

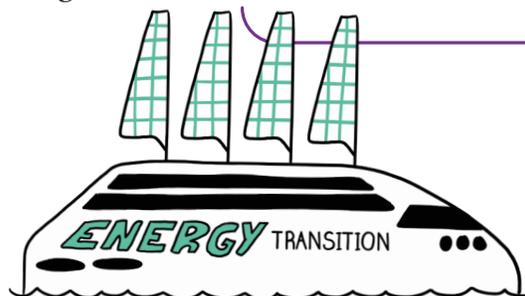
THE EPIC CHALLENGE

Let your **energy transition challenge** spark its own solution

Harness the power of digitisation to mitigate your risks in the transition from fossil fuels to decarbonized energy systems, by making your real-world challenge the focal point that unites the unique mix of digital innovators and stakeholders required to solve it.

Creating the robust data solutions to enable the game-changing decision making that will revolutionise your energy transition ambitions at scale, requires

unprecedented orchestration of diverse stakeholders and the hottest tech thinkers and creators. So why not let your Firebox Challenge ignite the co-ordination and collaboration necessary to enjoy the smoothest, most efficient shift to producing, consuming or managing energy in a more innovative and sustainable way?



Which area will inspire your Firebox Challenge?

1 Climate Change and Emissions Reduction

- Developing or deploying renewable energy solutions and encouraging the adoption of low-carbon technologies.
- Informing new financial instruments, such as green bonds and climate funds, to support sustainable projects based on social and environmental value creation.

2 Energy Management and Storage

- Emerging Technologies: Technologies like hydrogen fuel cells, carbon capture and storage (CCS), and advanced battery systems are still in early development stages and face issues related to scalability, efficiency, and cost.

3 Sustainable Energy Production

- Resource Extraction: Mining for critical minerals needed for renewable technologies can lead to environmental degradation if not managed sustainably.
- Ecosystem Impact: Renewable energy project design, such as wind farms, can disrupt local wildlife and ecosystems
- Supply Chain Sustainability: Ensuring that the supply chains for renewable technologies are transparent, manageable and sustainable.

4 Energy Grid Access and Design

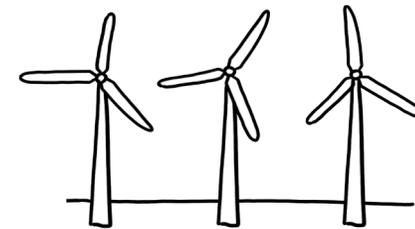
- Upgrading aging energy infrastructure to handle real and increasing demands, by integrating or leveraging renewable energy sources.
- Creating reliable and affordable access to energy supplies across the country to underserved and remote areas.

5 Efficient and Effective Energy Usage

- Supporting end users with affordable energy offers, as fluctuations in energy prices and market conditions can create uncertainty for the consumer
- Conducting energy audits to identify areas where energy is being wasted and implementing actions to reduce or eliminate waste.

6 Industry Collaboration and Data Sharing

- Knowledge Sharing through interoperable systems: Sharing information, data and best practices across sectors and regions to accelerate innovation within Energy, by understanding the gaps in data, resources and expertise.



Be part of Gemini Firebox

To discuss taking part in the Gemini Firebox programme, email Ryan.Goodman@cp.catapult.org.uk

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