. This password will be required in order to access and complete the Competition application form for submission.

Applications will be assessed on their potential to deliver both Stream 2A and Stream 2B. Bidders are not required to submit detailed information on their Stream 2B plans at this stage; they will however be asked for an outline project plan and budget for Stream 2B, at a minimum. Please see **Section 8.6** for expectations of required activities to be complete at the point of application to Stream 2B.

If you have any questions about the competition, please submit them during the Q&A window, by 14:00 BST, 18 May 2022 to nzip.hydrogen@beis.gov.uk; questions submitted after this deadline may not be answered. We will provide replies to any questions which, in our judgement, are of material significance, through an online anonymised FAQ sheet published on the IHA Website. All applicants should take the answers to the clarification questions, the online FAQs and this competition guidance into consideration when preparing their own tenders. BEIS will evaluate tenders on the assumption that they have done so.

The full proposal must be submitted via the online application form, available through the IHA Website, by 14:00 BST, 23 June 2022. Any supporting materials must be attached to the online application form and in line with the guidance on such materials. Please see **Section 17** for guidance completing the application form and associated supporting materials. Please note that each supporting document cannot exceed the size limit set within the application form, so we advise checking these in advance**.**

BEIS **strongly recommends that you begin to complete the application form several days before the application submission deadline**, to ensure that you leave ample time to complete and submit the entire application. Applications (or any part of an application) submitted after the deadline will not be accepted. You must have uploaded all supporting information and declarations and clicked 'submit application' by the application deadline.

You can save your application at any time by clicking "Save and Continue Later". You will then be e-mailed a link which you can use to return to your application and complete it.

You may also find it useful to review the offline application form, available through the IHA Website. This is a Word document copy of the questions that will be asked of you in the online application form, which you can use to view the sequence of all the questions and to plan your time allocation or content prior to submitting your application. The offline Word document is **for reference only and cannot be submitted as your application**. All applications will need to be completed and submitted through the online platform.

Alongside the offline Word application form, you will find offline examples of the forms and declarations you need to complete and return with your application. These examples are **also for reference only**. In your online application, you will be provided with links to download

these forms and declarations. You then need to sign them (**please note you cannot do this directly in the application platform**) and re-upload them to your application.

If you have any enquiries regarding your online application, please contact nzip.hydrogen@beis.gov.uk.

3.3. Submission Content

Each proposal must include the following:

Completed application form (online), including attachments:

- IHA Stream 2A Project Cost Breakdown Form (a template is downloadable through the online application form)
- Project work package description
- Project Gannt chart
- Project organogram
- Project risk register
- Project Team CVs
- Referenced figures document (optional)
- Letters of support (optional)
- Partner Information Form (if you have project partners)

The following forms are downloadable through the online application form, which applicants must complete, sign and re-upload to their application:

- Declarations (also available in Annex 2B on the IHA website):
    - Declaration 1: Statement of non-collusion (one form to be completed by the lead applicant)
    - Declaration 2: Form of Tender (one form to be completed by the lead applicant)
    - Declaration 3: Conflict of Interest form (one form to be completed by the lead applicant on behalf of themselves and all project partners)
    - Declaration 4: Standard Selection Questionnaire (every organisation being relied on to meet the selection must complete parts 1&2, lead applicant to complete part 3 on behalf of all partners)
    - Declaration 5: Code of Practice (one form to be completed by the lead applicant)

- Declaration 6: GDPR Assurance Questionnaire (one form to be completed by the lead applicant)

Any supporting materials must be attached to the online application form.

You should endeavour to answer all questions on the application form in full. Incomplete applications and any containing incorrect information will very likely be rejected although BEIS may, at its discretion, request clarification before making a final decision.

Any **applications or supporting documentation received after the application deadline will not be considered**. Please do not leave the uploading of your bid to the last few days – please plan ahead and prepare well in advance.

3.4. Key information about your application

Application costs: You will not be entitled to claim from BEIS any costs or expenses that you incur in preparing your bid, whether or not your proposal is successful.

Multiple Bids: Applicants may put in multiple bids or be part of multiple consortia. Please see **Section 5.1** for eligibility criteria around multiple bids.

Tender Validity: Tenders shall be valid for a minimum of 180 calendar days from the submission deadline**.**

Stream 2B Submissions: For Stream 2B, an application form and guidance will be published prior to the completion of Stream 2A. Only successful Stream 2A projects (that have received funding through the Stream 2A competition to deliver a feasibility study) are eligible to apply to Stream 2B.

Consortia: Bids may be submitted by single applicants or project teams (i.e., consortia). For consortium bids, only one application should be submitted for each project.

The lead organisation must sign up to the Stream 2A terms and conditions. How the consortium manages the commitments that the lead organisation makes on its behalf is the responsibility of the consortium. If a consortium is not proposing to form a separate corporate entity, the project partners will need to complete a consortium agreement. A consortium agreement will not be required at application stage, but BEIS strongly advise that applicants provide a consortium agreement within one month of the Stream 2A project contract being signed. BEIS reserves the right to require a successful consortium to form a single legal entity in accordance with Regulation 28 of the Public Contracts Regulations 2015 (as amended by the Public Procurement (Amendment etc.) (EU Exit) Regulations 2020). BEIS recognises that arrangements in relation to consortia and sub-contractors may (within limits) be subject to future change. Suppliers should therefore respond in the light of the arrangements as currently envisaged and are reminded that any future proposed changes in relation to consortia and sub-contractors must be submitted to BEIS for approval.

Applicants will be required to provide information about their partners at application stage by completing the Partner Information Form (Annex 5B) and attaching it to the online application form,

For the purposes of the IHA competition, a project partner is likely to be an organisation responsible for the delivery of any significant innovative programme element or standard service; partners must sign the consortium agreement. A sub-contractor is likely to be an organisation delivering a standard service, as organised through a separate contract at market value. Sub-contractors will not be required to sign the consortium agreement. Subcontractors delivering more than 20% of the work (by value) must be named in the application, with information provided on the organisation size, what work they will be delivering, where the work will be located and evidence of their commitment to the project (e.g. a signed letter of support). If a small organisation, receiving a higher grant intensity, is subcontracting a large portion of their work to a large organisation, BEIS will review at assessment and due diligence stage whether this is appropriate and whether the funding requested is at an acceptable level; clarifications may be required.

3.5. Contract Award

Stream 2A contracts are expected to be awarded in **August 2022**. Please note that BEIS reserves its right to not award any contracts and/or grant agreements under this competition.

The contracts will be based on the BEIS pre-commercial procurement contract. The terms and conditions for the Stream 2A contract are provided in Annex 1B**.** These terms and conditions are final and non-negotiable: by applying to the competition, you are agreeing to these terms and conditions.

There will be an opportunity for successful applicants, prior to contracts being signed, to discuss the contract at a meeting with official(s) from BEIS. The BEIS official(s) will explain the contractual terms and conditions and respond to any queries which the applicant may have at this stage, but they will not allow any changes to be made to the contract. It is crucial that all applicants review the terms and conditions prior the submission of their application and ask any questions prior to submitting the bid.

For consortium bids, the lead company (project co-ordinator) will be the recipient of the contract (the supplier) and will be responsible for managing payment to the other project partners.

4. Competition Budget and Funding

The total budget available for the Industrial Hydrogen Accelerator programme is £26 million. The programme will be delivered through three funding streams:

- Stream 1: up to £17 million available
- Stream 2A: up to £2 million available
- Stream 2B: up to £7 million available

The total budget available for the Stream 2A competition is £2 million, with up to £400,000 available for each project. The competition funding will be awarded using the Small Business Research Initiative (SBRI) approach[5]. SBRI is a well-established pre-commercial procurement process that enables the development of innovative products and services in response to specific challenges faced by government departments and public-sector bodies. Successful business partners receive finance to develop their innovative ideas, generating new business opportunities and routes to market. An SBRI will fund 100% of eligible costs. For more information on eligible costs, see Appendix 3: Eligible and Ineligible Costs.

We intend to fund ~5 projects in Stream 2A; the actual number of Stream 2A projects funded depends on the number of eligible project applications, and the number of projects that are affordable within the allocated budget. Projects which meet the minimum assessment threshold will be ranked by total score and allocated funding in order of merit until the available funding is utilised or there are no more suitable projects (whichever comes first).

In the event of securing additional budget, BEIS can award funding to additional projects at any point. BEIS may also choose to re-distribute the funding that is available across each stream, to meet the needs of the programme as required.

Bidders should not rely on there being further funding available for the competition in excess of the allocated budget. BEIS may also, at its discretion, choose not to make an award or allocate an award that is less than the total budget depending on the quality of applications.

A further £7 million will be available for demonstration/FEED projects in Stream 2B, with a maximum of £7 million of grant funding available per project. Unlike the SBRI funded Stream 2A, the Stream 2B competition **will not** fund 100% of eligible costs of projects. Instead, the competition will support successful applicants through subsidies awarded in the form of grants towards the eligible costs of the proposal, and projects will be required to provide match funding. See **Section 8.8** for more details on grant funding for Stream 2B.

In Stream 2A, eligible costs are those directly associated with preparation of the feasibility study and knowledge dissemination activities. However, an indication of the potential costs involved in participating in Stream 2B is also required when bidding for Stream 2A. In Stream 2B, eligible costs are those directly associated with the development and implementation of the

[5] This competition is **not** limited to small and medium sized organisations.

end-to-end hydrogen demonstrator/FEED (see project scope **Section 2.2 and Section 8.4** 2B eligible costs) and knowledge dissemination activities.

For Stream 2A all costs should be provided excluding VAT. Your total costs excluding VAT should not exceed the maximum allowable budget per project.

IMPORTANT INFORMATION

No Reliance

Nothing in this funding call requires BEIS to award any applicant a contract of any particular amount or on any particular terms. Nor does BEIS commit to proceeding to Stream 2B whether or not Stream 2A is successful. BEIS reserves the right not to award any contracts.

Applicants apply for funding in this competition at their own risk and expense. BEIS will not, under any circumstances, be liable for nor make any contribution to the costs of participation, preparing proposals and taking any professional or specialist advice. Applicants accept the risk that they may not be awarded a contract. BEIS gives no guarantee or warranty as to the nature, or number of projects funded.

5. Eligibility for Funding

5.1. Competition Eligibility Criteria

To be eligible for funding under Stream 2A, proposed projects must meet all the following eligibility criteria. These will be listed in the online application form as the Yes/No questions exemplified below. BEIS will consider all information on the application form when reviewing project eligibility. If, after reading this competition guidance, you are still uncertain whether your project is eligible, organisations may seek clarifications on eligibility by sending an email to nzip.hydrogen@beis.gov.uk during the Q&A clarification window.

1. Technology and project scope

The competition is looking to fund innovation in end-to-end hydrogen fuel switching in industrial applications.

Projects must include hydrogen generation, hydrogen delivery infrastructure and industrial end-use in a robust chain as a single project.

The hydrogen generation technology must confirm it can be operational by January 2025 and low carbon by 2030.

The core hydrogen end-use must be for industrial processes under industrial operational conditions (but these could be simulated at a pilot facility). A minimum of 50% of the hydrogen generated in the demonstration project in the timeframe of this competition funding must be used for the core industrial application(s).

Please see Section 2.2 for more detail on stipulations and exclusions of the project scope.

Eligibility question: Is this project and technology in scope?

2. Innovation and technology readiness

The competition is to support the development of innovative hydrogen fuel switching solutions, which are not yet in commercial operation. Stream 2A feasibility studies must be focussed on the feasibility of the Stream 2B demonstrator/FEED projects. The competition will support pre-commercial feasibility, FEED and demonstration activity, but will not support commercial operation.

The end-to-end industrial hydrogen system will likely be made up of component technologies, some of which may be more mature than others. There are no specific technology readiness levels required for the component technologies, but projects must be able to justify that the full solution and/or specific technologies within it are innovative and unproven prior to launch. This includes confirming that the system can’t currently be procured as a whole on the open market

and there is uncertainty over its success. Note that individual components are permitted to be mature/commercially available.

Eligibility question: Is this proposed system innovative and pre-commercial?

3. Project activity

BEIS is unable to fund retrospective work on projects.

Eligibility question: Can you confirm that your application does not seek funding for retrospective work on this project?

4. Multiple applications and projects

Applicants may submit more than one application to the overall competition. Applicants may submit more than one application to Stream 2A, provided they are materially different in their core innovation and/or configuration.

