Engineering and Physical Sciences Research Council

Mike Simpson

Senior Portfolio Manager (Engineering)

EPSRC – Strategy and Opportunities in NWTF Research Areas

- EPSRC Strategic Priorities
- Tomorrow's Engineering Research Challenges
- Technical Challenges
- Future Opportunities for NWTF

Engineering and Physical Sciences Research Council

EPSRC – Powering UK science and prosperity

Our Vision

To make the UK recognised as the place where the most creative researchers can deliver world-leading engineering and physical sciences research.

Mission Statement

EPSRC invests in world-leading research and skills to advance knowledge and deliver a sustainable, resilient and prosperous UK.

Our diverse portfolio ranges from digital technologies to clean energy, manufacturing to mathematics, advanced materials to chemistry.

We support new ideas and transformative technologies which are the foundations of innovations that improve our economy, environment and society.

In partnership and co-investing with industry, we work to deliver both national and global priorities

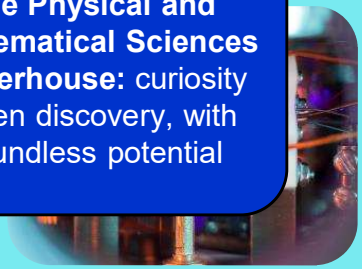
UKRI Engineering and Physical Sciences Research Council

EPSRC's 8 Strategic Priorities

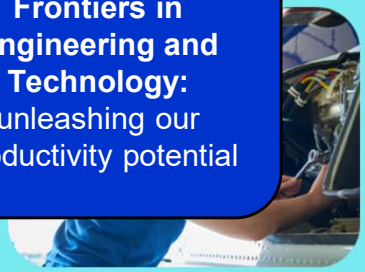
Discovery - led Research

Mission - Inspired Research

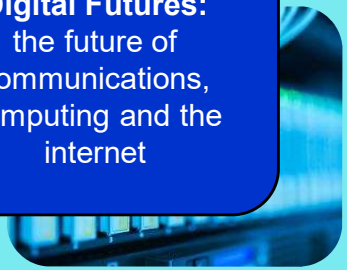
The Physical and Mathematical Sciences Powerhouse: curiosity driven discovery, with boundless potential



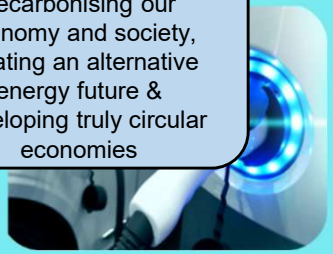
Frontiers in Engineering and Technology: unleashing our productivity potential



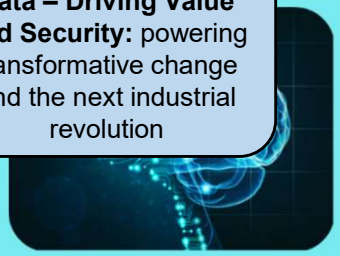
Digital Futures: the future of communications, computing and the internet



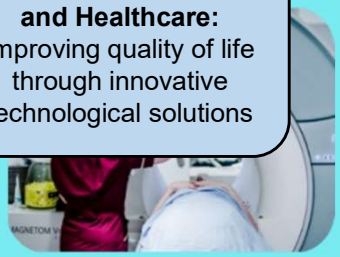
Engineering Net Zero: decarbonising our economy and society, creating an alternative energy future & developing truly circular economies



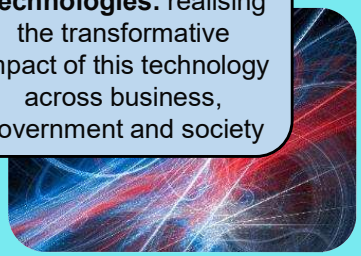
AI, Digitalisation and Data – Driving Value and Security: powering transformative change and the next industrial revolution



Transforming Health and Healthcare: improving quality of life through innovative technological solutions



Quantum Technologies: realising the transformative impact of this technology across business, government and society



International | **Talent and Skills** | **Place** | **World Class Infrastructure** | **Impact** | **Business Engagement**

An Effective Ecosystem for Engineering and Physical Sciences

UKRI Engineering and Physical Sciences Research Council

Tomorrow's Engineering Research Challenges

TERC was initiated with a UK-wide community engagement activity from EPSRC to identify key challenges and the engineering research that is needed to tackle these challenges.

