

Marine Energy Array Demonstrator (MEAD)

Pre-Submission Briefing
2 May 2012

Agenda

14.30	Introduction <ul style="list-style-type: none">• DECC Innovation Programme	Ian Ellerington, Head of Innovation Delivery, DECC
14.45	Marine: Technology Innovation Needs Assessment (TINA) <ul style="list-style-type: none">• Presentation on the Marine TINA	Tom Jennings, Carbon Trust, On behalf of the Low Carbon Innovation Coordination Group
15.10	Marine Energy Array Demonstrator <ul style="list-style-type: none">• Key Criteria and application Process• Q&A	Bart de Leeuw Innovation Delivery Team, DECC
16.10	Next steps and closing Remarks	

DECC Innovation Programme

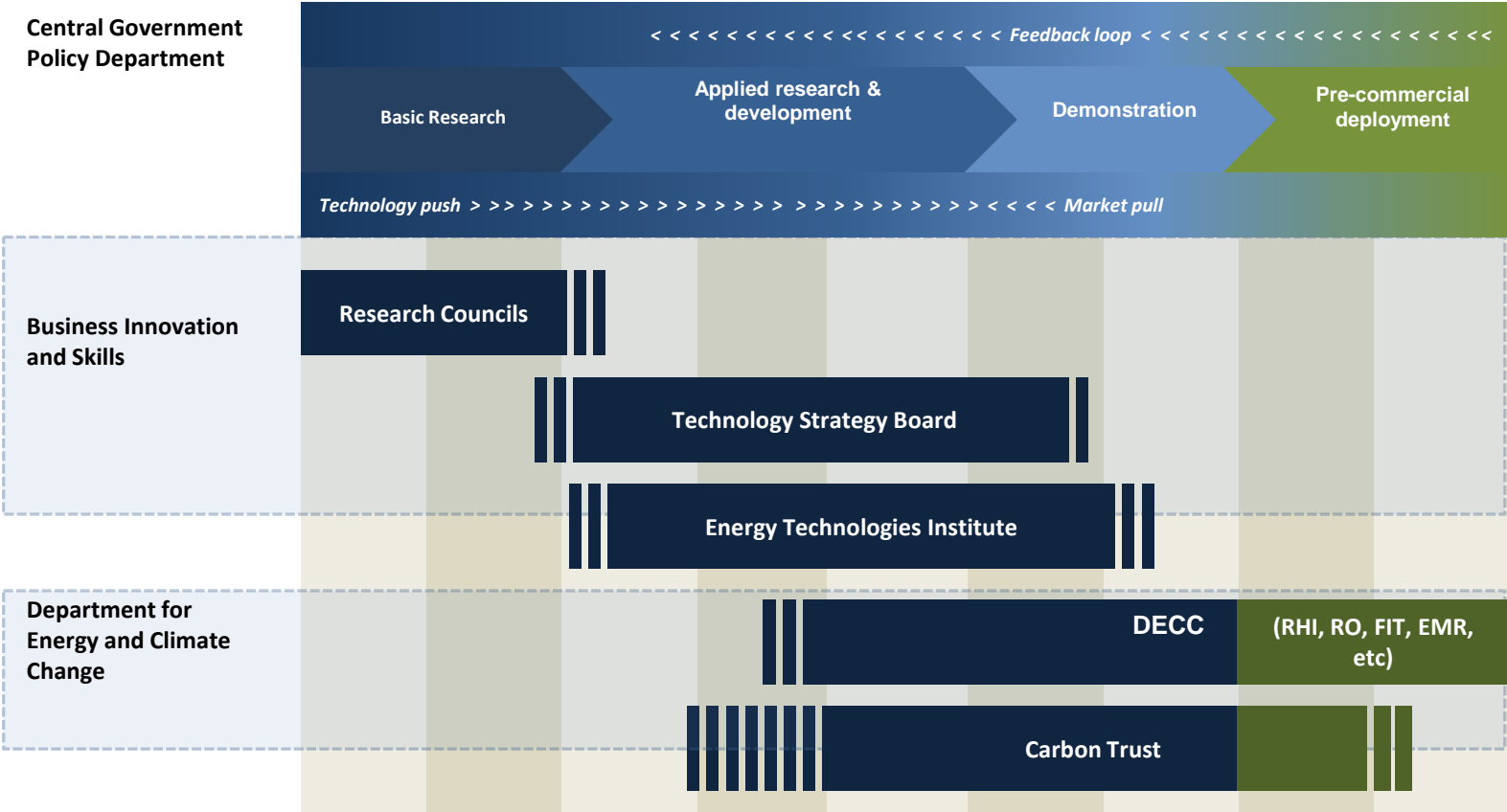
Ian Ellerington

DECC Mission is to power the country and protect the planet.