Applicants are encouraged to choose between Stream 1 and Stream 2A depending on how much feasibility work has already been completed on the project. If a project considers itself applicable to both IHA Streams, the applicant may apply to both Streams for the same project, but will need to fill out separate applications and declare on the application that the project has applied to both Streams. The same project or scope of work cannot be funded twice.

Eligibility question: If you or your consortium are part of multiple applications to Stream 2A, can you confirm that the core innovation/system developed is materially different in each application? YES/NO/Not applicable

If project leads, partner(s) or subcontractors are part of multiple successful bids, they must be able to deliver on all projects if they are successful.

Eligibility question: If you or a project partner are part of multiple applications, would you and/or they be able to successfully deliver all projects, if necessary? YES/NO/Not Applicable

5. Project timescale

It is anticipated that project delivery will begin in September 2022. Projects will be required to produce a presentation of interim findings at the mid-point of the project. Exact target dates for this milestone will be agreed between the successful projects and BEIS prior to awarding the contract.

Stream 2A draft feasibility studies must be completed and sent to BEIS for approval by Friday 6th January 2023. The BEIS monitoring officer will review the feasibility study and feedback accordingly in 2 weeks (20th January 2023), with a final report due by Friday 10th February

2023. Should the project be successful in Stream 2B, all project work related to the Stream 2B demonstrator/FEED, including the final approved BEIS report, must be completed by Friday 7th March 2025**.**

Projects accepted for funding for Stream 2A will not automatically progress into Stream 2B, which is a separate competition. However, BEIS will consider projects' capacity to deliver Stream 2B demonstration/FEED projects in the initial application.

Eligibility question: Can you confirm that your feasibility study will be completed within the timescales set out? YES/NO

6. Additionality

Projects can only be funded where evidence can be provided that innovation would not be taken forwards (or would be taken forwards at a much slower rate) without public sector funding.

Eligibility question: Can you confirm that this project would not be taken forward (or would progress at a much slower rate) without public sector funding? YES/ NO

7. Contract size and funding

Contracts will be awarded in two phases:

Stream 2A (this competition) - Feasibility Study (SBRI). The contract size per project is up to £400,000 (this must cover 100% of eligible project costs). The approach to funding is outlined in **Section 0.** Eligible costs for the Stream 2A competition are available in Appendix 3: Eligible and Ineligible Costs**.**

Stream 2B (succeeds this competition) – Demonstration/FEED (grant). The indicative maximum funding available per demonstration/FEED project will be £7 million. Stream 2B will be a grant competition, so the project teams must provide match funding in accordance with the guidance on eligible costs and funding amounts set out in in **Section 8.8.**

Eligibility question: Can you confirm the funding requested from BEIS for your Stream 2A feasibility project does not exceed £400,000? YES/NO

Eligibility question: Can you confirm the funding requested from BEIS for your likely project for Stream 2B will not exceed £7 million, and that you will be able to source the required match funding for this project? YES/NO

8. Eligible project costs

SBRI funding is aimed at organisations working on research and development (R&D) of an innovative process, material, device, product, or service prior to commercialisation. Funding is available for R&D activities only, including related dissemination activity. Projects requesting funding for commercialisation activities are not eligible.

BEIS must fund 100% of eligible project costs, no match or in-kind funding is allowed. Project costs must not include profit to the lead applicant or consortium partners.

As this Stream 2A competition supports feasibility studies we don't anticipate notable spending on capital equipment. However please note that under SBRI rules, we will only fund the cost of use of capital equipment for the duration of the project, unless the equipment is specialised and bespoke enough that it only has a value for the duration of the project.

The full list of eligible project costs is set out in Appendix 3: Eligible and Ineligible Costs.

Eligibility question: Can you confirm that requested funding is for eligible costs and BEIS will fund 100% of those costs? YES/ NO

9. Risk-Benefit sharing

The sharing of risks and benefits is an important aspect to the SBRI approach. Projects receive financial support and retain any intellectual property generated, with certain rights of use retained by BEIS (see Conditions 27 and 28 of the standard terms and conditions in Annex 1B). Project outputs are also expected to be shared widely and publicly and project teams are not permitted to include profit in the eligible project costs.

Eligibility Question: Do you agree to this risk-benefit sharing approach? YES/NO

10. Applicants and project team composition

Stream 2A can be led by a single organisation or by consortium. For consortium bids, a single project application must be submitted by the lead project member (the project co-ordinator) on behalf of the consortium members (project partners). Please note that all project partners will be required to complete the Standard Selection Questionnaire (Declaration 4).

Applications must be led by private organisations or research and technology organisations (RTO), and may not be led by universities or non-commercial organisations. Similarly, other Government Departments, Agencies and local authorities are not eligible to enter as the lead applicant for any IHA stream, but they can act as a project partner or sub-contractor. Special Purpose Vehicles are permitted to lead projects only if they are constituted as legal entities.

Eligibility Question: Do you confirm that this project has a credible route to market and is led by a private organisation or RTO? YES/NO

11. UK requirements

Projects can work with international partners, but over 50% of the funded project work (by value) must be conducted in the UK. Stream 2B demonstrators (where relevant) must be conducted in the UK.

Eligibility question: Can you confirm that > 50% of the work (by value) will be carried out in the UK and the Stream 2B demonstrator (where relevant) would be located in the UK? YES/NO

5.2. General BEIS Conditions

Applicants must not meet any of the BEIS grounds for mandatory rejection, and as a general rule they should not meet any of the BEIS grounds for discretionary rejection (see Appendix 5: Exclusion Grounds). Applicants will be required to declare this as part of completing the Standard Selection Questionnaire.

There are six declaration forms which must be completed:(see **Annex 2B**):

Declaration 1: Statement of non-collusion

Declaration 2: Form of Tender

Declaration 3: Conflict of Interest

Declaration 4: Standard Selection Questionnaire

Declaration 5: Code of Practice

Declaration 6: The UK General Data Protection Regulation Assurance Questionnaire for Contractors

These declarations are provided in the online application form and can also be downloaded from the competition website. All declarations must be signed and uploaded to the online proposal by the applicant.

For Declaration 4: Standard Selection Questionnaire please observe the following guidance:

- Please ensure that all questions are completed in full, and in the format requested. Do not leave any question without an answer. If the question does not apply to you, please state ‘N/A’, even if it is a tick-box option.
- Should you need to provide additional information in response to the questions, please submit a clearly identified appendix within the declaration form.

- Every organisation that is being relied on to meet the selection must complete and submit Part 1 and Part 2 of Declaration 4. This includes: all partner organisations and all sub-contractors.
- Please list every partner organisation and sub-contractor in the lead bidder's Declaration 4, in the table in question 1.2(b)-(ii).
- Please make sure that each partner and sub-contractor lists their respective sub-contractors in their own Declaration 4, in the table in question 1.2(b)-(ii).
- Please include all the sub-contractors listed in the Project Cost Breakdown Form in the lead bidder's Declaration 4, in the table in question 1.2(b)-(ii).
- If you plan to sub-contract part of the work but have not yet identified sub-contractors, please at least provide the percentage of the work that will be subcontracted and the scope of the work in the table in question 1.2(b)-(ii).
- For answers to **Part 3** - If the lead partner is bidding on behalf of a group, for example, a consortium, or you intend to use sub-contractors, you should complete all of the questions on behalf of the consortium and/ or any sub-contractors, providing one composite response and declaration.

5.3. Conflicts of Interest

The BEIS standard terms and conditions of contract include reference to conflict of interest and require contractors to declare any potential conflict of interest to the Secretary of State.

For research and analysis, conflict of interest is defined as the presence of an interest or involvement of the contractor, subcontractor (or project partner) which could affect the actual or perceived impartiality of the research or analysis.

Where there may be a potential conflict of interest, it is suggested that the consortium or organisation designs working arrangements such that the findings cannot be influenced (or perceived to be influenced) by the organisation which is the owner of a potential conflict of interest. For example, consideration should be given to the different roles which organisations play in the research or analysis, and how these can be structured to ensure an impartial approach to the project is maintained.

This is managed in the procurement process as follows:

- During the bidding process, applicants may contact BEIS to discuss whether or not their proposed arrangement is likely to yield a conflict of interest.
- **Suppliers are asked to sign and return Declaration 3** to indicate whether or not any conflict of interest may be, or be perceived to be, an issue. If this is the case, the contractor or consortium should give a full account of the actions or processes that it will use to ensure that conflict of interest is avoided. In any statement of mitigating actions, contractors are expected to outline how they propose to achieve a robust, impartial and credible approach to the research.

- When tenders are assessed, this declaration will be subject to a pass/fail score, according to whether, on the basis of the information in the proposal and declaration, there remains a conflict of interest which may affect the impartiality of the research.
- Failure to declare or avoid conflict of interest at this or a later stage may result in exclusion from the procurement competition, or in BEIS exercising its right to terminate any contract awarded.

Applicants will be subject to financial viability checks, as described in **Section 10.1**. BEIS will make a decision as to the eligibility of projects based on the results of these checks.

6. Assessment Process and Criteria

All applications will be considered initially against the competition eligibility criteria (described in **Section 5**). Eligible projects will be further assessed against the assessment criteria described in **Section 6.1** by **a minimum of 3** reviewers, which may include external reviewers[6].

Project scores will then be moderated to determine a ranking list for Stream 2A that will be used to allocate the funding, starting from the highest scoring projects. To be eligible to receive funding, a project must achieve a moderated score of at least 2 out of 5 against each sub-criterion (or criterion if there are no sub-criteria), with a minimum total weighted score of 60%. If budget is available after the initial award, additional projects may be funded in line with the process described in **Section 6.3**.

The Application Form and these Guidance Notes are designed to inform you about the types of information you should be prepared to provide to BEIS in your online application. The individual bullet points listed under the assessment criteria headings in **Section 6.1** are not assessment sub-criteria but are an indication of the factors considered when assessing each proposal, so applicants should aim to address all of them to achieve high marks.

6.1. Assessment Criteria

There are 5 assessment criteria for Stream 2A, some of which are broken further into sub-criteria, as shown in Table 1. Each sub-criterion will be awarded a score of 1 to 5 based on the scoring guidance summarised in **Section 6.2**.

Table 1 Summary of assessment criteria

Criteria	Criteria weighting	Sub-criteria	Sub-criteria weighting
1 Innovative solution	15%	Innovative solution	15%
2 Performance	25%	a) Performance and feasibility	15%
		b) Cost of solution	10%
3 Social value	10%	Emissions, environment and safety	10%
4 Project financing	25%	a) Project cost breakdown form	10%
		b) Additionality and value for money	15%
5 Project delivery plan	25%	a) Delivery plan, risk management and knowledge sharing	15%
		b) Skills and capabilities	10%

[6] All external reviewers will have signed up to adhering to strict conflicts of interest and confidentiality terms.

Criterion 1: Innovative solution (15%)
Guidance for criterion 1: Applicants are expected to: • Explain what the proposed hydrogen solution is, summarise its benefits, and give an overview of the project to be carried out in the feasibility and demonstration/FEED streams. State the estimated scale (MW) of the proposed Stream 2B project. Provide evidence that the integrated system is a robust end-to-end hydrogen system i.e. it is a full system configuration that, if successful, could reasonably be utilised and/or scaled up for use long term on a commercial basis. Describe how the project will support the competition objectives. • Describe how the proposed system is innovative and novel and outline the core innovation(s) in the project. Explain whether any similar technologies exist, and how your proposed approach is different. • Summarise any work that has been done to date on the solution. Describe what technological progress will be made through the project and the potential for knowledge gain in the system and technologies. Estimate and justify the TRL of the system and separately its component technologies, where possible, at the start and end of the feasibility study and proposed demonstrator/FEED project. Higher marks will be awarded to answers where the project is: clearly described; will strongly support the competition objectives; is innovative; and will lead to a large amount of technological progress.

Criterion 2: Performance, feasibility and cost of solution (25%)

Guidance for criterion 2: This criterion will assess the performance, feasibility, scale and cost of the proposed solution, as well as the applicability of the solution to wider UK industry and the long term development plan.

Criterion 2a: Performance and feasibility (15%)

Guidance for criterion 2a:

- Justify why you believe hydrogen is the best decarbonisation route for this process/site, considering technical and economic factors. Show that you have considered other decarbonisation options and explain why they are not possible/favourable.
- Describe the estimated performance (e.g. efficiency, lifetime, product impact) of the proposed solution. Explain which technologies you expect to use and how you will ensure this is the best design of the system. Compare the solution to the counterfactual and alternative options.
- Summarise any supporting evidence on the technical feasibility of the proposed approach and appraise outstanding technical challenges.
- Describe how the performance of the solution will be further validated through the feasibility study and demonstration/FEED. Describe how your project (feasibility and demonstration/FEED) will improve knowledge about the long term feasibility, reliability and viability of the solution.
- Describe (and if possible quantify) the applicability, adaptability and scalability of the solution and wider knowledge across UK sector(s), particularly industry. Estimate the proportion of UK industrial sites which could benefit from this system or the core technologies within it. Outline your long-term development plan for the system/solution and/or the component technologies, including any plans for promoting wider use.

