



# Department of Energy & Climate Change

Redacted redacted  
Via email at redacted redacted redacted

**Department of Energy & Climate Change**  
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Our ref: 13/0584

30-05-2013

Dear redacted

## **Freedom of information request: Further request on geoengineering**

Thank you for your email dated 4 May 2013 (received by this Department on 7 May 2013). Your request has been considered under the Environmental Information Regulations 2004. Under the EIRs you have the right to:

- know whether we hold the information you have requested; and
- be provided with that information (subject to any exceptions under the EIRs which may apply).

A search of our paper and electronic records has returned the following information relevant to your request:

### **1. The UK research councils involved ie: BBSRC3, ESRC4 and 5 and NERC6, explain what the acronym stands for and also addresses and contact details for each council.**

The acronyms for the Research Councils can be found as a footnote in the Royal Society report, and are reproduced below. Contact details are available on the Research Councils' websites:

- BBSRC: Biotechnology and Biological Sciences Research Council – <http://www.bbsrc.ac.uk/site/contact/contact-index.aspx>
- ESRC: Economics and Social Research Council – <http://www.esrc.ac.uk/contact-us.aspx>
- EPSRC: Engineering and Physical Sciences Research Council – <http://www.epsrc.ac.uk/about/contactus/Pages/contacts.aspx>
- NERC: Natural Environment Research Council – <http://www.nerc.ac.uk/about/contacts/>

### **2. When did the 10 year research programme begin?**

The ten year research programme was a recommendation by the Royal Society which has not been put into action. As such there is currently no ten year research programme in place.

### **3. How much money is being made up, for this environmental crime masquerading as 'research', in fictitious loans from the International Bankers and passed back to we the people as debt? 10M? More? Or less?**

DECC receives all of its funding from the Treasury.

### **4. Which geoengineering options are being 'researched'.**

The ten year research programme proposed by the Royal Society has not been undertaken. However, geoengineering research has been undertaken by the Research Councils and, separately, by DECC through the Met Office Hadley Centre (MOHC).

Geoengineering options have been investigated through the Stratospheric Particle Injection for Climate Engineering (SPICE) project. The SPICE project began in October 2010, funded by two of the Research Councils; the Natural Environment Research Council and the Engineering and Physical Sciences Research Council. It comprised two lab based and one field based components. The field technology test would have involved pumping water to a height of 1km through a suspended hose, held aloft by a helium-filled balloon. This was simply to gain a better understanding of how the equipment and water droplets would behave in such conditions. At no point did it seek to perform geo-engineering, or release any substance other than water.

However, in May 2012 the researchers decided to cancel this test before any field work took place, due to a combination of legal issues regarding patents, and a realisation that more public engagement needed to be done. The laboratory based components are currently taking place, and involve using computer models to investigate the effects of different particles in the atmosphere, and the resulting climate and environmental impacts.

The government has agreed that research into geoengineering is desirable; see a statement of our views at <https://www.gov.uk/government/publications/geo-engineering-research-the-government-s-view>.

DECC is a member of LWECC (Living with Environmental Change; a partnership of government departments, research councils and other bodies) and believes that UK research would best be conducted under the auspices of LWECC. This would be consistent with the recommendation of the Royal Society that government departments and research councils should together fund a research programme. Discussions about LWECC work in this area are proceeding. Meanwhile DECC has funded work within the Climate Programme which it funds at the MOHC. This has included an assessment of priority research needs which will inform the discussions within LWECC.

**5. If the answer includes stratospheric spraying and/or tropospheric spraying:**

**a) Please explain by what means spraying is achieved ie. via UAVs (unmanned airborne vehicles) or other- please specify. Please also reveal if UAVs or other aircraft by what means these are powered ie. rocket or jet or other- please specify if other.**

**b) Please state what chemicals are being tested or used past, present and/or planned for future.**

**i) in stratospheric spraying.**

**ii) in tropospheric spraying.**

**c) Please disclose the date that the first stratospheric spraying occurred, and the date of first tropospheric spraying. How often is spraying being done? eg. Every day since September 2009?**

**6. Please reveal where the first stratospheric experiments were conducted and by whom, with which governance and scientific bodies involved.**

**7. Re: chemicals: Please reveal how much of each chemical in either stratospheric or tropospheric aerosol spraying has been used annually since onset date. a) in UK b) rest of world.**

**8. At what height is stratospheric aerosol spraying effected and at what height is tropospheric spraying effected?**

In answer to your questions 5 to 8, the research programme suggested by the Royal Society report does not exist, and as such, no research of any kind is taking place under it. Other geoengineering research is taking place, as described in the response to question 4. However

none of these include stratospheric or tropospheric spraying, and to the best of our knowledge, no spraying is taking place in UK airspace, or by UK government or researchers.

**9. Please reveal details of named legislation enacted to make provision for any of the geoengineering options that you are undertaking. Both UK, EU and International.**

We are not currently undertaking any geoengineering options. The London Convention and Protocol<sup>1</sup> and Convention on Biological Diversity<sup>2</sup> address issues around geoengineering.

**10. Please reveal if any mention has ever been made in any governing party's public manifesto and state in which and provide copy.**

We do not hold any records regarding geoengineering in a governing party's public manifesto. These manifestos are publicly available (<http://www.politicsresources.net/area/uk/man.htm>) or you may wish to approach the relevant bodies of governing parties.

**11. Please reveal the 'International programme' referred to by the Royal Society.**

The international programme was a recommendation by the Royal Society which has not been put into action. As such there is currently no international programme in place, and we hold no records regarding it.

**12. Please reveal the 'climate research programmes' also mentioned.**

A number of climate research programmes currently exist in the UK. The recommendation in the Royal Society report is for the ten year geoengineering research programme to link up with climate research programmes. As this ten year geoengineering research programme does not exist, it is not clear which climate research programmes it would have linked with.

DECC jointly funds the Met Office Hadley Centre climate research programme which enables the Met Office to play a leading role in the UK's national climate capability and ensures that we have the information needed to navigate the risks and opportunities presented by changes in the climate. Further information is available about this programme at <http://www.metoffice.gov.uk/publicsector/climate-programme>.

**13. Who do I approach at the Royal Society to make a FOI request from them and also who should I approach at the World Meteorological Organisation. Do they have a London office or other in UK?**

We do not hold specific contact details regarding who to contact to make an FOI request at the Royal Society or the World Meteorological Organisation. You may be able to find this information on their websites (<http://royalsociety.org/Contact-us/>, [https://www.wmo.int/pages/contact/form\\_en.php](https://www.wmo.int/pages/contact/form_en.php)).

Please note that the purpose of FOI and EIR requests are to reveal data we hold on a given issue which is not publicly available. While every effort has been made to provide you with the information requested on this occasion, please be aware that many of these requests do not fall under FOI or EIR guidelines.

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: [foi@decc.gsi.gov.uk](mailto:foi@decc.gsi.gov.uk)

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<sup>1</sup> <http://www.imo.org/OurWork/Environment/SpecialProgrammesAndInitiatives/Pages/London-Convention-and-Protocol.aspx>

<sup>2</sup> <http://www.cbd.int/>

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 faithfully,

Climate and Energy: Science and Analysis  
Department of Energy and Climate Change

Yours faithfully,

Name Surname