

Evidence from the Science Media Centre to the Select Committee on Climate Change

June 2013

1 *Introduction*

The Science Media Centre (SMC) was set up in 2002, in the aftermath of public controversies on BSE, GM crops and MMR, and in response to recommendations in the House of Lords Science and Technology Select Committee's 2000 report on science and society. Its aim is to support and encourage more experts to engage with the media more effectively in times of crisis and controversy, to ensure that the public get access to accurate and evidence-based information through the news. In over 10 years of responding to stories such as 'Climategate' and working with scientists to communicate complex science to the media we have built up a huge body of expertise.

2 *Communicating climate science to the public*

As an organisation we support openness and transparency in all areas of science, particularly where there is media controversy. We run press briefings for journalists, produce fact sheets on controversial scientific areas and seek quotes and interviews from scientists when their subject is in the headlines. We ran the press briefings for all three of the inquiries into UEA and 'Climategate'. Our 11 years' experience working with climate scientists to communicate climate science is summarised in the following paragraphs.

2.1 *Get the science out there*

The main contribution researchers can make to the public understanding of climate change is to publicise and shout about all the research taking place. Scientists are filling in the gaps in knowledge and reducing uncertainty every day through research, but often it is published in obscure journals without drawing the media's attention to it. The SMC works regularly with the UK's top climate scientists to ensure the translation from university lab to newsroom is accurate and responsible, and we urge climate researchers to work with press officers to identify more studies that will be of wider media interest.

2.2 *Every crisis an opportunity*

The SMC sees all issues in the headlines as opportunities to inform the public and policymakers about key issues, and we encourage experts to engage, irrespective of how complex or controversial a story becomes. 'Climategate', when the emails of climate scientists were hacked and made public, was the perfect example of this. Science was under attack but it captured the media's attention for weeks and was therefore the ideal opportunity to talk about climate science to a captive audience. The SMC ran

a number of media briefings during this time, including an emergency background briefing with three of the UK's top climate scientists on the state of climate science, to keep channels of communication wide open and journalists well informed. Indeed, as the four separate inquiries concluded, the science itself was sound and robust. Science has nothing to hide and should be transparent and forthright at all times.

2.3 *Correct bad and exaggerated science*

In September 2011 the Times Atlas published new maps of Greenland which misinterpreted scientific data and incorrectly showed ice loss to be worse than it really was. This was a publisher's error and the first people to spot it were glaciologists - who know that ice loss from warming is indeed fast and alarming, but who were concerned that false information was being presented to the public in these maps. The SMC helped them communicate this to the press. Incorrect information must be corrected wherever it is found and scientists are the best people to do that; if it is left unchallenged it undermines trust in science.

2.4 *Don't gloss over uncertainties*

Uncertainty is a normal feature of every branch of science, particularly when we are talking about prediction. It is sometimes used by climate sceptics to foment doubt over global warming, just as tobacco companies did with smoking and cancer, and such hostility can make scientists fearful of 'admitting' to uncertainties or gaps in knowledge. But those uncertainties should never be papered over or dismissed; that would (a) be dishonest and (b) risk overclaiming. There is a huge difference between uncertainty in science and simply 'not knowing', so how those uncertainties are explained is of high importance and scientists should be supported in their efforts to explain highly complex findings to the mass media.

2.5 *Shout just as loud when new science shows reduction in warming*

The picture of man-made global warming becomes clearer every time a new paper is published, but sometimes data show that predictions have to be revised downwards – such as the Met Office data which was posted to their website on Christmas Eve 2012. It was brought to the attention of the press by sceptic groups and made to appear that 'bad news was being buried' – it was not, this was an honest mistake on their part, but damage was done to the image of climate science. Once again, science does not take sides, and there is nothing to be ashamed of about such evidence. Scientists should always be the ones bringing these stories to the media and should have no fear of doing so.

2.6 *Stop obsessing about sceptics and address the reasonable majority*

The majority of the public are honest and pragmatic. We want to be told the truth so we can make up our own minds. Climate sceptics shout very loud and are given disproportionate media attention but they are not representative of public opinion. Climate scientists should always feel able to face the sensible, neutral majority when communicating their work.

2.7 *Beware of looking like campaigners*

The SMC tries to ensure that public debate is informed by the most accurate, evidence-based science. Of course it's perfectly alright for scientists to campaign about any issue of importance to them if they choose. But science does not exist to win arguments or be on message. Scientists are not campaigners, and they should always be allowed to stick to the evidence. Climate data tell an important story but science is neutral; it is important that climate science is presented to the media accurately, and scientists should be unconcerned with the 'message' beloved of green NGOs or environmental campaigners.

