DEPARTMENT OF ENERGY & CLIMATE CHANGE

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15 January 2010

Dear Ms Evans

Freedom of information request numbers 09/1894 and 09/1895

Thank you for your requests for information regarding investment in UK deep and shallow offshore wind respectively since 2003. I am dealing with your requests under the Freedom of Information Act.

As the documents held by this Department and the Department for Business Innovation and Skills (BIS) and its predecessors do not differentiate between deep and shallow offshore wind I am sending a combined response to both your requests.

I also note that you are seeking a response in an Excel spreadsheet. However, the Freedom of Information Act does not require us to provide information in a format in which it does not already exist. The documents referred to below are therefore provided in their existing formats.

In particular you have requested information on:

"The amount of Departmental spending on deep and shallow offshore wind research, construction, maintenance and deconstruction for the UK"

You have asked for this to be broken down as follows:

1. *"Category of spending in the supplementary budgetary report (http://www.hm-treasury.gov.uk/d/sbi66_decc.pdf).*

and

2. *Time: this information to be broken down annually from 2003 up to the time this request is answered. The years should be consistent with those in the supplementary*

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budgetary report
(http://www.hm-treasury.gov.uk/d/sbi66_decc.pdf)"

Neither DECC, BIS nor its predecessors hold information on investment in offshore wind in the format set out in your request i.e. broken down under the headings in the Supplementary Budget Report attached with your request. However, it is clear that the majority of the identified spending on offshore wind will fall under the headings "supporting affordable, secure and sustainable energy" and "bringing about a low-carbon UK". The other headings in the Report are not relevant to your request.

I have set out below the information that you have requested by calendar year from 2003 to the present (where available). This has been broken down into two sections - "research" and "construction, maintenance and deconstruction".

Research

A variety of research has been carried out on behalf of the Departments mentioned above. A non-exhaustive list is set out below:

General research on offshore wind

From 2003 to 2009, the Department of Trade and Industry/Department for Business, Enterprise and Regulatory Reform/ Department of Energy and Climate Change managed a Research Advisory Group (RAG) that funded a total of £2.5m for research on offshore wind across a wide range of projects. This included producing guidance documents, and research data collection & analysis, including aerial bird surveys. It also produced a range of reports which are available on the DECC website at http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/energy_mix/renewable/policy/offshore/orrsg/rag_projects/rag_projects.aspx.

Research on wind turbines and aviation/radar

The table attached to my letter of 14 December 2009 in response to your earlier Freedom of Information request number 09/1672 relating to onshore wind is also relevant to this case i.e. no special radar work has been specifically funded for offshore wind power. The Department's radar research is intended to help to clear planning barriers, regardless of whether the turbines are onshore or offshore. A copy of the table is attached at annex 1.

Technology Strategy Board (TSB) funding

The TSB spend figures since 2003 against offshore wind are set out in the table below:

2003/04	£1.395m
2004/05	£1.46m
2005/06	£1.137m
2006/07	£845,000
2007/08	£3.456m
2008/09	£774,000
2009/10	£1.657m**(estimated)**

It should be noted that the above includes spend for projects in the area of underpinning technologies applicable to both offshore and onshore wind, and already provided in the answer to your earlier request on onshore wind.

Funding from Research Councils

BIS provides funding through the Science Budget to the Research Councils. Research Council expenditure on wind power-related research and post-graduate training is set out below. However, it should be noted that it this includes both offshore and onshore wind.

2003/04	£0.482m
2004/05	£0.243m
2005/06	£0.125m
2006/07	£1.07m
2007/08	£0.768m
2008/09	£1.13m

Information about the Research Councils Energy Programme is available at: http://www.rcukenergy.org.uk/

Carbon Trust funding

We are unfortunately unable to provide this data at the present time but expect to be in a position to do so by Friday 22 January.

Energy Technologies Institute funding

The Energy Technologies Institute (ETI) is 50% funded by BIS. In 2009 ETI accrued expenditure on Offshore Wind projects was estimated as £7.366m (with cash expenditure of ca £3.18m). Details about the ETI can be found at http://www.energytechnologies.co.uk/Home.aspx.

Construction, maintenance and deconstruction

I can confirm that the Department holds information within the terms of your request under this heading. The information is exempt under Section 21 of the Freedom of Information Act (FOIA), because the information is accessible to you, as it is already in the public domain.

Round 1 offshore wind demonstration wind farms that received funding under the Offshore Wind Capital Grants Scheme are required to produce annual reports including the information that you have requested. These are available from our website at http://decc.gov.uk/en/content/cms/what_we_do/lc_uk/lc_business/env_trans_fund/wind_grants/wind_grants.aspx.

In addition, the Environmental Transformation Fund (ETF) has awarded £23m from August 2009 to date under the ETF Offshore Wind Demonstration Call . Details of the scheme are available from our website at http://www.decc.gov.uk/en/content/cms/what_we_do/lc_uk/lc_business/env_trans_fund/wind_demo/wind_demo.aspx.

