

Technology Strategy Board

Driving Innovation



Competition briefing

**Developing the offshore wind
supply chain**

Feasibility Studies

Sarah Vodden

Competitions Manager

London, 13th November 2012

Health and safety

Agenda - Developing the offshore wind supply chain	
10.00	Welcome Welcome & Introduction
10.05	The Technology Strategy Board Introduction
10.15	Competition Scope & Background <ul style="list-style-type: none"> • Competition Strands (Feasibility / Development & Demo / KTP) • Q&A
10.45	Feasibility Competition Process Application criteria and process Timelines
11.00	Feasibility Finances & Way Forward <ul style="list-style-type: none"> • Funding Rules, Finance Forms and Eligible Costs • Je-S (for academic funded submissions) • The Way Forward • Q&A
11.30	Break
11.50	Development & Demo Application Process <ul style="list-style-type: none"> • Application, Criteria and Process (DECC) • Q&A
12.30	KTP Application Process <ul style="list-style-type: none"> • Application, Criteria and Process • Q&A
	Lunch
14.00: 16:00	1:1's and Consortium Building <ul style="list-style-type: none"> • Consortium Building • 1:1 Feasibility Study Ideas discussion with industry experts • 1:1 Scope / application process to DECC strand • 1:1 KTP scope / application process with KTP advisors

By the end of the briefing

You should, with confidence and knowledge, be able to:

- Understand the scope and objectives of the competition
- Understand the competition process and criteria
- Understand the application requirements
- Be clear on the timelines & deadlines

All presentations will be available at:

<https://ktn.innovateuk.org/web/competitions-faqs/document-library>

Technology Strategy Board

Technology Strategy Board
Driving Innovation

Our vision...

for the UK to be a global leader in innovation and a magnet for innovative businesses, where technology is applied rapidly, effectively, and sustainably, to create wealth and enhance quality of life.

Partnership is key

The Technology Strategy Board is...

A national body supporting business innovation...

for business benefit..

for economic growth..

for quality of life..

Who we are as an organisation...

- An arm's length executive body guided by business-led Governing Board
- Sponsored by the Department for Business, Innovation and Skills (BIS)
- We work across government departments and often in partnership with the research councils
- Focused on **business innovation** and the **application** of technology
- Staff of around 140 based in Swindon

Our strategy

Support for companies from

Concept to
Commercialisation



In just 5 years...

- Over 2000 CR&D projects launched
 - Most are Business led
- 4000 business partnerships and almost all the UK's universities
- Together with partners and business, over £2bn invested in UK innovation
- Developed new ways of reaching out to SMEs
 - Launchpad, Feasibility Studies, Smart Scheme
- Catapults programme

For more information...

competitions@innovateuk.org

Competition Helpline: 0300 321 4357

www.innovateuk.org

_connect Network: <https://ktn.innovateuk.org>

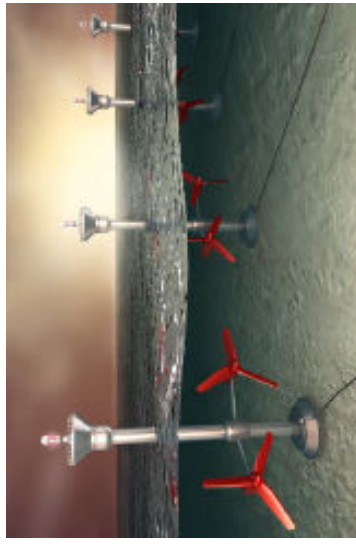
Rob Saunders

Lead Technologist – Offshore Renewables

Rob.Saunders@tsb.gov.uk

Competition Scope

Developing the offshore wind supply chain



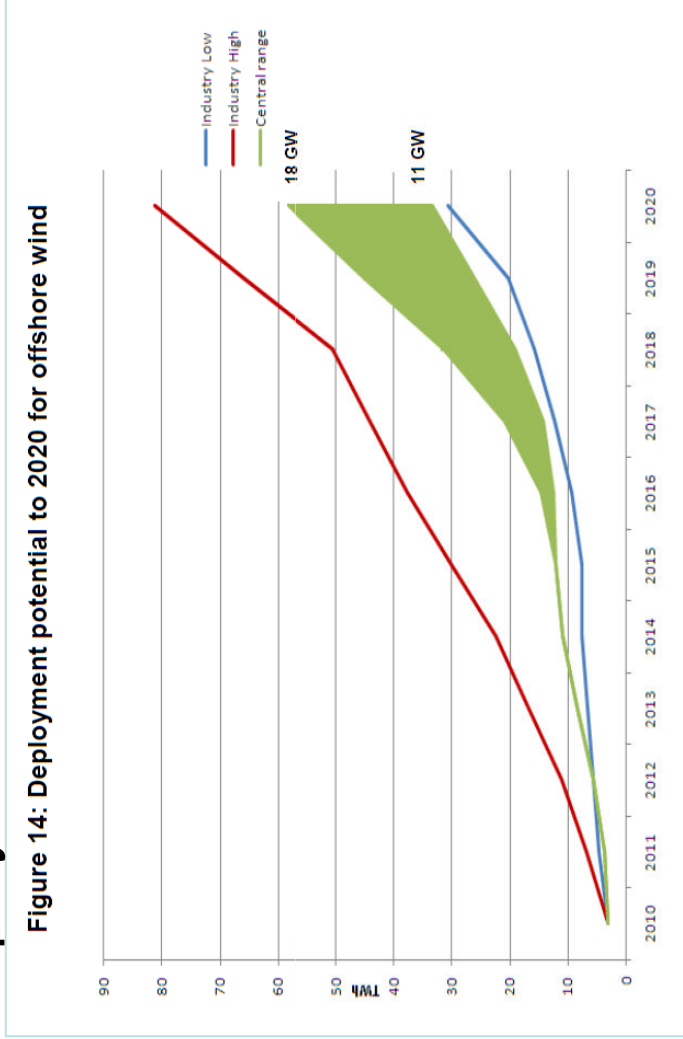
Developing the Offshore Wind and Offshore Renewables Supply Chain.

Briefing event

13th November 2012

Offshore Wind is a big opportunity...

DECC Renewables Roadmap: 2020 Deployment



Technology & Innovation Needs Assessment Med

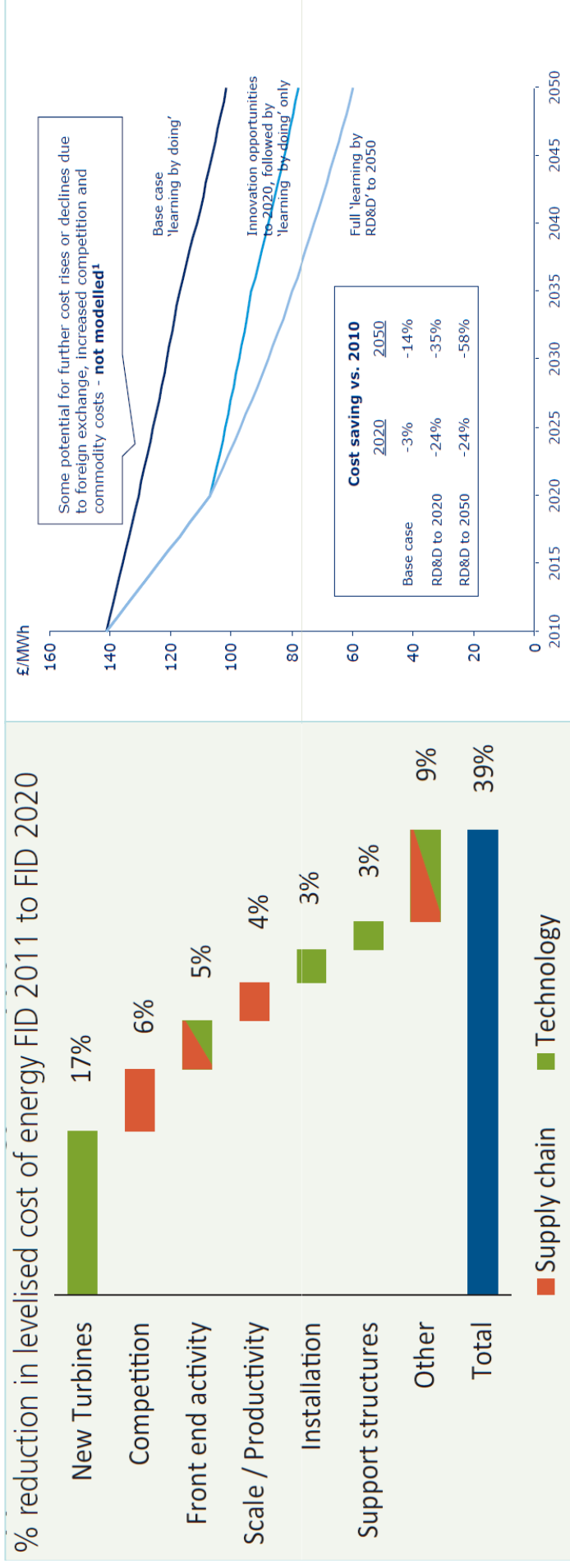
Scenario	UK	Global
2020 (GW)	18	86
2050 (GW)	45	439

Future Markets :

- Global and significant
- £56bn / year in 2050
- 5% of global market delivers same GVA as 50% of UK market

But costs must be driven down...

And focussed innovation will be a key enabler of this.....



Key 'big ticket cost reduction areas, but also a long tail...