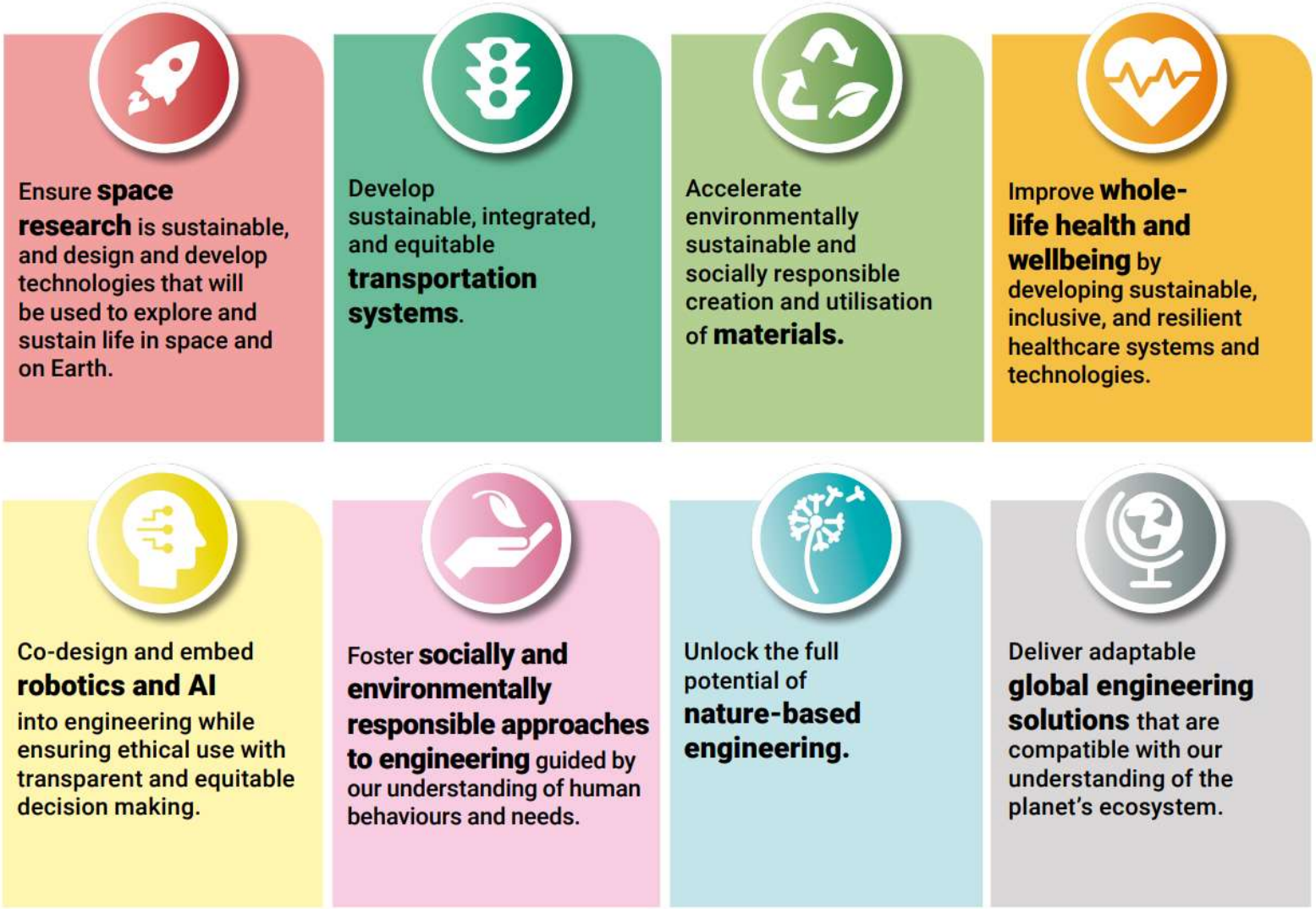
This process identified a spectrum of challenges at different levels:

- high-level community priorities
- cross-cutting themes
- technological challenges.

The high-level community priorities, cross-cutting themes and technological challenges are all detailed in the report document, along with some recommendations from the co-chairs and annexes containing details on the sources of the information gathered.

Engineering and Physical Sciences Research Council

Technical Challenges



UKRI Engineering and Physical Sciences Research Council

Future Opportunities for NWTF

- Future Research Funding especially around TERC challenge areas

- Support for an open culture around Research Infrastructure

- New directions for research agenda shaped by industry and government challenges

- Interdisciplinary research opportunities (systems engineering, new materials)

Engineering and Physical Sciences Research Council

Mike Simpson

Senior Portfolio Manager (Engineering)