

**Department of
Energy & Climate
Change**

3 Whitehall Place,
London SW1A 2AW
www.decc.gov.uk

Our ref. **12/0449 & 0450**

16 April 2012

Re: Points about Global Warming and Climate Change

Thank you for your recent correspondence in which you have asked for information on several points related to the issue of global warming and the threats of climate change.

We have considered your request in accordance with the Environmental Information Regulations 2004 (EIRs), as the information you have sought disclosure of under points (a), (c), (d) and (f) does, in our view, fall within the definition of "environmental information" as stated in the EIRs. In so far as the information requested in (b) and (e) contains non environmental information, we have considered it in accordance with the Freedom of Information Act 2000 (FOIA).

DECC has an obligation under both Freedom of Information and Environmental Information Regulations to respond to requests for access to information that it holds. However, requests for information held by other Government Departments should be made to those Department(s).

We hope the following responses to your request are helpful and sufficiently address the points you have raised.

a) How much does the government spend supporting research on global warming and where does it go to?

DECC holds no data on total government expenditure on global warming research. DECC spent £14.7 million in 2011-12 via its Climate Research Programme on climate research and modelling, on climate related Earth Observation, and on understanding impacts and adaptation options, including bilateral projects with India and China. Table 1 below provides a breakdown of the budgeted DECC 2011 - 2012 Climate Research Programme expenditure.

Table 1. DECC Climate Research Programme: budgeted 2011 - 2012 expenditure.

| Programme / Project: Short Title | Cost (x £1000) | Lead Contractor | Description |
|--|-----------------------|---------------------------------------|---|
| Met Office Hadley Centre Climate Programme | 11,966 | Met Office | Underpinning and policy relevant climate research and modelling |
| Advanced Along Track Scanning Radiometer; Flight Operations; Data Exploitation; Science and Validation | 852 | Space ConneXions Ltd | Satellite measurements of sea surface temperatures for climate research |
| JASON-3 Satellite Earth Observation | 264 | Met Office | Satellite altimetry measurements for climate research |
| Support to the International Argo Float Programme | 396 | Met Office | Ocean temperature and salinity observations for climate research |
| AVOIDing Dangerous Climate Change Programme | 586 | Met Office | Analysis of emissions pathways and mitigation options for avoiding dangerous climate change |
| Impacts and Adaptation in India | 134 | Environmental Resources Management | Potential impacts of climate change and options for adaptation at the regional level |
| Impacts and Adaptation in China | 170 | Multiple contracts through DfID China | Potential impacts of climate change and options for adaptation at the regional level |
| Regional Impacts Factsheets | 100 | Met Office | Assessment of climate change impacts in major emitter countries |
| IPCC Data Distribution Centre | 239 | British Atmospheric Data Centre | Data distribution for climate change impact assessments |
| Total | 14,707 | | |

b) Could you give me the name and addresses (postal and email) of the person who is sufficiently senior in the DECC to change DECC policy before you waste any more of taxpayers money so that I can send him my findings directly.

Professor David MacKay, DECC Chief Scientific Adviser, would be the appropriate person for you to contact concerning the scientific evidence for DECC policy on climate change. His contact details are:

Postal address: Department of Energy & Climate Change, Area 6A,
3 Whitehall Place, London SW1A 2AW

Email: csa@dec.gsi.gov.uk

c) The vast majority of climate scientists agree that climate change is a major threat to global security, prosperity and equity. Under the Freedom of Information Act would you please provide me with the evidence on which you base this statement, including the titles, names and addresses of the climate scientists who expressed this opinion and copies of the references in which this opinion is expressed.

The evidence that informs DECC policy formulation comes from a huge range of sources, including peer-reviewed scientific research on climate change and the various national and international assessments of it and of the impacts of climate change. These include the most authoritative assessments, undertaken by the Intergovernmental Panel on Climate Change (IPCC; see www.ipcc.ch), which rigorously assess published literature and are undertaken and reviewed by many climate experts; for example, the IPCC's Fourth Assessment Report involved more than 500 Lead Authors and 2,000 Expert Reviewers.

The conclusions of the IPCC's Fourth Assessment Report (2007) and specifically its Working Group II and III reports are quite clear in respect of the threats of climate change and the implications for global security, prosperity and equity. DECC does not hold personal information on any persons who have contributed to these international assessments or the thousands of reviewed papers that underpin them.

DECC funds climate research from the Met Office Hadley Centre and elsewhere (see table provided) to provide evidence to inform policy development. Information about these programmes of work can be found on the DECC website (www.decc.gov.uk) and the outputs of the current programmes are in the public domain, in the form of peer-reviewed publications.

d) "The sooner we act, the more potential we have to manage those threats. The Government is therefore acting now." Under the Freedom of Information Act would you please provide me with evidence of the ways you are currently managing those threats and acting now.