Driving 4x cost reductions vs base case to 2050

This call: £11.2m of joined-up innovation funding



3rd Round:
Component
Technologies
Development &
Demonstration
Up to £7m



Feasibility
Studies
Up to £3m



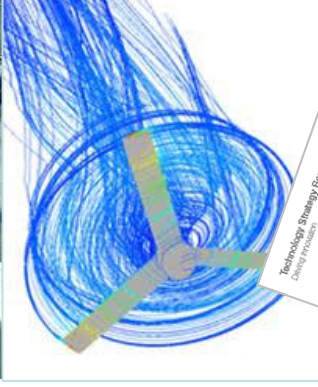
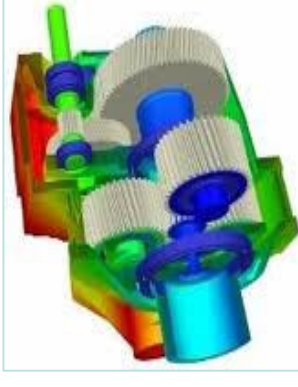
Knowledge
Transfer
Partnerships
Up to £1.2m

Delivering cost reduction and a stronger UK supply chain

Technology Strategy Board
Driving Innovation

Feasibility Studies

- Up to £3m of funding to explore a new innovative technology for offshore wind
- Projects of up to £150k and 1 year duration
- Bringing new ideas to the offshore wind sector
- Across any part of the system
- Ideas from inside and outside the sector eg.
 - New technologies from those in offshore wind
 - Assembly methods / technologies from the manufacturing industry
 - CFD from automotive
 - Composites and coatings from materials
 - Reliability and asset management from defence...



Component Technologies:

Development and Demonstration

- Up to £7m of funding to develop new component technologies across the system.
- 3rd Round of calls this year from DECC
- Grants of up to £4m
- Across any part of the system

Knowledge Transfer Partnerships

- Up to £1.2m to accelerate innovation from academia to industry
- KTP funds hiring graduate for a project and provides 0.5 day/wk academic support to it.
- eg novel electronics, control, environmental tools development



This funding dovetails with others in offshore wind...

- **Offshore Wind Programme Board** to oversee cost reduction to £100/MWh by 2020
 - Technology, Finance and Alliancing
- **Offshore Wind Accelerator** focuses on certain key areas (Foundations & access primarily)
 - These calls may provide future projects for OWA.
- **RCUK & Supergen**
 - We hope to take ideas on from research into development in feasibility studies and KTPs
- **ETI**
 - Components developed here will feed future ETI system level projects.
- **Offshore Renewable Energy Catapult**
 - Building innovation capability supporting future Catapult activities.

Feasibility Studies

Designed to bring new ideas to offshore wind

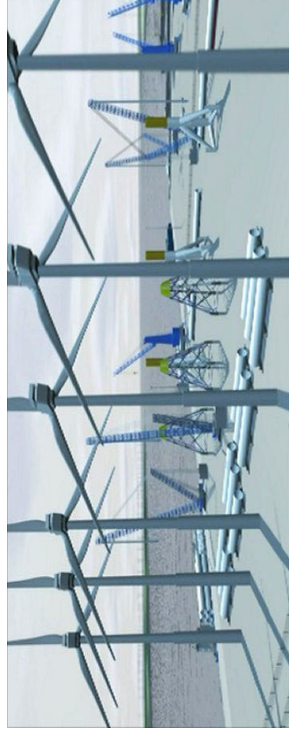


- Aim to ‘gather up’ latent ideas within the sector, and from parallel sectors.
- Assist in developing ideas to a point where they can attract further investment.
- Provide an entry point and guidance for new players in the supply chain
- Develop competitive UK companies that can capture share of offshore wind market in the UK and globally
- Use cost of energy reduction as a ‘lever’ for supply chain entry.



We have experience and new technology in parallel sectors that offshore wind needs...

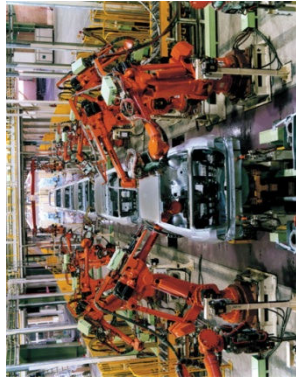
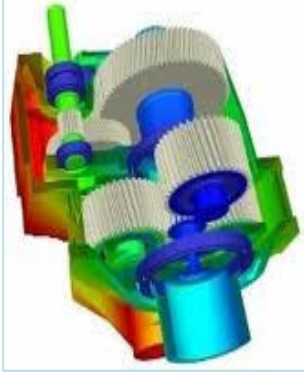
- Offshore wind can reach its potential faster with help from expertise in:
 - Defence
 - Oil & Gas
 - Automotive & Manufacturing
 - Advanced Materials
 - Aerospace
 - Marine Industries
 - Environmental management
- Ideas can contribute anywhere in the offshore wind system:
 - Project Development
 - Turbine & structure
 - Foundations
 - Electrical Connection & Transmission
 - Installation
 - O&M



For example: Opportunities for the Automotive Supply Chain



- Drivetrain Reliability
 - Avoiding unplanned maintenance is critical when 100km offshore

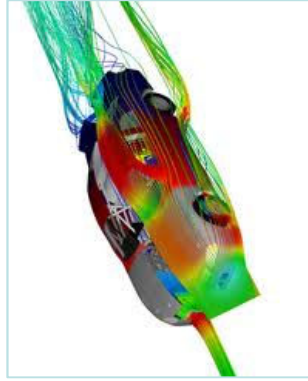


- Advanced Assembly Technologies
 - Infant manufacturing industry needing to grow up quickly

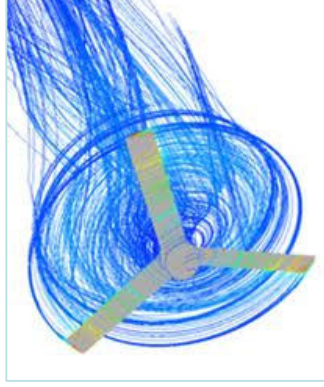


- Supply Chain Quality Management

- New supply chains needing mature systems



- Computational Fluid Dynamics
 - Understanding airflows



Scope & Eligibility:

- Any new technology in the broad offshore wind system (to shoreline)
- Must show potential to reduce cost of energy
 - Common basis cost of energy model provided upon registration.
- Technical feasibility study at pre-industrial stage.
- Single company or collaborative
- Business-led



Key Dates



- Single Stage Competition

Competition Opens 5/11/12

Briefing Event **NOW!**

Registration Deadline 9/1/13

Application Deadline 16/1/13

Questions & answers

Scope

Alex Chahian

Application process

Technology Strategy Board
Driving Innovation

TSB strategic criteria

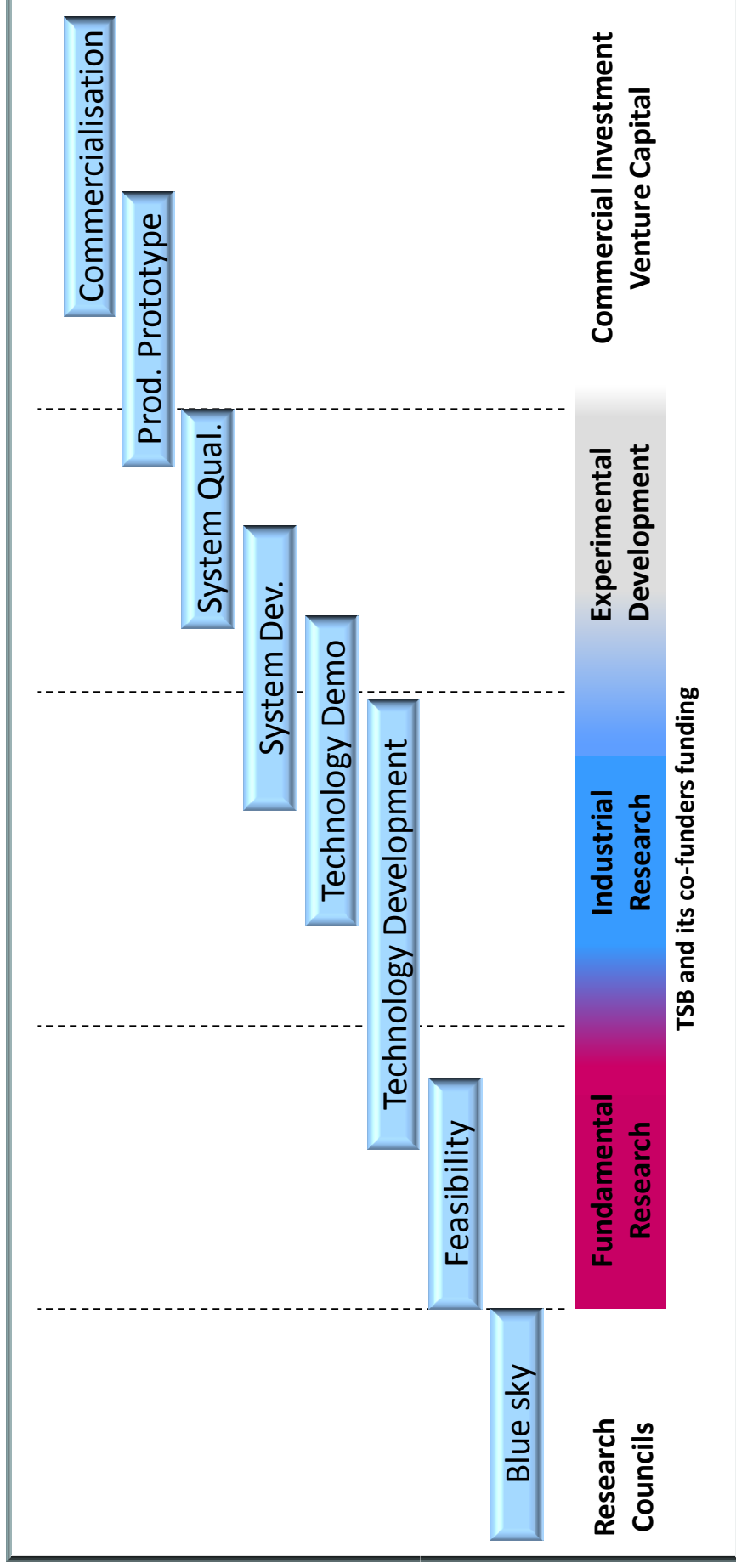
- **Does the UK have the capability?**
 - Significant research capability/capacity to exploit opportunities.
- **Is the idea “ready”?**
 - Clear opportunity to which this is a timely response.
 - Speed progress towards more sustainable economic growth.
- **Is there a large market opportunity?**
 - What is the size of the global market opportunity?
 - Will it create added value in the UK, taking into account the global market potential?
- **Can the Technology Strategy Board make a difference?**
 - Can we add value?
 - Will our investment promote sustainability and quality of life?

