House of Commons
Energy and Climate Change Committee

The Intergovernmental Panel on Climate Change

Third Special Report of Session 2014–15

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The Energy and Climate Change Committee

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Special Report

Appendix: Government response

Introduction

The Intergovernmental Panel on Climate Change (IPCC) is the leading international body for the assessment of climate change. It is a scientific body under the auspices of the United Nations (UN). It reviews and assesses the most recent scientific, technical and socio-economic information produced worldwide relevant to the understanding of climate change. It does not conduct any research nor does it monitor climate related data or parameters.

The Fifth Assessment Report (AR5) provides an up to date view of the state of scientific knowledge relevant to climate change. Working Group I contribution provides a comprehensive assessment of the physical science basis of climate change. The report includes a detailed assessment of climate change observations throughout the climate system; dedicated chapters on sea level change, biogeochemical cycles, clouds and aerosols, and regional climate phenomena; extensive information from models, including near-term and long-term climate projections; and a new comprehensive atlas of global and regional climate projections for 35 regions of the world.

We are very grateful to the Energy and Climate Change Select Committee (ECC) for conducting its inquiry into Working Group I’s contribution to the Fifth Assessment Report of the IPCC, and for its report of that inquiry, published on 29th July 2014.

This memorandum is the Government’s formal response to the report. In the following sections we provide the committee’s recommendations in bold italics followed by the Government response.

Recommendation 1

The IPCC has continued to strengthen and improve its Assessment Report procedure. The IPCC has put a series of measures in place to help to minimise the risk of errors creeping in, and quickly rectify them if they emerge. The IPCC has responded extremely well to the constructive criticism of the InterAcademy Council (IAC). With regard to the IAC’s recommendations, we would like to see the appointment of non-climate scientists to the Executive Committee. (para 10, section 2)

The Government is pleased to note that the IPCC’s positive response to the IAC, agreed at its 33rd session in 2011, has been recognised by the committee. With regard to this specific recommendation, although the UK supported it, there was no consensus amongst the member governments. We note that the IPCC is committed to reviewing the terms of reference, the composition and the mode of operation of the Executive Committee before the formation of the next Bureau (in 2015) (this was agreed at the IPCC’s 33rd session). This presents an opportunity to revisit the issue of external members. It could also be taken up in the current internal IPCC review of its future processes and activities.
Recommendation 2

For future Assessment Reports the Government should recommend to the IPCC that they recruit a small team of experts who are not climate scientists to observe the review process from start to finish. The team would not constitute an extra stage of review, but rather oversee the process and arbitrate when controversies arise. The testimony of this independent team would improve the credibility of the report when it is released, and potentially protect it from any unnecessary and unfounded criticism. The team could also feed back to the IPCC in order to facilitate continuous improvement. (para 12, section 2)

We consider that the IPCC process already allows for dealing with controversies. Such a team would duplicate the role of the Review Editors, whose remit is described in Appendix A to the IPCC procedures. It says Review Editors will “ensure that all substantive expert and government review comments are afforded appropriate consideration, advise lead authors on how to handle contentious/controversial issues and ensure genuine controversies are reflected adequately in the text of the Report.”

As part of the review of its products and processes, the IPCC has sought the opinions of authors and review editors involved in the AR5. This will provide an opportunity for recent participants to feed back to the IPCC and facilitate continuous improvement based on their experiences.

Recommendation 3

There are mixed views regarding the frequency and size of IPCC Assessment Reports. Transition to smaller, more frequent reports would arguably relieve the burden on contributing authors and ensure policymakers were kept up to date, but the finished document would lack the comprehensive and authoritative nature of the current Assessment Reports. Any revision of the tried and tested IPCC formula should only be introduced after careful consultation with both the governments who use the IPCC reviews and the scientists who write them. The aftermath of AR5 is an optimum time for this period of reflection to take place. (para 26 section 2)

The government agrees that this is an optimum time to review the IPCC’s products and processes, and that any revision of the tried and trusted formula should only be introduced after careful consultation. Such consultation, with governments and authors, is already underway. The UK submitted its views to the IPCC early in 2014 and continues to participate in the work of the IPCC Task Group which is taking forward the IPCC’s review of its products and processes.

