

## Sustainable manufacturing for the process industry

*Darren Ragheb*

It's all in the mix...

RSC Formulation Science and Technology Group  
University of Birmingham

21<sup>st</sup> March 2012

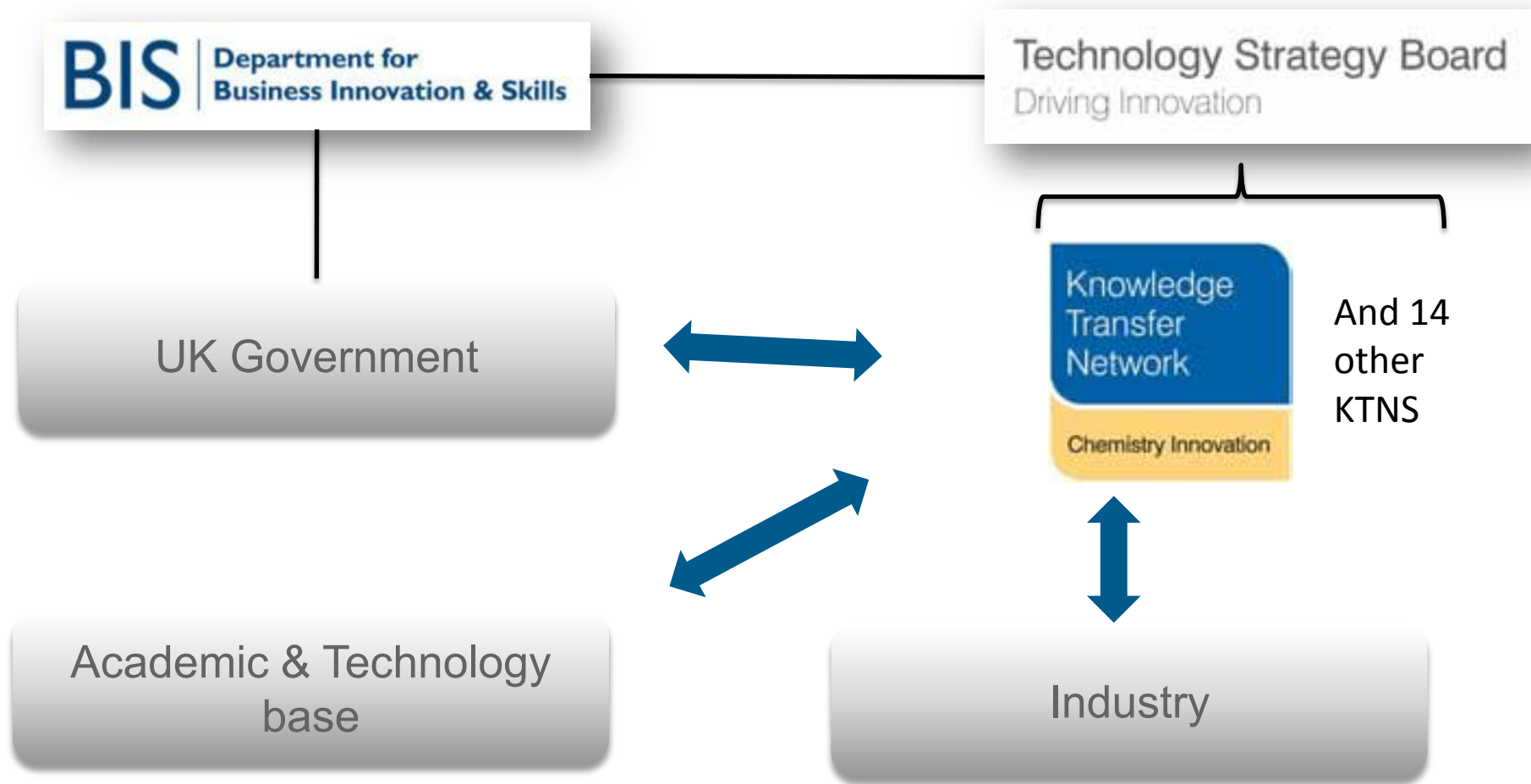
# What we do

## Mission

To stimulate & support  
product and process  
innovation  
that will deliver  
tangible value  
for the UK  
chemistry-using industries