The “ideal project”

- A **clear commercial opportunity** to open up or exploit a significant growth market.
- A **technical challenge** that requires the creation of an **industrially driven consortium** and innovative and risky research and development to solve.
- A **realistic project** with deliverables and applications that are innovative, commercially exploitable and of wider benefit.
- A **demonstrable need** for support.

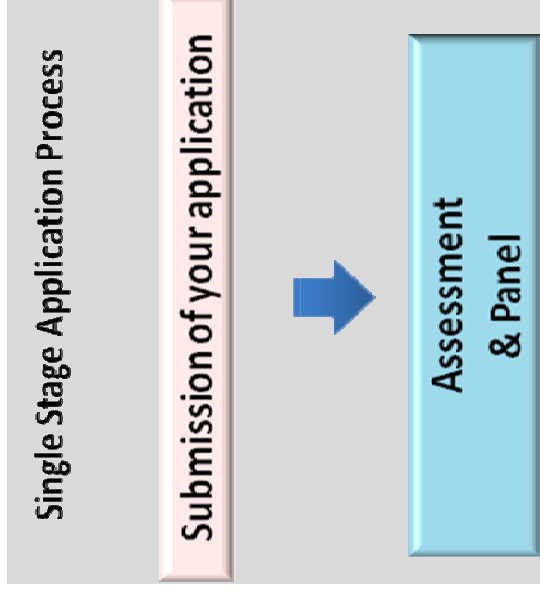


Types of project



Competition eligibility

	Developing the offshore wind supply chain
Type of Competition	Single Stage
Project composition	Single Company or Collaborative
Funding available	Up to £3m
Project Size	Up to £150k (indicative)
Total Grant size	----
Approx % Funding for business	Up to 75%
Anticipated Project length	Up to 12 month
Application form	10 marked questions



Competition page

The screenshot shows a web browser window with the URL www.innovateuk.org/content/competition/energy-efficient-computing.ashx. The page header includes the Technology Strategy Board logo and navigation links: Home, Our strategy, Delivering innovation, Competitions, Publications, News & Media, Events, Case studies, and About us. A search bar and social media icons are also present. The main content area shows the breadcrumb 'Home > Competition > Energy-efficient computing' and a 'Feasibility' section with a 'Feasibility Studies' button. A sidebar on the left contains links for 'Competitions', 'Competition Announcements', 'Competition Guidance for Applicants', and 'Competition search'.

Guidance for Applicants

DOWNLOAD documents

2

Status:
Open

Download the brief
Energy efficient computing competition brief

Click to start download

Application process & supporting downloads

Join the competition special interest group on connect

Energy Efficient Computing [Guidance for Applicants](#)

Event details

Register for the competition briefing event on 23 October

WEBINAR: Join the briefing event via our live webinar, [register here](#)

Competition registration

Register for the

1

REGISTER

Feasibility

Feasibility Studies

Energy-efficient computing

The Technology Strategy Board, with its partners, the Engineering & Physical Sciences Research Council (EPSRC) and Defence Science & Technology Laboratory (DSTL) Futures and Innovation Domain, are to invest up to £1.25m in feasibility studies to encourage technologies which can reduce the mounting energy burden of computing and communications devices and systems.

The increasing trend in electronic and computing systems on a global scale is set to continue, to the point where it is likely to have a significant impact on climate change.

For many years, electronic and computing systems and the software which runs on them have been designed with a view to ever-improved performance. However, there is now greater focus on improving energy efficiency of the system as a whole. By devising more energy efficient computing devices and software, we can reduce the global energy burden of such systems and increase customer satisfaction by extending battery life, reducing device size and other measures.

This collaborative demonstrator competition focuses on the design and development of energy-efficient hardware and software, not only for large-scale systems relying on computing capacity but also for mobile devices and embedded chips.

These feasibility projects must be undertaken by a consortium of at least two partners, one of whom can be an academic institution, but

Technology
Driving Innovation



REGISTER

1. If you intend to make an application, you must first **REGISTER** for the competition. (Remember: Registration ends 1 week prior to the competition close)
2. You will receive an email with your **username** and **password** along with a link to the secure upload area. This email will also contain your application form with unique application number.
3. For multiple projects: please contact the support team (support@innovateuk.org) after your first registration for additional *unique* application forms.

Project summary

Summary of Proposed Project (Not Scored)	
Question	Guidance
Please provide a short summary of the content and objectives of the project including what is innovative about it.	<p>This is an opportunity to provide a short summary of the key objectives and focus areas of the project. It is important that this summary is presented in reference to the main outline of the project, with sufficient information to provide a clear understanding of the overall vision of the project and its innovative nature.</p> <p><i>This summary is not marked, but provides a summary of your proposal for the benefit of the Assessors.</i></p>

This part of the application is not marked

Public description of the project

Public Description of the Project (Not Scored)	
Question	Guidance
If your application is successful, the Technology Strategy Board will publish the following brief description of your proposal. Provision of this description is mandatory but will not be assessed.	<p>To comply with Government practice on openness and transparency of public-funded activities for projects in receipt of grant, the Technology Strategy Board has to publish information relating to funded projects. Please provide a short description of your proposal in a way that will be comprehensible to the general public. Do not include any commercially confidential information, for example Intellectual Property or patent details, in this summary.</p> <p>Whilst this section is not assessed, provision of this public description is mandatory. Funding will not be provided to successful projects without this.</p>

This part of the application is **mandatory** but is **not marked**

Application structure

The Application is broken down into 4 marked sections:

Page	Information Required
1	Application Details
2	Summary of Proposed Project
2	Gateway Question: Scope
3	Section 1 – The Business Proposition
4 & 5	Section 2 – Project Details & Partner/Collaborator Details
5	Section 3 – Funding and Added Value
6	Other Funding From Public Sector Bodies
7	Finance Summary Table

Please refer to the Competition Guidance.

Gateway question: Scope

How well does the project fit the competition?

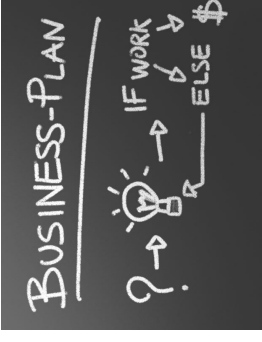
Scope Gateway question	Guidance
Question Gateway Question: Scope - How does this application align with the specific competition scope?	All applications must align with the competition selected by the applicant and shown on the first page of the application form downloaded. Details of the specific competition criteria are provided in the relevant Competition Brief, which can be located at: http://www.innovateuk.org/competitions/competitionsear.ch.ashx Note: To demonstrate alignment, applicants need to reflect that a clear majority of the project's objectives and activities are aligned with the specific competition. In forming their judgment on this, the Reviewers will also consider whether the application addresses the research objectives and topics it claims to. Therefore, it is important for the applicant to fully understand the background, challenge and scope of the competition, as outlined in the Competition Brief.

Key points:

- “must align”
- “clear majority of the projects objectives and activities”

Don't write yourself out of scope...!

Section 1:



The business proposition

Question 1	What is the business opportunity that this project addresses?
Question 2	What is the size of the market opportunity that this project might open up?
Question 3	How will the results of the project be exploited and disseminated?
Question 4	What economic, social and environmental benefits are the project expected to deliver to those inside and outside of the consortium and over what timescale?

All questions are equally weighted (10 marks per question)

Business proposition – key points

Question 1	What is the business opportunity that this project addresses?
Question 2	What is the size of the market opportunity that this project might open up?

- Have you identified a viable business opportunity?
- Is it clear you understand the dynamics of the market?
- Has the “size of the market” been quantified and where possible, has evidence been given?
- Is the business need and market realistic and addressable by the project?

“If no-one in the consortium knows the market, you haven’t got the right consortium!”

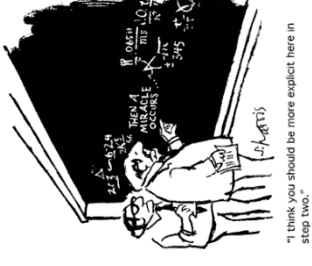
Business proposition – key points

Question 3 How will the results of the project be exploited and disseminated?

Question 4 What economic, social and environmental benefits are the project expected to deliver to those inside and outside of the consortium and over what timescale?

- Is it clear how your consortium plans to exploit the results?
- Is it clear how your consortium will benefit from the project?
- Have you quantified the value of the output and how it will be disseminated?
- Who else will benefit from the project and how?
- Will there be any social or environmental impacts? If these are negative how will they be mitigated?
- Sustainability implications?

Section 2:



The Project details

Question 5 What technical approach will be adopted and how will the project be managed?

Question 6 What is innovative about the project?

Question 7 What are the risks (technical, commercial and environmental) to project success? What is the project's risk management strategy?

Question 8 Does the consortium have the right skills and experience and access to facilities to deliver the intended benefits?

All questions are equally weighted (10 marks per question)

Project details – key points

Question 5

What technical approach will be adopted and how will the project be managed?

Question 6

What is innovative about the project?