Criterion 2b: Cost of solution (10%)

Guidance for criterion 2b:

- Describe the estimated costs of the solution and component technologies (generation, transport, end-use) and how these compare with the current process and with other low carbon options. Where relevant, distinguish between the demonstration and commercial scale.
- Describe how the feasibility study phase will firm up costs for the demonstration. Indicate aspects of your end-to-end solution where cost uncertainties are particularly acute.

- Describe how the feasibility and demonstration/FEED projects would lead to improved evidence on system cost and to cost reductions in the commercialised solution.

Criterion 3: Social value (Emissions, environment and safety) (10%)

Guidance for criterion 3:

- Provide an estimate of the expected emissions intensity (e.g. gCO_2e/MJ_{LHV} H_2) of the hydrogen produced, and the overall emissions abatement of the system relative to the current process (e.g. % emissions reduction). Use Green Book Guidance where relevant, and share the assumptions used. Explain whether you expect the hydrogen generation technology to meet the Draft Low Carbon Hydrogen Standard. Projects with very low emissions and strong evidence will score higher.
- Explain how your proposed solution and the knowledge gained will support wider emissions reductions across the economy, and in particular UK industrial sectors, and describe how the emissions savings will contribute to the UK's 2050 Net Zero target, and international targets.
- Describe and provide evidence on the wider environmental impact and safety of your solution (e.g. air quality, NOx, methane leakage, scarce materials, water usage, waste, noise, safety regulatory requirements etc – see **Section 22**) and how any potential negative impacts can be mitigated.
- Describe how you will monitor, measure and report on your commitments/the impact of your project. Examples of reporting metrics might include:
    - People hours spent disseminating knowledge on the low carbon solution to facilitate wider industrial decarbonisation.
    - People hours spent working to minimise the environmental impacts of your solution through improved design.

Criterion 4: Project financing (25%)
Guidance for criterion 4: This criterion will be used to assess whether the proposed project costs are eligible, accurate, realistic and justified in delivering the innovation. It will assess the additionality of public funding and the value for money of the project.
Criterion 4a: Project cost breakdown form (10%)
Guidance for criterion 4a: Fill out and upload the IHA project cost breakdown form (excel). This will be assessed on whether the proposed costs are eligible, accurate, realistic and justified in terms of the proposed project plans, sufficient to provide the deliverables sought, represent fair market value and are sufficiently disaggregated to judge that this is the case. BEIS will not normally pay overheads over 20%, unless robust justification is provided for this being surpassed. The eligible costs are set out in Appendix 3: Eligible and Ineligible Costs.
Criterion 4b: Additionality and value for money (15%)
Guidance for criterion 4b: • Explain how and why the availability of public funding makes a material difference to the ability of this project to progress (at all, and in the proposed timeframes), and what would happen in the absence of public funding. Please make clear the key uncertainties / risks around the outcome of the project that mean public funding is necessary to de-risk the project. • Describe why the proposed project provides good value for money and fair market value for BEIS. Qualify and quantify the savings that are being passed on to HM Government to reflect the asymmetric balance of risks and benefits accruing to the project consortium and HM Government. For example through widely sharing the knowledge to support HMG goals, or through reasonable day rates or reduced rates on subcontracts. Match funding and in-kind contributions are not allowed in Stream 2A. • Provide indicative information on Stream 2B demonstrator/FEED project costing. Please check the eligible costs in **Section 8.4**. Outline where you expect the match funding required for the Stream 2B demonstration/FEED to come from and the level of that match funding.

Criterion 5: Project delivery (25%)

Guidance for criterion 5: This criterion will assess the effectiveness, feasibility and efficiency of the delivery plan and risk management approach, as well as the skills and capabilities of the project team.

Criterion 5a: Delivery plan, risk management and knowledge sharing (15%)

Guidance for criterion 5a:

Attachments should be provided covering key work packages, Gantt chart and risk register, which will be assessed. The delivery plan will be assessed on the basis of expected effectiveness and efficiency of delivery, including its completeness, appropriateness, deliverability in timeframe and access to materials facilities and skills.

- Provide the **key work packages** document for the Stream 2A feasibility study summarising the delivery plan. Outline and describe a project plan, listing the key tasks, skills and competencies required, and timescales.
- Provide a separate high-level **Gantt chart** for Stream 2A, including identifying key milestones, interdependencies and critical path items.
- Provide a high-level **project risk register** for the Stream 2A feasibility study and any risks that are foreseen for the proposed Stream 2B demonstration/FEED, identifying key risks and providing suitable management and mitigation strategies. In addition, provide a description of the risk management process, including how risks will be identified & rated, risk ownership, reporting and escalation.
- Give evidence of access to any specialist facilities or materials needed to complete the feasibility project.
- Describe your indicative plan for the Stream 2B project, including timeframes and key roles. Identify long lead time capital items (e.g. electricity supply connection, gas pipework and electrolyser). Provide evidence of the feasibility to deliver a Phase 2B project in the time available i.e. to complete by February 2025.
- Describe how the evidence generated by the feasibility study will be shared with industry. The information shared should include lessons learned during the project and any challenges faced during delivery, as well as the public feasibility report. Provide details of the organisations/channels that the information will be disseminated through (e.g. meetings, webinars, events, industry publications). Explain how the findings will support stakeholder understanding of how to design, implement and deliver a hydrogen solution in an industrial application.

Criterion 5b: Project team skills and capabilities (10%)

Guidance for criterion 5b:

- Provide an **organogram** outlining the involvement and roles of key organisations and individuals.

- Provide brief **CVs** of key individuals within the project team, including partner organisations, in an attachment to this criterion as supporting information (CVs should be no longer than 2 pages each).
- Describe the relevant skills, qualifications, and experience of main project team members, including relevance to the role in the project and tasks to be undertaken. Give details of previous relevant work / projects carried out by specific team members, including the date, location, client, project size and relevance to this proposal.
- Describe whether and how the team may develop for the proposed Stream 2B demonstration/FEED.
- Demonstrate strong commitment of all participating organisations for Stream 2A, as well as letters of support from any proposed Stream 2B partners. Provide letters of support from any other organisations particularly key to the delivery of Stream 2B, for example key subcontractors or suppliers of long lead time capital items.
- Explain how the project team will ensure they have sufficient capacity to deliver the project(s), in particular if involved in multiple IHA applications (or other funding applications).

6.2. Scoring Guidance

We will select projects based on their assessment against the criteria outlined in **Section 6.1**. The projects will be scored using the scoring system set out below in **Table 2**.

Score	Description
1	**Not Satisfactory**: There is no evidence to **very little evidence** that the question has been satisfactorily answered and **major omissions** are evident.
2	**Partially Satisfactory**: There is **little evidence** that the question has been satisfactorily answered and **some omissions** are evident. **Much more detail is needed.**
3	**Satisfactory**: There is **reasonable evidence** that the question has been satisfactorily addressed but **some omissions** are still evident and **further detail** is needed.
4	**Good**: The question has been well addressed with a **good evidence base**, with only **minor omissions or lack of detail.**
5	**Excellent**: There is **clear evidence** that the **question has been completely addressed** in all aspects, with question answered clearly, concisely with a **strong evidence base**.

Table 2: Scoring guidance

6.3. Selection Approach

Applications will be assessed by a minimum of three assessors, which could include BEIS assessors and independent assessors[7] (technical and commercial experts). The score given to each sub-criterion (or criterion where there are no sub-criteria) will be based on the information provided in the response to that sub-criterion; however, assessors will consider the information in the context of the wider application for the purposes of clarity and consistency. Applicants should ensure all information key to each sub-criterion is included in the response to that sub-criterion, and where relevant documents are attached that these are clearly referenced. A moderation meeting will be held at the end of the assessment process to agree the overall weighted scores for each of the projects. To be eligible to receive funding, a project must achieve a score of at least 2 out of 5 against each sub-criterion, with a minimum total weighted score of 60%. Therefore, an application which leaves a sub-criterion answer blank will not be eligible. BEIS may, at its discretion, request clarifications or information before making a final decision.

Suppliers will be ranked in order of merit. The highest-scoring proposals will be put forward for Stream 2A funding if they meet the minimum scores and eligibility for funding. BEIS will fund projects up to the Stream 2A total of £2 million, giving a minimum of 5 funded feasibility studies, provided sufficient eligible and quality applications are received.

If a project has applied to both Stream 1 and Stream 2A and has scored highly enough to be awarded funding in either, BEIS will consider which stream is most appropriate for the project and there will be a discussion between BEIS and the project team around the stream allocation.

[7] All external reviewers will have signed up to adhering to strict conflicts of interest and confidentiality terms.

7. Deliverables

Stream 2A projects will be expected to deliver a publishable feasibility study report for their proposed solution, in an accessible format, and contribute to knowledge dissemination and sector capacity-building. Projects will also be required to produce a presentation of interim findings approximately halfway through the project timeframe. The date of this milestone will be agreed between BEIS and successful applicants to the Stream 2A competition. It should be noted that SBRI contracts require that project outputs are shared publicly – therefore all information apart from commercial-in-confidence information will be required to be shared.

For more information on knowledge dissemination requirements see **Section 12.**

Stream 2A feasibility study reports should contain, at a minimum:

- A summary of the project and the feasibility study objectives, and how the project performed against these.
- Main findings from the study, including:
    - technical and regulatory feasibility
    - expected performance of the solution including detailed technical data of the proposed solution (e.g. efficiencies, % emissions reduction and gCO_2e/MJ_{LHV} H_2)
    - expected costs of the solution (e.g. £/MWh H_2 and levelized cost of abatement), including capital and operating costs, for the demonstration and commercial use.
    - carbon emissions savings potential and potential contributions to net zero targets
    - assessment of the benefits and challenges of the solution and process risks
    - how the process could be scaled and replicated more widely
    - key lessons learned in the feasibility study phase and describe how to address any risks, challenges and uncertainties associated with the proposed technology.
- A summary of the dissemination plan and progress against this.
- A summary of the social value derived through the contract, including emissions and environmental impacts.
- A Stream 2B project delivery plan, including:
    - engineering design for the demonstrator implementation, or detailed plans for the FEED work
    - detailed cost estimates for the demonstration/FEED. We would expect at least Class 4 AACE cost estimates for the demonstration. The levelized cost of hydrogen generation should be in £/MWh and a levelized cost of abatement in £/tCO_2e over the system counterfactual is recommended.
    - a plan for how the solution will continue to be developed (and/or used) after the funding for the demonstration/FEED ends
    - information on planning permissions requirements, environmental permitting requirements and electricity connection requirements, where relevant
    - outline safety plan and approach to safety during the demonstration, including roles of expert staff and safety plan approach.
- An explanation of how the demonstration/FEED will enable hydrogen fuel switching and the applicability of the solution and knowledge across industrial sectors in the UK.

- An assessment of how the solution, technologies and knowledge will continue to be developed, commercialised and/or used after funding ends, including potential for technology roll-out and potential carbon savings across sectors.

Alongside the feasibility report, suppliers will need to deliver appropriate explanations of the analysis undertaken and the raw data used. The report will require a log of assumptions made when conducting the feasibility study, along with an assessment of the impact that gaps in the data may have on the viability of the hydrogen fuel switching solution.

If there are aspects of this report which are commercially confidential, then project teams will be required to provide a version of the report that can be published. Omissions on the basis of commercial reasons should be discussed with BEIS at the earliest opportunity once the phase 1 contract has been awarded.

BEIS will appoint a Monitoring Officer[8] to each project to monitor the delivery of the project deliverables and assure the feasibility report for submission. Project teams will be required to meet with their Monitoring Officer at least monthly. For more information about the monitoring and reporting requirements for this Competition, see **Section 9**.

The feasibility study will act as the Stream 2A project closure report. Projects which do not submit these deliverables will not be eligible for advancement into Stream 2B.

For indicative information on expectations for 2A project progress at the point of Stream 2B application, see **Section 8.6.** Projects should bear this in mind when planning their feasibility studies.

[8] In some instances, the monitoring services will be provided by an external organisation. External organisations will be subject to a confidentiality agreement.

