

Royal Society submission to the House of Commons Environmental Audit Committee 2010-15 progress report

1. The Royal Society welcomes the opportunity to contribute to the House of Commons Environmental Audit Committee progress report.

2. Executive summary

- a. The House of Commons Environmental Audit Committee plays a vital role in scrutinising the environmental protection and sustainable development policies and programmes across government.
- b. The majority of the environmental and sustainable development issues addressed in the 2010-15 parliament will continue to be important during the next parliament. The Society also wishes to highlight some additional issues that should be addressed in the next parliament:
 - i. International agreements – on disaster risk reduction, the Sustainable Development Goals (SDGs) and climate change – which will be reached this year, must be ambitious, aligned and consistent. As well as scrutinising this, the Committee is well-placed to determine whether these international agreements are being implemented and monitored coherently across Government.
 - ii. A vital issue which has not been resolved, and which the Committee could investigate, is how to move beyond GDP to more comprehensive wealth measures. The Society commented on this in its *People and the Planet* report¹.
 - iii. This relates in part to the work of the Natural Capital Committee (NCC) (on natural capital accounting). Given the NCC comes to the end of its term in 2015, the Committee could scrutinise the degree to which their recommendations are being followed-up under the new Government, and the future oversight of the issues they have highlighted.
 - iv. Two other issues which may warrant further investigation include the effectiveness of the environmental measures within the Common Agricultural Policy; and the issue of multifunctional landscapes, including the success of Nature Improvements Areas, uplands policy etc.
 - v. Finally, the next parliament will play an important role in ensuring the 20 Aichi Biodiversity Targets are reached by 2020. It would be useful if the Committee were to assess UK progress towards these targets.
- c. In terms of *how* these tasks are carried out, the Society recommend that:
 - i. The Committee actively engage with and draw upon the strong UK research base in identifying emerging issues for assessment throughout the next parliament. The Committee may valuably consider new approaches to analyse and assess evidence provided to them, such as the Commons Education Select Committee's 'evidence check', to support its scrutiny role.
 - ii. Given many of these issues are cross-cutting, involving significant input from different Government departments, the Committee could examine how well departments work together to deliver these objectives.
 - iii. The Committee consider working with other Select Committees to address issues, such as alternative wealth measures and sustainable development, where remits and expertise overlap.
 - iv. The Committee consider working with parliaments overseas to consider issues which require co-ordinated global action such as population and consumption,

¹Royal Society (2012) *People and the Planet* <https://royalsociety.org/policy/projects/people-planet/>

alternative wealth measures and, more broadly, how governments can overcome barriers to sustainability together.

3. The Royal Society is the National Academy of Science in the UK. It is a self-governing Fellowship of many of the world's most distinguished scientists. The Royal Society draws on the expertise of the Fellowship to provide independent and authoritative scientific advice to UK, European and international decision makers.
4. The Society has a long history of involvement with topics relevant to the Committee. Recent work includes the publication of reports on Resilience to Extreme Weather², People and the Planet³, Climate Change: Evidence & Causes⁴ and Shale Gas Extraction in the UK: A Review of Hydraulic Fracturing⁵. The Society regularly engages with discussions about environmental protection and sustainable development. For example, it has also recently organised 'PolicyLab' events, bringing together scientists and policymakers to discuss "The post-2015 development agenda: what do civil society and policymakers want from science?", "Science for Disaster Risk Reduction" and "Biodiversity Offsetting: can it work in England?". Royal Society reports and statements have also been produced on such related issues as integrated assessment modelling⁶, geoengineering the climate⁷, energy technologies for a low carbon future⁸, governance of research into solar radiation management⁹, ground-level ozone¹⁰ and ocean acidification¹¹.
5. This submission will comment briefly on progress in relation to the inquiries to which the Society has submitted evidence. It will then highlight sustainable development and environmental protection issues that should be addressed in the next parliament.
6. The Society has submitted evidence to three inquiries over the course of this parliament:
 - a. Climate change adaptation (announced 09 July 2014)
 - b. Sustainable Development Goals (announced 04 September 2014). Session 2014-15, 7th Report, Connected world: Agreeing ambitious Sustainable Development Goals in 2015
 - c. Environmental risks of fracking (announced 04 December 2014)
7. All three are recent inquiries, with the report from one yet to be published. As a result it is difficult to offer concrete indications of progress. The report of the Committee 'Connected world: Agreeing ambitious Sustainable Development Goals in 2015' was published in December, so it is relatively premature to draw conclusions on progress since. However, the Society welcomed the focus of the report on ensuring the UK is ready to implement the Sustainable Development Goals (SDGs).

