

# **Sustainable Agriculture & Food Innovation Platform**

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## Who are the Technology Strategy Board?

- We are a national body set up to invest in business innovation
- We work across business, universities and government
  - ...and anyone else who can help
- We come from business (and the public sector)
  - 90 people with > 600 years of business experience
- We are responsible for investing £1bn over the next 3 years

## Our purpose

- Is to support businesses to be more profitable, now and in the future
- What they need to know is how the markets will evolve, and come and go, to be able to invest now
- There are some markets we can predict...
- ...the ones that are driven by Governments to address societal challenges...
- ... and others driven by the needs of people

## And we make choices

- We don't pick winners, we pick sectors where UK businesses can thrive and support innovative companies in them
- We consider the size of the markets, the capability of the UK to address them and the timing
- And the difference our support would make

## Four Criteria

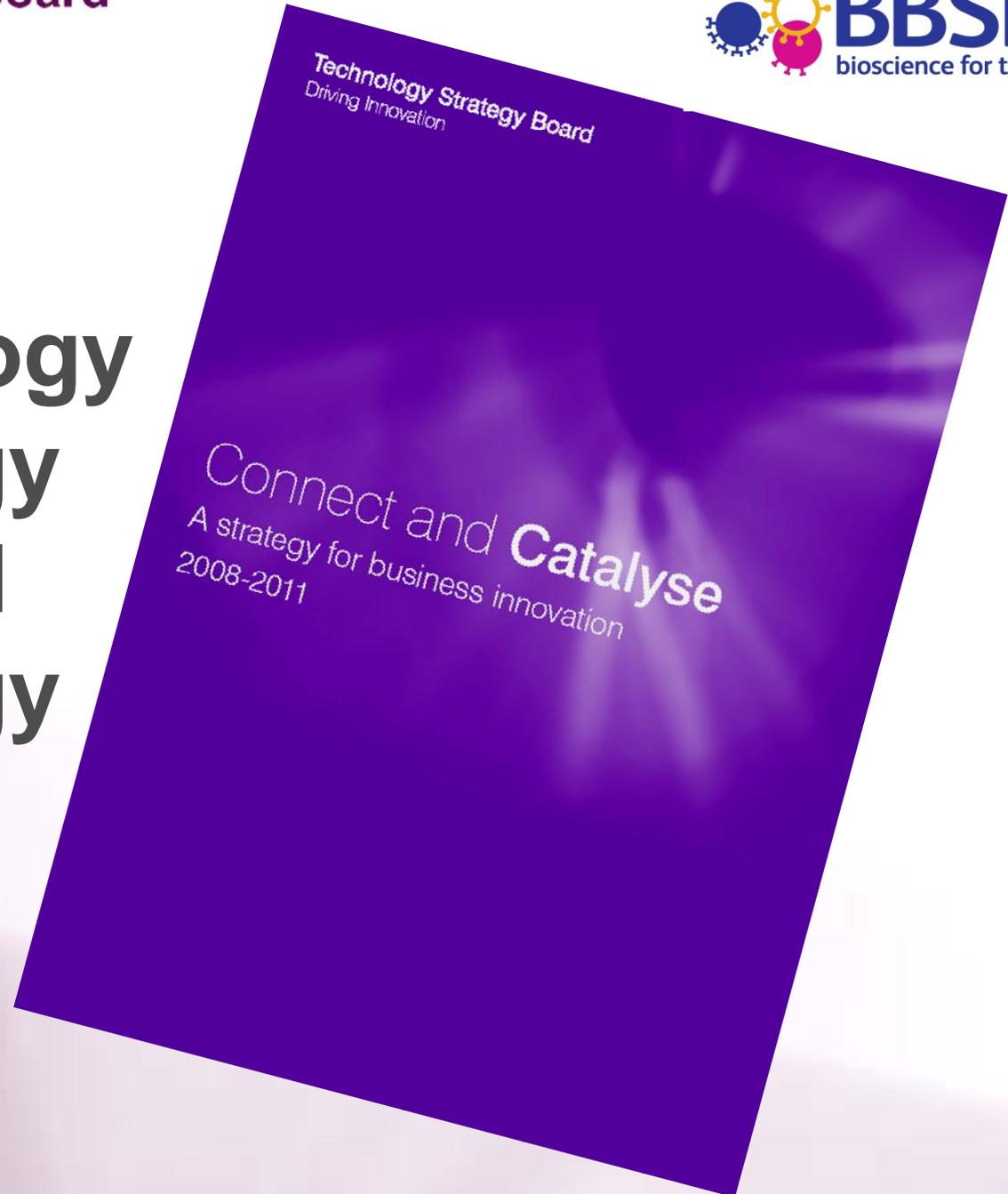
Capability

Impact