I hope that this is helpful.

Yours sincerely

Julie Farrow

Julie Farrow
Wind & Planning Delivery
Office for Renewable Energy Deployment

Attachment: annex 1 - spending on aviation/radar research

Appeals procedure

If you are unhappy with the result of your request for information, you may request an internal review within two calendar months of the date of this letter. If you wish to request an internal review please contact me, quoting the relevant case number. If you are not content with the outcome of the internal review, you have the right to apply directly to the Information Commissioner for a decision. The Information Commissioner can be contacted at:

Information Commissioner's Office
Wycliffe House
Water Lane
Wilmslow
Cheshire
SK9 5AF

ANNEX 1

SUMMARY OF AVIATION PROJECTS SUPPORTED BY HMG SINCE 2003

(FREEDOM OF INFORMATION REQUEST 09/1672 - YEARLY INVESTMENT IN UK ON-SHORE WIND SINCE 2003)

Project Title and web link *	Detail	Consultant	Manager	Status	HMG contribution £
1. Radar in-fill for Greater Wash area. Feasibility study: final report. (PDF) (link opens in a new window)	Investigate practical feasibility of deploying Infill Radar in the Greater Wash	QinetiQ Ltd.	AEA	Completed Sept. 2007. Report on BIS (URN 07/1442) and COWRIE publication websites	£63,565 funded 50 % by COWRIE and BERR
2. http://www.bwea.com/pdf/AWG_Reference/0806%20BERR%20URN%2008-618%20Clatter%20report.pdf	Test potential software fixes for ADT (& SPE3000)	BAE Systems (& (Sensis	AEA/MoD	Report published 2008 (URN 08/618) (not found on BIS website, however, link provided to BWEA site where report was published)	£489,644

3. Clatter 2 trials "Celtic Storm"	Test improved software fixes for ADT & SPE3000	BAE Systems/ Sensis	BERR / MoD	Completed 2006 Information remains classified	BERR contributed £115k for flight trials, Brian George £30k Field £940
4. Watchman primary surveillance radar in the presence of wind turbine interference. Part 1: generic safety case. (PDF) (link opens in a new window)	Production of a draft safety case for baseline Watchman Radar and ADT and SPE3000 technologies	HVR consulting Ltd.	AEA	Safety Case Part 1 completed Oct. 2007 Report on BIS publication website (URN 07/1441)	£81,896
5. Air traffic service safety case workshop	Capture of ATC safety requirements	BAE Systems	BERR/ Brian George (consultant)	Completed 2007 Report on BIS publication website (URN 07/1142)	£5k
6. Options for mitigating the impact of wind turbines on NERL's primary radar infrastructure	Phase 1 (design options for mitigating radar interference)	Raytheon	BERR/NATS	Phase 1 completed 2006 Report on BIS publication website	£60k
7. Feasibility of mitigating the effects of wind farms on primary radar.	Feasibility study to	Alenia Marconi	AEA	Completed June 2003	£71,811

(PDF) (link opens in a new window)	investigate mitigating technologies for primary radar systems	Systems		Report on BIS publication website (URN 03/976)	
8. Scoping Study of the Effect of Wind Turbines on Aeronautical Radio Navigational Systems	Generic study investigating effect of wind turbines on radars and CNS.	Roke Manor Research	DTI	Completed 2004 Radar Sub Group recommended that report is not published	£15,000
9. Stealth technology for wind turbines. (PDF)	Development of RAM for wind turbines	BAE Systems, ATC	AEA	Completed Dec. 2007 Report on BIS publication website (URN 03/976)	£570,980 – funded by the Technology Strategy Board
10. Stealthy Wind Turbines – Addressing the Radar Issue	Development of RAM for wind turbines	QinetiQ Ltd.	AEA	Final reporting due early 2010	£416,078 – funded by the Technology Strategy Board
11. A low cost, safety critical radar absorbing material for wind turbine nacelles and towers	Development of RAM for wind turbines	Hitek	AEA	Final reporting due early 2010	£422,401 – funded by the Technology Strategy Board

12. Development of an innovative radar absorbing composite structure for wind turbine blades	Development of RAM for wind turbines	Hitek	AEA	Work programme in progress	£391,466 – funded by the Technology Strategy Board
13. The measurement of low frequency noise at three UK wind farms	Study to investigate if wind turbines produce LFN	Hayes McKenzie Partnership Ltd.	AEA	Completed 2006 Report on BIS publication website (URN 06/1442)	£25,000
14. Research into aerodynamic modulation of wind turbine noise: report by University of Salford	Further investigate LFN form wind turbines	Salford University	BERR / DEFRA	Complete July 2007 Report on BIS publication website (URN 07/1235)	£30850 though DEFRA may have also contributed.

* Link for Department for Business Innovation and Skills:

http://bis.ecgroup.net/Search.aspx

Total contribution by HMG (includes TSB) - £2,587,841
(TSB contribution - £1,800,925)