²Royal Society (2014) *Resilience to Extreme Weather* <https://royalsociety.org/policy/projects/resilience-extreme-weather/>

³Royal Society (2012) *People and the Planet* <https://royalsociety.org/policy/projects/people-planet/>

⁴Royal Society and US National Academy of Sciences (2014) *Climate Change Evidence and Causes* <https://royalsociety.org/policy/projects/climate-evidence-causes/>

⁵Royal Society and Royal Academy of Engineering (2012) *Shale gas extraction in the UK: a review of hydraulic fracturing* <https://royalsociety.org/policy/projects/shale-gas-extraction/>

⁶Royal Society (2013) *Modelling Earths future* <https://royalsociety.org/policy/publications/2013/modeling-earths-future/>

⁷Royal Society (2009) *Geoengineering the climate: Science, Governance and Uncertainty* <https://royalsociety.org/policy/publications/2009/geoengineering-climate/>

⁸Joint academies statement (2009) *Climate change and the transformation of energy technologies for a low carbon future* <https://royalsociety.org/policy/publications/2009/joint-academies-climate-change/>

⁹Royal Society, Academy of Sciences for the Developing World (TWAS) and Environmental Defense Fund (EDF) (2011) *Solar radiation management governance* <https://royalsociety.org/policy/projects/solar-radiation-governance/>

¹⁰Royal Society (2008) *Ground-level ozone in the 21st century: future trends, impacts and policy implications* <https://royalsociety.org/policy/publications/2008/ground-level-ozone/>

¹¹Royal Society (2005) *Ocean acidification due to increasing atmospheric carbon dioxide* <https://royalsociety.org/policy/publications/2005/ocean-acidification/>

8. The report of the Committee 'Environmental Risks of Fracking' was published last week. The Society welcomed the opportunity to respond to this inquiry, however we were concerned by the short timeframe within which to submit evidence. Such a tight turnaround limits the Society's ability to provide a thorough synthesis of relevant evidence. Select Committees play a highly trusted role in analysing and assessing evidence. We would encourage the Committee where possible to provide longer timeframes to better enable respondents to prepare submissions, and to explore methods to weight and review the validity of evidence provided to inform their analyses. Initiatives such as the Commons Education Select Committee's 'evidence check' may be helpful. Evidence checks are particularly useful for issues of long-term importance that the Committee is likely to have an ongoing interest in.
9. More generally, the House of Commons Environmental Audit Committee makes a vital contribution to the scrutiny of environmental protection and sustainable development policies and programmes across government, making strong and clear statements on issues of enormous importance. The Committee's ability to shine a spotlight on important issues and hold government to account is invaluable. Consultation with a selection of our Fellows suggests that the inquiries into marine protected areas, biodiversity offsetting and invasive species have been particularly good and strong in challenging the Government. There is a feeling that those on pollinators and neonicotinoid insecticides would have been improved by addressing uncertainties and by more effective consideration of the precautionary principle.
10. Given that environmental protection and sustainable development issues are relevant across all sectors it is beneficial that the Committee's remit cuts across government, rather than focuses on the work of a particular department. Due to the cross-cutting nature of many issues, the Committee should examine how Government departments work together in addressing issues; and should also consider working with other Select Committees where their remits and expertise overlap. Examples of topics for which this would be appropriate are given in the section below.

