

Net Zero Hydrogen Fund: Round 2

Strand 1 Development Expenditure (DEVEX)

Strand 2 Capital Expenditure (CAPEX)

Applicant briefing

Date: 19 April 2023

The webinar will start at 10am

- We are currently on mute, whilst waiting for more people to join
- The briefing will be recorded and available to refer to through the IFS dates page

Welcome and Introductions

Abbie Wood

Portfolio Manager, Competitions Team

Bryony Livesey

Challenge Director – Industrial
Decarbonisation Challenge

Avijita Kharel

Knowledge Transfer Manager – Clean
Energy



Housekeeping

- All participants will be muted throughout the webinar.
- Please use the 'Q & A' box for asking questions.
- This session is being recorded and will be uploaded on the Innovate UK KTN site for your future reference throughout the competition process. You will be sent the link, along with other information, shortly after the webinar.
- For any technical issues, please contact Olivia Brown.
- Subtitles are available – please go to 'Live Transcript' on the Zoom toolbar and select 'Show Subtitles'.
- PDFs of the presentation will also be available on request
- For more information on the competition process, please go to: [Competition briefing: applicant information – YouTube](#)

Agenda

10:00	10 mins	Welcome, Introductions and Housekeeping	Avijita Kharel, KTN
10:10	10 mins	Net Zero Hydrogen Fund (NZHF) Context	Bryony Livesey, Industrial Decarbonisation Challenge Director, UKRI
10:20	15 mins	Introduction and scope of the NZHF Strand 1 and Strand 2 competitions	
10:35	10 mins	Q&A up to this point – Clarifications only	All
10:45	45 mins	Innovate UK Competition process	Abbie Wood, Innovate UK Competitions Team
11:30	10 mins	Q&A on competition process	All
11:40	up to 30 mins	Q&A – general	All
12:10	5 mins	Wrap up	Avijita Kharel, KTN
12:15		Close	

Innovate UK

- We are the UK's innovation agency
- We support business-led innovation in all sectors, technologies and UK regions
- A key delivery body of the Government's Innovation Strategy

Our Mission

To help UK businesses grow through the development and commercialisation of new products, processes, and services, supported by an outstanding innovation ecosystem that is agile, inclusive, and easy to navigate.



Innovate UK KTN Hydrogen Innovation Network 2023

Purpose:

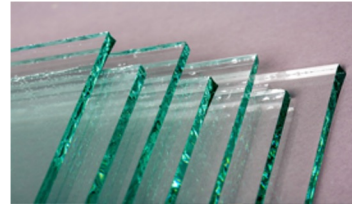
To enable local clean hydrogen **uptake** at scale and cost by facilitating technology and knowledge sharing among businesses, public bodies and academia to foster innovation and cross sector collaboration for innovative solutions.



Production

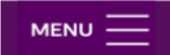
Distribution
& Storage

End Use



Innovate UK KTN Hydrogen supply chain directory

Hydrogen Supply Chain Directory



The Supply Chain Directory shares details of end users who are either currently using hydrogen or are proactively planning to. It also aims to showcase solutions-providers in this space who may be able to help these end users move closer to their hydrogen goals.

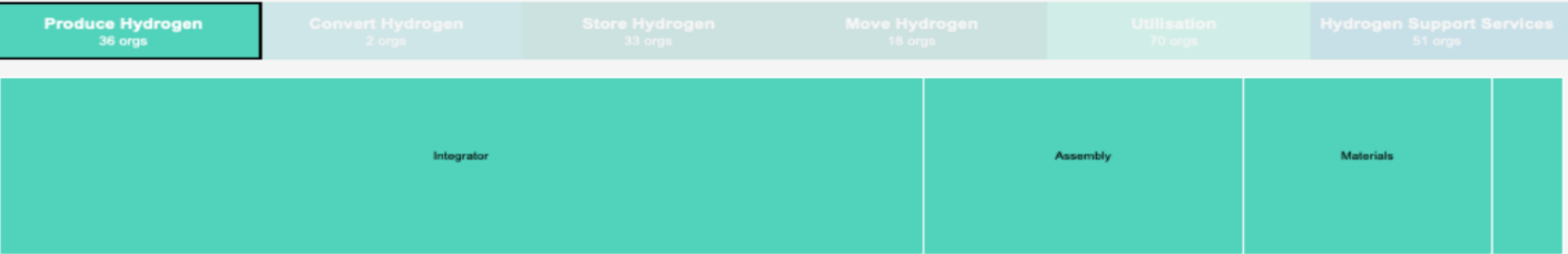
Select Organisation Type

(All)

Select Nation/Region

(All)

Supply Chain View Click to on a section of the supply chain to filter the dahsboard. Hover over the chart for more information.