Recommendation 4

We recommend that the Government call on the IPCC to introduce a greater level of transparency in the plenary meetings to agree future Summaries for Policymakers (SPM). This may be through the admission of the independent team of observers to oversee the discussions (see paragraph 12). The feedback from the team would then serve to provide reassurance that the summary-writing process has been carried out objectively. (para 33 section 2)
The Government considers IPCC plenary meetings to be sufficiently transparent already, through the presence of a number of observer organisations. There are 62 non-governmental organisations who are approved observers; there are also several inter-governmental and UN observer organisations.

They are listed at: [https://www.ipcc.ch/pdf/ipcc-principles/ipcc_observers.pdf](https://www.ipcc.ch/pdf/ipcc-principles/ipcc_observers.pdf) and the criteria for their selection and approval are given at: [http://www.ipcc.ch/organization/organization_procedures.shtml](http://www.ipcc.ch/organization/organization_procedures.shtml)

We consider that this wide range of observer organisations should provide reassurance that the process has been carried out transparently.

Furthermore, the International Institute for Sustainable Development (IISD) reports every day during the sessions of the IPCC through its Earth Negotiations Bulletin. The IISD aims to provide a “neutral, authoritative and up-to-the-minute record of on-going multilateral negotiations on environment and sustainable development.”

The government considers the ENB reports to be a valuable independent record of IPCC meetings. They provide an important conduit of information to non-participants, and we support this contribution to the IPCC’s transparency.

**Recommendation 5**

*In the light of the WGI contribution to AR5, the Government should commission a strategic review of UK modelling facilities to discern how current computing capacity could be used more effectively to reduce remaining uncertainties. The review should highlight areas of potential national and international collaboration between modelling centres and any funding shortfalls that need to be met (para 65 section 3).*

The government shares the committee’s concern that computing capacity should be used effectively. We have carried out a number of reviews of the Met Office Hadley Centre (MOHC) programme, to ensure that it offers both value for money and provides the science the government needs. In addition the programme is overseen by a Science Review Group, whose role is to ensure that the programme provides the best possible advice on the scientific aspects of climate change to government.

The Met Office High Performance Computer is a shared facility, which enables the scientific community to work jointly on a single supercomputing platform sharing the same codes and exploiting the same data, encouraging collaboration and more effective multi-disciplinary interaction and integration. This Joint work is coordinated through two managed programmes — the Met Office Academic Partnership (Met Office and Universities of Exeter, Leeds, Oxford and Reading) and the Joint Weather and Climate Research Programme (comprising Met Office and NERC scientists) — as well as with international partners.

Spending Round 2013 committed to funding high priority science infrastructure projects including a new High Performance Computer for the Met Office. Subject to approval of the business case, this will provide a strategic UK asset to exploit UK excellence in environmental science and deliver significant socio-economic benefits as new and existing
science is exploited. Amongst other things, this capability will allow a better understanding of uncertainty in the climate system, through multiple realisations of climate runs.

Uncertainty in the Met Office climate model is one of the key areas of science that the MOHC programme focuses on. However, whilst sufficient computing resources are of course needed, it is also a scientific problem, requiring a better understanding of the physical processes that determine climate. Such understanding requires other resources including observations of the climate system. It is important to note that uncertainty is not the only key area of science that needs to be addressed. We address all the science requirements of the MOHC programme together.

Furthermore, the uncertainties in projected future climate are currently dominated by the uncertainties in future emissions; this requires improved understanding in other domains, as well as a global binding agreement.

In parallel we (DECC and Defra) will continue to consult the UK modelling and wider scientific community on the future development of climate modelling and on how the benefits of greater national and international collaboration may be realised.

**Recommendation 6**

The Government should ensure that the report it has commissioned to look at the benefits and opportunities in tackling climate change, The New Climate Economy, considers evidence about the costs of climate change to business. We believe that this report should be peer reviewed to avoid attracting the same criticism that was made of the Stern Review (para 70 section 4).

The New Climate Economy (NCE) is the flagship project of the Global Commission on the Economy and Climate. This Commission was established by seven countries (UK, Sweden, Norway, South Korea, Indonesia, Ethiopia, and Colombia) and was given an independent mandate to provide objective and authoritative evidence about how to achieve economic prosperity and development while also combating climate change.

