



# KNOWLEDGE TRANSFER NETWORK

THE UK'S INNOVATION NETWORK

# Welcome to the KTN



## The KTN – Support available from the Innovation Network

Brian J. McCarthy – Knowledge Transfer Manager – Materials Community

SUPERGEN Annual Assembly – Birmingham

Arch 30, Innovation Centre North Campus, Manchester



# Introducing the KTN

The UK's Innovation Network



What we do

The KTN is the UK's innovation network. We bring together businesses, entrepreneurs, academics and funders to develop new products and services.

We help business to grow the economy and improve people's lives by capturing maximum value from innovative ideas, scientific research and creativity

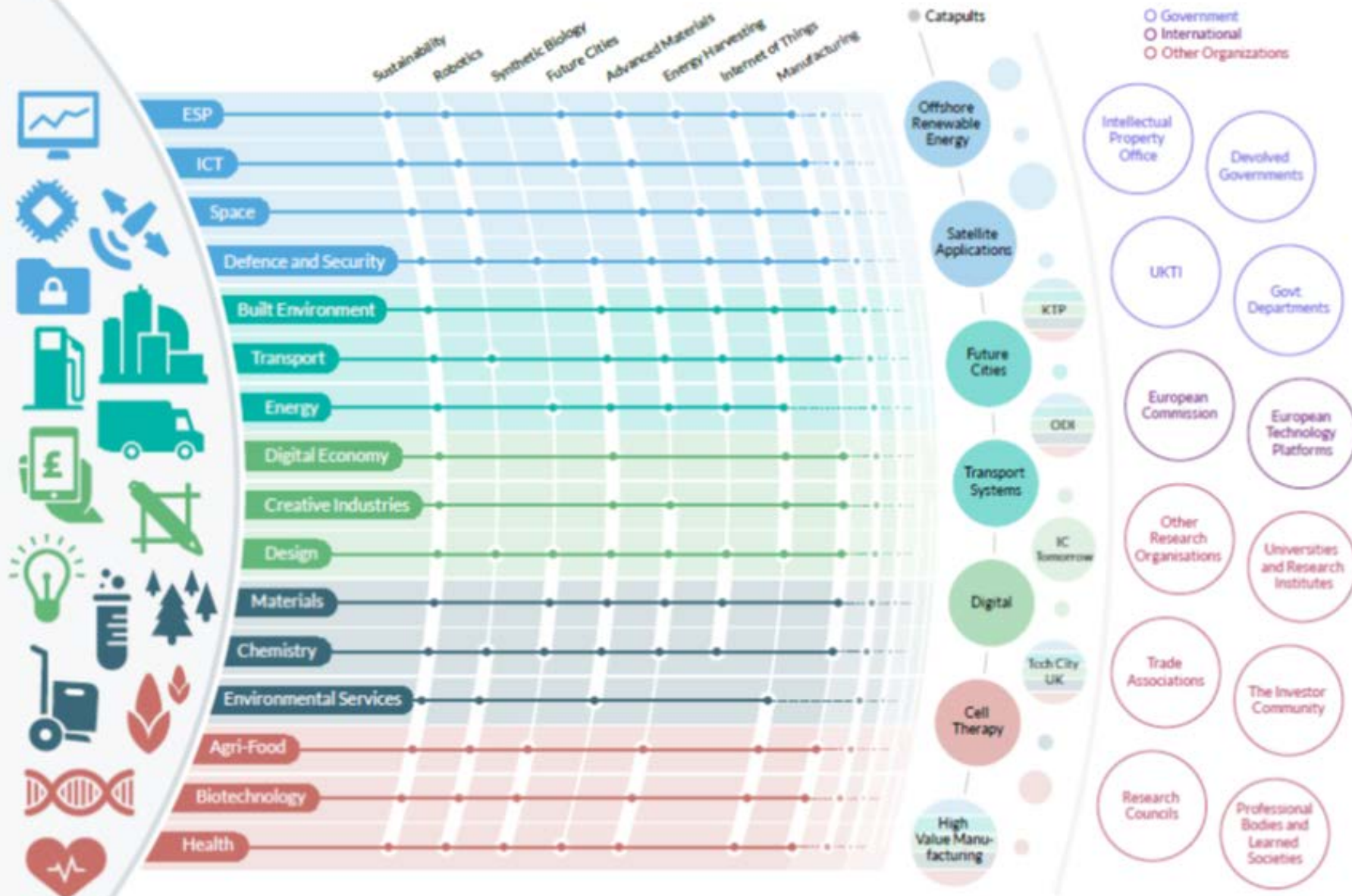
# The Knowledge Transfer Network

## CORE COMMUNITIES

## CROSS-CUTTING PROGRAMMES

## INNOVATE\_UK FAMILY

## OTHER ACTORS





# The Knowledge Transfer Network

Stimulating dialogue/accelerating innovation

*We are eliminating silos to make it easier to assemble multi-disciplinary teams so that we can do more, and do it well.*



