

# FUNDING INNOVATION FOR NET ZERO

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The Hydrogen and Advanced Technologies branch in the Department for the Economy has created this regular newsletter to keep you informed of any relevant external funding opportunities available. Our focus is funding which promotes clean energy and a low carbon economy. We hope you find this helpful and if you have any feedback on the newsletter, please contact us at:

HydrogenAdvancedTechnologiesBranch@economy-ni.gov.uk



Disclaimer: In this newsletter we are referencing publicly available information, we acknowledge that it may not be exhaustive. We advise all interested parties to engage with funding bodies in the first instance directly at the earliest opportunity. DfE accepts no liability for discrepancies in dissemination. Funding opportunities detailed do not represent DfE endorsement or involvement in any way.

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## New this Issue:

#### **Net Zero Hydrogen Fund**

The Net Zero Hydrogen Fund (NZHF), announced in the Prime Minister's Ten Point Plan for a Green Industrial Revolution, is worth up to £240 million and will be delivered between 2022 and 2025.

The aim of the Net Zero Hydrogen Fund (NZHF) is to provide capital expenditure (CAPEX) and development expenditure (DEVEX). 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. The NZHF will deliver up to £240m via four strands as follows:

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.



Open Date: 25th April 2022



Closing Date: 22nd June 2022 at 11am



More information on Strand one can be found at: Competition overview - Net Zero Hydrogen Fund - Strand 1 Development Expenditure (DEVEX) - Innovation Funding Service (apply-for-innovation-funding.service. gov.uk)

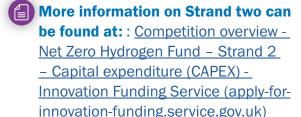
Strand 2: Capital Expenditure (CAPEX) for projects that do not require a hydrogen specific business model. These are low carbon hydrogen projects that can deploy on the basis of capital expenditure support and are able to start construction rapidly.



Open Date: 25th April 2022



Closing Date: 6th July at 11am



**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.



## New this Issue:

### Industrial Hydrogen Accelerator Programme

The Industrial Hydrogen Accelerator (IHA) competition supports projects generating evidence on end-to-end industrial fuel switching to hydrogen. It will cover 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 competition will fund demonstrations and, where needed, feasibility and FEED studies:

 the feasibility studies will explore how systems could be designed and provide information on the technical requirements and costs  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 realworld performance and costs

It forms part of the 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.

Funding Organisation: BEIS

**5** Total Fund: Stream 1 – up to £10 Million in grant funding per project

Stream 2A – up to £400,000 in SBRI funding per project

Open Date: Currently open

Closing Date:
Stream 1 – Complete and submit registration form by 7th July at 2pm - Application form to be submitted by 2pm on 21st July 2022

Stream 2A – Complete and submit registration form by 9th June 2022 - Application form to be submitted by 2pm on 23rd June 2022.

More information can be found at:
Industrial Hydrogen Accelerator
Programme: open to applications GOV.UK (www.gov.uk)





**Hydrogen Research Call for Proposals** 

The Clean Hydrogen Partnership is launching its hydrogen research call for proposals – €300.5 million will be made available for proposed projects in an unprecedented drive to support the creation of cutting-edge hydrogen technologies.

The call addresses key priorities within different areas of research and innovation, with direct and quantified impact towards the achievement of the objectives of the Clean Hydrogen joint undertaking.

- Opening date: 31st March 2022
- Closing dates: 31st May 2022, 17:00 (CEST) and 20 September 2022, 17:00 (CEST)
- More information can be found at:
  Call for proposals 2022 (europa.eu)

**Automotive Transformation Fund Scale up Readiness Validation (SuRV)** 

APC is seeking proposals from single organisations or consortiums with R&D projects validating readiness for scale up through pilot production, with a maximum grant request of £2 million.

These projects must produce physical production samples, of a quantity and quality which supports the case for the commercial viability of scale up in the UK. It may include samples to validate technical qualification.

The resulting projects must support the UK automotive industry in:

- increasing business confidence in making large scale manufacturing investments
- · building electrified vehicle supply chains

- Funding Organisation: Advanced Propulsion Centre and Partners
- **£** Total Fund: £2,000,000
- Open Date: 20th April 2022
- Closing Date: 25th May 2022 at 11am
- More information can be found at:

  <u>Competition overview Automotive</u>

  <u>Transformation Fund Scale up</u>

  <u>Readiness Validation (SuRV) Innovation Funding Service (apply-forinnovation-funding.service.gov.uk)</u>



**Canada-UK net zero value chains:** transportation

UK registered businesses and Canadian small and medium-sized enterprises (SMEs) can apply to collaborate on joint research and development projects that enable the transition to net zero for the automotive, rail, or maritime sectors.

- Funding Organisation: Innovate UK
- **£** Total fund: £4,000,000
- Opening date: 4th April 2022 09:30
  UK time
- Closing date: 29th June 2022 17:00 UK time
- More information can be found at:

  <u>Canada-UK net zero value chains:</u>

  <u>transportation UKRI</u>

Innovate UK Smart Grants: April 2022

UK registered organisations can apply for a share of up to £25 million for game-changing and commercially viable R&D innovation that can significantly impact the UK economy.