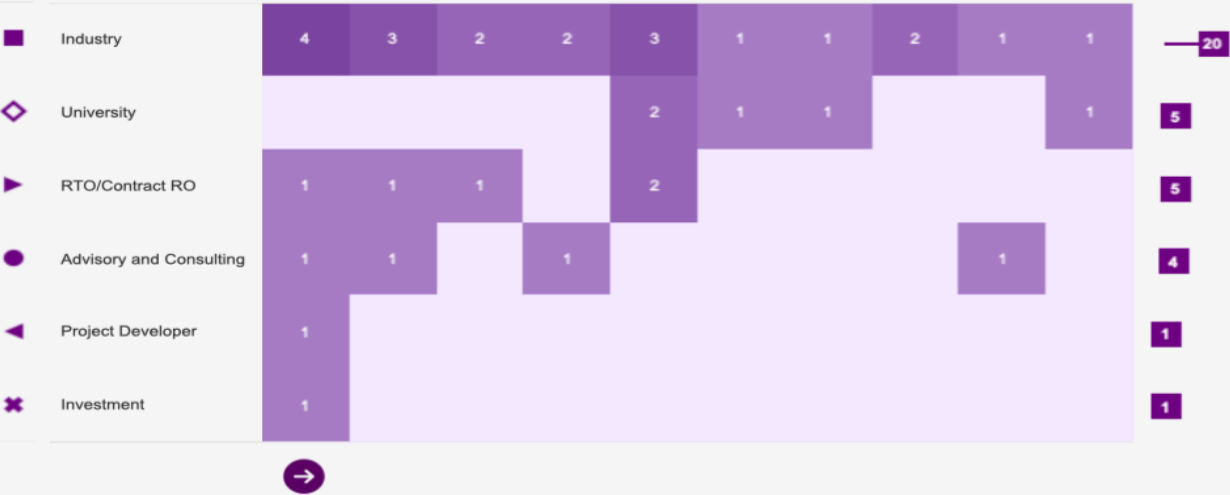
UK View

Based on postcodes provided by respondents. Hover over the map for more information about each organisation.



Org View

Click on the chart to filter on a certain region and/or organisation type.



Innovate UK KTN Hydrogen Innovation Network 2023

- Network with a **community of UK hydrogen supply chain technology businesses and end users**
- Discover the **latest hydrogen funding opportunities** and meet energy investors
- Join the [Hydrogen Supply Chain Directory](#) and discover the 190+ organisations across the UK involved in various stages of the hydrogen supply chain.
- Listen to and engage with **hydrogen specialist speakers** throughout the day and explore our **hydrogen technology exhibition**.
- Find out about the **success stories of the Innovate UK funded businesses** and their plans for the future.



Hydrogen Supply Chain Showcase

22 June 2023

10:00-16:00

Toyota Motor Manufacturing (UK) Ltd

[Register Now](#)

[Already registered?](#)



Link:

<https://iuk.ktn-uk.org/energy/hydrogen/>



**UK Research
and Innovation**



Department for
Energy Security
& Net Zero

Net Zero Hydrogen Fund Round 2

Context

Dr Bryony Livesey

Industrial Decarbonisation Challenge Director, UKRI



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Powering up Britain: government action to achieve net zero objectives

The Powering Up Britain package, announced by Government on 30 March, sets out how government is taking bold action to achieve our energy security and net zero objectives, including by delivering a hydrogen economy.

The Energy Security Plan and Net Zero Growth Plan included a suite of developments to realise our low carbon hydrogen ambition.

