

Department of Energy & Climate Change

3 Whitehall Place, London SW1A 2AW

T:

E:

www.decc.gov.uk

By email:

Our ref: EIR Case 12/0624

11 May 2012

Dear

RE: FOI CASE 12/0624- ONSHORE WIND FARMS

Thank you for your email of 16 April 2012 about onshore wind turbines.

Your request has been considered under the Environmental Information Regulations 2004.

You asked: "In the light of the recent publicity concerning a possible review of the current policy regarding on shore wind farms I am writing to ask if there are have been any studies by the Department comparing actual measured output of on shore wind turbines with the installed claimed capacity on the basis of which the installation was originally authorised..

If so I would be pleased to receive such information. If no such study has been undertaken perhaps you could comment on how a decision on the future policy of such turbines can be made.

My interest in this matter arises from my observation of a group of turbines which very frequently are not generating power or are only partially doing so".

DECC has not carried out any studies and does not hold any information comparing actual measured output of individual onshore wind turbines with the installed capacity on which the installation was authorised. (On the latter point I have assumed that you are referring to information about installed capacity that may be included in any relevant planning decision for the onshore wind turbine(s)).

Data on overall levels of renewable electricity generated from onshore wind in the UK is collected by DECC, and published in the Digest of United Kingdom Energy Statistics (DUKES). A copy of the latest version of DUKES 2010, which includes data for the period 2006 to 2010 can be viewed on the DECC website at:

http://www.decc.gov.uk/en/content/cms/statistics/publications/dukes/dukes.aspx

Chapter 7 provides details of the total installed capacity and amount of energy generated from renewable energy (including onshore wind) for the UK (see table 7.4). It also provides a map at page 196 showing the location of onshore and offshore wind sites in the UK as at 31 December 2010.

According to DUKES 2010 the <u>generation</u> data for the last five calendar years for onshore wind is as follows (all figures are in gigawatt hours (GWh)):

YEAR	ELECTRICITY GENERATION (GWh) FROM ONSHORE WIND
2006	3,574
2007	4, 491
2008	5,792
2009	7,564
2010	7,137

More recent information is also set out in a related DECC publication 'Energy Trends'. The March 2012 edition, which can be viewed at: http://www.decc.gov.uk/assets/decc/11/stats/publications/energy-trends/4779-energy-trends-mar12.pdf. gives a provisional 2011 total UK onshore wind generation figure of 10,416 GWh. This increase over the 2010 figure reflects increased operational capacity and higher wind speeds.

Generation data for large-scale renewables projects including onshore wind <u>on</u> <u>a calendar month basis</u> is also available from the Ofgem Renewables and CHP Register at:

https://www.renewablesandchp.ofgem.gov.uk/Public/ReportManager.aspx?ReportVisibility=1&ReportCategory=0

The Register is used to manage the renewables and combined heat and power (CHP) schemes that Ofgem administers on behalf of the Government, including the Renewables Obligation (RO) and Feed –in Tariff.

You also asked about DECC's future policy on onshore wind in the light of recent comments in the press.

I can confirm that there has been no change in our policy. Onshore wind is a mature, low carbon cost effective technology which can be deployed at scale now, and can play a vital role as part of a flexible energy mix which includes other renewables, new nuclear and cleaner coal with carbon capture and storage. It reduces our reliance on imported fossil fuels and supports investment and jobs across the country.

The Government's anticipated mix of technologies and their expected contribution to our energy security and low carbon goals is set out in the Renewable Energy Roadmap published in July 2011. A copy of the Roadmap is available at:

http://www.decc.gov.uk/en/content/cms/meeting_energy/renewable_ener/re_roadmap/re_roadmap.aspx

We recognise that wind is variable, but there is no rational argument to oppose windfarms on energy grounds. Research suggests that wind turbines tend to generate electricity for around 80-85%¹ of the time and the likelihood of low wind speeds affecting 50% of the country occurs less than 100 hours per year. The incidence of turbines shutting down due to very high wind speeds is low. As the DUKE statistics show, in 2011 UK onshore wind farms produced over 10GWh of renewable electricity which is enough to meet the average electricity consumption need of almost 2.5 million households.

Further information on DECC's onshore wind policy is set out on our website and in particular our onshore wind 'Frequently Asked Questions' webpage at: http://www.decc.gov.uk/en/content/cms/meeting_energy/wind/onshore/faq/faq.aspx

If you are dissatisfied with the handling of your request, you have the right to ask for an internal review. Internal review requests should be submitted within two months of the date of receipt of the response to your original letter and should be addressed to: **Information Rights Unit** (foi@decc.gov.uk)

Please remember to quote the reference number above in any future communications.

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

Yours sincerely

Office of Renewable Energy Deployment

¹ See Report by Centre For Sustainable Energy (May 2011) at: http://www.cse.org.uk/downloads/file/common_concerns_about_wind_power.pdf