



The Funding landscape, UK and Europe

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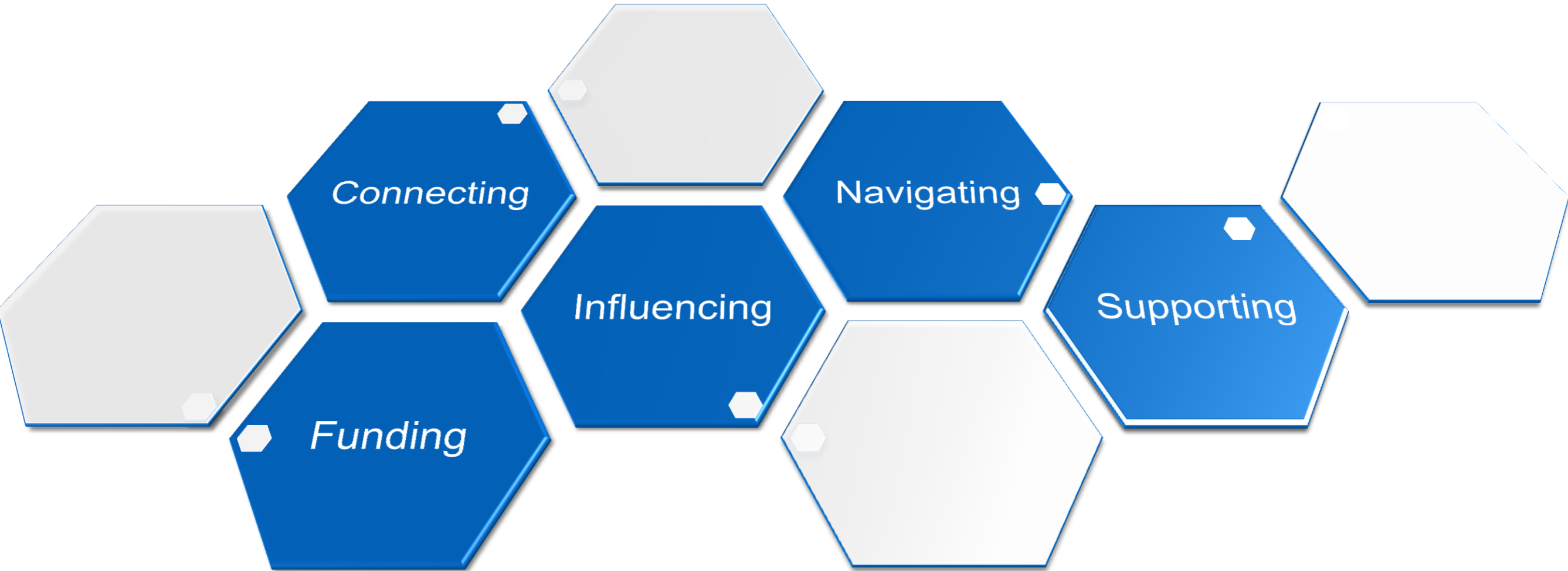
13th April 2016

Introducing The Knowledge Transfer Network

What we do

- KTN is the UK's innovation network. It brings together businesses, entrepreneurs, academics and funders to develop new products, processes 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

Our Services



UK Funding Landscape

InnovateUK

New Delivery plan 2016 – 2017

Four innovation sector programmes

- Infrastructure Systems
- Emerging and enabling technologies
- Health and Life Sciences
- Manufacturing and Materials

Plus Open innovation programme – open to any sector

Competitions will be much broader in scope and will focus on groups of inter related sectors.

UK Funding Landscape

InnovateUK

Infrastructure Systems theme

Optimising transport and energy systems and integrating them with other systems such as health and digital in an urban context

Priority activities

- Energy systems - electricity, gas and heat networks
- Energy supply - nuclear and offshore wind
- Transport systems - intelligent mobility
- Smart and resilient infrastructure
- Urban living – integrating multi urban systems

UK Funding Landscape

InnovateUK

Infrastructure Systems theme

- Two broad Infrastructure Systems competitions
 - Round One opens July 2016 up to £15m
 - Round Two open January 2017 up to £15m

To support businesses with scalable solutions for system challenges across energy generation and supply, transport and urban living:

- solutions for affordable, sustainable and secure energy delivery
- solutions for intelligent mobility
- integrated solutions to systemic challenges in urban areas
- resilience of infrastructure and cities to environmental and societal pressure