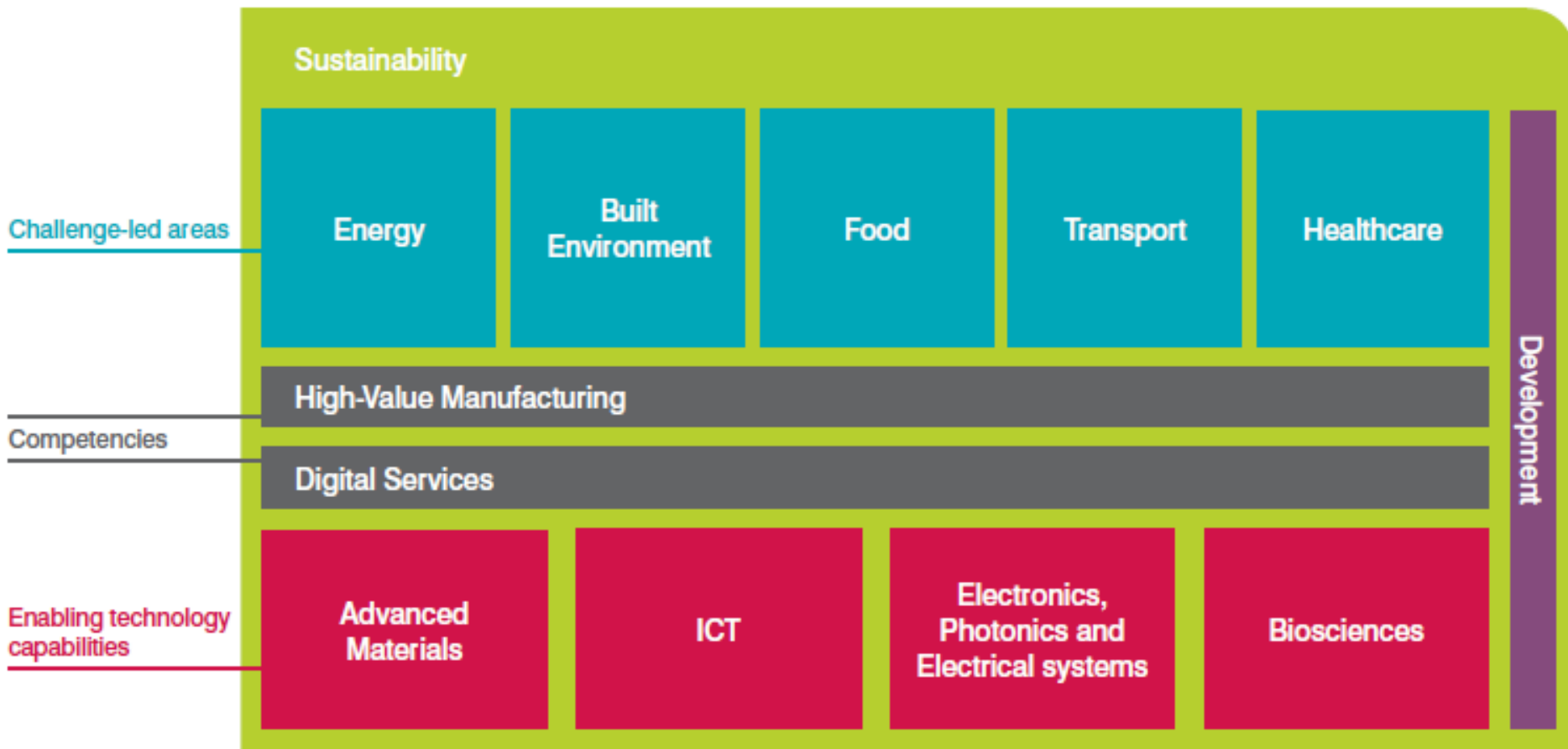
# Who we are. Where we're positioned



# Technology Strategy Board - strategy

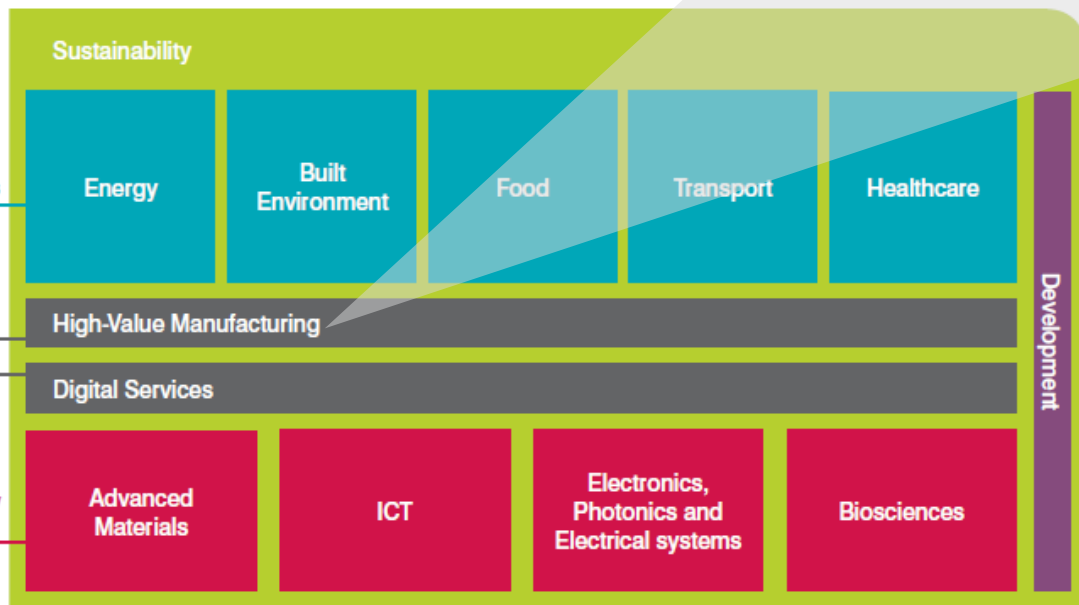
## Concept to Commercialisation

A strategy for business innovation, 2011-15



# High-Value Manufacturing

Maintaining or enhancing the international competitiveness of **UK-based manufacturing industries**, including aerospace, automotive, **chemicals, pharmaceuticals and foods**, through the development and application of innovative manufacturing technologies in product and process areas within and across sectors.



