

Technology Strategy Board

Driving Innovation

An Introduction to the **Technology Strategy Board**

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Driving Innovation

The Technology Strategy Board

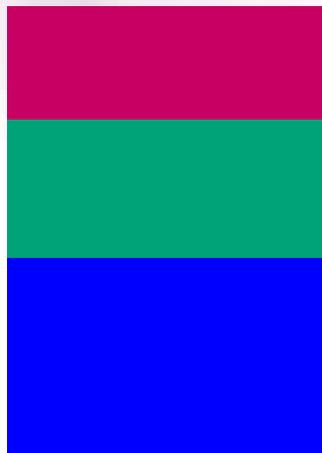
- **“The UK’s Innovation Agency”**
- Set up in 2007 to invest in business-led innovation, promoting the application of science & technology
- £750m over 3 years (plus co-funding of over £300m)
- Working across business, public sector, academia, regional and central government
- Staffed mostly from the private sector
 - 96 people with over 1200 years of combined business experience

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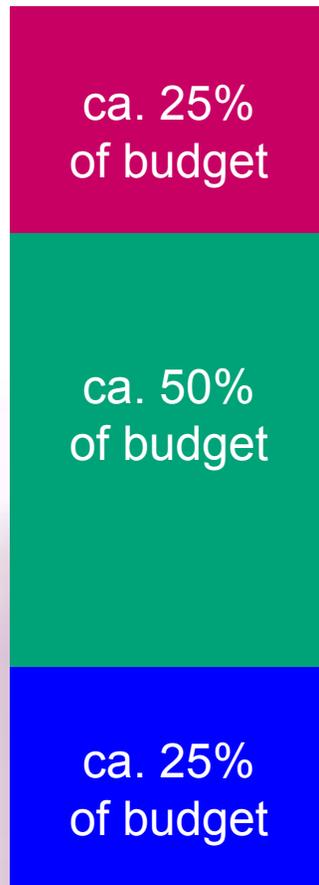
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What we cover - Broad areas of activity

Budget
2008-9



Budget
2010-11



The innovation climate

(15 Knowledge Transfer Networks;
≈1000 Knowledge Transfer
Partnership Projects)

Challenge-led innovation

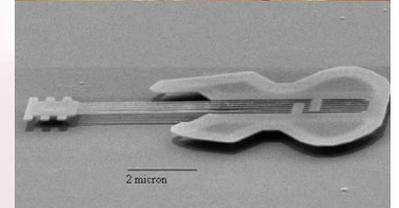
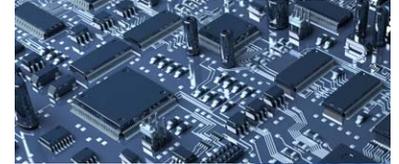
Technology-inspired innovation

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Technology Inspired Innovation

- We build capability in underpinning technologies, to enable an effective future response to market needs:
 - Advanced materials
 - Bioscience
 - Electronics, photonics & electrical systems
 - Information & communication technologies
 - High value manufacturing
 - Nanotechnology

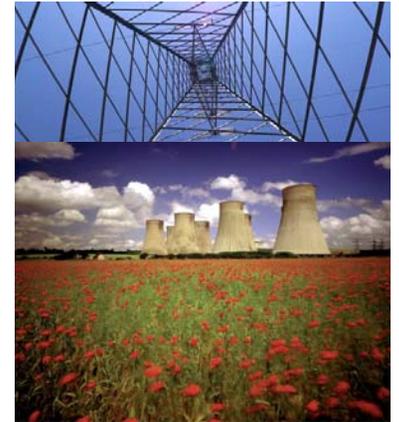


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Challenge-led innovation: *our Application Areas*

- Understand the market needs;
support innovative and competitive
responses
 - **Energy generation and supply (EGS)**
 - Creative industries
 - High value services
 - Medicines and healthcare
 - Transport
 - Built environment
 - Environmental sustainability

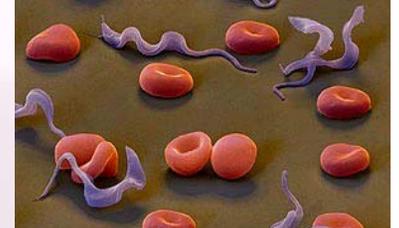


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Challenge-led innovation: Innovation Platforms

A cross-cutting strategic response
to today's significant societal and market
challenges



What is an Innovation Platform?