UK Funding Landscape

InnovateUK

Infrastructure Systems theme

- Continue to invest in the Energy Systems, Future Cities, Transport Systems and Offshore Renewable Energy Catapults
- Conduct a Future Cities entrepreneur mission to India, aligned with the Newton Fund Q3
- Cities Integrated by Design competition – follow from phase 1
- Deliver the Energy Research Accelerator £60m

UK Funding Landscape

InnovateUK

Open programme

This enables businesses to address high-growth opportunities when their concept or idea might not fit one of the Innovate UK sectors or is at the interface of multiple themes with differing scopes

- Two 'open' funding competitions per year for applications from any sector
 - Round one – June 2016 up to £14m
 - Round two – December 2016 up to £14m
- Open knowledge transfer competitions through the year up to £31m
 - Open all year, similar format to SMART
- Open 'growth and scale' competition in Q3 up to £2m
 - Proof of market activities

UK Funding Landscape

Energy Catalyst

- £9million budget
- Opened 4th April 2016
- Support by InnovateUK, DECC, EPSRC and DFID

Scope

- Energy trilemma – affordability, security of supply and emissions reduction
- Innovation must be “relevant to the needs of developing countries”
- Transforming access to energy for poor communities in developing countries (particularly in Sub-Saharan Africa & South Asia)

<https://www.gov.uk/government/publications/funding-competition-energy-catalyst-round-4>

UK Funding Landscape

Energy Catalyst

Technology areas

- Carbon abatement
- Renewable energy (solar thermal, heat pumps, heat storage, geothermal, bio)
- Nuclear Fission
- Hydrogen & Fuel Cells
- Energy networks and System integration (heat networks)
- Demand side technologies
- Enabling technologies and processes

Funding

- Early stage feasibility <1yr, <£200k, academic or SME led, 50% matched funding
- Mid stage CR&D, <3yrs, <£1.5m, must be industry led, 70% matched funding
- Late stage CR&D, <3yrs, <£10m, must be industry led, 70% matched funding

UK Funding Landscape

Energy Game Changer

- £2million budget
- Opened 29th March 2016, closes noon 11th May 2016
- Feasibility studies - < 12mth, <£100K
- Must be led by non-energy sector SME

Aim

To solve the challenges of highly regulated energy sectors such as oil and gas, nuclear and energy systems (national grid, utilities)

Three stage application process

Step 1 – 2 minute video pitch and short written description

Step 2 – Written application form (for invited applicants only)

Step 3 – Panel interview

UK Funding Landscape

Energy Game Changer

Themes

1. Taking inspection to the limit

Inspection, characterisation and clean up of buildings, vessels and components in aggressive environments (explosive, radioactive, subsea, high temperature)

2. Dealing with data

Managing big data, integration, analysis and visualisation in real time to aid decision making

3. Engaging in energy

Minimising the cost of energy without losing comfort, roll out of energy systems in a non invasive way, encouraging user engagement in energy efficiency

UK Funding Landscape

DECC

Heat Strategy – The Future of Heating: Meeting the Challenge 2013

- Described the current situation for heating
 1. Industrial process heat
 2. Heating for buildings – domestic, commercial and industrial
 3. Heat networks
- Identified the barriers
 1. Balancing standards with the need for affordable housing
 2. Undervalued energy efficiency measures
 3. Consumer understanding of energy saving
 4. Cost of low carbon heating

UK Funding Landscape

Support to alleviate the barriers

Support for local authorities

Setting up a **Heat Networks Delivery Unit** and development funding stream

Consumer challenges

Supporting the establishment of an industry-led customer **code of conduct** and transposition of the **Energy Efficiency Directive** to improve metering and billing

Capital funding & financial incentives

Examine scope for extra **financial support** for heat networks through the **Renewable Heat Incentive**

Supporting long-term development

Developing **technical standards** and **supporting technical innovation** in design and installation

European Funding Landscape

Horizon 2020 EU Work programme 2016 – 2017

- Societal challenge 3 – Secure, clean and efficient energy
 - Improving efficiency of district heating,
 - waste heat recovery from urban facilities,
 - heating and cooling using low grade heat,
 - next generation heating technologies

- SME instrument – close to market R&D activities and business support

How to connect with us

Our community

<https://connect.innovateuk.org/web/thermal-energy-community>

- LinkedIn Energy at KTN
- Twitter @EGS_KTN
- Email jenni.mcdonnell@ktn-uk.org