2.8 *Be on the front foot*

When climate science or the integrity of scientists are unfairly threatened it is important that the media present a fair assessment, not just rumours and hearsay. The Intergovernmental Panel on Climate Change (IPCC) frequently comes under fire in an attempt to call its science into question. When the work of IPCC author Prof Martin Parry was under scrutiny in a Dutch Environment Agency report, we arranged for him and his colleagues to meet journalists to anticipate and tackle the criticisms head-on, resulting in more balanced coverage at a febrile time. Similarly when the emails of Prof Phil Jones' were dumped on the internet for a second time we rushed him to the SMC to take reporters' questions on the same day. These activities help ensure the press receive the full story. It is essential that scientists, assisted by communicators and press officers, are prepared for any attempts to discredit their work, particularly in advance of the IPCC's Assessment Report 5 whose publication begins in September 2013.

2.9 *Disagree openly*

Science is an argumentative profession; indeed it progresses by trying to prove itself wrong. Scientists should be able to freely express disagreement in public and we believe this strengthens science, not diminishes it. There exist a million genuine, intelligent disagreements about the details of climate change, but these are often overshadowed by the essentially false debate over whether climate change is real.

3 *Climate change and the media*

Science is at the heart of almost all the major challenges we face as a society: how to treat incurable diseases, how to feed the growing population, how to tackle climate change. Surveys continue to show that the public get most of their information about science from the mass media, including television and newspapers¹.

Climate sceptics – those with a view contrary to that of the mainstream climate science community – have sought to undermine public confidence in the science by misrepresenting studies and cherry-picking data, and this conflict has fuelled media reporting.

Yet there is overwhelming agreement among climate scientists publishing in peer-reviewed journals that climate change is real and man-made², and it is important that this is reflected in media coverage.

The media has a crucial role to play in the understanding of this area of science but it has become a highly political issue, confusing (sometimes deliberately) our societal response to climate change with the reality of climate change itself.

Climate change is a slow process whose trends are reflected over decades not days and whose impacts are not immediately apparent; this makes it an unattractive subject for regular media coverage and appetite for reporting since Climategate has dropped dramatically. But when it is covered, the specialist science and environment journalists at the majority of national newspapers and broadcasters have helped ensure that climate science gets fair representation. The BBC is particularly good, especially so since the Trust Review which rightly recommended they avoid the 'false balance' created by giving equal weight to sceptics and scientists.

But many of the underlying values remain in newsrooms: the appetite for a scare story, the desire to overstate claims made by one individual, the reluctance to put one alarming story into its wider context, 'journalistic balance' that conveys a divide among experts where there is none, and so on.

4 *Who to trust?*

Public trust in scientists remains extremely high among the professions¹. Much of this is down to an expectation that scientists stick to the evidence and tell it straight. The SMC supports scientists in their efforts to communicate the science and impacts of climate change accurately to the news media and not get embroiled in political differences or messaging; scientific evidence is not a tool to change behaviour. Science does not work by consensus, but consensus is a strong indicator of scientific confidence to journalists and the public. It should underpin government policy and public confidence, just as we expect in medicine.

Part of public trust in scientists comes from many experts independently coming to the same conclusion. It is therefore essential that all climate scientists, especially those advising government and at arms-length bodies, are supported at all levels of government in communicating their science openly and transparently to journalists.

The UK is lucky to have such a huge number of excellent specialist science and environment journalists, across news outlets from tabloids to major broadcast organisations and much accurate, evidence-based reporting can be traced back to them. These specialists are a dedicated and skilful group of journalists who, despite the pressures of the newsroom and editorial lines, take pride and responsibility in getting science stories right.

Finally, much has been made of the lack of increase in average surface temperatures since 1998, despite this being well within most predictions and a too short a time frame to draw new conclusions. It is sometimes used to suggest that global warming has stopped, disregarding all the other clear indicators such as polar ice melt. Similarly, the idea that the world will gradually get uniformly warmer is an often exploited myth. Climate science is a complex, emerging field and scientists need to be able to speak confidently without fear that their comments will be undermined for political gain, and

parliament can assist with clear, cross-party recognition of the reality of human-induced climate change even when differences remain over the policy response.

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The Science Media Centre is an independent venture working to promote the voices, stories and views from the scientific community to the news media when science is in the headlines. Over 80 supporters including scientific institutions, media groups, charities, universities, corporate organisations and individuals fund the Centre, with donations capped at 5% of the running costs to preserve its independence. Science Media Centre is a registered charity (no. 1140827) and a company limited by guarantee (no. 7560997). Registered in England and Wales.

¹ BIS Public Attitudes to Science 2011: <http://www.bis.gov.uk/policies/science/science-and-society/public-attitudes-to-science-2011>

² Quantifying the consensus on anthropogenic global warming in the scientific literature, Cook et al, Env Res Letters, May 2013