Global Market

Additionality

# Technology Strategy Board Strategy

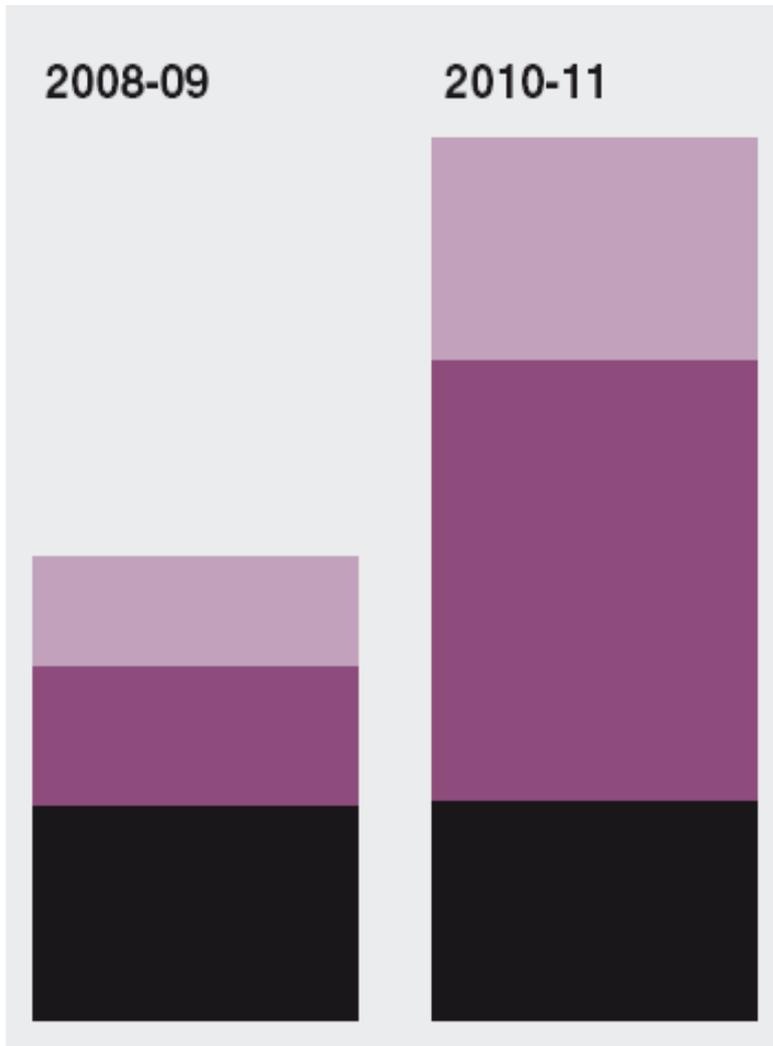


# £1 billion investment over 3 years

**The innovation climate**

**Challenge-led innovation**

**Technology-inspired  
innovation**



## Delivery mechanisms

- Consortium R&D Investment
  - “normal” 2-stage
  - “fast track” 1-stage
  - feasibility first stage
  - 2-stage with consortium building workshop
  - sandpit first stage
- Single company “starter” grants
- SBRI – R&D contracts
- KTPs

## Application areas

Environmental sustainability    Energy generation and supply  
**Medicines and Healthcare**    Transport    Creative industries  
High-value services    Built environment



**Advanced materials    Biosciences    High value manufacturing**  
**Electronics, photonics and electrical systems**  
**Information and communication technologies    Nanotechnology**

## Technology areas

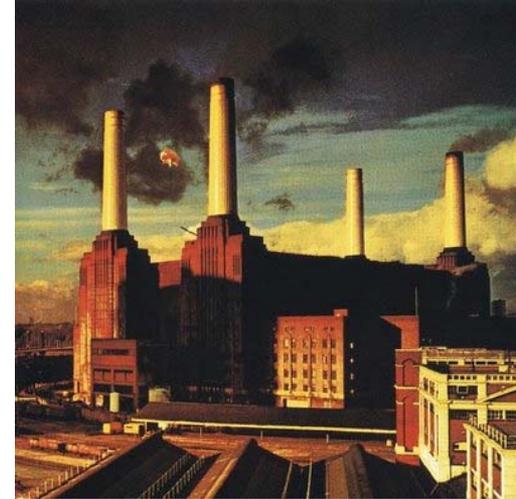
## Innovation Platform

- A programme to assist UK businesses grow through the opportunities created by government action to address a societal challenge
- Lead by Technology Strategy Board with DEFRA and BBSRC: up to £90M over the next 5 years