- Have you described the main technical objectives, methodology and the project plan?
- Have you explained how the project will result in substantial and lasting changes?
- Does the project present both commercial and scientific innovations?
- Have you provided evidence such as patent search of this innovation?

The UK Intellectual Property Office says 80% of published patents are lapsed and estimates that 30% of European R&D expenditure is wasted!

Project details – key points

Question 7

What are the risks (technical, commercial and environmental) to project success? What is the project's risk management strategy?

- Have you identified the risks for your project; technical, commercial, managerial, environmental and others?
- Have you outlined how the risks will be managed and mitigated?

Innovation is risky!– what is important is whether you have identified the risks and how you plan to mitigate them!

Project Details – key points

Question 8

Does the project team have the right skills and experience and access to facilities to deliver the intended benefits?

- Why is your team best placed to do this project?
- Have you adequately demonstrated your team's proven track record?
- Have you successfully completed other innovative R&D projects?
- Do you have the ability within your team to develop and exploit?

Section 3:



Funding and added value

- Question 9** What is the financial commitment required for the project?
- Question 10** How does the financial support from the Technology Strategy Board and its funding partners add value?

All questions are equally weighted (10 marks per question)

Funding – key points

Question 9 What is the financial commitment required for the project?

- **Do not** simply write out the finance table!
- Have you explained the funding model & cost break down for the project?
- Is the budget realistic and appropriate? – underestimating cost is as bad as overestimating costs
- Have you explained and justified any significant costs e.g. subcontracting or travel?
- Have you articulated and quantified the amount of investment required to deliver the project?

Funding – key points

Question 10

How does the financial support from the Technology Strategy Board and its funding partners add value?

- Will the TSB investment increase the amount of Research and Development undertaken in the UK?
- Have you explained and justified why you are not fully funding the project yourselves?
- Have you explained how the project would be undertaken differently with TSB investment?
- What are the implications of the TSB funding? What does it mean to the project, idea and exploitation?

Finance summary table

Finance Summary Table (continued)								
	1	2	3	4	5	6	7	8
	Organisation name	Organisation registration number	Enterprise Category	Postcode	Contribution to project by each organisation (£)	Funding sought from the Technology Programme (£)	Other funding from public sector bodies (£)	Total (£)
	Lead org.				0	0	0	0
	Partner 1				0	0	0	0
	Partner 2				0	0	0	0
	Partner 3				0	0	0	0
	Partner 4				0	0	0	0
	Partner 5				0	0	0	0
	Partner 6							
	Partner 7							
	Partner 8							
	Partner 9							
	Partner 10							
	Partner 11							
	Partner 12							
	Partner 13							
	Partner 14							
	Partner 15							
	Partner 16							
	Partner 17							
	Partner 18							
	Partner 19							
	Partner 20							

Project cost summary
(for each project participant)

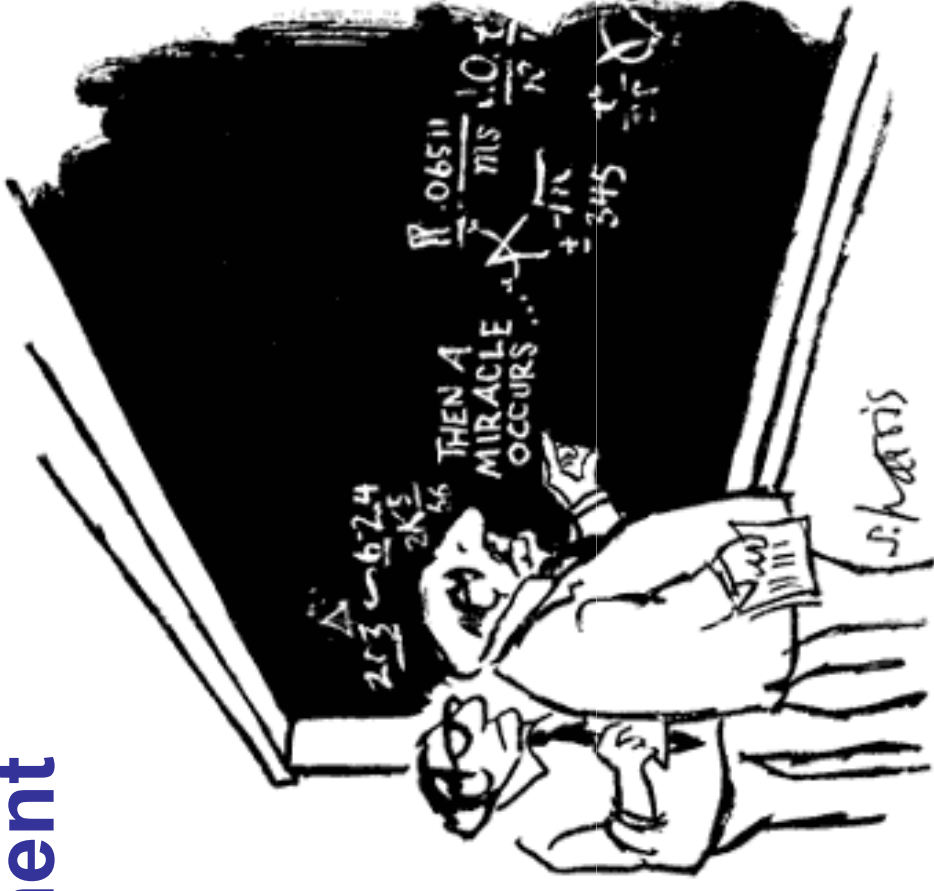
1. Organisation name
2. Organisation registration number
3. Enterprise category
4. Postcode
5. Contribution to project by each organisation
6. Funding sought from the Technology Strategy Board
7. Other funding from public sector bodies
8. Total

Application assessment

All applications are assessed by independent reviewers drawn from industry and academia

What do they look for?

- **Clear and concise answers**
- **The right amount of information**
 - not too much detail
 - no assumptions
- **Quantification and justification**
- That **the applicant has the right people with the right bright idea and the means to exploit its potential**



"I think you should be more explicit here in step two."

Top tips

- Answer the question fully and use all the space available
- Number your sections & questions
- Check your application for quality of presentation – make the best impression on the assessors
- Use capitals when correct to do so but not to draw attention to your case – reviewers do not like it
- Quantified means put some numbers in
- Avoid clichés – “Holy Grail” or “Market is massive”
- Don’t leave your submission until the deadline
- Please refer to the Guidance for Applicants

Key dates – Developing the offshore wind supply chain

Time line	Dates
Competition Opens	5 th November 2012
Briefing Event	13 th November 2012
Registration Closes	Noon 9th January 2013
Competition Closes	Noon 16th January 2013
Applicants Informed	19 th February 2013
Offer Letters Issued	22 nd March 2013
Feedback to Applicants	22 nd March 2013

competitions@innovateuk.org

Competition Helpline: 0300 321 4357

www.innovateuk.org

_connect Network: <https://ktn.innovateuk.org>

Sarah Vodden

Funding

Technology Strategy Board
Driving Innovation

Funding

- New funding rules
 - Types of organisation
 - Business
 - Research Organisations
 - Public Sector Organisations & Charities
 - Collaborative projects
 - Definition of collaboration
 - Levels of participation
 - Minimum grant
- Funding criteria for this competition

Changes to funding rules

- All competitions opening from 1st September
- A simplified scheme, but very different
- Previous scheme;
 - fixed grant at project level
 - academic grant was always 80% of FEC
 - business partners had to split remaining grant between them
- New scheme means business grant not reduced as result of collaborating with research base
- Focus on business driven R&D so business element must be the primary focus of the project (and the share of costs)

Changes to funding rules

- Rates applied to individual participant
- no longer applied at project level (old scheme)
 - R&D project must still sit in the category specified in the competition scope (e.g. preparatory to industrial research – 75%)
 - Rate depends on organisation type, size and the activity being undertaken
 - New rules on level of participation of research and business partners (ie shares of the project costs)
 - **Funding rules in Guidance for Applicants**
<http://www.innovateuk.org/competitions/guidance-for-applicants/funding-rules.ashx>

Types of organisation

- Business – SME or large (EU definition)
- Research Organisation (RO):
 - Universities (HEIs)
 - **Non profit distributing** Research & Technology Organisation (RTO)
 - Public Sector Research Establishments (PSRE)
 - Research Council Institutes (RCI)
 - Catapults
- Public sector organisations and charities doing research activity

Business rates

Business Size	Pre-industrial research Feasibility Studies
Micro/Small	75%
Medium	75%
Large	65%

Research organisations

- Use EU Community Framework definition
- Must be 'non-economic' activity
- Universities – 80% Full Economic Cost (FEC) via JeS (mandatory for HEIs)
- Other Research Organisations can claim 100% of eligible costs **but MUST:**
 - **be non-profit distributing and**
 - **disseminate the results of their project work and**
 - **explain in the application form how this will be done**

Public Sector Organisations & Charities

- Must be:
 - performing research activity and
 - Disseminating project results
- 100% of eligible costs
- Must ensure that the eligible costs do not include work or costs already funded from other public sector bodies

Levels of participation

- The aim of our State Aid scheme is to:
 - optimise the level of funding to business and
 - recognise the importance of research base to project
- **At least 70% of total eligible project costs must be incurred by business**
- **The maximum level (30% of project costs) is shared by all research organisations in the project**
- Please refer to the competition guidance for applicants on our website

What is collaboration?