8. Indicative Information: Stream 2B

8.1. Stream 2B: Overview

Stream 2B will follow on from Stream 2A and will provide grant funding for demonstration projects, or Front-end Engineering Design (FEED) work; demonstration projects are likely to score better than FEED work as their outcome would better meet the objectives of the programme. For applicants considering applying to Stream 2A and then Stream 2B for a FEED study, the FEED study can be completed on a hydrogen supply route that would not be operational by January 2025, but we would expect Final Investment Decision (FID) to be taken shortly after the FEED study is complete, with a view to implementing by the end of 2026 to support IHA programme objectives. The FEED study in IHA must be on an innovative end-to-end project.

The draft project scope, eligibility and assessment criteria are outlined in the following sections. Up to £7 million funding will be available for Stream 2B; BEIS however reserves the right to reallocate funding between streams. The contracts will be based on the BEIS Grant Funding Agreement and Grant Offer Letter and will be the same as those for Stream 1.

8.2. Stream 2B: Timelines

BEIS anticipates that the Stream 2B competition will likely open for applications for successful Stream 2A projects in December 2022. A separate Competition Guidance Document will be published closer to the time and a separate application is required. Indicative key dates for Stream 2B are shown below, but remain subject to change**.**

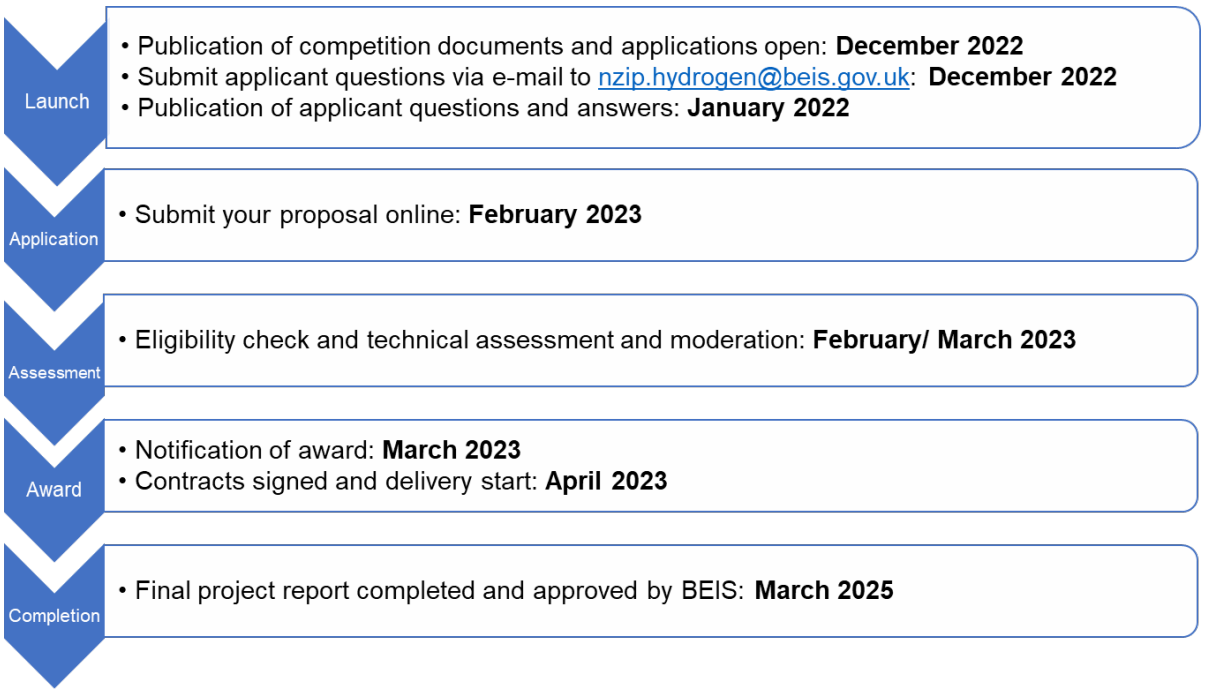

Figure 3 Stream 2B Indicative Timeline

8.3. Stream 2B: Eligibility for Funding

Only projects which have participated in Stream 2A will be eligible to apply for Stream 2B funding. No new applicants will be permitted for Stream 2B. Projects which are completing Stream 2A (see **Section 7** for the required deliverables) will be invited to complete a new application form for progression into Stream 2B. To be considered for Stream 2B, Stream 2A projects must meet the eligibility criteria outlined below. Eligible projects will then be assessed for progression into Stream 2B, using the draft assessment criteria detailed in **Section 8.5** below.

Some variation in project partners may also be permitted at this stage but must be justified by lead project partners. Where applicable, new partners/changes in lead partners will require additional financial due diligence checks.

To be eligible for Stream 2B, projects must fulfil the following eligibility criteria. These are subject to change.

1. Technology and project scope: demonstration/FEED projects must meet the project and technology scope criteria (Criteria 1) as applied to the Stream 2A competition.
2. Innovation and technology readiness: projects must meet the innovation and technology readiness criteria (Criteria 2) as applied to the Stream 2A competition.
3. Project activity: projects must meet the project activity criteria (Criteria 3) as applied to the Stream 2A competition
4. Multiple applications and projects: each Stream 2A project can only apply once to Stream 2B and the project scope should not be materially different than that proposed at Stream 2A application stage; project modifications can be agreed with BEIS.
5. Project timescale: final demonstration/FEED reports will be complete and signed off by the project monitoring officer by Friday 7th March 2025 (as outlined in Eligibility Criteria 5 of the Stream 2A competition).
6. Contract size and match funding: applicants must apply for funding of up to £7 million and provide evidence of availability of the required match funding within 3 months of signing the Grant Funding Agreement. Any other public funding required to deliver the project must be confirmed at 2B application stage.
7. Eligible project costs: applications for funding must only be for eligible costs (indicative eligible costs outlined in **Section 8.5** below).
8. Applicants and project team composition: applications must be led by private organisations or research and technology organisations (RTO), and may not be led by

universities or other non-commercial organisations (as outlined in Eligibility Criteria 10 of the 2A competition)

9. UK requirements: the physical demonstrator (where applicable) must be in the UK and > 50% of the work (by value) must be carried out in the UK.
10. Participation in Stream 2A: to be eligible for progression to Stream 2B, all projects must have participated in Stream 2A.

8.4. Stream 2B: Scope of Eligible Costs

An indicative overview of the scope of projects for Stream 2B is:

- Energy inputs to hydrogen generation: the eligible costs include low carbon energy generation (e.g. solar PV, wind, biogas generation) and the associated infrastructure (e.g. electricity grid connection, direct wire or pipeline), provided they are required for the demonstrator as an input to the hydrogen generation process and are not the focus of the project or of the funding requested.
- Hydrogen generation, storage, delivery systems and end-use equipment required for the demonstration system are eligible.
- Peripheral equipment and systems required for integration of components together and with industrial facility (e.g. control systems), are eligible, provided they are essential for the demonstrator.
- Opex (Operating Expenditure) associated with the demonstration period (e.g. electricity costs and labour) are eligible. Opex for commercial operation is excluded.

Eligible costs are those associated with the demonstration/FEED, not the commercial deployment of the project or the wider infrastructure on the industrial or pilot site. However, the industrial goods/commodities (e.g. low carbon ceramics / oxygen) produced during a trial period can be sold on the open market and the assets installed during the funded activities can continue to be operated after the end of the demonstration period. Income generated through the sale of commodities produced during the demonstration cannot be used as match funding, which projects must provide evidence of having secured within three months of the funding agreement being signed.

Please note that residual values of capital items should be considered, so that eligible cost is only the use of the asset for the purposes of the funded activity (i.e. the depreciation). The size of the residual value at the end of the demonstrator will be dependent on the maturity (TRL) of the capital item. For example, for mature assets (e.g. solar PV), the eligible cost is only the depreciation costs for the duration of the project. Fully bespoke R&D assets may only have a value for the duration of the project so may have limited residual value afterwards. More detail on residual value estimates can be found in the IHA Stream 1 guidance.

The Stream 2B Competition will support successful applicants through subsidies awarded in the form of grants towards the eligible costs of the proposal. The maximum amount of grant

funding that can be provided towards eligible project costs (as a percentage of the project cost) is summarised in **Section 8.8.**

Please note this list of eligible costs is indicative only at this stage and BEIS reserves the right to change this in the Stream 2B competition guidance.

8.5. Stream 2B: Assessment Process and Criteria

The assessment process for Stream 2B is likely to be very similar to the assessment process for Stream 2A (in terms of assessors, moderation and minimum scoring required for eligibility for funding). See **Section 6** for more information on the Stream 2A selection approach.

The assessment criteria for Stream 2B are likely to be similar to those used in the Industrial Hydrogen Accelerator Stream 1 Guidance notes; please see Table 3 for an overview. Please note that Stream 2B demonstration projects are likely to score better than FEED work as their outcome would better meet the objectives of the programme and the evidence developed is likely to lead to more progress on industrial decarbonisation; this would be reflected in the innovative solution, emissions, value for money and knowledge sharing sub-criteria in particular.

Table 3 Indicative Stream 2B assessment criteria

Criteria	Criteria weighting	Sub-criteria	Sub-criteria weighting
1 Innovative solution	10%	Innovative solution	10%
2 Performance	35%	a) Performance and feasibility	15%
		b) Cost of solution	10%
		a) Emissions, environment and safety	10%
3 Project financing	25%	a) Project finance form	10%
		b) Additionality and value for money	15%
4 Project delivery plan	30%	a) Delivery plan and risk management	15%
		b) Skills and capabilities	10%
		c) Knowledge sharing	5%

8.6. Stream 2B: Expectations at Stream 2B Application Stage

Stream 2A feasibility studies will be developing detailed information on the Stream 2B demonstration/FEED plan, including information on the technical requirements and costs. An

indicative list of what projects should aim to have completed before applying to Stream 2B in early 2023 is below:

1. **Demonstrator/FEED planning documents, including**:
    a. Detailed technology / demonstrator costing and system performance, at a minimum Class 4 AACE cost estimates.
    b. Project plan, including detailed work packages, resourcing & milestone payments
    c. Evidence that delivery plan can achieve all objectives, including the demonstrator being operational, or FEED complete, by February 2025
    d. Detailed risk register, mitigation strategies and contingency planning
    e. Assessment of technology commercialisation and development plan
2. Front-end-engineering design (FEED) work planned and supplier in place, at minimum
3. Confirmation that match funding can be provided; evidence must be provided by the first Stream 2B project milestone.
4. Draft supply chain relationships for key work packages, with letters of support.
5. [Demonstration projects only] Information on planning permission requirements and timelines for build and operation of demonstrator, and engagement with relevant planning body (e.g. pre-application), or letter of support, to evidence clear route to full planning permission for their proposed demonstrator
6. [Demonstration projects only] Discussions with Environment Agency (and Health and Safety Executive where relevant) and provisional plans/timelines for sign-off.
7. [Demonstration projects only] Initial discussions with DNO/other supplier on electricity supply/connection, where relevant. Ideally draft electricity supply agreement in place where needed (e.g. formal grid connection offer or direct wire).
8. [Demonstration projects only] Draft agreements on hydrogen supply / equipment, with letters of support and timelines (e.g. electrolyser production slot discussed and specification and delivery timescales agreed).
9. [Demonstration projects only] Consideration of use of assets post-demonstration and source of operational costs/funding where needed.

8.7. Stream 2B: Stage Gates

The IHA programme will undergo a stage gate review approximately twice a year. The purpose of the stage gates will be to review the progress of all projects and to ensure the programme is meeting its objectives.

For Stream 2B, the first stage gate is expected to occur in September 2023. The exact timing and requirements for this stage gate will be similar across projects but will be agreed between individual projects and BEIS prior to contracts being signed, based on the specific requirements of the project. The anticipated requirements for this stage gate are:

1. Detailed mobilisation and demonstration/FEED planning documents:
    a. Updated project plan and evidence that delivery plan can achieve all objectives, including the project being complete by February 2025
    b. Updated detailed risk register, mitigation strategies and contingency planning
    c. Benefits realisation and management plan
2. [Demonstration projects only] FEED work to be in advanced stages or is complete

3. Formalisation of all key supply chain relationships. Heads of terms/final draft commercial contracts for key work packages and draft end-user commercial contracts if applicable (note – this is applicable for sub-contractors/suppliers only, details of projects partners must be provided at application stage, with heads of terms agreed within one month of IHA contract signature).
4. [Demonstration projects only] Evidence of planning permission/certificate of lawfulness obtained for build and operation of the demonstrator (where relevant), or at minimum pre-application checks and a provisional plan for approval.
5. [Demonstration projects only] Relevant sign-off (where needed) from HSE, Environment Agency and equivalents in devolved regions, or evidence of robust plan with pre-application.
6. [Demonstration projects only] Electricity supply agreement in place where needed (e.g. formal grid connection offer or direct wire) with timeframes agreed.
7. [Demonstration projects only] Hydrogen supply / equipment agreed e.g. electrolyser production slot reserved and specification and delivery timescales agreed.