- Funding Organisation: Innovate UK
- **£** Total fund: £25,000,000
- opening date: 25th April 2022 09:30 UK time
- Closing date: 27th July 2022 11:00 UK time
- More information can be found at:

  Competition overview Innovate UK Smart

  Grants: April 2022 Innovation Funding Service

  (apply-for-innovation-funding.service.gov.uk)



Manufacturing research hubs for a sustainable future: outline stage

Apply for funding to establish a large-scale, multidisciplinary research hub in support of manufacturing, environmental sustainability and net zero.

Projects should address major, long-term challenges facing manufacturing industries.

Two Projects will be funded. EPSRC will fund 80% of the full economic cost of each project up to £12 million. Funding for each project will be awarded over seven years.

Funding Organisation: Engineering and Physical Sciences Research Council (EPSRC)

**£** Total fund: £24,000,000

**6** Maximum award: £12,000,000

Opening date: 26th April 2022

**Closing date:** 16th June 2022

More information can be found at: Manufacturing research hubs for a sustainable future: outline stage – UKRI



**SBRI:** Fusion Industry Challenges – phase one

Organisations can apply for a share of £2 million, inclusive of VAT, to develop solutions to encourage innovation in the fusion industry, through the use of novel and innovative heating and cooling systems, materials, manufacturing and technologies.

Funding Organisation: Innovate UK

**£** Total fund: £2,000,000

Opening date: 9th May 2022

Closing date: 22nd June 2022 at 11am

More information can be found at: Competition overview - SBRI:

Fusion Industry Challenges - phase 1 - Innovation Funding Service

(apply-for-innovation-funding.service.gov.uk)



Knowledge transfer partnerships (KTP): 2022 to 2023, round two

The Knowledge Transfer Partnership (KTP) programme allows a UK registered business or not for profit organisation (which we will refer to collectively as the 'business partner' from now on) to partner with a knowledge base partner' (either a UK higher education (HE) or further education (FE) institution, research and technology organisation (RTO) or Catapult).

The KTP partnership brings new skills and the latest academic thinking into the business partner to deliver a specific, strategic innovation project. The knowledge base partner recruits the 'associate' to work on the project. The associate has the opportunity to lead a strategic development within the business developing new skills and gaining valuable experience.

- Funding Organisation: Innovate UK
- **10 Total fund:** £8,000,000
- **6** Opening date: 11th April 2022 09:30 UK time
- (Elosing date: 15th June 2022 11:00 UK time
- More information can be found at: Competition overview Knowledge transfer partnerships (KTP): 2022 to 2023, round 2 Innovation Funding Service (apply-for-innovation-funding.service.gov.uk)

**Environmental response to hydrogen emissions** 

Apply for funding to explore the environmental response to hydrogen emissions. The full economic cost of a project can be up to £1,687,500. NERC will fund 80% of the full economic cost.

- Funding Organisation: Natural
  Environment Research Council (NERC)
- **10 Total fund:** £3,850,000
- **£** Award range: £400,000 £1,350,000
- Opening date: 8th April 2022
- Closing date: 16th June 2022 16:00 UK time
- More information can be found at:

  <u>Environmental response to hydrogen</u>

  <u>emissions UKRI</u>



#### **Manufacturing the future**

Manufacturing the future investigatorled research grants are for researchers at UK higher education institutions, research council institutes, UKRIapproved independent research organisations and NHS bodies.

Collaboration is encouraged with other researchers, industry, the public sector and other relevant partners.

Researchers are being sought in engineering, physical sciences, information and communications technologies, and mathematical sciences.

There is up to £3 million available for projects each quarter, dependent on demand and the quality of the proposals. There are no deadlines.

80% of the full economic costs of the project will be awarded, organisations must agree to find the balance.

- Funding Organisation: Engineering and Physical Sciences Research Council (EPSRC)
- **£** Maximum award: £2,000,000
- Opening date: N/A
- Closing date: Open no closing date
- More information can be found at:

  <u>Manufacturing the future UKRI</u>



#### Net zero transatlantic flight fund

The Department for Transport, in partnership with Innovate UK, has launched a competition to support industry to achieve the first net zero transatlantic flight on a commercial aircraft using 100% sustainable aviation fuel (SAF) within one year.

Up to £1 million in funding will be made available from 2022 to 2023 to support the testing, research and personnel costs of the initiative.

Interested airlines, fuel producers, aircraft or engine manufacturers and fuel suppliers are invited to complete an initial expression of interest (EOI).

Submissions will be used to:

- help set the programme's timescales and determine the delivery plan
- preselect proposals that will progress to the full competition stage
- The deadline for applications is 11:59pm on 12 June 2022.
  Send your completed application to <a href="mailto:saf@dft.gov.uk">saf@dft.gov.uk</a>.
- No funding decisions will be made at EOI stage. Shortlisted parties will be invited to apply for funding in the next stage of the competition.
- More information can be found at:

  Net zero transatlantic flight fund GOV.UK (www.gov.uk)



#### Ideas on research priorities for Northern Ireland economic policy

Apply for funding to develop research priorities for economic policy through the 'ADR UK: Business Data for Research (BDR) Northern Ireland' programme.