In all collaborative projects there must be:

- **at least two collaborators**
- a **business-led** consortium, which may involve both business and the research base and
- evidence of **effective collaboration** (see guidance)
 - *Typically this would mean that no one partner would be taking more than 70% of the eligible costs, and we would expect to see the structure and rationale of the collaboration described in the application.*

Minimum grant changes

If partner wishes to collaborate but does not wish to claim a grant:

- role and work should be in application as for all other partners
- partner name and total costs (contribution to the project) must be included in the finance summary table.
 - Enter zero grant requested in finance summary table
- no partner finance form required
- not be named in the offer letter if your project is successful

Changes to funding rules

- All competitions opening from 1st September
- A simplified scheme, but very different

Previous scheme

- Fixed grant at project level
- Academic grant was always 80% of FEC so business partners had to split remaining grant between themselves
- Collaborative, no single applicants
- No zero grant partners allowed

New scheme

- Business grant not reduced as result of collaborating with research base
- **Focus** on business driven R&D so business element must be the primary **focus** of the project (and the share of costs)
- Single applicants allowed
- Zero grant partners allowed

Total funding limits

Worked example – £100k total cost project:

Project costs involving 2 partners (1 SME, 1 University).

	Total eligible project cost	Maximum % of eligible costs which may be claimed as grant	TSB Grant	Project contribution
Business (SME)	£70,000	75%	£52,500	£17,500
Research organisation	£30,000*	100%	£30,000	nil**
Total	£100,000	-	£82,500	£17,500

*80% FEC

**20% FEC not to be shown as a contribution

Project costs

- Business & non-academic partners
 - Eligible Project Costs
 - Partner Finance Form
- Academics
 - Je-S
 - Academic Finance Form

Eligible project costs

(applicants / non-academic partners)

- Labour Costs
- Overheads
- Materials
- Capital Equipment Usage
- Sub-Contracts
- Travel & Subsistence
- Other Costs
 - Other eligible direct costs not included in the above headings
 - Contributions in kind
 - IP filing costs up to £5,000 (SME only)

Ineligible project costs

- Input or Output VAT
- Interest charges, bad debts, profits, advertising, entertainment
- Hire purchase interest and associated service charges
- Profit earned by a subsidiary or by an associate undertaking work sub-contracted out under the project
- Inflation and contingency allowances
- The value of existing assets such as IPR, data, software and other exploitable assets that are contributed to the project by any collaborator
- Independent Accountant's Report Fees

Eligible overheads

- **Indirect labour costs**
 - **Board & senior management** – the percentage of their time where they are involved in your projects but are not included as individuals in the direct labour costs
 - **Admin and support staff** – where not included in direct labour costs
- **Recruitment costs**
- **General supplies and IT** – not linked to production or service delivery
- **Corporate fees and expenses** – IPR maintenance, insurance, photocopying
- **Site expenses** – building rental, taxes, security and cleaning
- **Utilities** – careful not to include production equipment energy or supply costs

Ineligible overheads

- **Production or service delivery costs** – any costs associated with the way in which the company makes its money. This would include all items used to calculate gross margin and cost of sale.
- **Marketing and sales costs** – these again count in the cost of sales
- **Non-bookable R&D time** – non productive time or non-chargeable time of technical or support personnel
- **Entertainment and hospitality**
- **New IP protection costs**
- **Any headings that are being charged for directly within the project** – such as training, T&S

Partner finance forms

- Each applicant or non-academic partner claiming a grant must complete a Partner Finance Form.
- Figures on the individual Partner Finance Forms must total the same as those shown on the Finance Summary Table on the application form.
- The form includes a tab for each cost category which needs to be completed. The figures in each cost category tab populates the summary/total fields.
- Form must show the status as “complete” before submitting.

Grant claims & payments

- All grants are claimable **quarterly in arrears**
- Claims can only be made for costs **incurred and paid** between the project start and end dates
- Claims may be subject to an **independent audit** (including all academic partners) according to grant size
- Claims are only paid once quarterly reporting and necessary audits are complete
- Projects are **monitored** according to project size – **on a quarterly basis for Larger Feasibilities** including a visit from the appointed Monitoring Officer
- The monitoring will be carried out against a detailed project plan and financial forecast

Academic partners & Je-S

Technology Strategy Board
Driving Innovation

Why Je-S?

- The Research Councils Joint Electronic Submission System (Je-S) is being used to collect ALL academic finance forms
- Also to collect project finance details from non-HEIs (e.g. RTOs) that are claiming they are carrying out academic quality work and want to be funded on an FEC basis
- The Je-S system automates the collection of Full Economic Costs (FEC) based costs from academic partners and tells them exactly what numbers should be used in the application form for their costs
- Using Je-S enables Research Councils to easily co-fund Technology Programme projects

Eligible costs (academic partners)

Technology Strategy Board **Resource summary** Automatic logout in 1:59:24 [Help](#) ~ [Log Out](#) [Report Problem](#)

Scheme: Technology Strategy Board - CR&D
 Project Title: Low Carbon Student Union Buses
 Organisation: London South Bank University Department: Fac of Eng Science & Built Env

You must provide your Lead Partner with summary information to add to the main Technology Programme Application Form. This information can be found in the 'Summary Of Grant Requested' section below. Please note that for the purposes of the Technology Programme, your total project costs are the total of the 'RC contribution' column in the table below. The difference between this value and the total of the 'Full economic cost' column DOES NOT represent a contribution to the project by your Research Organisation and should not be included in any part of the application.

Summary fund heading	Fund heading	Full economic cost	RC contribution	% RC contribution
Directly Incurred	Staff	75,000.00	60,000.00	80
	Travel & Subsistence	5,000.00	4,000.00	80
	Equipment	0.00	0.00	80
	Other Costs	0.00	0.00	80
	Sub-total	80,000.00	64,000.00	
Directly Allocated	Investigators	100,000.00	80,000.00	80
	Staff	0.00	0.00	80
	Estates Costs	36,500.00	29,200.00	80
	Other Costs	0.00	0.00	80
	Sub-total	136,500.00	109,200.00	
Indirect Costs	Indirect Costs	54,377.00	43,501.60	80
Exceptions	Staff	0.00	0.00	100
	Other Costs	0.00	0.00	100
	Sub-total	0.00	0.00	
Total		280,877.00	216,701.60	

- Eligible costs are based on FEC calculation
- RC Contribution is the total eligible cost of academic partners.
- The 20% difference between this and the FEC total **DOES NOT** represent a contribution to the project and should not be included anywhere within the application.

Academic partner finance form

Je-S Equivalent Summary Form - To be completed by each academic applicant from the Je-S submission document and submitted to the Technology Strategy Board by the lead applicant

Please complete this form by filling in the pink shaded cells and return with all other paper work as advised in the guidance notes. This form is for HEI's and not for industry partners – the "Grant Sought" Total should be transferred to column 4 on Page 8 of the Application Form.

Summary Fund Heading	Financial resources			Percentage Tech Prog Grant Sought (% of FEC)	Grant Sought
	Fund Heading	Full Economic Cost (FEC)	Grant Sought		
Directly Incurred	Staff		£0	80%	£0
	Travel & subsistence		£0	80%	£0
	Equipment		£0	80%	£0
	Other Costs		£0	80%	£0
	Sub-total		£0	80%	£0
Directly Allocated	Investigators		£0	80%	£0
	Estates Costs		£0	80%	£0
	Other Directly Allocated		£0	80%	£0
	Sub-total		£0	80%	£0
Indirect Costs	Indirect Costs		£0	80%	£0
	Staff		£0	100%	£0
Exceptions	Travel & Subsistence		£0	100%	£0
	Equipment		£0	100%	£0
	Other Costs		£0	100%	£0
	Sub-total		£0	100%	£0
	Total		£0		£0

Summary of staff effort requested	
Staff Role	Months
Investigator	
Researcher	
Technician	
Project Students	
Visiting Researchers	
Other	
Total	0