The stage gate will include a discussion between the project team, the monitoring officer, technical experts and BEIS representatives focussed on the delivery plan and the key risks and challenges. The discussion will ascertain whether any of the residual risks are unacceptable to BEIS and the project team, to make a joint decision on if/how to progress. Where, in the opinion of the BEIS project team, unsatisfactory progress has been made, the BEIS SRO will review the evidence and make the final decision on progressing.

The second stage gate is expected to occur in Spring 2024. The exact timing and requirements for this stage gate will be agreed between individual projects and BEIS prior to contracts being signed. It may be based on project specific milestones, such as the completion of FEED. Subsequent stage gates will occur at approximately 6 month intervals.

8.8. Stream 2B: Grant Funding Intensities

The Stream 2B Competition will support successful applicants through subsidies awarded in the form of grants towards the eligible costs of the proposal. The grant funding intensity rules will be the same as those as applied to the Stream 1 competition. A summary of those rules is included here.

The rules set out in this document apply equally to all applicants from England, Wales, Scotland, and Northern Ireland that are eligible to receive funding (except where specifically indicated below, regarding the definition of a parent and associated grant intensity requirements). Grants awarded to applicants and partner organisations from Northern Ireland will also be subject to scrutiny from the European Commission in accordance with Article 10 of the Northern Ireland Protocol in the UK/EU Withdrawal Agreement. If the European Commission considers a business or any undertaking to have been incorrectly in receipt of grant funding, that undertaking is likely to be required to repay any aid received to the value of the gross grant equivalent.

Applicants to Stream 2B will be required to specify whether project costs classify as Experimental Development or Industrial Research in the Project Costs Breakdown Form at application stage.

The maximum amount of grant funding that can be provided towards eligible project costs (as a percentage of the project cost) is summarised in Table 5. The maximum funding level available varies by organisation size and research category. These maximum funding amounts apply to applicants and, if relevant, consortium partners.

Table 4 SME Definitions

Company category	Staff headcount	Turnover	OR	Balance sheet total
Medium	< 250	≤€50m (approx. £40m)		≤€43m (approx. £35m)
Small	< 50	≤€10m (approx. £8m)		≤€10m (approx. £8m)

For applicants and project partners based in Great Britain, a parent company is defined as an enterprise with controlling interest (>50% control) of the subsidiary company. The data concerning the parent company and the applicant company cumulatively must be used when calculating the organisation size (as outlined in Table 4) and subsequent maximum funding entitlement (as outlined in Table 5).

For applicants or project partners based in Northern Ireland, for the purposes of the IHA competition, the definition of a parent company includes any 'partner enterprise(s)' or linked enterprise(s)' as defined in Annex I of the guidance linked in the footnote below.[9] When calculating the organisation size (as outlined in Table 4) and subsequent maximum funding entitlement (as outlined in Table 5), applicants & project partners based in Northern Ireland must adhere to the instructions outlined in Annex I of the linked guidance.

Table 5 Maximum Funding Amounts for Stream 2B

Research Category	Business Size	Maximum amount of funding towards eligible Project Costs
Industrial Research	Small	80%
	Medium	75%
	Large	65%
Experimental Development	Small	60%
	Medium	50%
	Large	40%

It is a requirement of receiving this funding that projects ensure that the results of the project are widely disseminated through conferences, publication, open access repositories, or free or open source software.

Compliance with grant intensity levels is a further requirement of this Competition and the risk of non-compliance rests with the grant recipient. It is therefore crucial that you address these

[9] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02014R0651-20210801

rules within your application, as any errors at this stage may result in BEIS being able to offer only a reduced level of funding or repayment of grant by applicants.

For collaborations containing different sized enterprises or research organisations, funding intensity is related to the company (or parent company if applicable) receiving the aid.

Projects may include a mix of industrial research and experimental development related costs. For such projects the maximum subsidy levels will be based on the individual thresholds for that type of research activity.

For example, a project led by a small business, 25% of whose costs classified as industrial research and 75% classified as experimental development, would have a maximum aid threshold, based on project out-turn costs, of 65%. A large business consortium partner 50% of whose project costs classified as industrial research and 50% classified as experimental development would have a maximum aid threshold, based on project out-turn costs, of 52.5%. See the IHA Stream 1 competition guidance and project cost breakdown form for further information.

It is essential to ensure that the total grant funding for the project from public sources does not exceed the permitted percentages stated for the relevant subsidy category. Grant recipients must adhere to all Subsidy Control obligations set out in the Grant Funding Agreement. Failure to do so may result in termination and clawback of funding.

Whilst BEIS will check the information provided to try and ensure that applicants meet the requirements of the grant intensity levels outlined in Table 5, applicants should establish that they fall within the grant intensity rules before submitting applications. BEIS requires applicants to notify them of any change to their situations or circumstances during the project.

In applying to this Competition, you must state if you are applying for, expect to receive, or have received in the past 5 years, any funding for your project from public authorities in the UK or the European Union (EU) or its agencies. Any other public funding will be cumulated with BEIS funding to ensure that the public funding limit and the grant intensity levels are not exceeded for the project.

If an applicant breaches the grant intensity requirements for this Competition, for whatever reason, BEIS requires repayment of any grant received, including interest, above that which was due. In this situation applicants will be required to repay any funding received.

Applicants may be eligible to apply for Stream 2B as well as other public funding. Applicants must ensure that any other sources of public funding that are required for the demonstration/FEED to go ahead must be confirmed at the point of the Stream 2B application, and there must be no overlap in the scope of the costs funded. Stream 2B applications will not be successful if their delivery relies on other funding sources which are not yet confirmed at the point of application. It is essential to ensure that the total grant funding for the project from public sources does not exceed the permitted percentages stated for the relevant subsidy category.

In addition, if seeking to use non-IHA public funds, the applicant will be required to provide evidence that the granting authority gives permission for the funding to be used as such. If considering the use of non-IHA public funds within their projects, applicants are further advised to consult the specific rules associated with the receipt of that funding.

8.9. Stream 2B: Deliverables

Stream 2B will provide grant funding for demonstration projects, or Front-end Engineering Design (FEED) work, with a preference for demonstrations systems, from hydrogen production to end-use, to provide further evidence on performance and costs.

An indicative list of Stream 2B deliverables is:

- A physical demonstration of their end-to-end system, or full FEED work
- Interim findings reports for publication throughout the project lifecycle, for the purposes of knowledge dissemination (exact content and dates to be agreed between individual projects and BEIS)
- Knowledge dissemination activities (see **Section 12** for more information)
- An evidence-based final project report for BEIS (and other government departments) detailing:
    - the design and development of the system
    - demonstrator/FEED results, including performance of the solution and detailed technical data (e.g. efficiencies, % emissions reduction and gCO_2e/MJ_{LHV} H_2)
    - costs of the solution (e.g. £/MWh H_2 and levelized cost of abatement), including capital and operating costs, for the demonstration and estimates for commercial use.
    - carbon emissions savings potential and potential contributions to net zero targets
    - assessment of the benefits and challenges of the solution and process risks
    - environmental, safety and regulatory considerations and requirements
    - how the process could be scaled and replicated wider
    - key successes and lessons learned in the project
    - how to address any risks, challenges and uncertainties associated with the proposed technology.
- A version of the final project report that can be published.
- An assessment of how the process, technologies and knowledge will continue to be developed and/or used after funding ends.

9. Reporting

9.1. Project Monitoring and Reporting

If successful, each project will be required to submit a completed BEIS project plan and finance form, to be signed off by BEIS prior to the start of delivery. This will provide information about the project's deliverables and milestones. This is a key document which BEIS will use to monitor the project. The successful supplier(s) for this competition will also need to register on the Jaggaer platform.

Each project will be allocated a Monitoring Officer at the point of notification. In some instances, the monitoring services may be provided by an external organisation contracted by BEIS. External organisations will be subject to a confidentiality agreement.

This competition also has a requirement to demonstrate the benefits and key performance indicators (KPIs) that it is seeking to realise for the Industrial Hydrogen Accelerator programme and the wider Net Zero Innovation Portfolio. Project monitoring and reporting is required to track project progress against these benefits and KPIs, as well as progress towards milestones.

9.2. Reporting Requirements

Applicants will undertake their own project management and will be overseen by their appointed Monitoring Officer.

Regular project monitoring and reporting will take two forms:

11. Project teams will be required to meet with their Monitoring Officer once per month to discuss project progress and highlight successes, issues, and risks.

12. Projects will be required to submit a brief project progress report at the mid-way point of the project. This may be submitted alongside the presentation of interim findings (see **Section 9.3** below). We expect this report to cover, as a minimum:

- progress against the project delivery plan and project milestones
- upcoming work over the next quarter
- financial information (including budget spend so far and budget forecast)
- an updated risk register (including flagging where risk ratings have changed or new risks/issue have emerged)
- any key lessons learnt during delivery, and progress against relevant programme benefits.

9.3. Milestone Payments

Payments will only be made by BEIS after an agreement has been signed between the applicant and BEIS. Further details on payments and financial requirements will be provided by BEIS as part of any funding agreement. These will include the requirement for detailed statements of expenditure and requests for funds in a specified format. Payments will be made on a milestone basis upon receipt of a detailed statement of expenditure. They will be subject to satisfactory progress against the project's work plan.

Applicants must satisfy the due diligence, financial and organisational checks required prior to receiving public funds.

BEIS anticipates that Stream 2A projects will have 2-3 milestones:

- a mid-point milestone with projects required to deliver a presentation of findings so far
- a draft feasibility report to be delivered in January 2023 and
- a final milestone once the report has been signed off by BEIS.

The exact milestones and associated payment amounts will be agreed on a project-by-project basis prior to the start of delivery.

BEIS recognises the importance of remaining flexible and pragmatic throughout project implementation and will consider changes to ensure the most effective use of funds. Approval from BEIS should be sought for changes to the overall impact and outcome of projects and any significant changes in outputs. Requesting a significant change may necessitate a re-examination of project purpose or implementation or in some circumstances, may invalidate the contract. BEIS must approve any changes that require the movement of more than 10% of the total budget between budget lines. An updated work plan and budget may also be needed when requesting changes.

Milestone claims for Stream 2A must be invoiced in time to be processed and paid by 31st March 2023. If circumstances outside the control of the project occur which impact on delivering the expected outputs, the project must inform their Monitoring Officer as soon as possible. The Monitoring Officer will consult with BEIS to determine the best course of action.

Funds should be claimed against evidence of expenditure usually in the form of a receipted invoice accompanied by evidence or copies of work undertaken. After each stage of work is completed, you will be expected to complete and submit a claim form. Claims should be submitted to the Monitoring Officer for processing and will be paid within 30 working days of a complete and satisfactory claim being received. Finance is released against work carried out rather than a lump sum on approval.

9.4. Benefits Realisation and Management

During the application process, each project will be asked to select one or more benefits that their project will contribute to, within the Programme Performance Indicators and Benefits

section of the online application form. Projects should select benefits for which they can report on a minimum of one measure, and should note that if successful, they will be encouraged to report on more than one measure for their selected benefits. The Programme Performance Indicators and Benefits section is not scored as part of the application process but is mandatory to complete.

Table 6 Benefits, measures, KPIs

Benefit/Measure	Links to KPIs
Accelerate Commercialisation	
Number and value of contracts signed	8
Amount of private funding leveraged at project close	6i
Amount of follow-on funding received	6ii
Cost Reduction of Low carbon Technologies	
Reduction in the cost of the technology	
Demonstrating UK leadership on the innovation	
Number of domestic and international collaborations	4
Number of invitations to speak at international events	
Increased Knowledge Simulating Further Innovation	
Amount of domestic and international interest in the technology	4
Number of projects sharing skills/ knowledge with companies through consultancy or human resources (staff exchange/contractors)	4
Publication of project reports	4
Amount of media/research coverage, including announcement of new projects/partnerships	4
Growth and Resilience in UK Companies	
Number of jobs supported	3
Number of new companies in the project's supply chain	3
Increase in the market potential of the innovation	5

The programme will be reporting against a selection of the benefits such as those listed above, using appropriate measures to provide evidence for each of these benefits. The corresponding KPIs listed relate to the portfolio-level NZIP KPIs discussed in **Section 9.5**. This Table 6 is **for**

information only and serves to outline the expected level of granularity for reporting against benefits.