Funding for Hydrogen Production

- ✓ Published the list of successful applicants for **strands 1 and 2 of the £240 million Net Zero Hydrogen Fund (NZHF)**. This confirms the first projects to be offered grant funding through the NZHF, for a total of £37.9 million for 15 new hydrogen production projects across England, Scotland, Wales and Northern Ireland
- ✓ Named the **two CCUS-enabled hydrogen projects** moving forward on the Track-1 clusters
- ✓ Published a shortlist of 20 projects we intend to enter due diligence with for the **first electrolytic hydrogen allocation round**
- ✓ Announced our intention to open **two further hydrogen funding rounds in 2023**

Hydrogen Production, Innovation, and Hydrogen to power

- ✓ Taking forward the Independent Review of Net Zero recommendation to develop a **Hydrogen Production Delivery Roadmap in 2023** to show how hydrogen production can be scaled up over the coming decade.
- ✓ Published a **consultation on proposed regulations** in relation to the hydrogen production and Industrial Carbon Capture business models.
- ✓ To bring forward hydrogen T&S (transport and storage) business models, the Government is introducing legislative powers when parliamentary time allows which will be crucial to designing these new business models by 2025.
- ✓ Announced the five winners of follow-up funding in the **NZIP Low Carbon Hydrogen Supply 2** competition. These projects have been allocated a combined total of **£19.4 million** to demonstrate cutting-edge technologies.
- ✓ Government has announced **its intention to consult on the need and potential design options for hydrogen to power market intervention**.



Net Zero Hydrogen Fund

Aim:

To provide capital expenditure (CAPEX) and development expenditure (DEVEX). This will support the commercial deployment of new low carbon hydrogen production projects during the 2020s.

This is to ensure the UK has a diverse and secure decarbonised energy system fit for meeting our ambition of up to 10GW low carbon hydrogen production by 2030, and commitment to reach net zero by 2050.



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NZHF will deliver up to £240m via 4 strands:

This briefing event is in relation to Strands 1 and 2.

It is the responsibility of the applicant to ensure that they are entering the appropriate challenge competition for their project.

Strand 1:	Development Expenditure (DEVEX) support for front end engineering design (FEED) studies and post-FEED studies, to grow the future pipeline of hydrogen projects in the UK.
Strand 2:	Capital Expenditure (CAPEX) for projects that do not require a hydrogen specific business model. These are low carbon hydrogen projects that can deploy on the basis of capital expenditure support and are able to start construction rapidly.
Strand 3:	CAPEX for projects that require a hydrogen business model (HBM) and sit outside of the Phase 2 cluster sequencing process.
Strand 4:.	CAPEX for carbon capture usage and storage (CCUS) enabled projects that require a hydrogen specific business model and are part of the Phase 2 cluster sequencing process.



**UK Research
and Innovation**



Department for
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Introduction to the Net Zero Hydrogen Fund Round 2

Strands 1 and 2 competitions



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Available Funding

UK registered businesses can apply for a share of up to £45 million across both competition strands.



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Scope



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Scope – Strand 1

Hydrogen Pathways	<p>This competition supports the following hydrogen production pathways:</p> <ul style="list-style-type: none">• Electrolysis• Natural gas reforming, with carbon capture and storage (CCUS)• Biomass or waste conversion to hydrogen, with or without CCUS
We will support	<p>This competition will support development expenditure (DEVEX) costs for front end engineering design (FEED) and post-FEED studies. The aim is to build the pipeline of hydrogen production projects and measurably move them closer to deployment.</p> <p>Note: Please check what are eligible and ineligible costs on competition page</p>
Project we will not fund	<ul style="list-style-type: none">• Do not focus on low carbon hydrogen production at scale and the immediate supply chains• Produce hydrogen that is not compliant with the low carbon hydrogen standard• Have total grant requests or timescales outside the specified range and have not been approved in advance by Innovate UK <p>We cannot fund projects that are:</p> <ul style="list-style-type: none">• Dependent on export performance, for example giving a subsidy to a baker on the condition that it exports a certain quantity of bread to another country• Dependent on domestic inputs usage, for example giving a subsidy to a baker on the condition that it uses 50% UK flour in their product
Further Details	<p>Please read the full details of scope on the competition page</p>