Research Council Facilities	£0

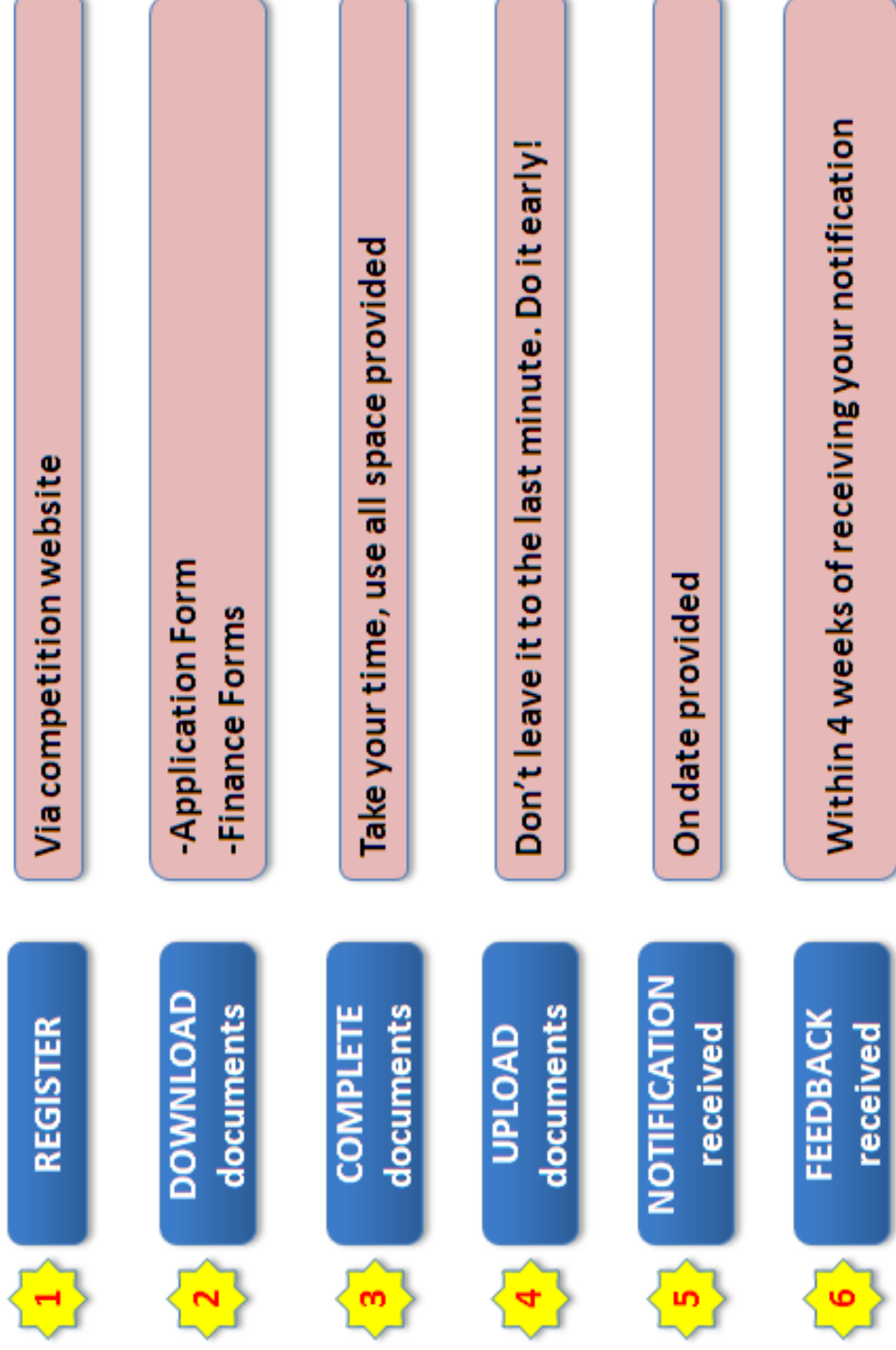
Normal Je-S application elements

Not just the financials

- E.g. Justification of resources
- E.g. Pathways to impact
- Full details on the Je-S system
- Queries about Je-S via the Je-S Helpdesk
 - JeSHelp@rcuk.ac.uk
 - 01793 44 4164

Submitting your application & the way forward

The application submission process



Competition page

The screenshot shows a web browser window with the URL www.innovateuk.org/content/competition/energy-efficient-computing.ashx. The page header includes the Technology Strategy Board logo and navigation links: Home, Our strategy, Delivering innovation, Competitions, Publications, News & Media, Events, Case studies, and About us. A search bar and social media icons are also present. The main content area shows the breadcrumb path: Home > Competition > Energy-efficient computing. Below this, there is a 'Feasibility' section with a 'Feasibility Studies' button. A 'Competition Announcements' sidebar lists 'Competition Guidance for Applicants' and 'Competition search'.

Guidance for Applicants

DOWNLOAD documents

2

Status:
Open

Download the brief
Energy efficient computing competition brief

Click to start download

Application process & supporting downloads

Join the competition special interest group on connect

Energy Efficient Computing Guidance for Applicants

Event details

Register for the competition briefing event on 23 October

WEBINAR: Join the briefing event via our live webinar, register here

Competition registration

Register for the

1

REGISTER

Feasibility

Feasibility Studies

Energy-efficient computing

The Technology Strategy Board, with its partners, the Engineering & Physical Sciences Research Council (EPSRC) and Defence Science & Technology Laboratory (DSTL) Futures and Innovation Domain, are to invest up to £1.25m in feasibility studies to encourage technologies which can reduce the mounting energy burden of computing and communications devices and systems.

The increasing trend in electronic and computing systems on a global scale is set to continue, to the point where it is likely to have a significant impact on climate change.

For many years, electronic and computing systems and the software which runs on them have been designed with a view to ever-improved performance. However, there is now greater focus on improving energy efficiency of the system as a whole. By devising more energy efficient computing devices and software, we can reduce the global energy burden of such systems and increase customer satisfaction by extending battery life, reducing device size and other measures.

This collaborative demonstrator competition focuses on the design and development of energy-efficient hardware and software, not only for large-scale systems relying on computing capacity but also for mobile devices and embedded chips.

These feasibility projects must be undertaken by a consortium of at least two partners, one of whom can be an academic institution, but

Technology
Driving Innovation



REGISTER

1. If you intend to make an application, you must first **REGISTER** for the competition. (Remember: Registration ends 1 week prior to the competition close)
2. You will receive an email with your **username** and **password** along with a link to the secure upload area. This email will also contain your application form with unique application number.
3. For multiple projects: please contact the support team (support@innovateuk.org) after your first registration for additional *unique* application forms.

2

DOWNLOAD documents

Public area

The screenshot shows a web browser window with the URL <https://tsbcom182.ftpstream.com>. The page title is "Technology Strategy Board" and the subtitle is "Driving Innovation". The main heading is "Emerging Technologies - Energy Efficient Computing". Below the heading, it says "Logged in as public login (public access)".

A table of files is displayed with the following columns: Name, Size, Type, and Date.

Name	Size	Type	Date
Academic_Partner_Finance_Form_V1.xls	48.5 KB	application/vnd.ms-excel	05 Oct 08:01
Model_Collab_Astree_v2.0111.docx	83.0 KB	application/msword	05 Oct 08:01
Partner_Finance_Form1.3.1for_Feasibility.xls	471.0 KB	application/vnd.ms-excel	05 Oct 08:01
TSB_Offer_Letter_V10_final_25-6-10.pdf	139.4 KB	application/pdf	05 Oct 08:00

In the top right corner of the browser window, there is a "Login" button, which is highlighted with a red circle. A "Help" button is also visible next to it.

Click Login to access the Secure area



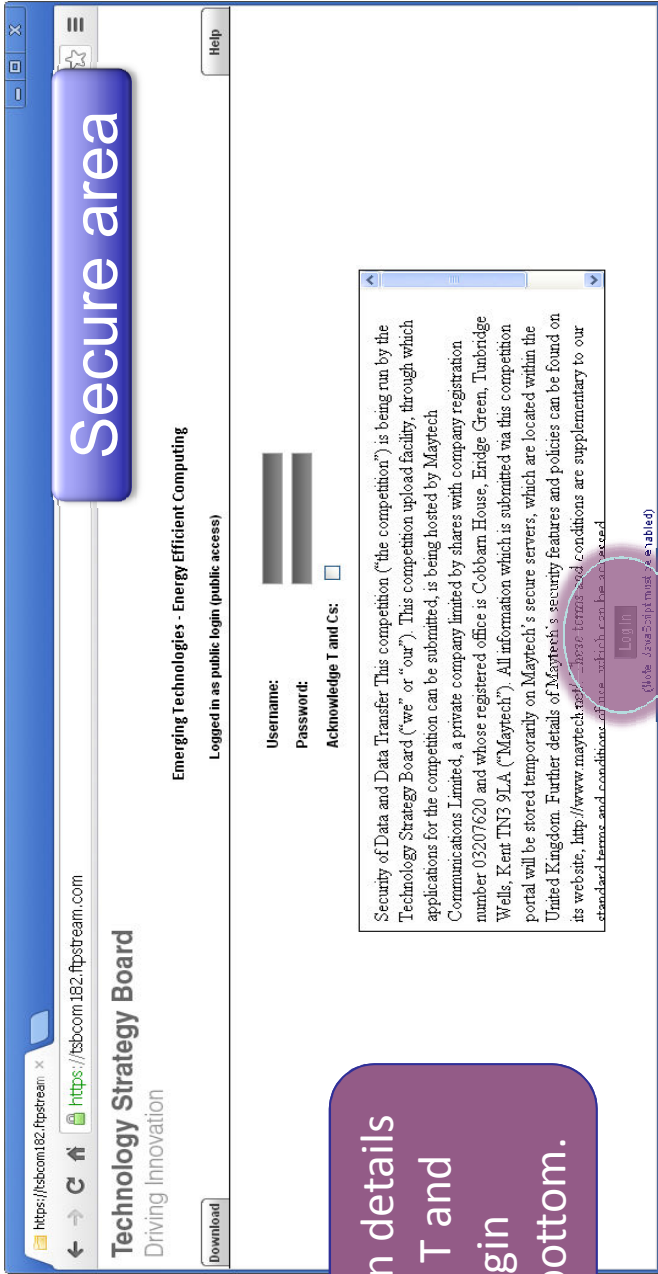
COMPLETE
documents

- **Naming**
 - a) Your documents should contain your unique application number (e.g.: App12345.docx)
 - b) Appendices begin with APPENDIX and supplied in **PDF format**.
- **Format**
 - a) Application Form submitted as a **Word** file (.doc /.docx)
 - b) Finance Forms submitted as **Excel** file (.xls /.xlsx)
 - c) Appendices submitted as **PDF** file

