# KTN and the Hydrogen Innovation Network

Avijita Kharel, Innovate UK KTN







### **About Us**

Innovate UK KTN exists to connect innovators with new partners and new opportunities beyond their existing thinking – accelerating ambitious ideas into real-world solutions.



#### What we do



#### Connecting

Finding valuable
partners
Project consortium
building
Supply Chain
Knowledge
Driving new
connections
Articulating challenges
Finding creative
solutions



#### **Funding advice**

Awareness and
dissemination
Public and private
finance
Advice – project scope
Advice – proposal
mentoring
Project follow-up



#### Influencing

Promoting Industry
needs
Informing policy
makers
Informing strategy
Communicating
trends and
market drivers



### **Supporting**

Intelligence on trends
and markets
Business Planning
support
Success stories /
raising profile
High level application
review



### **Navigating**

Navigating the innovation support landscape
Promoting coherent strategy and approach
Engaging wider stakeholders
Curation of innovation

KTN



### **Hydrogen Innovation Network - Purpose**

To create a non-competitive advisory group to pool knowledge from existing hydrogen communities to validate views on the current challenges to enabling local clean hydrogen *uptake* at scale and cost and to find innovative solutions to those challenges.

#### **Production**









### Membership

• Current membership: 3,000+ • Investment Impact: £2,716,883+

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## Activities and services we offer





- Network/Connect the right people
- Community of UK hydrogen supply chain technology businesses and end users
- Bridge between Academia, Government,
   Public and Private sector

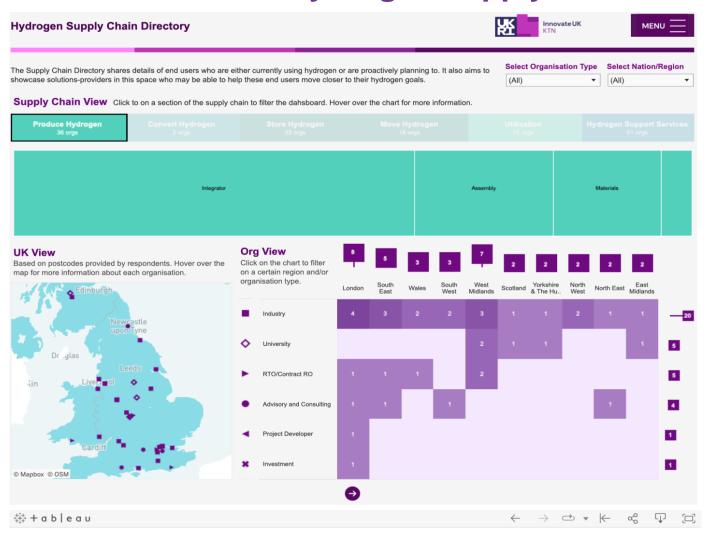
Database of thousands of companies

Investors and skilled workers





### Innovate UK KTN Hydrogen supply chain directory



Hydrogen Supply Chain
 Directory to discover the
 200+ organisations across the
 UK in Hydrogen supply chain.





Funding support

Discover the latest hydrogen funding opportunities and meet energy investors



Application support, Briefing, Information







• Knowledge sharing through:

. Events

Podcasts

Webinars



. Media and Newsletters



Advice/ Consultation

By helping startups with the right contacts and information

Signposting startups and organisations seeking help

Helping with applications (some applications only)







Providing opportunity and platform for organisations:

To share their story by pitching

To exhibit their technology

To share their events/ conferences and breakthroughs

To share their challenges





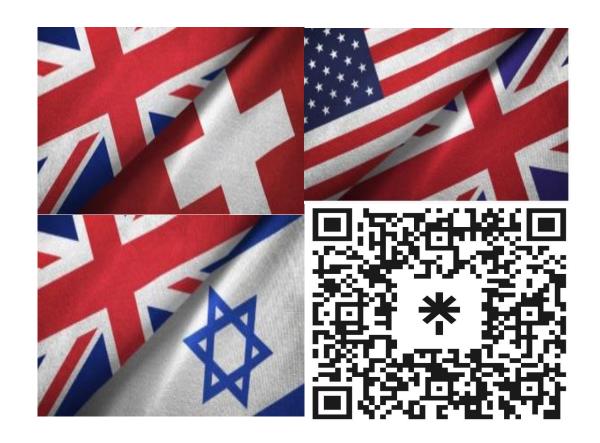


**Global reach** 

International partnership facilitation and UK technology commercialisation

**Through Embassies and International partners** 

**Support with International collaborative funds** 





Overarching view of the supply chain landscape allows us to:

Plan and Execute programmes to address the gaps

Advise for more funding where needed

Case studies and Consultations to spread knowledge/information







**Engagement and Collaboration** 

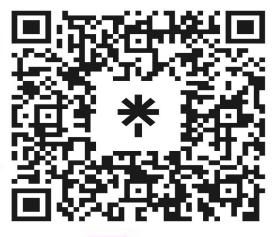
To reach Net Zero

To increase clean energy uptake from clean Hydrogen

To accelerate Hydrogen supply chain

To champion sustainability and low carbon Hydrogen







#### **Innovation**

### Through Innovation **Exchange platform**







KTN's **Innovation Exchange** programme connects companies with specific challenges to innovators who are already working on the solutions. Our unique cross-sector approach connects businesses with opportunities beyond their existing thinking.