This project has a wide evidence base, including responses to a call for evidence and contributing papers subject to peer-review and quality assurance processes. The Global Commission’s report received advice from its Economic Advisory Panel (EAP) of world-leading economists and was reviewed by individuals from around 100 organisations. This project is expected to be a comprehensive look at the evidence of all the costs and benefits associated with climate action, including the costs to business.

**Recommendation 7**

The WGI contribution to AR5 re-affirms the scientific underpinning of the Climate Change Act 2008 and hence the UK’s ambitious greenhouse gas emission reductions targets. We believe that there is merit in considering embedded carbon emissions alongside territorial emissions in the policy making process (para 75 section 4).

The Government, in common with the Committee on Climate Change (CCC) considers that we should continue to report emissions on a territorial basis as is the convention internationally. It does agree however that there is merit in also calculating embedded emissions as a means promoting global action on climate change. The Government is
already committed to monitoring consumption emissions data and to publishing it on a regular basis, at:


The CCC’s report on reducing the UK’s carbon footprint and managing competitiveness risks was published on 14 April 2013. It concluded that “it remains appropriate to account for carbon budgets on the basis of production emissions given accounting conventions and available policy levers. However, consumption emissions should be monitored to check whether these are falling in line with global action required to achieve the climate objective, or whether further action is required.”

The CCC also concluded that “moving to a consumption-based accounting methodology would be disruptive and impractical given international accounting conventions (which are based on territorial emissions and aim to avoid double-counting) and uncertainties over measuring and projecting consumption emissions”. The Government supports this.

Recommendation 8

The Government should provide an explicit commitment on the involvement of senior figures in the early stages of the Paris COP 2015. Senior Government members should be actively involved in the strategy for obtaining a global climate deal. The early commitment of the Prime Minister, Chancellor of the Exchequer and DECC ministers to the preliminary stages of the global climate negotiations will encourage other world leaders to similarly get involved (para 79 section 4).

This Government is strongly committed to action on climate change and to securing a global climate deal in Paris in 2015. DECC’s Secretary of State has attended a number of international ministerial climate change meetings this year, as well as undertaking a bilateral travel programme including many of the key Parties to the UNFCCC. We will, as usual, be represented at Senior Ministerial level at the Conference of the Parties (COP) in Peru in December 2014. On 23 September 2014, the UN Secretary General engaged world leaders at a climate summit in New York in September — the first meeting of leaders focused solely on climate change since Copenhagen in 2009—and the UK was represented by the Prime Minister and DECC’s Secretary of State and Parliamentary Under Secretary of State.

Recommendation 9

The implications of the report for policy-makers in the UK are simple: there is no scientific basis for downgrading the UK’s ambition to reduce greenhouse gas emissions. It is imperative that this message is also understood by the international community. The Government must renew its commitment to achieve a global deal on climate change. (para 83 section 5)

The Government remains firmly committed to achieving a global deal on climate change. We must agree a regime that keeps us on track to deliver the UNFCCC’s ultimate goal: to avoid dangerous climate change by limiting global average temperature increase to no more than 2°C above preindustrial levels. The most cost-effective and reliable way to achieve this is through an international, legally binding agreement with mitigation
commitments for all. Our commitment is set out in detail in the government document “Paris 2015: Securing Future Prosperity Through a Global Climate Change Agreement”, published on Tuesday 9 September 2014 (and placed in the Library of the House), including the Government’s vision for the new global deal to be agreed in Paris in 2015, why this is so important for the UK public and business, and an assessment of the key challenges facing us.

Conclusion
This memorandum forms the Government’s response to the recommendations set out in the Committee’s report: Intergovernmental Panel on Climate Change Fifth Assessment Report: Review of Working Group I contribution. The Government will continue to support the work of the IPCC, to support participation by UK scientists in the IPCC, and will work to improve IPCC’s products to meet the needs of stakeholders. It will also continue to support scientific research into the nature and risks of climate change and pursue policies both domestically and internationally which are aimed at avoiding dangerous levels of climate change.