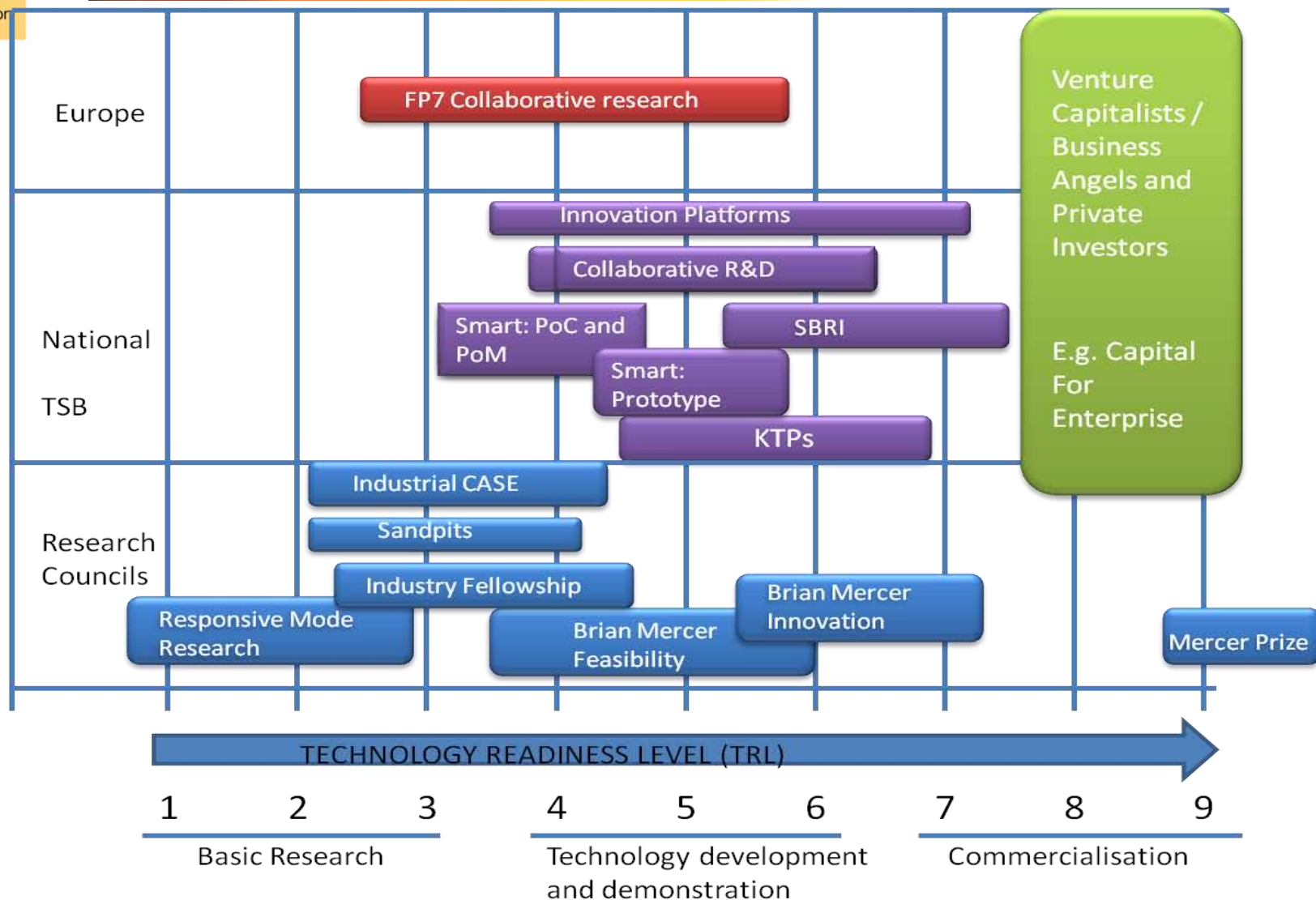
# Sustainable Manufacturing for the Process Industry

- *“Encourage the development and commercialisation of innovative approaches to sustainable manufacturing in the process industry”*
- £5m total TSB funding; £1m EPSRC contribution likely
- Collaborative R&D (up to £4.6m) and Feasibility projects (up to £0.4m)
- **Collaborative R&D projects** - business-led (and include an end user; one to three years; up to 50% public funding; max. total project size is ~£1m.
- **Feasibility projects** - business-led (may be collaborative or led by single companies); six to nine months; up to 75% public funding; max. total project size is £100,000.

# Scope

- Focuses on production technologies that, within a global marketplace, can create high value through novel processes, advanced product manufacture, resource efficient production techniques and facilitate greater environmental sustainability
- Example areas include, but not limited to:
  - Changing batch to continuous processes
  - Novel catalysis
  - Innovative heat management or input in process
  - Solvent-free reactions or use of novel solvents
  - Process measurement and analysis
- Upgrades/innovation in process steps on existing plants – in scope
- Industrial Biotechnology - out of scope

# Innovation Funding Landscape





# Key dates

- **27th Feb** Competition opened
- **8th Mar** TSB call briefing day (Manchester)
- **18<sup>th</sup> Apr** Registration deadline
- **25th Apr** Deadline (1)
  - For 1-stage feasibility funding (final application)
  - For 2-stage collaborative R&D (Expressions of interest)
- **4th July** Deadline (2)
  - For 2-stage collaborative R&D (final application)

# Support and next steps

Chemistry Innovation is the lead KTN supporting this call

- Fit to scope, partnering/consortia building, shaping proposal
  - Join the group [www.ciktn.co.uk](http://www.ciktn.co.uk)
  - **Darren Ragheb** 01928 511829 [darren.ragheb@ciktn.co.uk](mailto:darren.ragheb@ciktn.co.uk)
  - **Janet Sanger** 01928 513513 [Janet.Sanger@ciktn.co.uk](mailto:Janet.Sanger@ciktn.co.uk)

## TSB competition helpline

- Application queries about the competition (application forms, guidance documents and events)
  - 0300 321 4357 [competitions@tsb.gov.uk](mailto:competitions@tsb.gov.uk)