#### THANK YOU VERY MUCH!

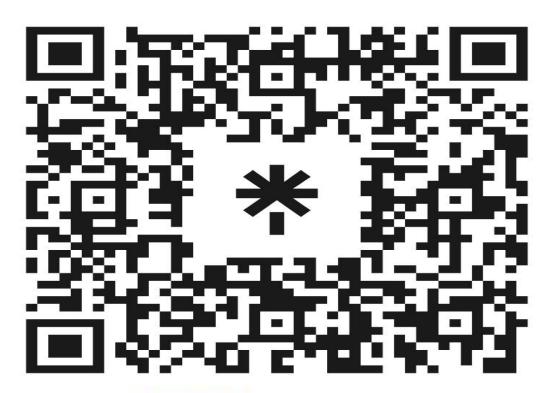
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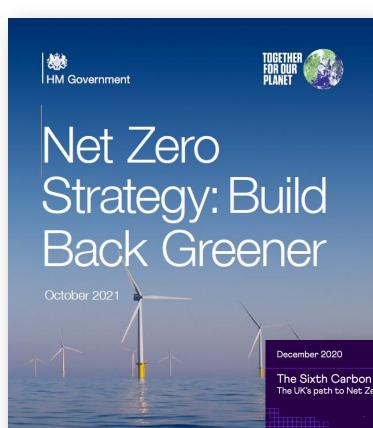
### Innovate UK

- We are the UK's innovation agency and at the heart of delivering UK R&D expenditure to businesses
- We invest in new ideas and technologies and connect businesses to the right people to drive economic growth and social benefits



- Wide sector cover: Health, Robotics, Al, Net Zero...
- Budget approaching £1 billion





### Our Net Zero Foundations









### **Funding Opportunities**

- Industrial Strategy Challenge Fund (ISCF)
- Innovate UK Smart Grants
- Small Business Research Initiative (SBRI)
- Managed Programmes
- Knowledge Transfer Partnerships
- Innovation Loans
- Investor Partnerships
- Innovation to Commercialisation of University Research (ICURe)
- Catalysts (Biomedical and Energy)
- Future Leaders Fellowship
- International



Innovate UK supports the following R&D categories:

- fundamental research
- feasibility studies
- industrial research



Not all funding options are open at any one time. Check website for latest opportunities.

https://apply-for-innovation-funding.service.gov.uk/competition/search?\_ga=2.115831622.115414534.1616576710-389397812.1611493012



### **Industrial Strategy Challenge Fund**



### **Ageing society**

- Medicines manufacturing
- Data to early diagnosis and precision medicine
- Healthy ageing
- Accelerating detection of disease



### **Future of mobility**

- Faraday Battery Challenge
- Robotics in Extreme Environments
- Future flight
- Driving the electric revolution



### Al and Data Economy

- Audience of the future
- Quantum technologies
- Next generation services
- Commercialising quantum technologies
- Digital security by design



### Clean growth

- Prospering from Energy revolution
- Low Cost Nuclear
- Transforming construction
- Transforming food production
- Manufacturing made smarter
- Smart sustainable plastic packaging
- Industrial decarbonisation





### **Innovate UK Smart Grants**

Innovate UK Smart grants support the very best, game-changing and disruptive ideas that have the potential to change the world.

Funding is available for projects at various stages, from feasibility studies through to developing and testing a prototype, coming from any industry and anywhere in the UK.

#### Projects should either:

develop a brand new product, service or process take an existing technology or service above and beyond what's currently available in the field



### SBRI: the small business research initiative

### Helping government, helping businesses

#### **Helping government:**

SBRI helps government organisations solve tough challenges by connecting them with innovative businesses.

#### **Helping businesses:**

SBRI offers innovators the chance to win a government contract of to help demonstrate and develop their new technologies.

over 80 public sector organisations participated average annual sales grow 30%







### **SBRI**

Small business research initiative



Pre-commercial procurement of R&D Services (Contract)



100% funding – avoids need for external investment



Work with a public sector customer or challenge owner



Applied to solve public sector delivery or policy challenges



Outcome-driven solutions with milestone payments



Open to all but tailored to SMEs

### Knowledge Transfer Partnerships (KTP)

- KTPs help UK businesses innovate and grow by linking them with an academic or research organisation and a graduate
- a KTP enables a business to bring in new skills and academic thinking
- the academic or research organisation partner will help to recruit a suitable graduate
- schemes last between 12 and 36 months





**Innovate** 

### What is Horizon Europe?

**€95.5bn** funding agreed for **2021-2027** 

€53.8bn

€24.9bn

### Pillar 1 EXCELLENT SCIENCE

**European Research Council** 

Marie Skłodowska-Curie Actions

Research Infrastructures



#### Pillar 2

GLOBAL CHALLENGES & EUROPEAN INDUSTRIAL COMPETITIVENESS

### uster

- Health
- Culture, Creativity and Inclusive Society
- Civil Security for Society
- · Digital, Industry and Space
- · Climate, Energy and Mobility
- Food, Bioeconomy, Natural Resources, Agriculture and Environment