The UK established the world's first long-term legally binding national framework to help tackle the dangers of climate change through the Climate Change Act 2008. The Act put in place system of five year 'carbon budgets' to set the trajectory towards our long term target to reduce greenhouse gas emissions by at least 80% by 2050 lower than the 1990 baseline. Carbon budgets provide a clear and credible

long-term framework to incentivise private sector investment in energy saving and low carbon technologies. The first three Carbon Budgets¹, which cover the periods 2008-12, 2013-17 and 2018-22, came into force on 31 May 2009. These require emission reductions of just over 22%, 28% and 34% respectively, compared to 1990 levels.

The Carbon Plan sets out the Government's plans to meet carbon budgets, showing how doing so sets us on a plausible pathway to 2050. The Carbon Plan and its action summary show what actions Government is taking now and in the long term to meet our emission reduction targets, those documents can be found at: http://www.decc.gov.uk/en/content/cms/tackling/carbon_plan/carbon_plan.aspx

The Climate Change Act also created a framework for building the UK's ability to adapt to climate change, including a UK wide climate change risk assessment that must take place every five years, a national adaptation programme which must be put in place and reviewed every five years to address the most pressing climate change risks to England and a mandate giving the government the power to require 'bodies with functions of a public nature' and 'statutory undertakers' (e.g. water and energy utilities) to report on what they are doing to address the risks posed by climate change to their work.

The Government has published the [UK Climate Change Risk Assessment \(CCRA\)](#), the first assessment of its kind for the UK and the first in a five year cycle. The reports provide an evidence base which will help us better understand the risks, and will inform [development of a National Adaptation Programme](#).

e) *"When climate experts tell us that warming is unequivocal, that there is a very high likelihood that we're causing that warming." Under the Freedom of Information Act would you please tell me who are the climate experts who told you this.*

As confirmed above, DECC policy is informed by a wealth of published literature and formal assessments thereof, written and reviewed by numerous experts. DECC is also informed by the results of DECC-funded research, the details of which are in the public domain, as well as that funded by other government departments, the UK Research Councils and by the UK and international academic communities. This involves thousands of individual climate experts. DECC does not hold and cannot provide the personal details of these persons.

f) *"there are a number of benefits of shifting to low carbon." Presumably you have undertaken a cost/benefit analysis based on practical experience before taking action. Under the Freedom of Information Act would you please let me have a copy of this analysis.*

DECC has made a number of assessments, drawing on the best available evidence, of the costs and benefits of measures that contribute towards achieving a low carbon economy, and uses these assessments to inform current and future policies.

¹ For more information on Carbon Budgets, please consult the relevant section of DECC's website: http://www.decc.gov.uk/en/content/cms/emissions/carbon_budgets/carbon_budgets.aspx

Supporting the 2008 Climate Change Act is an Impact Assessment of the provisions contained within the Act that contribute to reducing emissions across the economy, which includes an assessment of the relevant costs and benefits. The overall conclusion is that there is an estimated net benefit to the UK of between £53bn and £696bn from the long-term emissions reduction targets as set out in the Act. A copy of this impact assessment is available on DECC's website at http://www.decc.gov.uk/assets/decc/85_20090310164124_e_@@_climatechangeactia.pdf.

As required by the Act, DECC published in 2009 its Low Carbon Transition Plan, a White Paper that plots how the UK will reduce emissions by 34% on 1990 levels by 2020, and explains how the first three Carbon Budgets will be met. Within this Plan, an analysis of the costs and benefits of the identified measures is presented in an analytical annex which is also available on DECC's website, at http://www.decc.gov.uk/assets/decc/White%20Papers/UK%20Low%20Carbon%20Transition%20Plan%20WP09/1_20090727143501_e_@@_uklctpanalysis.PDF.

Similarly, following the setting of the fourth Carbon Budget in 2011, DECC published a further White Paper on cutting UK emissions, the Carbon Plan - as referred to above, which presents an updated analysis of low carbon opportunities for the UK. The analysis may be found within the published Carbon Plan, which is directly available on DECC's website at <http://www.decc.gov.uk/assets/decc/11/tackling-climate-change/carbon-plan/3702-the-carbon-plan-delivering-our-low-carbon-future.pdf>.

Aside from these broad analyses, Impact Assessments are conducted for DECC's individual policies that contribute towards reducing emissions in the UK. These Impact Assessments present the range of costs and benefits relevant to the policy in question. The published Impact Assessments are available centrally on DECC's website and are free to download from this address: http://www.decc.gov.uk/en/content/cms/about/ec_social_res/impact_assess/impact_assess.aspx.

Appeal Procedure

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 the **Information Rights Unit (DECC Shared Service)** (foi@decc.gsi.gov.uk), Department for Business, Innovation & Skills, 1 Victoria Street, London SW1H 0ET.

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

If you do request an internal review and are not content with its outcome, 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.

I hope this letter is of help to you.