Based on the benefits selected in their application form, each successful bidder will be asked to complete a Benefits Plan (see Appendix 2: Example Benefits Plan for an example) at the project kick-off meeting. Some benefits will have a quantitative measure that will be tracked using metrics that the project provides; other benefits are qualitative, the success of which could be determined by the quality of reports and other evidence produced. At this stage, projects may also identify additional measures that they will report on to demonstrate a particular benefit, although this is not a necessary requirement.

Progress against projects' benefits reporting will be monitored on a quarterly basis by the project Monitoring Officers. Projects will be required to make available any project data that is reasonably necessary for reporting against the project benefits. They will also be required to declare where they may need assistance in contributing to the project benefits.

In Stream 2A of the Competition, it is expected that projects may not be able to demonstrate significant contribution to the programme benefits. However, given the level of increased information and detail expected to be generated in Stream 2B, projects will be required to submit an updated, detailed Benefits Plan, including how each measure will be reported against as part of their application to the Stream 2B competition

9.5. Key Performance Indicators

BEIS requires all funded projects under the Net Zero Innovation Portfolio (NZIP), including all projects in the IHA programme, to report on key performance indicators (referred to as NZIP KPIs) to provide a consistent approach to reporting evidence, and to track and measure key outputs, outcomes and impacts. The evidence collected is used to demonstrate the impact of the NZIP on achieving the government's Net Zero ambitions and is necessary to be able to run future competitions.

Project lead organisations will be required to report on KPIs at various intervals for each project, including at the start of the project, during project delivery, at project closure and for three years after project closure. BEIS will supply funded projects with a reporting template to complete at set intervals, and recipients are expected to return the template to their Monitoring Officer upon completion, who will review and quality assure it. At project start, your BEIS Monitoring Officer will provide further details about the calculation of these KPIs and assist with the initial completion and measurement.

Please note that it may at times be necessary to make changes to the NZIP KPIs, data collection modes or frequencies. We will endeavour to keep all changes to a minimum and communicate any implications to you via the Monitoring Officers in advance of collection.

BEIS will be collecting the following KPIs, with data provided by Monitoring Officers marked in *italics*. Not all data will be collected annually.

KPI	KPI description	Metrics
KPI 1	*Number of NZIP projects supported*	• *Project start and completion.*
KPI 2	*Number of NZIP projects that have met objectives*	• *Extent to which project objectives have been met to date.* • *Change in objectives and reasons for change*
KPI 3	*Number of organisations supported to deliver the project*	• *Lead partner delivering the project: name, organisation size and number and type of jobs supported within the organisation to deliver the project.* • *Other partner organisations involved in delivering the project as named on the Contract or Grant: name, organisation size and number and type of jobs supported within the organisation(s) to deliver the project.*
KPI 4	Number of active contractual and non-contractual business relationships supported	• Number of contractual relationships: name and type of contractual relationship. • Number of informal non-contractual business relationships: name and type of non-contractual relationship. • Extent to which your organisation expanded its network of business relationships as a result of the project
KPI 5	Technology Advancement	• Technology Readiness Levels (current and anticipated). • Other technology improvement indicators: patents applied for or granted; academic, technical or non-technical publications generated and knowledge exchange events attended (such as conferences)
KPI 6i	*Initial Financial Leverage to deliver project*	• *Project funding structure: Amount in £ million of BEIS, Other Public Sector and Private Funding.*
6ii	Follow-on Funding secured	• Amount of follow-on funding raised and the source (public or private).
KPI 8	Commercialisation advancement	• Commercial readiness levels (current and anticipated) • Steps towards commercialisation incl. licensing agreements, commercial partnerships, product certifications etc.; national/ international standards passed • UK and International sales secured and their value (£million)
KPI 9	CO2 emissions reductions	• Scope and scale of project impact on carbon emissions • Route to achieving carbon emissions reductions
KPI 10	Policy impact	• Whether, how, and to what effect evidence from the project has informed policy development • Whether projects have engaged in activities with industry or civil society

9.6. Evaluation requirements

Beyond these NZIP KPIs, BEIS conducts independent evaluations of many of its programmes. The funded project organisation will be required to collaborate in reasonable evaluation activities, including, but not limited to, providing programme-specific KPIs, completing questionnaires or surveys, participating in interviews and workshops, communicating the learnings from the project, providing costs/sales data and elaboration of any of the measures covered in the NZIP KPIs.

10. Financial Information

Applicants are requested to provide a fixed price quotation for the work. A detailed cost breakdown is required to enable assessment of value for money. Financial information should include costs for the feasibility study, detailing labour (including manpower rates), material and capital equipment costs, and any travel and subsistence requirements. Applicants are required to complete a Project Cost Breakdown Form as part of the application process.

Estimated project costs should also be provided for the Stream 2B demonstration/FEED study.

10.1. Financial viability checks

BEIS will carry out financial due diligence on all preferred bidder(s). This may include, but not be limited to, credit checks and the detailed scrutiny of comprehensive reports resulting from said credit checks.

BEIS may need to check with bidder(s) that the information within the report is correct. BEIS may also request the latest accounts and financial information from the preferred bidder(s).

Financial due diligence checks will include looking at the latest independently audited accounts filed on the Companies House database. BEIS reserves the right to also verify the financial viability of all project partners and key sub-contractors.

Where a business is not required to file accounts with Companies House, other financial information may be requested to enable an appropriate financial viability review to be undertaken. We will be looking for evidence of your ability to resource the cashflow for the project appropriately, so the information we request will be focused on understanding how your business operates in this respect.

The outcome of BEIS financial due diligence may result in preferred bidder(s) not being awarded a Contract.

Before your project starts, BEIS will ask for evidence that you have the funding mechanisms in place to manage your cash flow across the life of your project. This could include letters of credit or other such mechanisms.

BEIS will not make payments in advance of need and typically makes contract payments in arrears on satisfactory completion of agreed milestones and deliverables. BEIS understands, however, the difficulties which small businesses may face when financing this type of project. BEIS will explore cash flow issues with the applicant as part of developing the financial and milestone profile during the Contract Award process. BEIS will offer flexibility in terms of profiles and payments, within the confines of the requirements for use of public money within which it operates.

11. Notifications and Publication of Results

11.1. Notification

Applicants will be informed by email whether their application has been successful.

BEIS may wish to publicise the results of the competition, which may involve engagement with the media. At the end of the application and assessment process, BEIS may issue a press release or publish a notice on its website. These public documents may, for example, outline the overall results of competitions and describe some of the projects to be funded.

Some organisations may want their activities to remain confidential and you will be given a chance to opt out of any involvement in media relations activity and further case study coverage of projects, should you see this as being absolutely necessary. However, the public description of the project you provide in your application will be made available in the public domain if your application is successful, and you are not able to opt out of the project description being published.

Information about all contracts awarded under the IHA competition, including a redacted version of the contract, will be published on Contracts Finder.

11.2. Publication of Results

SBRI funding involves a high degree of risk–benefit sharing. In return for the provision of funding, BEIS expects to be able to use and share the results and outputs of the activities with other government departments.

BEIS also wishes to publicise details of the award recipients. Therefore, on or after issuing a SBRI contract, BEIS will publish the following information:

- Identity of the participant and its partners
- Project summary information including aims and expected outcomes of the project and technology area
- Total award value

Following completion of the funded projects, BEIS will publish on its website a summary of the funded activities and the outcomes achieved. This will include a final project report from each project detailing technical approach and key achievements. BEIS may also revisit projects at a later date and publish an evaluation report for the scheme as a whole.

BEIS, however, recognises the need to maintain confidentiality of commercially sensitive information. We will consult applicants regarding the nature of information to be published, to

protect commercially sensitive information. The notice of the award on Contracts Finder will also include a redacted version of the contract and the value of the contract.

12. Knowledge Dissemination Requirements

Effective dissemination and knowledge sharing are key requirements of both the Stream 2A and Stream 2B competitions, and for each competition applicants will be assessed on the scope and scale of their proposed knowledge dissemination and sharing activities. The specific knowledge dissemination activities to be delivered are at the discretion of the project and will be agreed at project award.

Projects are also encouraged to identify how they will facilitate knowledge sharing and lessons learned between other IHA-funded and other relevant projects, for the purposes of maximising the amount of information shared with stakeholders and improving the overall quality and success of the project.

Across both competitions, projects will be required to produce evaluation reports of their knowledge dissemination activities, detailing their activities & lessons learnt. The Monitoring Officer assigned by BEIS will monitor the knowledge dissemination of project teams.

Stream 2A
Projects will be required to contribute to a minimum of one knowledge dissemination activity. Examples include participation in industry workshops, conference presentations, publication of articles in peer-reviewed scientific journals, or making project data openly available. In addition, contract recipients are required to feature their projects on open platforms.

Stream 2B
Projects will be required to contribute to a minimum of three knowledge dissemination activities. Projects will be expected to increase their efforts in sector capacity-building, contributing significantly to industry conferences or trade shows, as well as engaging in wider knowledge dissemination activities such as those suggested above. To be eligible for grant funding projects must disseminate their findings through conferences, publication, open access repositories, or free or open source software.

13. Intellectual Property Requirements

The proposed arrangements for intellectual property rights (IPR) and exploitation of IPR are set out in the contract terms and conditions for this competition, in **Annex 1B**.

Subject to the requirements of **Conditions 27 and 28** of the standard terms and conditions (**Annex 1B**), applicants will retain ownership of the intellectual property generated from the project. Applicants are required to identify and record any such intellectual property and to protect patentable knowledge in accordance with **Condition 28** of the standard terms and conditions. If within five years of its creation applicants have not commercially exploited intellectual property generated from the work, then in line with **clause 28 (5)** of the standard terms and conditions, BEIS may request the intellectual property be assigned to BEIS.

14. Feedback, Re-application and Right of Appeal

A short summary of key feedback regarding the applications will be provided to all applicants. This feedback will be based on the comments of technical assessors. BEIS will provide comments where an applicant is considered ineligible in light of financial viability checks, or other eligibility criteria. No additional feedback will be provided and there will be no further discussion on the application.

The feedback from the assessors is intended to be constructive. Comments are not a checklist of points which must be answered or argued in a resubmitted application as the assessors/requirements may be different and it is your decision as to whether you act on the suggestions made.

BEIS' decision regarding any application is final and no appeal process is in place, so it is important that you make any points you wish to make clearly and concisely in the Application Form.

15. Confidentiality and Freedom of Information

The Freedom of Information Act 2000 ("FOIA") and the Environmental Information Regulations 2004 ("EIR") apply to the Department.

You should be aware of the Department's obligations and responsibilities under FOIA or EIR to disclose, on written request, recorded information held by the Department. Information

provided in connection with this procurement exercise, or with any contract that may be awarded through this exercise, may therefore have to be disclosed by the Department in response to such a request, unless the Department decides that one of the statutory exemptions under the FOIA or the exceptions in the EIR applies. Where any request is made to BEIS under the FOIA for the release of information relating to any project or applicant, which would otherwise be reasonably regarded as confidential information, BEIS will notify you of the request as soon as we become aware of it.

If you wish to designate information supplied as part of your tender as confidential, of if you believe that its disclosure would be prejudicial to any person's commercial interests, you must provide clear and specific detail as to the precise information involved and explain (in broad terms) what harm may result from disclosure if a request is received, and the time period applicable to that sensitivity. Such designation alone may not prevent disclosure if in the Department's reasonable opinion publication is required by applicable legislation or Government policy or where disclosure is required by the Information Commissioner or the First-tier Tribunal (Information Rights).

As part of the application process all applicants are asked to submit a public description of the project. This should be a public facing form of words that adequately describes the project but that does not disclose any information that may impact on Intellectual Property (IP), is confidential or commercially sensitive. The titles of successful projects, names of organisations, amounts awarded, and the description of the project may be published once the award is confirmed as final.

Additionally, the Government's transparency agenda requires that tender documents (including ITTs such as this) are published on a designated, publicly searchable web site. The same applies to other tender documents issued by the Department (including the original advertisement and the pre-qualification questionnaire (if used)), and any contract entered into by the Department with its preferred supplier(s) once the procurement is complete. By submitting a tender, you agree that your participation in this procurement may be made public. Aside from the public description of your project (see above), the answers you give in this response will not be published on the transparency web site (but may fall to be disclosed under FOIA or EIR (see above)). Where tender documents issued by the Department or contracts with its suppliers fall to be disclosed the Department will redact them as it thinks necessary, having regard (inter alia) to the exemptions/exceptions in the FOIA or EIR.