Issues to be addressed in the next parliament

11. Many of the environmental and sustainable development issues addressed by the Environmental Audit Committee during the 2010-15 parliament, such as climate change adaptation and fracking, will continue to be relevant over the next. We are now at a critical time, both in terms of the state of the planet and the wellbeing of populations. The world continues to face challenges from climate change, biodiversity, food, energy and water security, to a growing population and increasing inequality.
12. This year, international agreements are due to be reached on the three interlinked areas of disaster risk reduction, sustainable development and climate change. These agreements will define the direction of international development and environmental policy for at least the next decade. It is important that these agreements are ambitious, aligned and consistent. Both cross-departmental and intergovernmental coordination is required to ensure that upcoming international agreements on climate change and disaster risk reduction have consistent targets and indicators which support the SDGs.
13. Societies depend on natural systems for food, water, energy and other components of wellbeing. The importance of the natural environment should be recognised within all three international frameworks. Similarly metrics, plus monitoring and reporting arrangements must be consistent across all relevant international policy frameworks in order to drive coordinated action.
14. Unlike the MDGs primary focus on alleviating poverty in developing countries, the SDGs will be globally applicable. The SDGs will therefore require direct action from developed countries as well as developing nations and will need to be considered by all areas of Government, not DFID alone. Sustainable development and environmental challenges cannot be addressed in isolation. The interconnectedness of the challenges requires an interdisciplinary and forward-looking approach. The resilience of societies should be considered across all Government departments and in all policies in a co-ordinated way. DFID should work with other departments

to develop and implement sustainable development policies that are resilient to future climate and demographic changes.

15. The Committee is well-placed to examine the implementation and monitoring of the UK's progress in addressing the targets set by the three international agreements (on disaster risk reduction, sustainable development and climate change respectively). The Society encourages the Committee to continue its work in this area. It may wish to collaborate with other Select Committees that have expertise in these areas, such as the International Development Committee.
16. In order to monitor sustainable development more broadly, the measurement of national wealth must move beyond just Gross Domestic Product to comprehensive wealth measures which include natural assets (recommendation 8 in *People and the Planet*²). This is an important issue in considering how sustainability can be achieved in an interconnected world and is one that the Committee could usefully investigate, perhaps in conjunction with the Treasury Select Committee [or with foreign parliaments].
17. The construction and maintenance of natural capital accounts, as proposed by the Natural Capital Committee (NCC), is a useful approach for recognising the value of natural capital and managing it appropriately. Given the NCC three year term ends in September this year, an investigation by the Committee into whether their recommendations are followed up would perform a valuable function, as would considering where in Government responsibility for this work will lie in future.
18. The Common Agriculture Policy (CAP) has recently been reformed. The Committee may wish to assess the environmental provisions of the reformed CAP and how they might be improved in the next round of CAP reforms to deliver sustainable intensification.
19. An investigation into how best to achieve and manage multifunctional landscapes, drawing on the experience of, for example, Nature Improvement Areas, and covering renewable energy production, uplands policy etc. could help Government reconcile competing demands and improve land-use decisions.
20. In addition, the UK should continue to work towards the Strategic Plan for Biodiversity 2011-20, including implementing the 20 Aichi Biodiversity Targets. The global mid-term progress towards these targets was summarised in the UN Convention on Biological Diversity Global Biodiversity Outlook (Fourth Edition). This assessment highlighted that, although progress has been made towards meeting some components of the Aichi Biodiversity Targets, in most cases the progress will not be sufficient to achieve them by 2020. The Committee may wish to assess the progress of the UK in reaching the targets.
21. As many environmental problems are global and require co-ordinated international action to address them, ensuring that countries taking action are not put at an economic disadvantage, the Committee might find it valuable to explore opportunities to work with foreign parliaments. This could be relevant to the work suggested above on alternative wealth measures. Other issues that could be considered for international work include the connected issues of population and consumption (depending upon how these are addressed in the SDGs); and how governments could work together to overcome barriers to sustainability.
22. The Society advocates evidence-based policymaking at all levels, encouraging policymakers to draw on the best available evidence and engage with those at the forefront of excellent science. Natural and social scientists have a vital role in developing a full picture of the environmental and sustainable development challenges, uncertainties and the efficacy of potential solutions. The Society recommend that the Committee actively engage and draw upon the strong UK research base in identifying emerging issues for assessment throughout the next parliament.

For all inquiries please contact Becky Purvis, Head of Public Affairs at the Royal Society, becky.purvis@royalsociety.org.

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