Network-H₂

Flexible Funding – Call for Applications

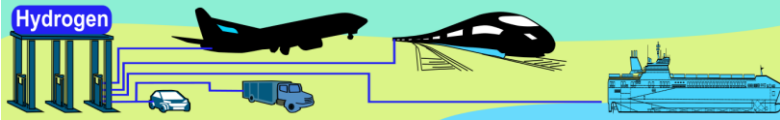## 3rd Call – Hydrogen Standards

1. Call Headline Details

Maximum proposal value	£50,000 at full economic costing (fEC)
Funding level	**80% of fEC**
Number of awards available in this call	Funding for 1 project
Available funding across this call	£50,000 (fEC)
Call opens	21st May 2021
Closing date for submissions	25th June 2021 at 17:00
Deadline for notification of outcome	23rd July 2021
Project duration	Up to 6 months
Anticipated project start date	1st September 2021
Anticipated project end date	28th February 2022

2. About Network-H₂

The network for hydrogen-fuelled transportation, Network-H₂, is led by Durham University, and is a partnership with Newcastle University, Advanced Propulsion Centre UK Ltd, Consortium on Turbulent Reacting Flows, Department for Transport, Department for Business, Energy and Industrial Strategy, Energy Systems Catapult, Transport Systems Catapult, UK Hydrogen and Fuel Cell Association.

It supports the dissemination and impact of research activities for academia, industry, policymakers and other stakeholders across all modes of transport with the following key objectives:

- Act as a forum to maximise impact, communicate, share best-practice, and disseminate information and data for research projects under the umbrella of 'Hydrogen fuelled Transportation'.
- Capture the state-of-the-art and identify the research challenges, incentives and barriers. Use this to identify and promote future research needs via the targeted use of feasibility-funding for those cutting-edge projects which can unlock hydrogen for transport applications whilst promoting collaborative research activities.
- Provide a wider forum for all stakeholders, including suppliers and consumers from across the energy sector, all modes of transport and technology developers. Foster long-term collaboration between outstanding international research teams in the UK, Europe and internationally.
- Engage with the wider research community across the physical sciences, social sciences & engineering disciplines to maximise dissemination, impact, reach and significance of research outcomes in this area and stimulate knowledge transfer between academia, industry, government and other stakeholders.
- Identify and promote future research needs based on partner contributions, forecasting exercises, and links to relevant networks and initiatives.

The network has eight cross-cutting themes:

(1) The whole transport/energy system.
(2) Pathways to sustainable hydrogen production and distribution.
(3) Compact and lightweight on-board storage.
(4) Compact and lightweight hydrogen energy conversion devices.
(5) Lightweight electrified powertrains.
(6) Hydrogen compatible materials and safety.
(7) Multi-modal transport, logistics and autonomy.
(8) Policy, economics and societal impacts.

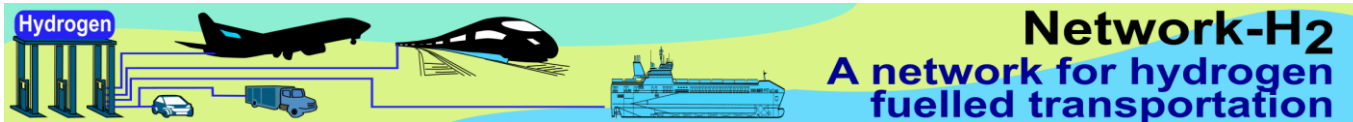# 3. About this Flexible Funding Call

Network-H$_2$ invites applications to this Flexible Funding Call for a project focusing on **hydrogen standards for transportation**.

Your proposal could consider:

(1) What and when new standards are required to facilitate technological innovation and application of hydrogen across transport modes?
(2) What are the current barriers/challenges faced by the UK market relating to the development of such standards?

The project should inform future hydrogen standards requirements by achieving the following objectives:

(1) Investigate the current national and international standards landscape and identify specific areas that require revision and further development. This should focus on:
    (i)   Production, storage and distribution infrastructure development, operation and maintenance; and
    (ii)   Vehicle fuel specifications, on-board fuel and storage systems, safety and operational performance.

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(2) Develop a framework for hydrogen standards in the UK context to provide a platform for technology innovation and provide an understanding of the current market for hydrogen and the level of adoption taking into account barriers/challenges.

Your proposal should take into consideration the following key areas for standards and regulation:

(1) Existing hydrogen standards on production, distribution, storage, refuelling, and onboard application.
(2) Storage and distribution networks.
(3) Ways to ensure the quality of supply.
(4) Vehicle standards for using hydrogen as a fuel.
(5) Supply and demand management.
(6) Construction/installation operations and maintenance requirements.