**Chris Warkup**  
CEO

*The “half-life of knowledge” is shortening, so we must connect business with research faster than ever before.*



**David Lockwood**  
Chair

Knowledge  
Transfer  
Network



## 17 Industry Communities

Core thematic networks covering key application areas and underpinning technologies



## 17 Cross-sector Groups

Interdisciplinary programmes building communities around priority challenges



## 60,000+ Members

An engaged online community of innovators served by a single platform



## 6,000+ Delegates per year

Hundreds of events bringing people together ‘to make magic happen’

Technology Strategy Board  
Driving Innovation

# •••• The KTN Structure

- Materials Domain – Materials, Nano, Chemistry and Resource Efficiency
  - Domain Director – Recruitment underway
    - Dr Robert Quarshie – Materials and Nano
- Fusion Domain – Domain Director is Frank Boyd
- Applied Domain – Domain Director is Steve Welch
- Living Domain – Domain Director is Sue Dunkerton, OBE
- Physical Domain – Domain Director is Colin Tattam



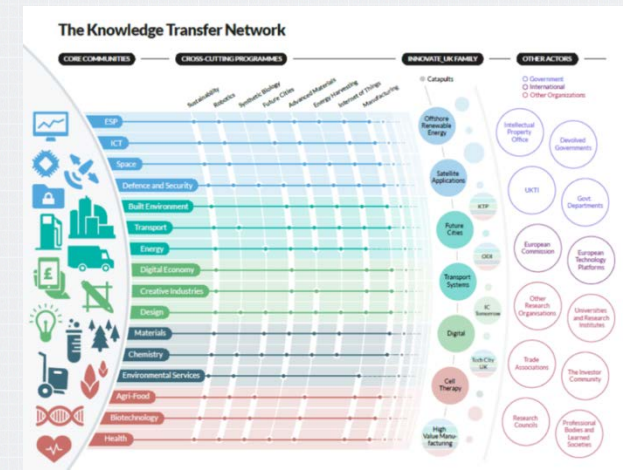
...

# Technology Strategy Board becomes



# How we can help:

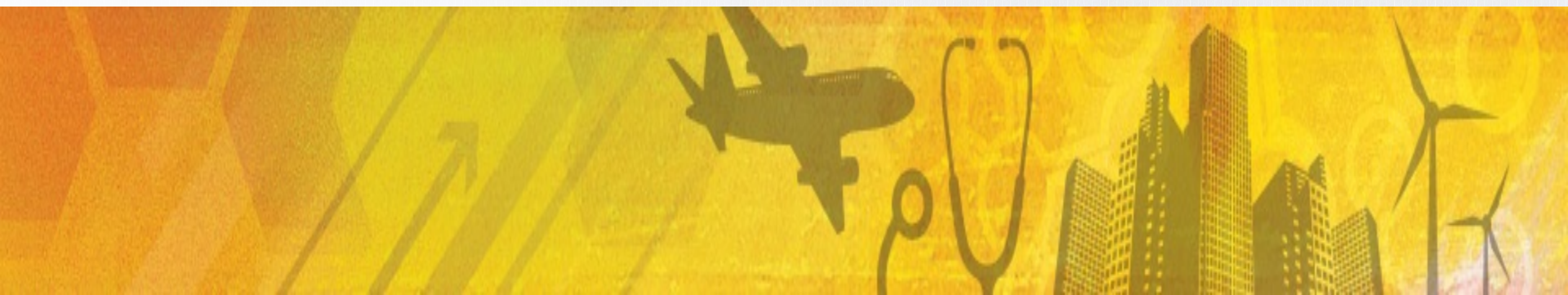
- Networking and introductions
- Access to information – who does what in industry and academia
- E.g. Gateway to Research Portal – [www.gtr.rcuk.ac.uk](http://www.gtr.rcuk.ac.uk)
- 160 Knowledge Transfer Staff Members
- Knowledge of funding schemes are regional, national and international levels
- Assistance in forming R&D collaborations
- Events, Conferences and webinars
- E-mail alerts and newsletters – information about open and forthcoming Innovate UK funding calls
- Feedback call and scope needs to Innovate UK
- A simple mission – to assist you to increase innovation and increase UK GDP!