Scope – Strand 2

Hydrogen Pathways	<p>This competition supports the following hydrogen production pathways:</p> <ul style="list-style-type: none">• electrolysis• biomass or waste gasification
We will support	<ul style="list-style-type: none">• Electrolysis:• Biomass or waste gasification <p>Note: Please check what are eligible and ineligible costs on competition page</p>
Projects we will not fund	<ul style="list-style-type: none">• do not focus on <u>low carbon hydrogen</u> production at scale and the immediate supply chains• require a hydrogen production business model (HBM)• are not building new low carbon hydrogen production facilities• have total grant requests or CAPEX support outside the specified range and have not been approved in advance by Innovate UK• rely on gas blending into the gas network as a sole offtaker• are not able to take a Final Investment Decision (FID) within 3 months of receipt of a conditional grant offer letter <p>We cannot fund projects that are:</p> <ul style="list-style-type: none">• dependent on export performance, for example giving a subsidy to a baker on the condition that it exports a certain quantity of bread to another country• dependent on domestic inputs usage, for example giving a subsidy to a baker on the condition that it uses 50% UK flour in their product
Further details	Please read the full details of scope on the competition page

Scope Q&A



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Eligibility criteria

Abbie Wood

Portfolio Manager, Competitions Team



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Eligibility criteria – Strand 1

Project eligibility	<p>This competition is open to single applicants and collaborations</p> <ul style="list-style-type: none">• lead must be a UK registered business of any size• must carry out all of the project work in the UK• intend to exploit the results from or in the UK and be able to demonstrate relevant commercial engagement• be using core technology that has been tested in a commercial environment, Technology Readiness Level (TRL) 7 or more• meet the Low Carbon Hydrogen Standard Version 2* (LCHS v2)
Project start / end	by 1 November 2023 and end by 31 March 2025
Project length	between 6 and 17 months
Total grant – Strand 1	between £80,000 and £10 million

Eligibility criteria – Strand 2

Project eligibility	<p>This competition is open to single applicants and collaborations</p> <ul style="list-style-type: none">• lead must be a UK registered business of any size• must carry out all of the project work in the UK• intend to exploit the results from or in the UK and be able to demonstrate relevant commercial engagement• be using core technology that has been tested in a commercial environment, Technology Readiness Level (TRL) 7 or more• meet the Low Carbon Hydrogen Standard Version 2* (LCHS v2)
Project start / end	by 1 November 2023 and end by 31 March 2025
Project length	between 6 and 17 months
Total grant – Strand 2	between £200,000 and £20 million

Funding

Funding rules

The level of funding awarded will depend upon the competition strand you are applying into and the type of organisation you are.

Funding is calculated by project participant

IFS will advise the maximum grant % you can request based upon:

- competition strand
- type of organisation



Eligibility Criteria: Funding Levels

Strand 1 (DEVEX)	Strand 2 (CAPEX)	Research organisations
50% if you are a business of any size	30% if you are a business of any size	100% funding

The research organisations undertaking non-economic activity as part of your project can share **up to 30%** of the total eligible project costs. If your consortium contains more than one research organisation undertaking non-economic activity, this maximum is shared between them.

For more information:

<https://www.ukri.org/councils/innovate-uk/guidance-for-applicants/general-guidance/categories-of-research-and-development/#contents-list>