- **A new approach to stimulating innovation by focusing on a specific large challenge (societal/market)**
- **It addresses a major societal challenge, by...**
 - Understanding how Government plans to use policy, regulation and/or procurement to address the challenge
 - Engaging with business and government to identify the resulting new market opportunities: giving business the future market definition it needs to be competitive
 - Identifying the barriers to exploiting the future market : “How can business benefit from the new opportunities and what kind of interventions are appropriate to facilitate that”.
 - Developing appropriate responses to those barriers, and supporting programmes to deliver innovative solutions

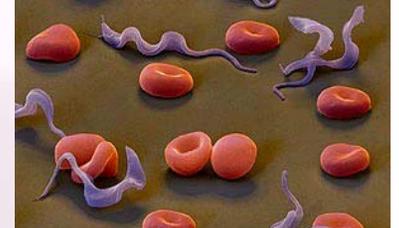
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Challenge-led innovation: Innovation Platforms

1. Climate Change & Sustainable Lifestyles

- Low Carbon Vehicles
- **Intelligent Transport Systems and Services**
- Low Impact Buildings
- Sustainable Agriculture and Food Production
- (Water)
- (Sustainable Aviation)
- (Waste)



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Challenge-led innovation: Innovation Platforms

2. Future Health Care Challenges

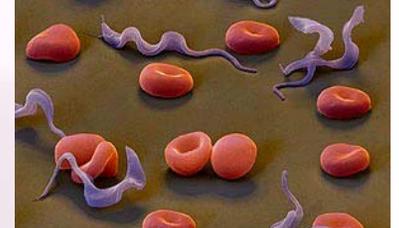
- Assisted Living
- Detection & Identification of Infectious Agents

3. Enabling the Digital Economy

- Network Security
- Complementary “Digital Britain” programme

4. Others

- (Technology-enabled learning)



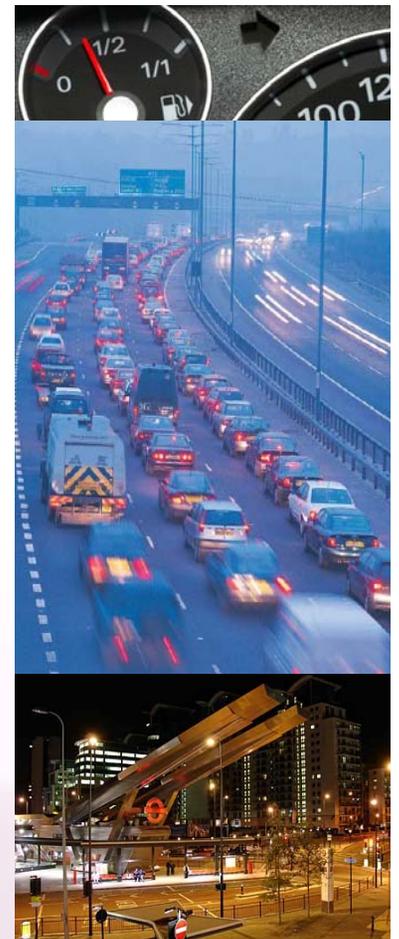
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Intelligent Transport Systems and Services