# The Materials Community – an \_connect Group

Materials Community – 7,421



97,148 people on \_connect

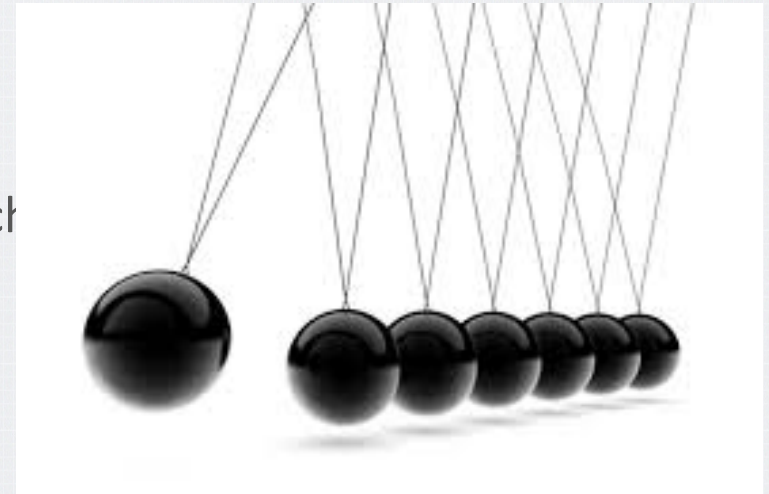
6,039 organisations on \_connect

13,515 networks

Open or closed Networks

# Example of KTN Event

- Materials for Personal Protection against Impact in Sport, Industrial and Transport Environments
- 26<sup>th</sup> November 2014 – Venue: IOM3, London
- Potential speakers
  - Prof Andy Alderson, Sheffield Hallam
  - Roy Burek, CEO of Charles Owen
  - Dr Xiaogang Chen, University of Manchester
  - Dr David Tyler, MMU





# .... The KTN

Connecting people who accelerate innovation



## Independent

a trusted, impartial intermediary, we work with public, private and academic partners

## Professional

with extensive commercial experience we understand the needs of business

## Knowledgeable

from bioscience to designer fashion, we have deep sector expertise across industry

## Connected

businesses, entrepreneurs, innovators, investors: if we don't know, we know someone who does

# The Knowledge Transfer Network

Enabling Collaboration

## Strategic



Connecting people who wouldn't usually meet to solve innovation challenges

## Interdisciplinary



Bringing together businesses and researchers from different sectors

## Entrepreneurial



Linking people with new ideas and technologies to partners and customers

## Commercial



Introducing innovators to public and private funders and investors





# Materials for Demanding Environments

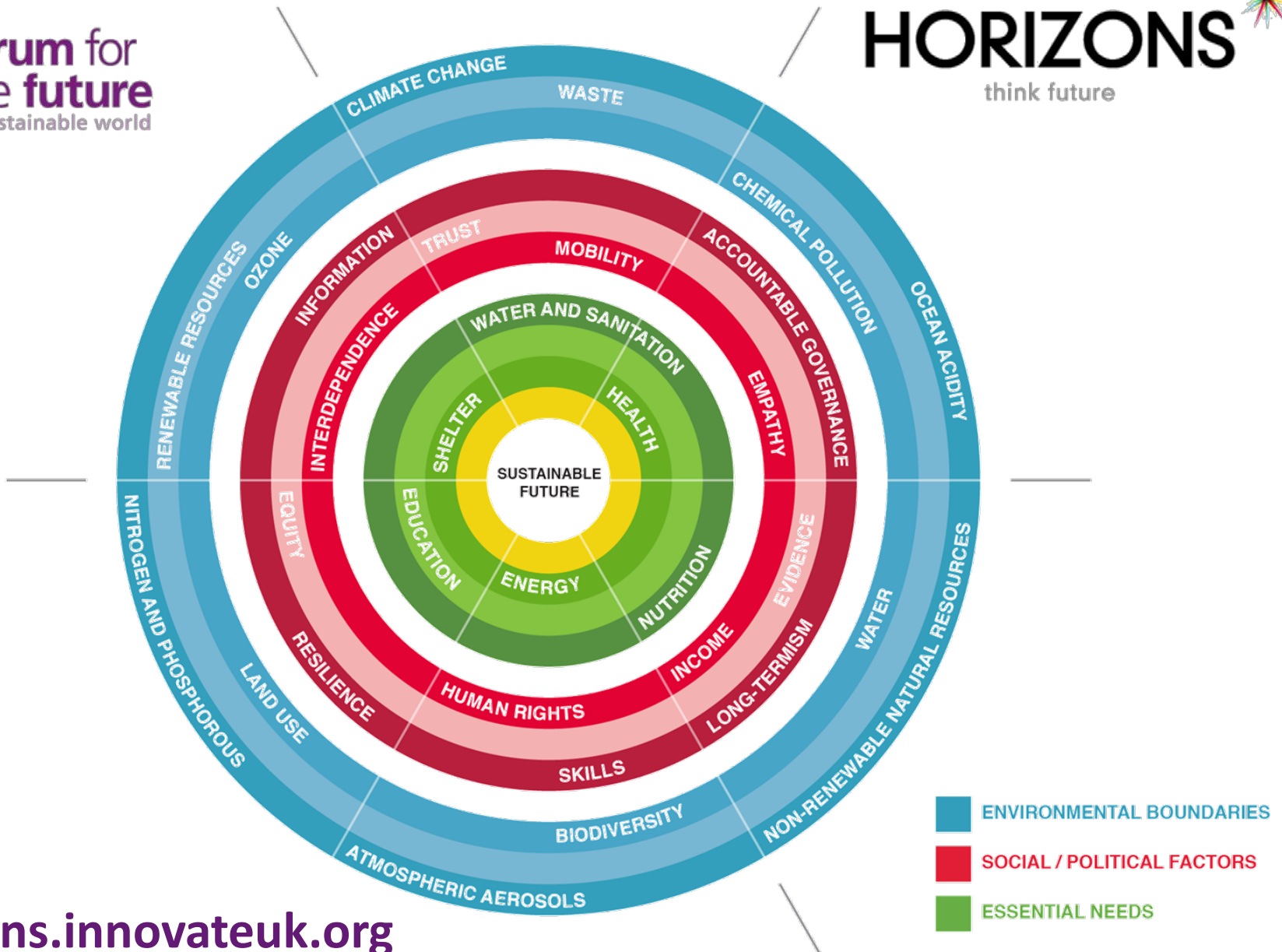
- In everyday Engineering applications, more and more is being demanded of materials in all sectors and this has become an area of interest for industry and academia.
- The Technology Strategy Board will be opening a Collaborative Feasibility Study Competition in early 2015 in this area. To prepare for this, there will be two competition scoping workshops held:
  - · **23rd October 2014 in South Wales**
  - · **31st October 2014 in Central London**
- The objectives of these workshops are:
  - · To identify which sectors are affected by demanding environments and what their materials needs are
  - · To confirm what constitutes a demanding environment for each of the sectors and identify any cross over
  - · To establish if there exists a UK testing capability which can support the development of materials for these demanding environments
- The results of the scoping workshops will support current and future funding plans by Innovate UK (the new name for the Technology Strategy Board).