Your Project Cost Categories



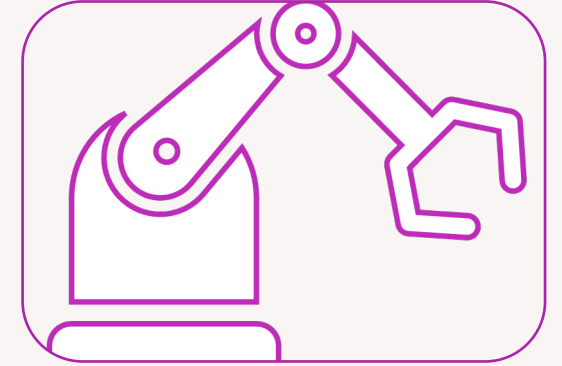
Labour



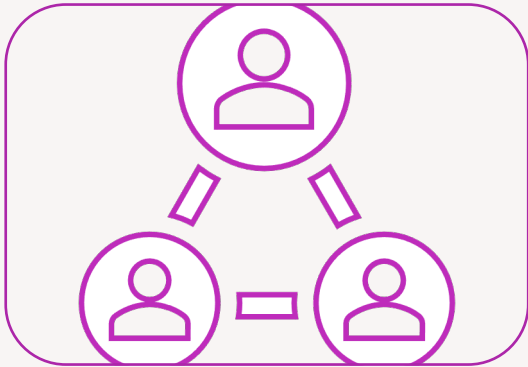
Overheads



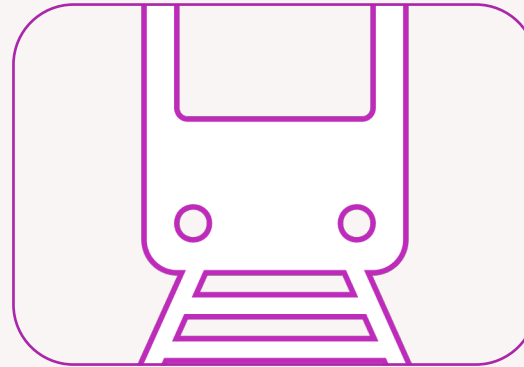
Materials



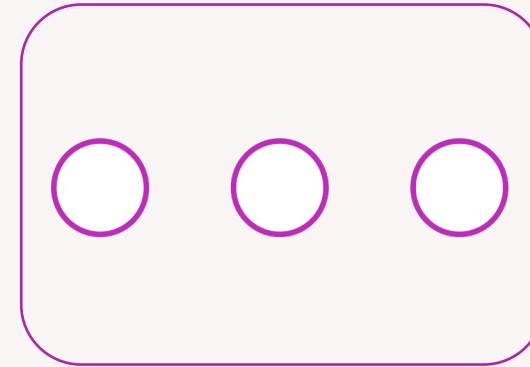
Equipment
Usage



Subcontractors



Travel &
Subsistence



Other

Conditions of Award

Under the Subsidy Control Regime, we will conduct a financial review and seek assurances on your organisation, leadership team, and persons of significant control.

Certify you are eligible

When submitting an application, you must certify that you are eligible for funding. If you are unsure, please take independent legal advice before applying. You must pass our financial review and assurances before being offered a conditional award.

Previously submitted applications

Previously submitted application	Not a previously submitted application
Not materially different from one you have submitted before (but it can be updated based on the assessors' feedback)	<p>A brand-new application, project or idea that you have not previously submitted into an Innovate UK competition</p> <p>OR</p> <p>A previously submitted or ineligible application which:</p> <ul style="list-style-type: none">• has been updated based on assessor feedback• <u>and</u> is materially different from the application submitted before• <u>and</u> fits with the scope of this competition

Key Dates

Timeline	Dates
Competition Opens	11 April 2023
Briefing Event	19 April 2023
Submission Deadline (11am)	Strand 1 - 31 May 2023 Strand 2 - 7 June 2023
Invite to interview	14 July 2023
Interviews	14 – 18 August 2023
Applicants informed	15 September 2023



Innovation Funding Service (IFS)

Search for a funding competition and review criteria

Funding competition

Net Zero Hydrogen Fund: Strand 1 Development Expenditure Round 2

Strand 1 of the Net Zero Hydrogen Fund will provide development expenditure (DEVEX) support for front end engineering design (FEED) and post-FEED studies for new low carbon hydrogen production facilities.

Competition opens: Tuesday 11 April 2023

Competition closes: Wednesday 31 May 2023 11:00am

[Start new application](#)

Or go to [your dashboard](#) to continue an existing application.

Summary

[Eligibility](#)

[Scope](#)

[Dates](#)

[How to apply](#)

[Supporting information](#)

Description

This competition will support development expenditure (DEVEX) costs for front end engineering design (FEED) and post-FEED studies. The aim is to build the pipeline of hydrogen production projects and measurably move them closer to deployment. This competition supports multiple hydrogen production pathways.

The aim of the [Net Zero Hydrogen Fund](#) (NZHF) is to provide capital expenditure (CAPEX) and development expenditure (DEVEX). This will support the commercial deployment of new low carbon hydrogen production projects during the 2020s.

