UK-HyRES

Engineering and Physical Sciences Research Council

UK Hub for Research Challenges in Hydrogen and Alternative Liquid Fuels

Hub Vision

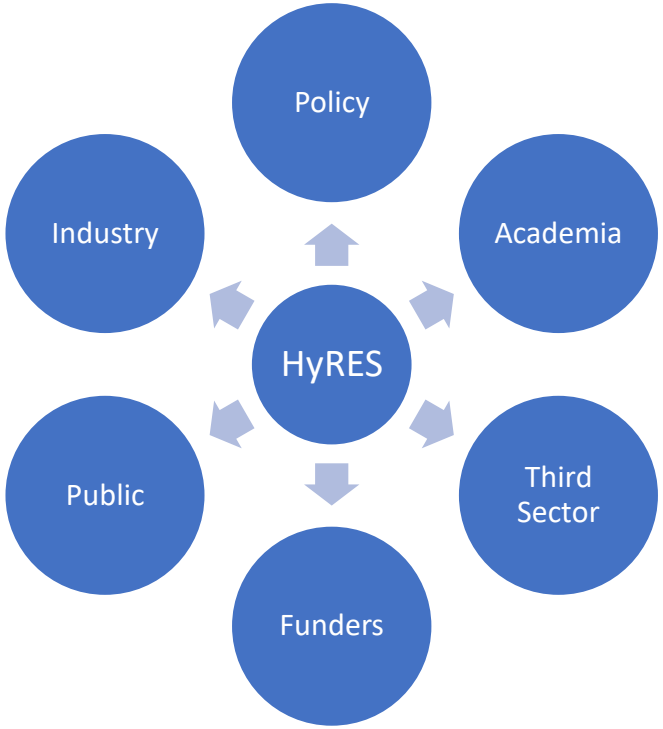
The flagship UK-HyRES hub will **identify**, **prioritise** & **deliver sustainable solutions** to **research challenges** that must be addressed to ensure widespread adoption of hydrogen & alternative liquid fuels to meet Net Zero.

UK-HyRES will provide an integrated **network** & **collaboration platform** for fundamental research & will be a focus for the UK research **community**.

www.ukhyres.co.uk

Partnerships

- **£23.7M** overall funding at this stage
- **£10.0M** EPSRC funding
  - £4.7M flexible fund
- **£8.1M** support from university partners
- **£5.6M** confirmed initial leveraged co-funding from 19 industry and other partners
- Additional strong support from potential collaborators
- Research across hydrogen value chain
- Multi-disciplinary, multi-site, integrated UK Hub
- 7 core universities, 9 core investigators, 15 projects already defined



Structure

UK-HyRES

Technical Themes

Projects

Cross-cutting Themes

Co-I

TT1: Production
John Irvine

Director & PI

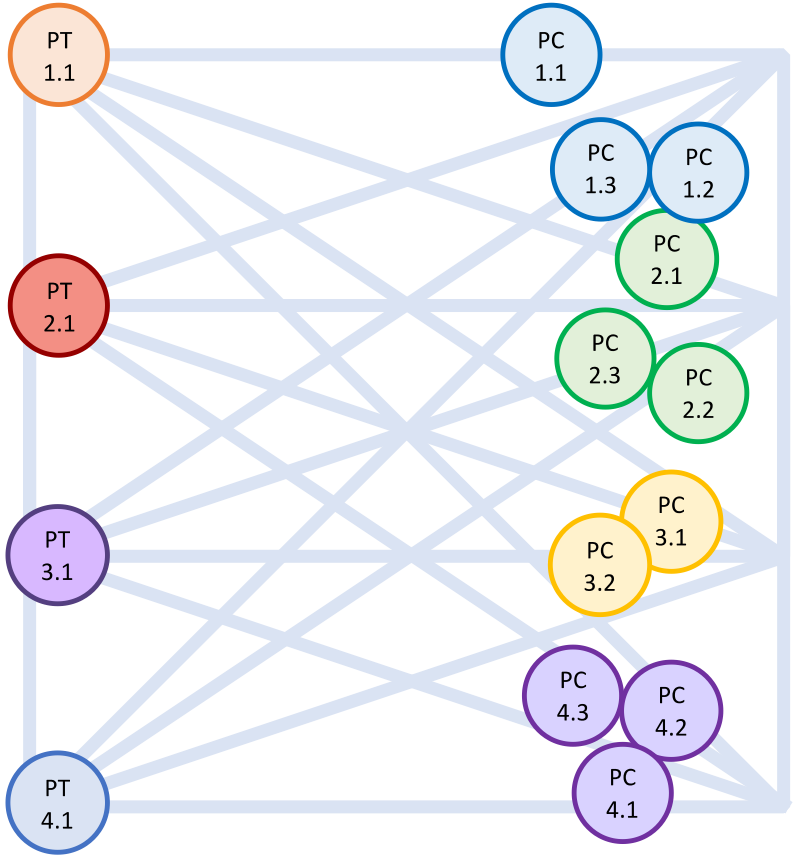
TT2: Storage & Distribution
Tim Mays

Co-I

TT3: End Use
Qiong Cai

Co-Director & Co-I

TT4: Alternative Liquid Fuels
Shanwen Tao



CT1: Economic
Paul Dodds

Co-I

CT2: Environmental
Rachael Rothman

Co-Director & Co-I

CT3: Social
Chris Jones

Co-I

CT4: Safety
Joan Cordiner

Co-I

Exemplar – Project PT2.1

Technical theme **TT2**
Project **PT2.1: Advanced Solid-state Hydrogen Storage**

Research Challenge: Safe, **h**igh density hydrogen storage for aerospace sector

Project: Stablisation and scale up of ultra-high local H_2 density in nanoporous carbons

Courtesy GKN Aerospace

Cross-cutting themes

- CT1: Economic
- CT2: Environment
- CT3: Social
- CT4: Safety

Priorities

- ED&I, RER&I, ECRs
- Collaboration with HI-ACT
- Calls for flexible funding
- New partnerships and funding
- Deliver real and sustained impacts
- Globalisation
- Look to 2028, 2050 and beyond

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Physical Sciences
Research Council