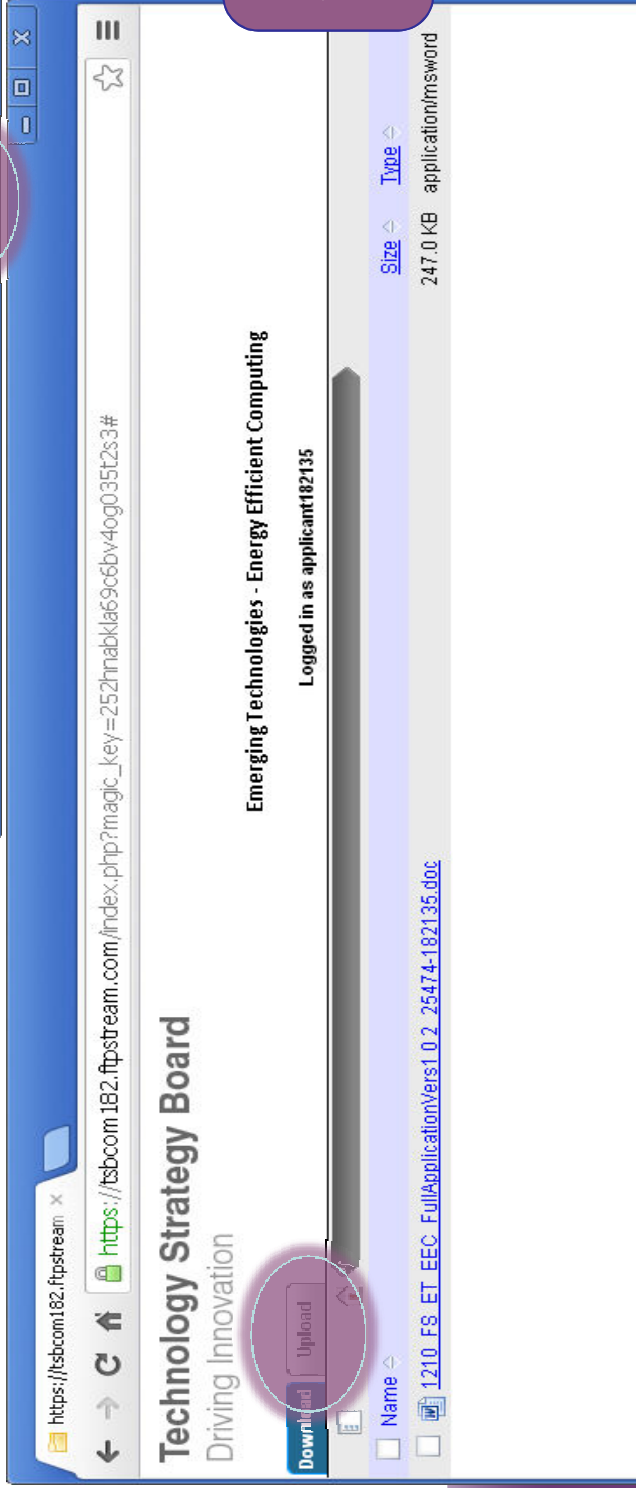
Check: your application number matches your login username number.

4

UPLOAD
documents



Enter your login details and accept the T and Cs. Click the Login button at the bottom.



Click Upload and follow the on-screen instructions.

5

NOTIFICATION
received

Technology Strategy Board

Successful Applicant

1. Conditional offer letters will be issued approximately 3-4 weeks after notification
2. Return of various documents within the timescales stated on the offer letter to validate the grant offer sent.
3. Financial project cost review and viability checks undertaken
4. Submit a financial forecast and detailed project plan
5. Sign & return Grant Confirmation Letter.

The Project may not start until the organisation has received and returned signed acceptance of the Grant Confirmation Letter

6

FEEDBACK received

Issued for both successful and unsuccessful applicants within 4 weeks of receiving your notification

Project Name: Sustainable Manufacturing for the Drivetrain Industry - CED
Lead Applicant: DaimlerChrysler AG
Lead Applicant Address: Mercedes-Benz Group AG, Mercedesstr. 120, 70372 Stuttgart, Germany
Project Description: The project aims to develop a sustainable manufacturing process for the drivetrain industry. The project will focus on reducing energy consumption and CO2 emissions. The project will also focus on improving the efficiency of the manufacturing process. The project will be implemented in three phases: Phase 1: Feasibility study, Phase 2: Pilot production, Phase 3: Full-scale production. The project will be implemented in three phases: Phase 1: Feasibility study, Phase 2: Pilot production, Phase 3: Full-scale production. The project will be implemented in three phases: Phase 1: Feasibility study, Phase 2: Pilot production, Phase 3: Full-scale production.

Q1 - What is the business opportunity that this project addresses?
 The project addresses the need for a sustainable manufacturing process for the drivetrain industry. The project will focus on reducing energy consumption and CO2 emissions. The project will also focus on improving the efficiency of the manufacturing process. The project will be implemented in three phases: Phase 1: Feasibility study, Phase 2: Pilot production, Phase 3: Full-scale production. The project will be implemented in three phases: Phase 1: Feasibility study, Phase 2: Pilot production, Phase 3: Full-scale production.

Q3 - How will the results of the project be exploited and commercialised?
 The project results will be exploited and commercialised through the development of a sustainable manufacturing process for the drivetrain industry. The project will focus on reducing energy consumption and CO2 emissions. The project will also focus on improving the efficiency of the manufacturing process. The project will be implemented in three phases: Phase 1: Feasibility study, Phase 2: Pilot production, Phase 3: Full-scale production. The project will be implemented in three phases: Phase 1: Feasibility study, Phase 2: Pilot production, Phase 3: Full-scale production.

Researcher?
 The project is led by a team of researchers from the Mercedes-Benz Group AG. The project will focus on reducing energy consumption and CO2 emissions. The project will also focus on improving the efficiency of the manufacturing process. The project will be implemented in three phases: Phase 1: Feasibility study, Phase 2: Pilot production, Phase 3: Full-scale production. The project will be implemented in three phases: Phase 1: Feasibility study, Phase 2: Pilot production, Phase 3: Full-scale production.

Q2 - What is the impact (technical, commercial and environmental) to project success? What is the project risk management strategy?
 The project success will be measured by the reduction in energy consumption and CO2 emissions. The project will focus on reducing energy consumption and CO2 emissions. The project will also focus on improving the efficiency of the manufacturing process. The project will be implemented in three phases: Phase 1: Feasibility study, Phase 2: Pilot production, Phase 3: Full-scale production. The project will be implemented in three phases: Phase 1: Feasibility study, Phase 2: Pilot production, Phase 3: Full-scale production.

Q4 - What economic and sustainability benefits to the project expected to deliver to those outside the consortium and how will they be realised?
 The project will deliver economic and sustainability benefits to those outside the consortium. The project will focus on reducing energy consumption and CO2 emissions. The project will also focus on improving the efficiency of the manufacturing process. The project will be implemented in three phases: Phase 1: Feasibility study, Phase 2: Pilot production, Phase 3: Full-scale production. The project will be implemented in three phases: Phase 1: Feasibility study, Phase 2: Pilot production, Phase 3: Full-scale production.

Word document

Uploaded to your secure area

Not issued via email

Coffee break

Technology Strategy Board

Driving Innovation

**DECC-TSB Offshore Wind Component Technologies
Development and Demonstration Scheme –
Third Call for Proposals**

**Sally Fenton, DECC Innovation
Delivery
(Offshore Wind & Energy Storage)**

**Offshore Wind Briefing Event, 13
November 2012**

Our criteria for funding innovation

- Support will be provided where:
 - the innovation will significantly contribute to the achievement of DECC’s energy and climate policy goals; and
 - there is clear evidence that the innovation need that would otherwise be unmet, i.e. where there are market failures or barriers that prevent/limit private sector investors; and
 - other actors (UK or international) have not, or are unlikely to, provide sufficient support;
 - the potential benefits can be shown to be likely to exceed the costs;
 - **Support is legal under UK and EU law**
- The focus of the portfolio will be primarily on the later innovation stages i.e. late stage development and partial and full scale demonstration (TRLs 5/6 to 8/9). The portfolio may however in exceptional circumstances fund innovation at the earlier stages, where other actors cannot or will not do so. It may also collaborate with other funders who are active at earlier TRLs, while seeking to maintain its own focus on the later TRLs.

Outline DECC Innovation Programme – approx £160m



Published Programme

- Offshore Wind – up to £30m (up to £15m for component technologies; up to £15m for Offshore Wind Accelerator)
- Marine Energy – up to £20m
- Carbon Capture and Storage – up to £20m
- Fuel Cells (Carbon trust accelerator)
- Buildings Innovation - £15m
- Entrepreneurs Support - £35m
- Energy Storage – up to £20m;
- Biomass

Other opportunities

- Nuclear

Overview of Component Technologies Scheme & Application Process

Sally Fenton, DECC

Overview

- **Aim:** To reduce the cost of offshore wind energy by accelerating the commercialisation of component technologies for offshore wind systems to be deployed in the run up to 2020 and in the subsequent decade.
- The scheme's main objectives are to:
 - Demonstrate component technologies for >5MW offshore wind turbines;
 - Provide support for innovative components that go beyond current understanding & experience in terms of scale and/or complexity;
 - Generate learning and practical experience to improve confidence in innovative large offshore wind systems & reduce future costs.
- Up to £7m capital expenditure is available for this call and DECC expects to support between 5 and 10 development and demonstration projects, with up to £4m grant available for an individual project.
- Joint funding grant scheme – i.e. private sector investment required alongside the DECC grant to fund projects.

Technology Scope

- Broad Technology Scope: this 3rd Call can potentially support innovation in the component technologies for any sub-area of a large, ie. greater than 5MW, offshore wind system, including the following sub-areas:
 - Turbines;
 - Foundations;
 - Connection & Transmission;
 - Installation;
 - Operation and Maintenance.
- Particularly keen to see projects which address cost reduction in connection and transmission; installation; and operation and maintenance.

Eligible Costs

- Grants will be awarded under the terms of the EU General Block Exemption Regulation¹ (GBER), within the **Experimental Development** category defined in the GBER.
- This limits total public funding to:

Size of Enterprise	Maximum amount of aid towards eligible Project Costs
Sole enterprise:	
Small	45%
Medium	35%
Large	25%

Public funding may be increased by a further 15% if the project involves effective collaboration between at least two independent undertakings – subject to certain conditions for collaboration.

1. http://ec.europa.eu/competition/state_aid/reform/gber_final_en.pdf

Eligible Costs

- DECC will only provide the grant to cover eligible capital costs incurred and defrayed in the period between acceptance of the DECC grant and the deadline specified in the grant offer letter for completion of the project.
- Funding is **not available beyond 31 March 2015** (projects may continue for up to one year beyond this date but all grant-supported expenditure, including costs related to the final project report, must be incurred by 31 March 2015).
- DECC may **prioritise projects with the majority of planned spend in the 2013-14 financial year** (i.e. the year ending 31 March 2014).