Funding competition

Net Zero Hydrogen Fund: Strand 2 Capital Expenditure Round 2

Strand 2 of the Net Zero Hydrogen Fund will provide capital expenditure (CAPEX) support for new low carbon hydrogen production facilities to begin deployment in the early 2020s.

Competition opens: Tuesday 11 April 2023

Competition closes: Wednesday 7 June 2023 11:00am

[Start new application](#)

Or go to [your dashboard](#) to continue an existing application.

Summary

[Eligibility](#)

[Scope](#)

[Dates](#)

[How to apply](#)

[Supporting information](#)

Description

This competition will support capital expenditure (CAPEX) costs for projects that do not require a hydrogen specific business model. The aim is to support low carbon hydrogen projects that can deploy on the basis of capital expenditure support and are able to start construction rapidly.

The aim of the [Net Zero Hydrogen Fund](#) (NZHF) is to provide capital expenditure (CAPEX) and development expenditure (DEVEX). This will support the commercial deployment of new low carbon hydrogen production projects during the 2020s.



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Create an IFS account

The lead applicant must sign in to their account:

UK registered businesses

Use Companies House lookup as it speeds up our checks by providing your company number. You are unable to enter this at a later date.

Research organisations, academics and universities

Enter your information manually so you are not listed as a business on IFS and ensure you receive the correct funding.



GOV.UK Innovation Funding Service

BETA This is a new service – your [feedback](#) will help us to improve it.

[Back](#)

Create your account

Your organisation

i Your organisation must be UK based to receive funding from Innovate UK

Business

Find your organisation on Companies House
Enter your organisation name or registration number

Companies House search results
Select your organisation from the options below

NOMENSA LTD
04214477 - Incorporated on 10 May 2001
13 Queen Square, Bristol, BS1 4NT

GOV.UK Innovation Funding Service

BETA This is a new service – your [feedback](#) will help us to improve it.

[Back](#)

Please sign in or create an account

Used this service before?
Please sign into your Innovation Funding Service account.

New to this service?
If you haven't used the new Innovation Funding Service before you will need to create an account.

Innovation Funding Service Sign in

Email address
Please enter your email address.

Password
Please enter your password.

▼ [Need help signing in or creating an account?](#)

My email and/or password isn't working

If you applied previously using the old service, you will need to create a new account.

[Forgotten your password?](#)

Project Details

- **Application Team** – Invite colleagues from your own organisation to help you complete your application. Invite organisations who you are working with on the project.
You must complete the Equality, Diversity and Inclusion survey embedded in IFS as part of your application.
- **Application Details** - Title, timescales
- **Subsidy basis** - Will the project, including any related activities, you want Innovate UK to fund, affect trade between Northern Ireland and the EU? All participants must complete this section.
- **Project Summary** - Short summary and objectives of the project including what is innovative about it
- **Public Description** - Description of your project which will be published if you are successful

Application Questions: Strand 1

Detailed guidance available on IFS

Question	Appendix requirements
1. Applicant location (not scored)	No
2. Scope (not scored)	Yes: 2 appendices
3. Project Finance (not scored)	No
4. Compliance with the Low Carbon Hydrogen Standard Version 2 (not scored)	Yes: 1 appendix
5. Finances (not scored)	Yes: 1 optional appendix
6. Project delivery (25% of score)	Yes: 2 appendices
7. Risks (10% of score)	Yes: 1 optional appendix
8. Project governance and stakeholder management (10% of score)	No
9. Project significance and economic benefits (20% of score)	No
10. Knowledge sharing and hydrogen market development (15% of score)	No
11. Commercial (20% of score)	No

Application Questions: Strand 2

Detailed guidance available on IFS

Question	Appendix requirements
1. Applicant location (not scored)	No
2. Scope (not scored)	Yes: up to 3 appendices
3. Project Finance (not scored)	No
4. Compliance with the Low Carbon Hydrogen Standard Version 2 (not scored)	Yes: 2 appendices
5. Finances (not scored)	Yes: 1 optional appendix
6. Project delivery (25% of score)	Yes: 2 appendices
7. Risks (10% of score)	Yes: 1 optional appendix
8. Project governance and stakeholder management (10% of score)	No
9. Project significance and economic benefits (20% of score)	No
10. Knowledge sharing and hydrogen market development (15% of score)	No
11. Commercial (10% of score)	No
12. Costs (10% of score)	Costs annex plus 2 other appendices in support

Q4. Compliance with the Low Carbon Hydrogen Standard V2 (not scored) – STRAND 2

On completion of the [hydrogen emissions calculator \(HEC\)](#), the calculator will confirm - based on the data submitted - whether your project is likely to be compliant with the Low Carbon Hydrogen Standard.