All assessors used during the assessment of applications will be subject to a confidentiality agreement.

16. Terms and Conditions

The Department's Standard Terms and Conditions of Contract as amended for the purposes of this competition will apply to this contract (see **Annex 1B**).

17. Completion of the Application Form

This section aims to guide you through the completion of the online Application Form for Stream 2A of the IHA competition. It is important that a response is provided to every question. This guidance is intended to explain what type of information applicants should consider providing to BEIS to best demonstrate the merit of their application.

Applications will be judged based on the information provided in the application form and any supporting information provided. Although questions relating to the competition can be asked during the Q&A window, there will not be the opportunity to enter into discussion about your project with the assessors or BEIS,. These guidance notes are not intended to be exhaustive; applicants are expected to develop their own responses based on your own skills, knowledge and experience. You are encouraged to be concise and to the point whilst providing all the necessary and relevant information.

Throughout the form there are boxes; in order to answer the question or provide information you should simply click on the box and begin typing or select from the drop-down menu. Questions do have word limits and when the text has reached the word limit you will not be able to add any further information and the text must be edited to fit within the word limit. CVs have a 2-page limit per individual; if individual CVs are longer than 2 pages assessors will not read beyond the second page.

All application documents must be submitted via the online application form. In the form there are opportunities to upload relevant supporting documents. In some sections, we specify the supporting information we would like to see uploaded. Uploaded documents cannot be in place of answers being provided in the Application Form itself. The application will be assessed on the answers in the survey fields. Uploaded documents should not be used as a way of circumventing the word limits for each section. If there is any reason to believe that this has occurred, the uploaded document will not be assessed.

Any graphs, diagrams or supporting evidence that you are providing to support your application should be uploaded to your submission.

17.1. Project & organisation information

The following table explains some of the key information you will be asked to provide within your application.

Section/Field	**Guidance**
Name of applicant organisation	Provide the name of the lead applicant
Project name	A brief title that can be used to summarise the project
Stream 2A Estimated start date	Select the date you would propose to start work on your Stream 2A project assuming successful funding
Stream 2A Project duration	Enter the expected duration of your Stream 2A project in months, taking into consideration the final feasibility study report must be completed and approved by BEIS by 10th February 2023.
Stream 2A Estimated end date	Select the date you propose to finish the project
Stream 2A Total Project Costs	This figure should match the figure calculated in the Project Cost Breakdown Form. It should be the total value of the project including all eligible costs.
Estimated Stream 2B total project cost	Please enter the estimated cost of the Stream 2B demonstration/FEED project excluding VAT.
Project summary	This should be a summary description of the project which should set the scene for the assessors and introduce your proposed project. You should use language that can be understood by people without specialist knowledge or expertise. This question is not scored but will be used by assessors to gain a high-level understanding of the project before they start their detailed assessment. (Maximum 400 words)
Primary Contact Details	Name and details of the person who will be the main point of contact for the application process
Email	Email address of the person who will be the main point of contact for the application process
Registered Address	This is the address where the organisation is registered

County	The county where the organisation is registered
UK Region	The UK region where the organisation is registered
Country	The country where the organisation is registered
Project Location	The location, if it is different from the registered address, where the main activity of the proposed project will be carried out
Organisation Type	Please select from the drop-down menu
Organisation Size	Please select your organisation size
Number of employees (including directors)	Number of staff in your organisation (this will help us confirm the nature of your company)
Organisation Registration Number	Your business registration number as listed by Companies House, or equivalent.
Turnover (in most recent annual accounts)	Please provide your most recent turnover figure from annual accounts and the date of those accounts. Please include currency of the amount in your response.
Balance Sheet Total (total assets net of depreciation)	Please provide your most recent balance sheet total (total assets net of depreciation) and the date of the calculation. Please include currency of the amount in your response.
VAT recoverable	Please enter whether your organisation is able to recover VAT on project costs.
Organisation maturity	Please enter the age of the business since its formal formation, this includes any periods of dormancy with Companies House.
How is the organisation currently funded?	Please select all the types of funding that are applicable.
Organisation Status	This should be a summary description of your company which should set the scene for the assessors and introduce your company. You should use language that can be understood by people without specialist knowledge or expertise.
Does the business have a parent company?	We need to understand if there any significant shareholders in your business. The parent company details should be provided in the Parent Company details section. (See **Section 8.8** for the definition of a parent company)
Parent Company Details	If you have a parent company, you must provide the details of that enterprise here.
Is this a collaborative project?	If you are applying collaboratively, please provide details of the partner organisations. Sub-contracting work to a third party does not classify as a collaboration.

18. Further Instructions to Bidders

The Department reserves the right to amend the enclosed competition documents at any time prior to the publication of supplier questions and answers **(Monday 30th May 2022).** Any changes are most likely to adjust editorial errors and include FAQs from questions asked from stakeholders/applications before **14:00 BST 18th May 2022.** Any such amendment will be numbered, dated and issued on the IHA website. Where amendments are significant, the Department may, at its discretion, extend the deadline for receipt of tenders.

The Department reserves the right to withdraw this contract opportunity without notice and will not be liable for any costs incurred by bidders during any stage of the process. Bidders should also note that, in the event a proposal is considered to be fundamentally unacceptable on a key issue, regardless of its other merits, that proposal may be rejected. By issuing this competition document, the Department is not bound in any way and does not have to accept the lowest, or any, proposal and reserves the right to accept a portion of any proposal unless the tenderer expressly stipulates otherwise.

18.1. Definitions

Please note that references to the "Department" throughout these documents mean The Secretary of State for Business, Energy and Industrial Strategy acting through his/her representatives in the Department for Business Energy & Industrial Strategy.

18.2. Data Protection and Security

The successful tenderer must comply with all relevant Data Protection Legislation, as defined in the terms and conditions applying to this Invitation to Tender. A guide to the UK General Data Protection Regulation published by the Information Commissioner's Office, can be found here.

Annex 2B contains a "The General Data Protection Regulation Assurance Questionnaire for Contractors" (Declaration 6) to evidence the extent of readiness. The Authority may ask the Contractor to provide evidence to support the position stated in the questionnaire. The Authority may require the successful Contractor to increase their preparedness where the Authority is not satisfied that the Contractor will be in a position to meet its obligations under the terms and conditions. If the Contractor fails to satisfy the Authority that it will be in a position to meet its obligations under the terms and conditions in the event that the Contractor is successful, the Authority reserves the right to exclude the bidder from this procurement.

18.3. Non-Collusion

No tender will be considered for acceptance if the contractor has indulged or attempted to indulge in any corrupt practice or canvassed the tender with an officer of the Department. Annex 2B contains a "Statement of non-collusion" (Declaration 1); any breach of the undertakings covered under items 1 - 3 inclusive will invalidate your tender. If a contractor has indulged or attempted to indulge in such practices and the tender is accepted, then grounds shall exist for the Authority to terminate the contract and claim damages from the successful bidders. You must not:

- Tell anyone else what your tender price is or will be, before the time limit for delivery of tenders.
- Try to obtain any information about anyone else's tender or proposed tender before the time limit for delivery of tenders.
- Make any arrangements with another organisation about whether or not they should tender, or about their or your tender price.

Offering an inducement of any kind in relation to obtaining this or any other contract with the Department will disqualify your tender from being considered and may constitute a criminal offence.

19. Appendix 1: Technology Readiness Levels

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. The Table 7 below defines TRLs 1 to 9.

Table 7 Technology Readiness Levels

TRL 1 – Basic Research	Scientific research begins to be translated into applied research and development.
TRL 2 – Applied Research	Basic physical principles are observed, practical applications of those characteristics can be 'invented' or identified. At this level, the application is still speculative: there is not experimental proof or detailed analysis to support the conjecture.
Applied research and development	
TRL 3 – Critical Function or Proof of Concept Established	Active research and development is initiated. This includes analytical and laboratory studies to physically validate analytical predictions of separate elements of the technology. Examples include components that are not yet integrated or representative.
TRL 4 – Laboratory Testing/Validation of Component(s)/Process(es)	Basic technological components are integrated to establish that the pieces will work together.
TRL 5 – Laboratory Testing of Integrated/Semi-Integrated System	The basic technological components are integrated with reasonably realistic supporting elements so it can be tested in a simulated environment.
Demonstration	
TRL 6 – Prototype System Verified	Representative model or prototype system is tested in a relevant environment.
TRL 7 – Integrated Pilot System Demonstrated	Prototype near or at planned operational system, requiring demonstration of an actual system prototype in an operational environment.
Pre-commercial deployment	
TRL 8 – System Incorporated in Commercial Design	Technology is proven to work - actual technology completed and qualified through test and demonstration.
TRL 9 – System Proven and Ready for Full Commercial Deployment	Actual application of technology is in its final form - technology proven through successful operations.

20. Appendix 2: Example Benefits Plan

Table 8 Example Benefits Plan

					Performance			
Benefit Name	**Description**	**Timeframe**	**Measure**	**Frequency of Measure**	**Baseline Project Start**	**Actual**	**Forecast Project Close**	**Target**
Reduction in Carbon Emissions	Reducing the carbon emissions of the product in order to meet revised Net Zero targets	Over 3 years	kT CO2e/yr	Forms part of quarterly review At project close 3 years after project close	1	5.3	13.5	29.7
Cost reduction of low carbon technologies	Reducing the manufacturing costs to increase consumer acceptability	Over 5 years	Reduction in cost £	Forms part of quarterly review At project close 5 years after project close	160	150	110	100
Increased knowledge stimulating further innovation	Agreed standardisation documents to provide guidance on the safe design of commercial appliances	At Project Close	Quality rating	Forms part of quarterly review At project close	N/A	N/A	N/A	N/A

21. Appendix 3: Eligible and Ineligible Costs

1. General Requirements

Applicants are instructed that the project costs quoted must reflect actual costs at a 'fair market value' and for this competition, **suppliers' profit must not be included**. Your application must have at least 50% of the contract value attributed directly and exclusively to research and development services, including solution exploration and design. BEIS may seek further clarification or justification of costs at assessment and moderation phase.

In Stream 2A, eligible costs are those directly associated with preparation of the feasibility study and knowledge dissemination activities. However, an indication of the potential costs involved in participating in Stream 2B is also required when bidding for Stream 2A. In Stream 2B, eligible costs are those directly associated with the development and implementation of the end-to-end hydrogen demonstrator/FEED (see project scope **Section 2.2** and **8.4** 2B eligible costs) and knowledge dissemination activities.

Applicants must complete the Project Cost Breakdown Form (attached to the online application form) to provide the necessary cost information for the assessment process; further itemisation of costs and methods of calculation may be requested to support the application.

Timing: BEIS will only provide the funding to cover eligible costs incurred and defrayed in the period between the project start date specified in the contract, and the deadline specified in the contract for completion of the project.

Who can incur eligible costs: The definition of eligible costs includes the applicant's own costs, eligible costs incurred by project partners and eligible costs incurred by companies sub-contracted to the applicant or project partners as defined in the application or subsequent agreements between the successful applicant and BEIS.

Non-sterling costs: Costs must be denominated in GB pounds. If relevant, applicants should indicate where conversion has been made to GB pounds from other currencies and indicate the conversion rate and assumptions used.

Research and development costs. Your application must have at least 50% of the contract value attributed directly and exclusively to research and development services.

2. Eligible Costs

Directly incurred costs:

These are costs that are specific to the project that will be charged to the project as the amount spent, fully supported by an audit record justification of a claim. They comprise:

- Labour costs for all those contributing to the project, broken down by individual
- Material costs (including consumables specific to the project)
- Capital equipment costs*
- Sub-contract costs
- Travel and subsistence

* BEIS will only pay full capital equipment costs for equipment that is specialised and bespoke enough that it only has a value for the duration of the project. For capital equipment that has a value at the end of the funded project, BEIS will only pay depreciation costs for the duration of the project.

Indirect costs:

Indirect costs should be charged in proportion to the amount of effort deployed on the project. Applicants should calculate them, using their own cost rates. They may include:

- General office and basic laboratory consumables
- Library services / learning resources
- Typing / secretarial
- Finance, personnel, public relations and departmental services
- Central and distributed computing
- Overheads

BEIS will not normally pay overheads of over 20%, unless robust justification is provided for this being surpassed.