Organisations must be based at a UK research organisation eligible for ESRC funding.

Challenges must support the Department for the Economy Northern Ireland economic policy, specifically their '10X Economy' economic vision for a decade of innovation.

The full economic cost of your project can be up to £65,000. ESRC will fund 80% of the full economic cost.

Projects must run for up to six months.

- Funding Organisation: Economic and Social Research Council (ESRC)
- **£** Total fund: £195,000
- **£** Maximum award: £65,000
- Opening date: 12<sup>th</sup> May 2022
- Closing date: 16<sup>th</sup> June 2022 16:00 UK time
- More information can be found at:

  Ideas on research priorities for

  Northern Ireland economic policy –

  UKRI



#### Design Exchange Partnerships: designing net zero

Apply for funding to develop designbased solutions for specific net zero and climate crisis challenges facing UK coastal and island communities.

Participants must be based at a UK research organisation eligible for AHRC funding.

The competition is particularly keen to receive applications from multidisciplinary design researchers, especially those in the early stages of their career.

Projects could focus on:

- decarbonisation
- environmental sustainability
- · climate mitigation
- the circular economy
- the reduction of waste

The full economic cost of a project can be up to £40,000, plus a 5 to 10% non-academic partner organisation contribution. AHRC will fund 80% of the full economic cost.

Researchers and supervisors must be based at a UK Research and Innovation (UKRI)-eligible research organisation or independent research organisation.

Non-academic partners must be either a:

- micro or small and medium-sized enterprise-sized, UK registered business, charity or not-for-profit
- similarly sized department of a public sector organisation

This first full round will focus on the specific net zero+ and climate emergency challenges faced by the UK's island and coastal communities.

A range of different types of design intervention can be supported, from product or service level innovation through to strategic, systems-level design thinking.





More information can be found at:

<u>Design Exchange Partnerships:</u>

<u>designing net zero - KTN (ktn-uk.org)</u>



# Coming Soon...

#### **Industrial Energy Transformation Fund Phase 2: Summer 2022**

The IETF supports businesses with high energy use to transition to a low carbon future, and to cut their bills and emissions through increased energy efficiency and decarbonisation. It is a crucial part of the Government's strategy for tackling climate change and reaching Net Zero by 2050. It complements other government programmes that offer innovation and early demonstration support, such as the Industrial Energy Efficiency **Accelerator and Industrial Hydrogen Accelerator (part of the Net Zero** Innovation Portfolio) and will help to transform an important part of the UK economy.

The new Phase 2 competition window for England, Wales and Northern Ireland opens on 30th May 2022 and runs until 9th September 2022 and is worth up to £70 million in funding. It will be available in the form of a grant scheme and will fund:

- Feasibility and engineering studies for potential deployment projects that will deliver energy efficiency or decarbonisation benefits if implemented, enabling decision-makers to make informed investment choices
- Deployment of mature energy efficiency technologies that improve industrial energy efficiency and reduce energy demand (TRL 8-9)

- Deployment of deep decarbonisation technologies that reduce carbon emissions associated with the industrial process (TRL 7-9)
- For more information register for the online event on:
- 8th June at 10am 12.30 using the following link:
- Registration Industrial Energy
  Transformation Fund Phase 2
  Summer 2022 (cvent.com)



# Coming Soon...

**Industrial Energy Efficiency Accelerator (IEEA)** 

Phase 4 of the IEEA opened for applications on 19th May 2022.

The BEIS IEEA supports partnerships between developers of efficient technologies and industrial companies willing to trial innovations on-site.

A further £8 million of funding has been made available through the IEEA programme for 2022-2025. The IEEA is funded through the **Net Zero Innovation Portfolio (NZIP)**, a £1 billion fund to support the development and adaptation of low carbon technologies and systems across industry, power and the built environment. It is anticipated that the BEIS IEEA funding will unlock up to £8-10 million of additional investment from the private sector to support the demonstrations.



More information can be found at:

Overview - Industrial Energy Efficiency Accelerator (IEEA) (carbontrust.com)



# Successful Bids:

DfE were delighted to hear of the success of Northern Ireland based company Catagen in the BEIS funding for Low Carbon Hydrogen Supply. Catagen were successful with two bids totalling over £570,000. A successful outcome from the first phase of the project in 2022 will lead to an application into the second phase and the possible award of up to £12m further funding across the two projects.

The funding awards are a potential game-changer for the company and for Northern Ireland, providing the opportunity to build a new green industry in the production of green hydrogen and e-fuels using CATAGEN's novel and proprietary technology.



#### More information can be found at:

Two BEIS awards for CATAGEN - Catagen Invest NI video on Vimeo

<u>Low Carbon Hydrogen Supply 2 competition - Stream 1 Phase</u>
<u>1: summaries of successful projects - GOV.UK (www.gov.uk)</u>