Appendix A must be a completed copy of the calculator demonstrating that the project can meet the [Low Carbon Hydrogen Standard Version 2](#) guidance, including the emissions threshold of 20gCO₂e/MJLHV H₂. It must be an Excel workbook and no larger than 10Mb in size. The font must be legible at 100% zoom.

Support videos for the HEC are available online.

<https://www.gov.uk/government/publications/uk-low-carbon-hydrogen-standard-emissions-reporting-and-sustainability-criteria>



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Additional Information – Strand 2, if invited for interview - Examples

- **Compliance with the Low Carbon Hydrogen Standard**
- Additional supporting evidence for data used in calculator
- CCUS project example - a proof of intent of an arrangement between your project and a CO2 transport and storage network
- Biomass project example - confirm with evidence that at least 50% of the hydrogen you produce by energy content will be made using biogenic feedstocks classified as wastes or residues.
- Electrolytic project example - proof of intent or a procurement plan for low carbon electricity input that outlines how the threshold for the low carbon hydrogen standard will be met (for example, Power Purchase Agreements (PPAs) in place for planned for volumes of low carbon generation).

Q12. Levelised Cost of Hydrogen (scored – STRAND 2)

- Requirement to fill out Excel spreadsheet Cost Annex on gov.uk where applicants will provide estimates on a range of costs.
- Applicants will need to supply supplementary evidence to support cost estimates provided.
- This information will be used to calculate the levelised cost of hydrogen (LCOH) of each project.



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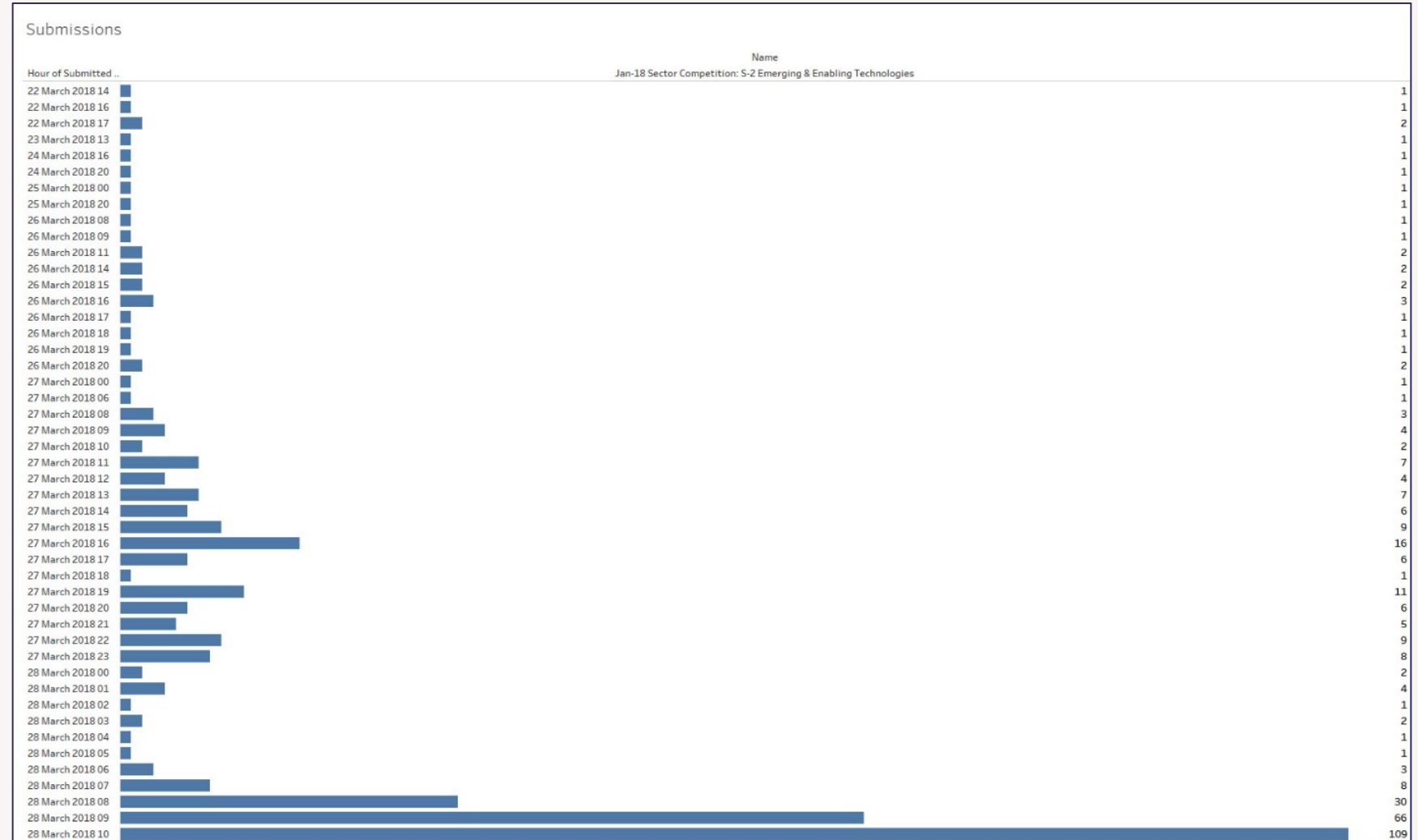