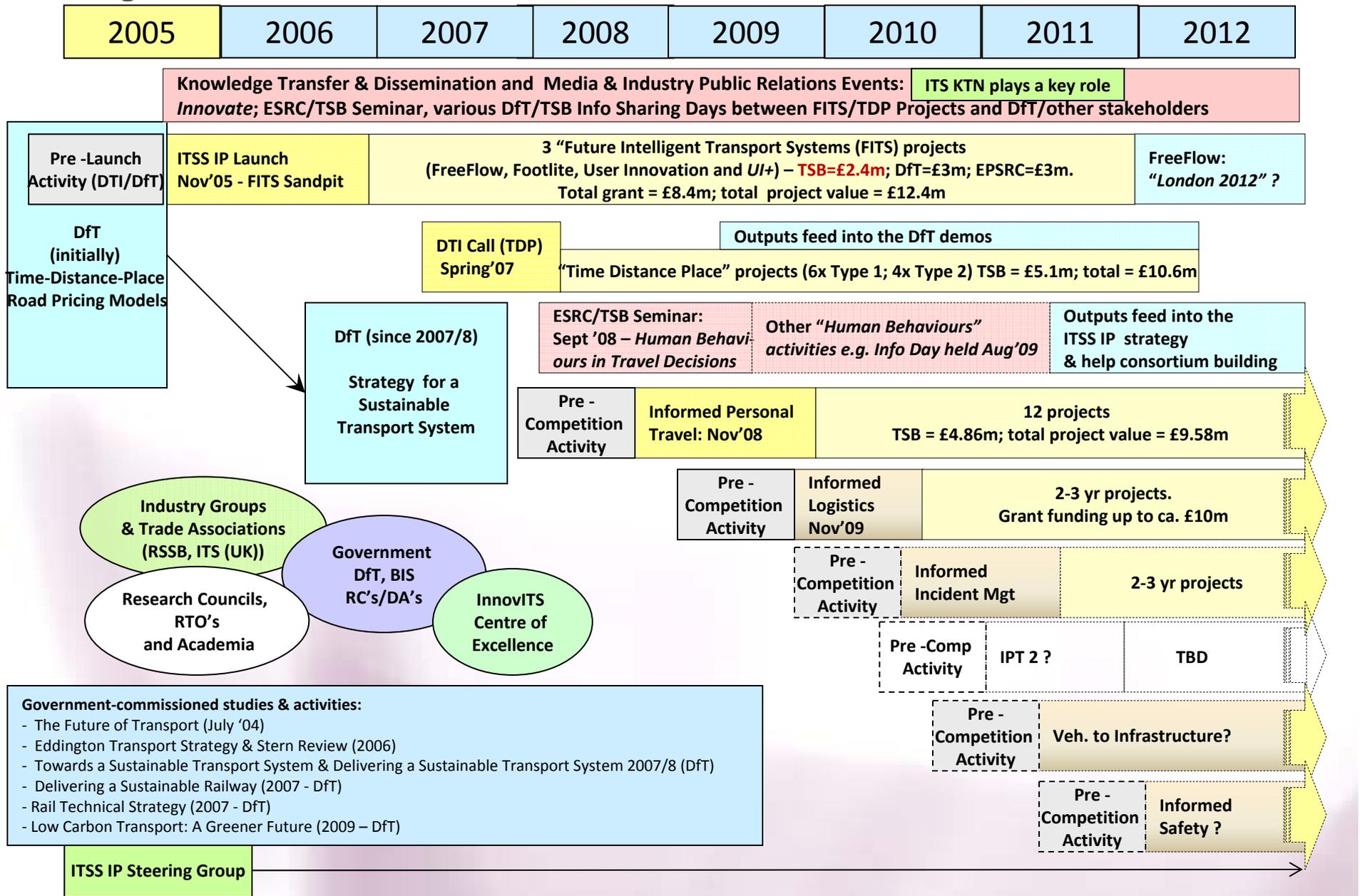
The challenge

- A sustainable transport system: **Balancing economic competitiveness** with the need for reducing the **carbon footprint of the entire transport system**
- In the last decade, vehicles in Britain have increased by 6 million (now over **33 million**)
- The **Eddington Transport Study** (Dec 2006) predicted that despite over £140 billion of planned investment over the next 10 years, congestion could get 25% worse by 2015...
- ... and that the cost of that congestion - currently £20 billion per annum – could more than double