## The Challenge

- Agri-Food chain causes 18% of UK GHG
  - 50% Agriculture
  - 50% storage, processing & supply
- Environmental pressures on
  - crop protection chemicals
  - air and water quality
- Population growth requires more food
- Produced on less land
- High waste (up to 40-50%) reduces outputs
- Climate change likely to impact on yields



## The Government Response

- Climate Change Act: 80% reduction by 2050
- Nitrates Directive
- Air Quality Directive
- Water Framework Directive
- New EU Directive on Pesticides
- Landfill Directive

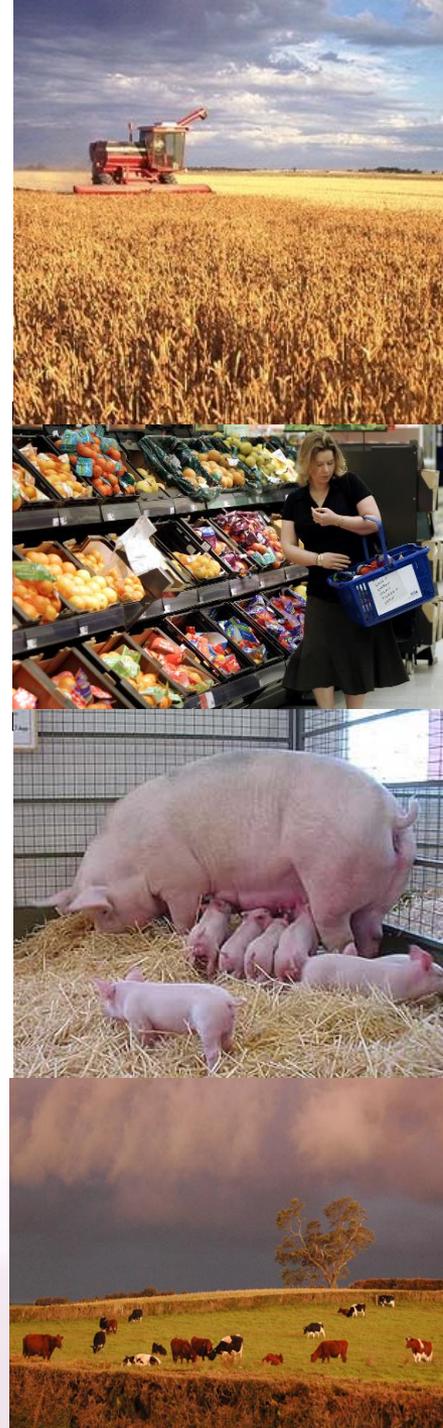


## Technology Strategy Board Criteria

- Does the UK have the capability?
  - Widespread business strength (£129bn, 7% GDP, employ 3.7m)
  - Deep scientific, technology & academic strengths
- Is there a large market opportunity?
  - Huge Global market. 2008 UK exports £13 bn.
- Is the idea ready?
  - Need to act now on climate change
  - Legislation is being introduced
- Can the Technology Strategy Board make a difference?
  - Yes, bringing people together

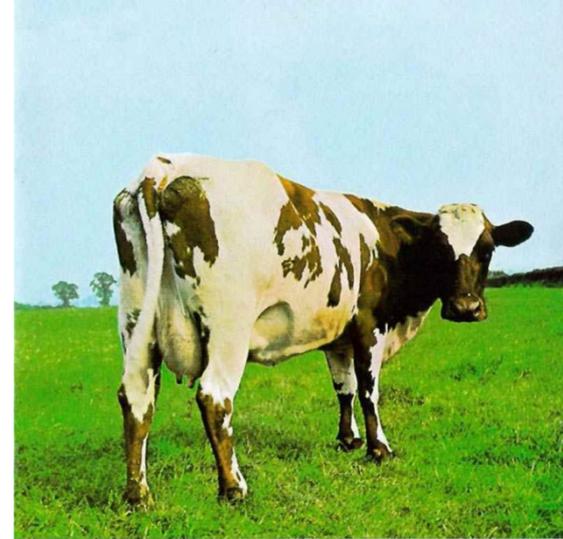
## Overlapping Themes

- Crops Production (Arable and Horticulture)
  - Crop protection
  - Crop nutrition and management
- Livestock Production (Rumens, Poultry ...)
  - Waste management
  - GHG impact (including methane)
- Food Chain Waste
  - Reduction and management  
(on farm, post farm-gate and in food processing)
- GHG (reducing 18% of UK emissions)



## Forward Plan

- 1<sup>st</sup> collaborative R&D competition open 18 January 2010
- ‘New Approaches to Crop Protection’
  - Answer to EU Directive 91/414
  - Broad remit (plant breeding, engineering solutions, chemical compounds)
- 2 stages: EoI and full stage application
- EoI deadline 25 February 2010
- Open to UK businesses: S2B or B2B



## More information

Technology Strategy Board:

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