2. Ineligible Costs

Under no circumstances can costs for the following items be claimed:

- Commercialisation activities
- Profit (i.e. applicants should not include profit for themselves or the other project team members within indirect costs or include it as a separate project cost)
- Profit on contractors (i.e., where contractors are used in key posts, these contractors should be paid at the standard market rate)
- Protection of IPR (including patent costs)
- For activities of a political or exclusively religious nature
- In respect of costs reimbursed or to be reimbursed by funding from other public authorities or from the private sector

- In connection with the receipt of contributions in kind (a contribution in goods or services as opposed to money)
- To cover interest payments (including service charge payments for finance leases)
- For the giving of gifts to individuals, other than promotional items with a value no more than £10 a year to any one individual
- For entertaining (entertaining for this purpose means anything that would be a taxable benefit to the person being entertained, according to current UK tax regulations)
- To pay statutory fines, criminal fines or penalties
- In respect of VAT that you are able to claim from HM Revenue and Customs.
- For project contingency funds

22. Appendix 4: Environment and safety resources

BEIS strongly encourages applicants to begin to consider the possible environmental impacts of proposed projects as early as possible. This consideration is needed at every stage of technology development to ensure that the risks to the environment and human health are adequately understood. Applicants should seek to design out and minimise environmental risks and maximise wider environmental co-benefits. There are three environmental principles that summarise how projects should approach this:

1. **Consider environmental risks early and comprehensively,** including providing robust evidence and management, considering the impact of deployment at scale, and engaging the public so they understand the risks and benefits. Impacts should be assessed cradle-to-grave, including harvesting feedstocks & raw materials, decommissioning, and safe long-term recovery or disposal of waste.
2. **Minimise the impacts and risks to people and our environment** – air, land and water. This includes: maximising greenhouse gas reduction, maximising resource, energy and water efficiency and maximising co-benefits for people and the environment.
3. **Ensure technologies are fit for the future**, including resilience to the impacts of climate change

Further suggestions for how projects can prevent or minimise their emissions and impacts on the environment is available through the EA's Best Available Techniques guidance.

Please read and follow our regulatory guidance relevant to your technologies, some of which are listed below. Please note that relevant authorities may charge for detailed pre-application and permitting advice. The scope and costs associated with this service will be discussed and agreed prior to providing detailed regulatory advice. Further details of our pre-application advice service here.

Examples of guidance for specific Environment Agency regulations of relevance

Examples of guidance for specific Environment Agency regulation of relevance		
	Does your innovation project involve…	**Regulations you may need to consider**
	Planning Permission	• Environmental advice on planning proposals
	Getting an environmental permit	• Check if you need an environmental permit • Risk assessments for specific activities: environmental permits • For further guidance on exemption for R&D projects, contact the relevant environmental regulator
	Control of Major Accident Hazards Regulations	• COMAH
Air	Carbon Capture and Storage	• Carbon Capture and Storage Best Available Techniques • Environmental Risk Assessment for Carbon Capture and Storage
	Hydrogen Production and Use	• Inorganic chemicals sector: additional guidance • Guidance in development for hydrogen production from methane/RFG with CCS is available on request. • We are in the process of developing other guidance to support hydrogen production and use. Please refer to Technical Guidance for regulated industry sectors: environmental permitting, for our latest publications.
	Gasification	• Gasification, liquefaction and refining installations: guidance
	Anaerobic digestion	• Regulation | Anaerobic Digestion (biogas-info.co.uk)
	Emissions to air	• Air quality in planning • Emissions Trading Scheme
Land	Waste management *(Think very carefully about potential waste status of each output and check guidance)*	• Check if your material is waste • Get an opinion from the definition of waste service • New waste management techniques • Waste and environmental impact • Register or renew waste exemptions • Incineration of waste (EPR5.01): guidance
Water	Water abstraction	• Fresh Water - Apply for a water abstraction or impoundment licence • Seawater - Do I need a marine licence Engage with Marine Maritime Organisation
	Effluent to water	• To Fresh Water and Sea water - engage with EA if novel, otherwise enhanced pre-application for Discharges to surface water and groundwater permit
	Farming	• Farming rules for water • Storing silage, slurry and agricultural fuel oil

23. Appendix 5: Exclusion Grounds

Mandatory Exclusion Grounds

Public Contract Regulations 2015 R57(1), (2) and (3)

Public Contract Directives 2014/24/EU Article 57(1)

Participation in a criminal organisation

Participation offence as defined by section 45 of the Serious Crime Act 2015

Conspiracy within the meaning of

- section 1 or 1A of the Criminal Law Act 1977 or
- article 9 or 9A of the Criminal Attempts and Conspiracy (Northern Ireland) Order 1983

where that conspiracy relates to participation in a criminal organisation as defined in Article 2 of Council Framework Decision 2008/841/JHA on the fight against organised crime;

Corruption

Corruption within the meaning of section 1(2) of the Public Bodies Corrupt Practices Act 1889 or section 1 of the Prevention of Corruption Act 1906;

The common law offence of bribery;

Bribery within the meaning of sections 1, 2 or 6 of the Bribery Act 2010, or section 113 of the Representation of the People Act 1983;

Fraud

Any of the following offences, where the offence relates to fraud affecting the European Communities' financial interests as defined by Article 1 of the convention on the protection of the financial interests of the European Communities:

- the common law offence of cheating the Revenue;
- the common law offence of conspiracy to defraud;
- fraud or theft within the meaning of the Theft Act 1968, the Theft Act (Northern Ireland) 1969, the Theft Act 1978 or the Theft (Northern Ireland) Order 1978;
- fraudulent trading within the meaning of section 458 of the Companies Act 1985, article 451 of the Companies (Northern Ireland) Order 1986 or section 993 of the Companies Act 2006;
- fraudulent evasion within the meaning of section 170 of the Customs and Excise Management Act 1979 or section 72 of the Value Added Tax Act 1994;

- an offence in connection with taxation in the European Union within the meaning of section 71 of the Criminal Justice Act 1993;
- destroying, defacing or concealing of documents or procuring the execution of a valuable security within the meaning of section 20 of the Theft Act 1968 or section 19 of the Theft Act (Northern Ireland) 1969;
- fraud within the meaning of section 2, 3 or 4 of the Fraud Act 2006;
- the possession of articles for use in frauds within the meaning of section 6 of the Fraud Act 2006, or the making, adapting, supplying or offering to supply articles for use in frauds within the meaning of section 7 of that Act;

Terrorist offences or offences linked to terrorist activities

Any offence:

- listed in section 41 of the Counter Terrorism Act 2008;
- listed in schedule 2 to that Act where the court has determined that there is a terrorist connection;
- under sections 44 to 46 of the Serious Crime Act 2007 which relates to an offence covered by the previous two points;

Money laundering or terrorist financing

Money laundering within the meaning of sections 340(11) and 415 of the Proceeds of Crime Act 2002

An offence in connection with the proceeds of criminal conduct within the meaning of section 93A, 93B or 93C of the Criminal Justice Act 1988 or article 45, 46 or 47 of the Proceeds of Crime (Northern Ireland) Order 1996

Child labour and other forms of trafficking human beings

An offence under section 4 of the Asylum and Immigration (Treatment of Claimants etc.) Act 2004;

An offence under section 59A of the Sexual Offences Act 2003

An offence under section 71 of the Coroners and Justice Act 2009;

An offence in connection with the proceeds of drug trafficking within the meaning of section 49, 50 or 51 of the Drug Trafficking Act 1994

An offence under section 2 or section 4 of the Modern Slavery Act 2015

Non-payment of tax and social security contributions

Breach of obligations relating to the payment of taxes or social security contributions that has been established by a judicial or administrative decision.

Where any tax returns submitted on or after 1 October 2012 have been found to be incorrect as a result of:

- HMRC successfully challenging the potential supplier under the General Anti – Abuse Rule (GAAR) or the “Halifax” abuse principle; or
- a tax authority in a jurisdiction in which the potential supplier is established successfully challenging it under any tax rules or legislation that have an effect equivalent or similar to the GAAR or “Halifax” abuse principle;
- a failure to notify, or failure of an avoidance scheme which the supplier is or was involved in, under the Disclosure of Tax Avoidance Scheme rules (DOTAS) or any equivalent or similar regime in a jurisdiction in which the supplier is established

Other offences

Any other offence within the meaning of Article 57(1) of the Directive as defined by the law of any jurisdiction outside England, Wales and Northern Ireland

Any other offence within the meaning of Article 57(1) of the Directive created after 26th February 2015 in England, Wales or Northern Ireland

Discretionary Exclusions

Obligations in the field of environment, social and labour law.

Where an organisation has violated applicable obligations in the fields of environmental, social and labour law established by EU law (as retained in UK law in accordance with Section 4 Section 4 of the EU Withdrawal Act 2018 (as amended by the EU (Withdrawal Agreement) Act 2020)), national law, collective agreements or by the international environmental, social and labour law provisions listed in Annex X to the Directive (see copy below) as amended from time to time; including the following:-

Where the organisation or any of its Directors or Executive Officers has been in receipt of enforcement/remedial orders in relation to the Health and Safety Executive (or equivalent body) in the last 3 years.

In the last three years, where the organisation has had a complaint upheld following an investigation by the Equality and Human Rights Commission or its predecessors (or a comparable body in any jurisdiction other than the UK), on grounds of alleged unlawful discrimination.

In the last three years, where any finding of unlawful discrimination has been made against the organisation by an Employment Tribunal, an Employment Appeal Tribunal or any other court (or incomparable proceedings in any jurisdiction other than the UK).

Where the organisation has been in breach of section 15 of the Immigration, Asylum, and Nationality Act 2006;

Where the organisation has a conviction under section 21 of the Immigration, Asylum, and Nationality Act 2006;

Where the organisation has been in breach of the National Minimum Wage Act 1998.

Bankruptcy, insolvency

Bankrupt or is the subject of insolvency or winding-up proceedings, where the organisation's assets are being administered by a liquidator or by the court, where it is in an arrangement with creditors, where its business activities are suspended or it is in any analogous situation arising from a similar procedure under the laws and regulations of any State;

Grave professional misconduct

Guilty of grave professional misconduct

Distortion of competition

Entered into agreements with other economic operators aimed at distorting competition

Conflict of interest

Aware of any conflict of interest within the meaning of regulation 24 due to the participation in the procurement procedure

Been involved in the preparation of the procurement procedure

Prior performance issues

Shown significant or persistent deficiencies in the performance of a substantive requirement under a prior public contract, a prior contract with a contracting entity, or a prior concession contract, which led to early termination of that prior contract, damages or other comparable sanctions.

Misrepresentation and undue influence

The organisation has influenced the decision-making process of the contracting authority to obtain confidential information that may confer upon the organisation undue advantages in the procurement procedure, or to negligently provided misleading information that may have a material influence on decisions concerning exclusion, selection, or award.

Additional exclusion grounds

Breach of obligations relating to the payment of taxes or social security contributions.

ANNEX X Extract from Public Procurement Directive 2014/24/EU

LIST OF INTERNATIONAL SOCIAL AND ENVIRONMENTAL CONVENTIONS REFERRED TO IN ARTICLE 18(2) —

- ILO Convention 87 on Freedom of Association and the Protection of the Right to Organise;
- ILO Convention 98 on the Right to Organise and Collective Bargaining;
- ILO Convention 29 on Forced Labour;
- ILO Convention 105 on the Abolition of Forced Labour;
- ILO Convention 138 on Minimum Age;
- ILO Convention 111 on Discrimination (Employment and Occupation);
- ILO Convention 100 on Equal Remuneration;
- ILO Convention 182 on Worst Forms of Child Labour;
- Vienna Convention for the protection of the Ozone Layer and its Montreal Protocol on substances that deplete the Ozone Layer;
- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel Convention);
- Stockholm Convention on Persistent Organic Pollutants (Stockholm POPs Convention)
- Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (UNEP/FAO) (The PIC Convention) Rotterdam, 10 September 1998, and its 3 regional Protocols.

Consequences of misrepresentation

A serious misrepresentation which induces a contracting authority to enter into a contract may have the following consequences for the signatory that made the misrepresentation: -

- The potential supplier may be excluded from bidding for contracts for three years, under regulation 57(8)(h)(i) of the PCR 2015;
- The contracting authority may sue the supplier for damages and may rescind the contract under the Misrepresentation Act 1967.
- If fraud, or fraudulent intent, can be proved, the potential supplier or the responsible officers of the potential supplier may be prosecuted and convicted of the offence of fraud by false representation under s.2 of the Fraud Act 2006, which can carry a sentence of up to 10 years or a fine (or both).

If there is a conviction, then the company must be excluded from procurement for five years under reg. 57(1) of the PCR (subject to self-cleaning).

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