Technology Strategy Board: Intelligent Transport Systems & Services

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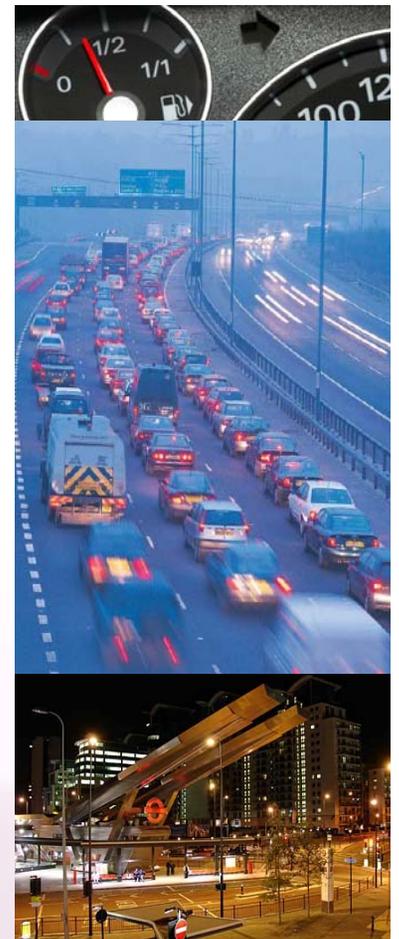


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The “Informed Logistics” Competition (2009)

- For the development of innovative **systems and services** that will help the industry to **move goods more efficiently** (road, rail and water)
- ... And simultaneously have the potential to reduce the carbon footprint of the logistics industry
- Local or regional test bed sites are encouraged
- Projects related to consumer choices are in scope
- Up to £10m core funding available; IAG funding could be for complementary or follow-on activities

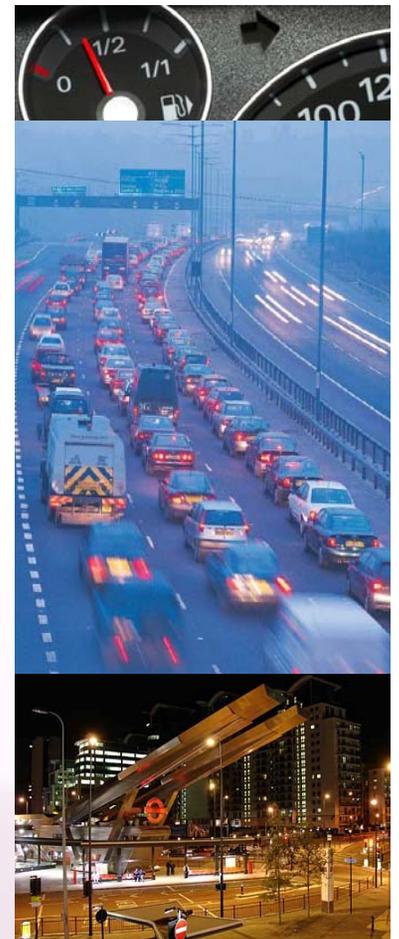


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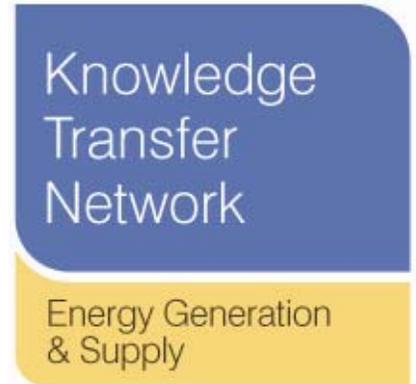
“Informed Incident Management” Call (2010)