4. Eligibility

Who is eligible to apply?

(1) Academics based at a UK institution when carrying out the project.
(2) We strongly encourage applications from Early Career Researchers (ECR). We define an ECR as any academic who has been awarded a PhD but has not yet held a research grant of £100,000 or more.
(3) Furthermore, we actively encourage applications from groups that are under-represented in transport research.
(4) Network-H₂ wishes to broaden the academic research engagement and therefore current network Co-Investigators are not able to be the Principal Investigator for a project proposal.

For this call, standard UKRI eligibility rules apply relating to the status of the organisation and the employment status of individuals applying. Co-Investigators from all disciplines supported by UKRI are welcomed and encouraged to apply.

For information on the eligibility of organisations and individuals to receive EPSRC funding, see the EPSRC Funding Guide.

5. Equality, Diversity and Inclusion

The Network is committed to EDI and this is at the heart of the Network's activities at all levels. The Network recognises the importance of EDI and that the link between diversity and research productivity is well established. It also understands the benefits that can be achieved through building an inclusive partnership within a multidisciplinary collaboration with representatives, both academic and industrial stakeholders, across the four major transportation modes of aviation, rail, road and marine.

6. Application Process

(1) Read the call guidance below.

(2) Complete the application form and return to Rachel.Simpson@durham.ac.uk no later than 25th June 2021 at 17:00. Any applications received after this deadline will not be considered.

(3) Your application will be reviewed by Network-H₂'s Support Team for compliance with the call guidance and will be checked against the UKRI eligibility criterion.

(4) If eligible, your application will be considered for evaluation.

7. Evaluation Process

Applications will be evaluated by Network-H₂'s Management Board based on the following main criteria:

(1) Novelty/transformative potential.

(2) Methodology.

(3) Overall quality and fit across the theme of this call.

(4) Clear plans for potential impact.

(5) Ability to deliver the project in the timescales.

8. Call Guidance

Costing

Prospective applicants must discuss their applications with their local research office and obtain project costings using the institutions standard UKRI template.

Funding is offered at 80% full economic cost (fEC) and may be used to cover any research related activity. Indexation should be included in the costing, as this will be applied upon award. UKRI funding rules will be applied to the final proposal.

Eligible costs must be in line with UKRI terms and conditions.

Please note large equipment cannot be supported by this call.

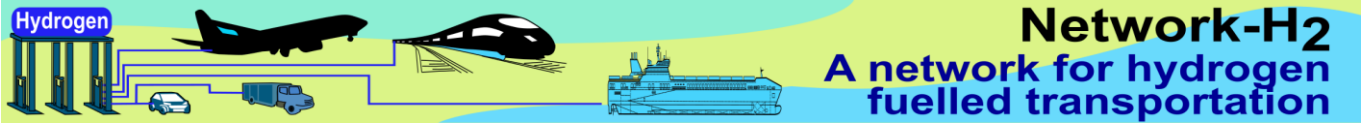**Reporting and Dissemination**

(1) At the start of the project, you will coordinate a stakeholder workshop, with the support of the Network-H₂ team, to gather information to inform the research program and you will produce a short workshop report.

(2) You will be required to provide monthly progress updates and a written report after 3 months describing interim research outcomes.

(3) A final written report will be required within one month of the end of the project covering the project outcomes, publications and any future plans.

(4) A final expenditure statement will be required within one month of the end of the project noting the actual costs at 100% and 80% fEC.

(5) By the end of the project, you will deliver (a) a dissemination workshop to present project outcomes and (b) provide a written report, to be published on the Network-H₂ website, summarising activities and key findings and (c) submitted a journal publication.

The project will receive the agreed funding upon completion of these requirements.

Further requirements

(1) Advocacy: You must be willing to contribute to the overall aims of Network-H₂, disseminating your findings via our project website and at our network events, as well as through other appropriate means, and engaging in building Network- H₂'s ethos into your project.

(2) Webinars**:** Successful applicants will be required to participate in 3 webinars relating to the project funded by this scheme; One where they will present and receive supportive feedback on their project, and two where they will participate and provide supportive feedback to the PIs of the other projects.

(3) Collaboration Agreement: Where the grant is associated with more than one research organisation, the lead institution will be required to put in place a collaboration agreement with all other parties. In order for funds to be released, a copy of the fully executed agreement must be shared with Network-H$_2$.

9. Point of Contact for Queries

If you have any questions, please do not hesitate to contact us by emailing Rachel.Simpson@durham.ac.uk