Department for
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& Net Zero

Submit your application early!

Customer Support can help resolve any issues you might have when submitting but only if they are contacted before the deadline.

Once the deadline has passed, your application cannot be submitted.



Interviews

Before the interview and by the deadlines stated in the invitation email, you:

- must provide the additional financial information within 10 working days
- must send a list of who will attend the interview
- must send your interview presentation slides
- must send a written response to the assessors' feedback

Additional Financial Information

The lead applicant must provide:

- your signed and audited accounts for the previous two financial years
- your ultimate parent company's signed accounts for the previous two financial years, if applicable
- company forecast accounts covering the remainder of this financial year and a further four financial years
- financial forecasting for the project, including calculated return on investment and financial viability of the project

Strand 2 - Value for Money (VfM) Assessment

- must return a Request for Information (RFI) template
- additional cost data or qualitative supporting answers to supplement the Question 12 cost annex information

Conditional offer of awarding

Your grant offer will be subject to you receiving Department for Energy Security and Net Zero ministerial approval and successfully completing due diligence checks.

Finance checks

You will be contacted by a delivery partner in one of Government's departments to undertake finance checks.

Your Grant offer letter (GOL)

Following successful completion of due diligence and relevant internal processes, you will be issued with a GOL.

Your GOL will show the start date for your project. Do not start your project before this date.

Additional Support



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Equality, Diversity & Inclusion

- We are on a mission to embed Equality, Diversity, and Inclusion in everything we do, internally and externally.
- We believe that great ideas can, and do, come from anyone and everyone.
- We know that diversity and inclusion in businesses contributes to enhanced innovation, satisfaction, performance, and ultimately, commercial success.
- So, if you would like any support, please contact our Customer Support Service Team on support@iuk.ukri.org or at 0300 321 4357.



Q&A

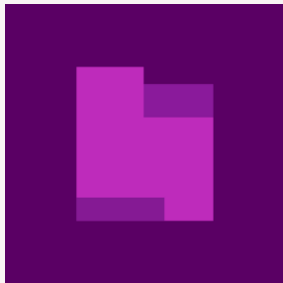


Contact

Customer Support Services

0300 321 4357 (Monday - Friday 9-5pm)

support@iuk.ukri.org



Innovate UK

ukri.org/councils/innovate-uk



Innovate UK KTN

ktn-uk.co.uk



Innovate UK EDGE

innovateukedge.ukri.org



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Thank you very much!