- For the development of innovative **systems and services** that will facilitate a **more effective, coordinated response to incidents in the transport network** (mainly road, rail, air)
- The term “Incidents” includes:
 - **Unplanned** events such accidents, severe weather events, flooding, terror attacks, etc.
 - **Planned** events such as large sporting or entertainment events.
- “Response” includes:
 - The actions of the emergency services in dealing with the incident itself
 - Actions to be taken to diminish the impact of the incident on users of the transport network



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Intelligent Transport Systems Knowledge Transfer Network

www.innovits.com/its-ktn/

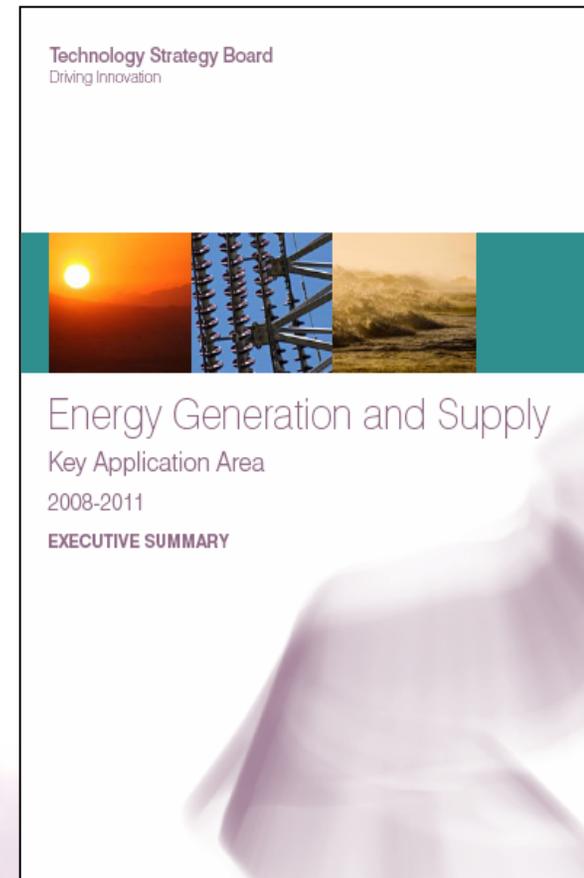
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Energy Generation and Supply Strategy May 2008

- *Directly invest in carbon abatement, fuel cells, hydrogen and oil and gas technologies.*
- *Support offshore wind, wave and tidal technologies through ETI. Ensure that UK businesses are engaged & well positioned.*
- Further analysis of UK capacity and added value in bioenergy, intelligent grid and nuclear.
- Work with other Technology areas and Innovation Platforms in Microgeneration & biofuels.
- Support knowledge transfer through establishment of KTN