Joint Research Centre



### Pillar 3 INNOVATIVE EUROPE

€13.4bn

**European Innovation Council** 

European innovation ecosystems

European Institute of Innovation and Technology

#### WIDENING PARTICIPATION AND STRENGTHENING THE EUROPEAN RESEARCH AREA

Widening participation and spreading excellence

Reforming and Enhancing the European R&I system

Contact <a href="mailto:louise.mothersole@iuk.ukri.org">louise.mothersole@iuk.ukri.org</a> for free support and guidance

### Horizon Europe – the facts

- UK organisations are fully eligible to apply for funding from the EU for all transport projects
  - 127 UK organisations sharing £106,996,565 for transport projects so far
- UK organisations have a better than average success rate in Horizon Europe for transport competitions
  - Average success rate across all countries 28%
  - UK success rate 33%
- Funding rate can be up to 100% of eligible direct costs plus additional 25% towards overhead – for all organisations, regardless of size (lowest funding rate for transport projects is 60% of eligible direct costs plus 25% towards overhead)

# Call for proposals: Clean and competitive solutions for all transport modes

- Zero Emission Road Transport
- Aviation
- Waterborne transport
- Transport related health and environment

- Link to call on EU Portal
- Call opening 7 Dec 2023
- Call closing 18 Apr 2024
- <u>18 different Topics</u> (competitions)

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2023 call closed 20 Apr 2023



Contact <a href="mailto:louise.mothersole@iuk.ukri.org">louise.mothersole@iuk.ukri.org</a> for free support and guidance





European Hydrogen Week

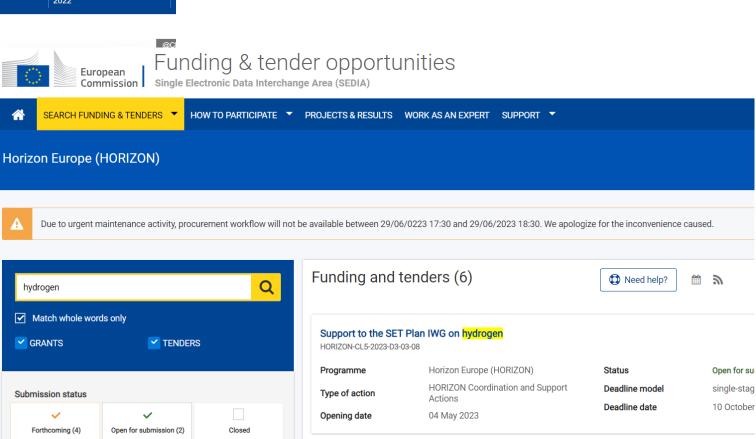
#### Clean Hydrogen Partnership

Home About V Projects Get Apply for Knowledge management V N

European Commission > Clean Hydrogen Partnership

### **European Partnership for Hydrogen Technologies**

The Clean Hydrogen Partnership's main objective is to contribute to EU Green Deal and Hydrogen Strategy through optimised funding of R&I activities. The Clean Hydrogen Partnership is the successor of the Fuel Cells and Hydrogen 2 Joint Undertaking (FCH 2 JU) and has taken over its legacy portfolio as of 30 November 2021.



### Public support for hydrogen doesn't always have hydrogen in the title!

- Industrial Cluster Decarbonisation ISCF
- Industrial Energy Transformation Fund
- Prospering from the Energy Revolution ISCF
- Future of Flight ISCF
- Aerospace Technology Institute Programme
- Driving the Electric Revolution ISCF
- Dept for Transport's Teesside Hydrogen Hub
- Automotive Transformation Fund/APC/ IDP Programmes
- Zero Emissions Road Freight Trial
- DfT Clean Maritime
- SMART
- Innovation Loans
- Strength in Places Fund
- Energy Catalyst

- Newton Fund
- Clean Air SPF
- Greenhouse Gas SPF
- Ofgem Strategic Innovation Fund
- Wider UKRI programmes
- Low Cost Nuclear
- Faraday Battery Challenge
- Active Building Centre
- Transforming Construction
- UK Energy Research Centre
- Hydrogen and Fuel Cell Supergen Hub
- Hydrogen Research Centres of Excellence and Integration ( (in development)
- Decarbonising Heating and Cooling
- Power Networks Demonstration Centre (PNDC)

- Centre for Research into Energy Demand Solutions (CREDS)
- Translation Energy Research Centre
- UK Collabatorium for Research on Infrastructure and Cities (UKCRIC)
- Place Based Climate Action Network (PCAN)
- UK CCS Research Centre
- Bioenergy Supergen hub
- Networks & Storage Supergen
- Decarbonising Transport Network
- Midlands Energy Research Accelerator
- KTN's Hydrogen Innovation Network
- High Value Manufacturing Catapult (e.g. National Composites Centre)
- Energy Systems Catapult
- Connected Places Catapult



# Thank you

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