....

# Innovate UK Grant Funding and Horizon 2020

- <https://www.innovateuk.org/funding-competitions>
- <https://www.h2020uk.org/>
- **Welcome to Horizon 2020 UK**
- If you run a business or are an academic brimming with innovative ideas you can now take advantage of the largest ever EU Research and Innovation funding programme with an available budget of €79bn.
- With the emphasis on excellent science, industrial leadership and tackling societal challenges, Horizon 2020's goal is to ensure Europe produces world-class science, removes barriers to innovation and makes it easier for the public and private sectors to work together in delivering innovation.





# What does a sustainable economy look like?

One that operates within safe environmental limits  
and delivers social value.



# The REBus Programme



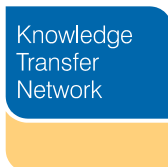
***VISION: “To be recognised as the leading enabler of more resource efficient business models in Europe”***

## Goals: profit, resource efficiency, resilience

- Assess state-of-the-art
- Develop 30 exemplary pilots
- Promote exemplars
- Develop “how to” toolkit
- Inform policy

### Programme overview:

- 3.5 years
- €3.1m



Rijkswaterstaat  
Ministry of Infrastructure and the  
Environment



THE UNIVERSITY OF  
**NORTHAMPTON**  
School of Science and Technology



# Recovering Valuable Materials from Waste

- Innovate UK and the Engineering and Physical Sciences Research Council (EPSRC) are to invest up to £4.5m in collaborative R&D projects that seek to **increase the recovery of valuable materials from waste** streams.
- The aim of this competition is to develop processes for dealing with continuously produced waste streams to maximise the value of recovered resources. Proposals should describe how they seek to maximise the value of outputs and, for this reason, those solely seeking to recover energy from waste are out of scope. Projects focused on product-return approaches, such as remanufacture, refurbishment and leasing, are also out of scope.
- Potential areas include (but are not limited to):
  - ▪ **improved collection schemes**
  - ▪ **techniques for identification of materials and parts**
  - ▪ **identification and processing of waste materials at speed**
  - ▪ **real-time monitoring of contaminants**
  - ▪ **recovery of valuable resources from wastewater or factory effluent**
- <https://connect.innovateuk.org/web/increasing-value-from-waste-competition/overview>





....

# Innovate UK 2014 – TSB Annual Showcase



# Contact Details

- Brian J. McCarthy
- Tele: 0161-306-8500
- Mobile: 07964-563373
- E-mail: [brian.mccarthy@ktn-uk.org](mailto:brian.mccarthy@ktn-uk.org)