Eligibility Criteria

- Applications will go through a two stage application process . The first stage will confirm that applications meet the **Requirements on Applicants and the Project Eligibility Criteria** (see *Guidance Notes for detail*).
- Eligibility Criteria include:
 - Technology scope (addressing 5MW+ systems)
 - Innovation & technology readiness;
 - Project status & locations;
 - Additionality/incentive effect;
 - Aid intensity & overall grant size;
 - Permissions & consents.

Please check eligibility criteria carefully before embarking on the application form!

Selection Criteria

- The second stage will determine the expected overall value for money of the proposed project by assessing it against the following five selection criteria:
 - Reducing the cost of offshore wind energy (30% weighting);
 - Likelihood of successful project delivery (30% weighting);
 - Project materiality and financing - leverage and affordability (15% weighting);
 - Likelihood of subsequent commercial availability and success of the innovation (15% weighting);
 - Contribution to expansion of the offshore wind sector, including supply chain development (10% weighting).

Application Timeline



Activity	Dates
Call for Proposals issued	5 th November 2012
Briefing event for potential applicants	13 th November 2012
Optional: Notify DECC of intention to apply	9 th January 2013
Closing date for applications	12pm on 16 January 2013
Assessment process & clarification of bid information	From February 2013
Interviews for shortlisted applications	11, 12 or 14 March 2013
Due diligence, detailed negotiation and financial close	From April 2013
Grant offers awarded	From May 2013

Other Requirements

Publication of grant award & results

Reporting

- Project Delivery Stage: *Reporting to track project progress and ensure payments are made according to a schedule of milestones.*

Project evaluation

- Participate in evaluation of scheme during and for several years after final grant payments to assess whether funds have been used effectively.

Data Gathering & Knowledge Sharing

- To benefit the industry as a whole and avoid repetition of costly or time-consuming mistakes – no formal knowledge sharing requirements but one of the selection criteria.

Application Process

- Please read guidance notes and application form carefully before completing and answer ALL questions asked.
- DEADLINE (for completed application form and any supporting documents): **12:00pm, 16 January 2013**
- Email digital copy to: innovation@decc.gsi.gov.uk
- Maximum email size is **10MB** - if needed break submission down into smaller parts.
- 1 signed hard copy of the application to be sent to DECC within 10 working days of submitting your electronic application.

One-to-One discussion available (on competition scope or process and on using the simplified Levelised Cost of Energy model

**“Developing the offshore renewable
energy supply chain”**

Targeted Call for Knowledge Transfer Partnerships

*Wendy Mannix KTP Portfolio Development Manager
Technology Strategy Board*



Technology Strategy Board
Driving Innovation

Targeted Call for KTPs

- Co-funded Technology Strategy Board (£1m) and Natural Environment Research Council NERC (£200k)
- Opportunity for businesses to work in partnership with the academic research base to address the industry challenges
- Businesses already engaged in OR or entering OR sector
- Exploit current and innovative technologies and methodologies to address identified challenges



The Partnership



Technology Strategy Board
Driving Innovation

Mission



Knowledge Transfer Partnerships

is Europe's leading programme helping businesses to improve their competitiveness, productivity and performance through the better use of knowledge, technology and skills that are available within the UK knowledge base.

Dr Vince Cable MP, Secretary of State for Business, Innovation and Skills, presenting the Overall Winning Partnership Award to Cherry Pipes Limited at Innovate '11

Succinctly.....

An opportunity to access innovation from
knowledge base expertise and to embed it in the
business for long term benefit.

Criteria for Technology Strategy Board

- ‘Innovative projects involving any part of the system of power generation from offshore wind, wave, tidal stream or tidal range.’
- Opportunity to access research strength specific to UK research base

UK Research Strengths

- Offshore engineering, operations and maintenance
- Environmental monitoring
- High voltage power transmission and conditioning
- Automation and methods for scale manufacture
- Advanced materials and corrosion resistance

Criteria for NERC

- Underwater noise: monitoring and mitigation systems (especially for pile driving)
- Marine life collision risk: models and risk-based approaches to assess, predict and manage collision risks
- Data access and management; improved data collection and real-time decision support methods
- Cost-effective monitoring: development of advanced surveying, monitoring methods and tools
- Cumulative impact assessment: tools and guidance to inform decision-making



The Features of KTP



Project length of between 6 months and 3 years

Associates recruited by KB and Business partners

The Associate is employed by the KB partner

Project located at business premises with
business supervisor

KB Supervisor spends approx. half a day
per week at the business premises

Technology Strategy Board
Driving Innovation

KTP - main points

- Partnership between business and academia - must be driven by business need
- Typically 67% grant funding for SME and 50% for large company
- Project length typically 2 year but can be 6m to 3 years
- **80% success rate for proposals**

Targeted Call Cohort – Knowledge-Sharing

- The group of KTPs will run together as a cohort
- Knowledge sharing approach
- Projects will be supported with a programme of networking between partners

The link between the 2 competitions

There can be a distinct link between a KTP application and a feasibility study proposal

or

The KTP proposal can be totally independent of feasibility study proposals

however,

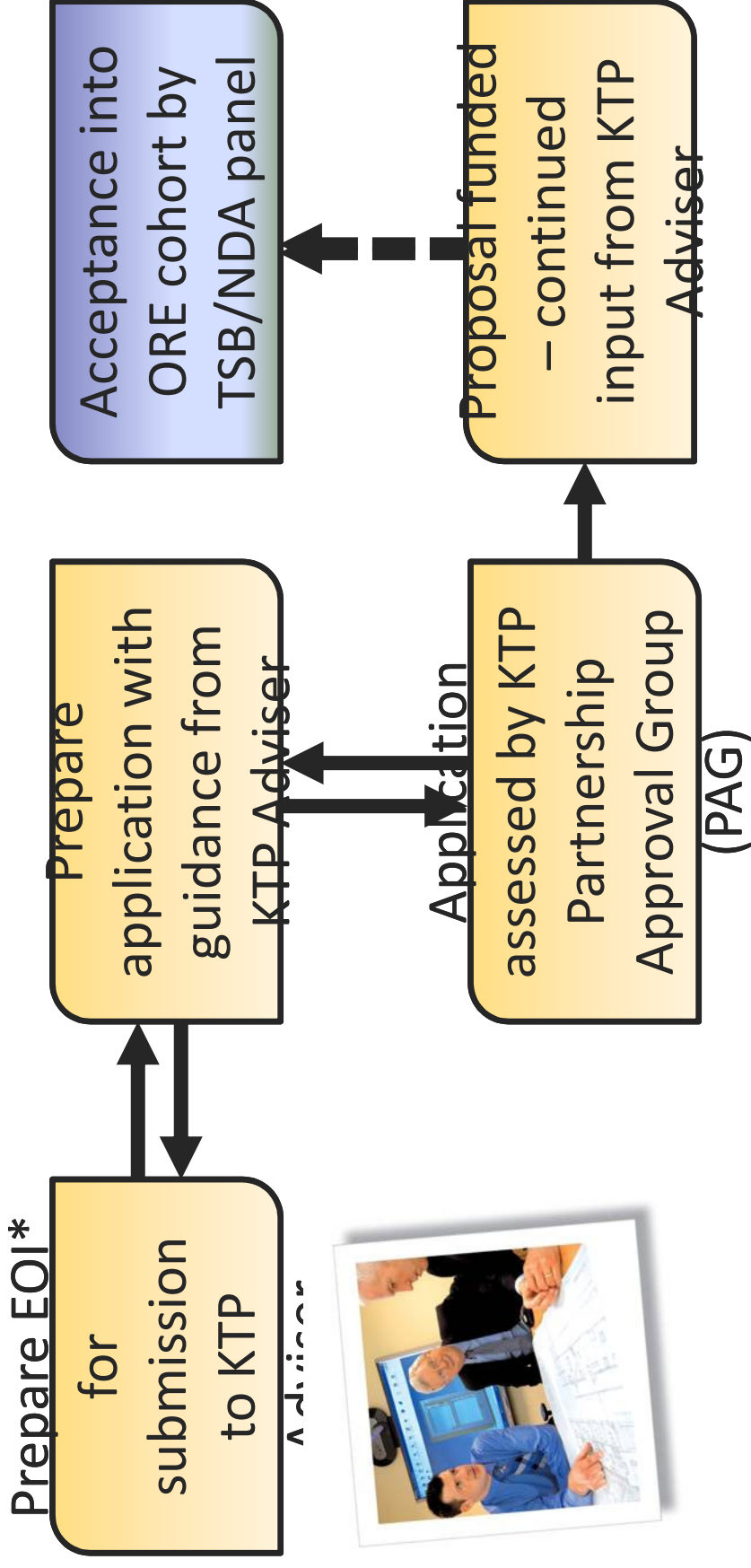
KTP application must be able to stand alone (ie not be dependent on a feasibility proposal being successful)



Next Steps

- Ideas for projects
- Partnering
- Contact one of our KTP Advisers
 - Provide advice on eligibility and timescales
 - Help businesses to identify a suitable academic partner (sometimes vice versa)
 - Work with potential KTP partners to develop the proposals

The Application Process – Targeted Call for KTP



* EOI – Expression of Interest

KTP Key Dates

- Briefing Day 13th November 2012
- KTP Final Closing date noon 24 April 2013

Contact us

General enquiries

KTP - Technology
Strategy Board

Tel.: 0300 321 4357

Email: ktp-companies@ktponline.org.uk

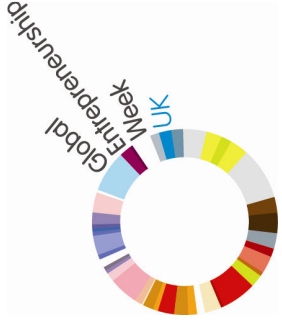
Web: www.ktponline.org.uk

To discuss an idea for a KTP

Regional KTP Adviser
University KTP Offices

Web: www.ktponline.org.uk

‘Contact Us’ Tab



Questions & answers