- DECC exists to head off two risks:
 - a shortfall in secure, affordable energy supplies
 - catastrophic climate change

~£800million available for energy R&D



Innovation Policy Aims

- Deliver our 2050 climate and renewables targets cost-effectively by ensuring that the right energy innovation happens.
 - 80% reduction in greenhouse gas emissions by 2050 – and contribution to interim targets.
- Economic benefits that will be taken into account

Our criteria for funding

- 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; and
- the potential benefits can be shown to be likely to exceed the costs.
- 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.
- **Support is legal under EU law**

Outline Programme – approx £160m

Published Programme

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

Other opportunities

- Nuclear
- Waste and Biomass Conversion
- Electricity Storage and networks

Overview of Application Process and Q&A

Bart de Leeuw

Overview

- **Aim:** To build confidence in wave and tidal generators as a viable technology to produce bulk electricity.
 - Demonstrate the capability of the technology to operate at an array scale.
 - Reduce cost of marine energy and increase investors' confidence.
 - Applying lessons learnt to future designs and operation methodologies.
- MEAD will support up to 2 pre-commercial projects, expecting to award up to £10mn to support capital expenditure on the projects.
- Awards are subject to value for money assessments.
- The grant will be subject to State Aid approval by the European Commission.

Criteria - Technology

- Wave and/or Tidal Arrays.
- The arrays:
 - We expect arrays to generate **10GWh** per year (Capacity ~5MW) or more but are prepared to consider projects from 7GWh per year.
 - Include at least **3 generating devices**.
- The devices of must have been demonstrated at full-scale in real sea conditions.
 - The design and scale of these devices must be comparable to those used for MEAD.
- Devices must be similar in scale and concept to devices that will be used in future arrays.

Criteria – Project Planning

- Project planning must be under way such that the complete project can be supplying electricity to the grid by **31 March 2016**.
- Three key areas to consider:
 - Grid Connection (must supply the UK Grid).
 - Agreement for Lease.
 - Planning Consents.
- Location: Project site must be entirely within UK territorial waters.
- Operation: Arrays awarded MEAD funding are expected to operate for a minimum of **2 years**.

Eligible Costs

- We anticipate the grant to be awarded under the **Experimental Development** category as defined by the Community Framework for State Aid for Research and Development and Innovation¹.
- This limits total public funding to:

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

- 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.**

1. OJ C 323, 30.12.2006,p.1. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2006:323:0001:0026:EN:PDF>

Eligible Costs

- The availability of any funding is restricted to the period between April 2013 and March 2015
 - all grant payments need to be completed by the **31 March 2015**.
 - We expect the bulk of the grant payment to be made in financial year 2013/14.
 - Indicative profile:
 - £13 million in FY 13/14 .
 - £7 million in FY 14/15.
 - Applicants should bear this in mind when providing their spend profile against milestones as there will not be a great deal of flexibility.

Application Process

- Please carefully read guidance notes and application form before completing.
- **DEADLINE: 12:00pm, 1 June 2012**
- **Email digital copy to: innovation@decc.gsi.gov.uk**
- **Subject Heading: 'MEAD Application (Project title, Lead Applicant)'**
- **Maximum email size is 10MB.**
 - If needed break submission down into smaller parts.
 - Label subject heading on each email :
MEAD Application (Project title, Lead Applicant) email 'x' of 'y'

Application Process

- Include a list of all attachments in the body of the email.
- Applications to be sent in Microsoft Word format.
- Answer ALL questions asked.
- All applicants will receive an email by 4:00pm on 1 June 2012 confirming receipt of application.
- 1 signed hard copy to be sent within 10 working days of submitting your electronic application.

Evaluation Criteria

Applications will go through a two stage application process which will evaluate:

- How well are the entry criteria met (or preferably exceeded).
 - The project Schedule.
 - The technology and its future potential.
 - The financial plan.
-
- How well does the project meet the underlying aims of the MEAD Scheme in progressing the development and roll-out of marine energy technologies?
 - Ensuring that money committed to MEAD is spent on project that can be delivered to schedule and with as little technical risk as possible.
 - Value for money for UK taxpayers.

Application Timeline

Milestone	Date
Official launch	30 March 2012
Pre-submission workshop	2 May 2012
Closing date for applications	12.00 pm 1 June 2012
Clarification and preliminary assessment	From 1 June 2012
Due diligence, <u>workplan</u> finalisation, negotiation, financial close	From 1 August
Final award	Late 2012/Early 2013
Projects start	2013
Payments	From 1 April 2013 to 31 March 2015
Projects operating by	31 March 2016

Other Requirements

Publication of Results:

(whilst maintaining confidentiality of commercially sensitive information)

- i. After issuing the grant
 - Identity of the participant and its partners;
 - Type of technology involved;
 - Summary details of the aims and expected outcomes of the project
 - Estimated total capital cost;
 - The size of the DECC Grant

- ii. Throughout project delivery
 - Summary of funded activities completed and the outcomes achieved;

Other Requirements

Reporting

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

Project evaluation

- Participate in evaluation of scheme during and 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.
- After 2 year operational period successful applicants are required to produce a confidential report for DECC, which is to include
 - Economic evaluation
 - Evaluation of environmental impacts

Questions?