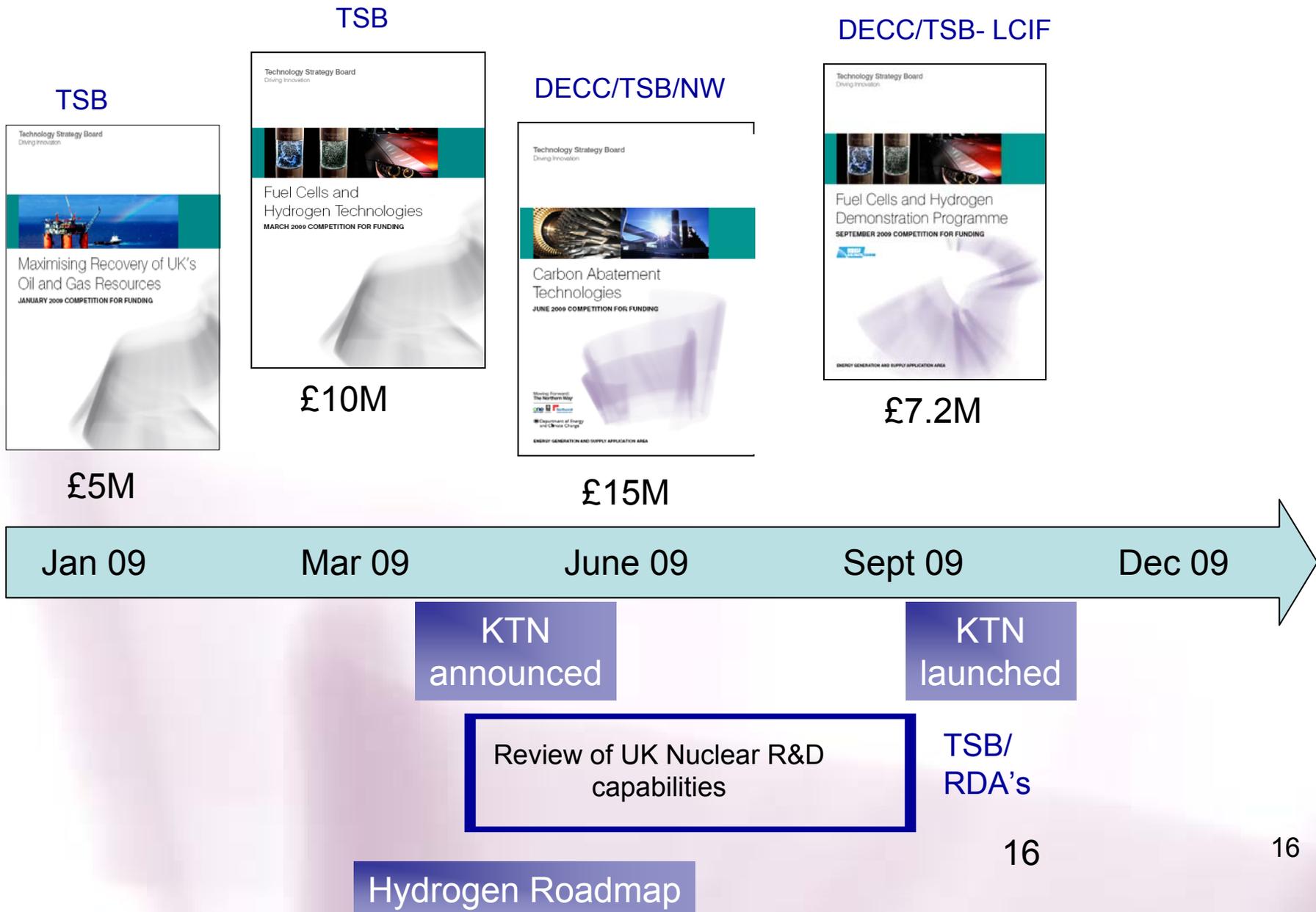
Market	Capacity
Timing	Added value



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EGS Delivery 2009



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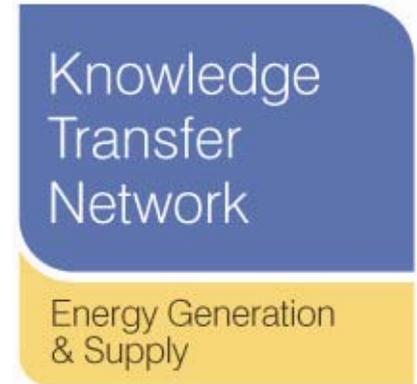
.....Initial Plans for 2010

Spring 2010 Collaborative R&D competition Wave and Tidal Stream Energy



Oyster device © Aquamarine Power Ltd





Energy Generation & Supply Knowledge Transfer Network

A new Knowledge Transfer Network to promote collaboration and knowledge sharing in the Energy Generation and Supply sector

<http://www.innovateuk.org/energyktn.ashx>

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www.innovateuk.org



TSB general Criteria for investment

- **UK capacity to develop and exploit the technology**
- **The right potential for impact in the right time frame**
- **The size of the global market opportunity**
- **A clear role for the Technology Strategy Board to add value**