

Independent advice to government on building a low-carbon economy and preparing for climate change

Professor Dieter Helm Chair, Natural Capital Committee Department for Environment, Food and Rural Affairs Nobel House, 17 Smith Square London SW1P 3JR

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Dear Dieter,

I am writing to offer any assistance my committee can provide to the Natural Capital Committee, to feed in to your advice to the Secretary of State on the 25 Year Environment Plan. I note that you have been asked to comment on what the Plan should aim to achieve, focusing on those areas where improvements are most urgent and where the benefits are greatest; how it should seek to do so; and the necessary conditions for success.

The UK Climate Change Risk Assessment Evidence Report, published by the ASC in 2016, concluded that climate change presents a substantial risk to the goods and services provided by natural capital, including risks to native wildlife, food, timber and fibre, clean water, carbon storage, and the cultural benefits derived from landscapes. As both of our committees have previously stated, there is a critical need for a long-term plan for the natural environment with clear, measurable outcomes. The plan should take climate change into account, and build on the level of ambition of current EU policies.

Our latest report on the National Adaptation Programme, published in June, notes that the ability of the natural environment to provide goods and services is deteriorating, and will deteriorate further with climate change, unless further action is taken now. The report sets out four priority areas where natural capital is most at risk in the context of climate change; the resilience of habitats and biodiversity; soil health; flood hazard protection, and the marine environment and fisheries. The annex to this letter provides details on these areas, along with a list of our relevant recommendations.

My committee will be undertaking further work over the coming year on better defining long-term outcomes for the natural environment in the context of climate change, and assessing 'what works' on adaptation. I am keen to involve the NCC in this work.

I would be very happy to discuss these issues and our recommendations in more detail.

Yours,

THE BARONESS BROWN OF CAMBRIDGE

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Annex – The Adaptation Sub-Committee's advice on natural capital

The Adaptation Sub-Committee's 2017 Progress Report to Parliament on the National Adaptation Programme assessed the latest progress in adapting to climate change in England. In relation to natural capital, the following four areas were highlighted as priorities - where plans are either not in place, or vulnerability to climate risks is not yet being managed adequately.

- Resilience of habitats and biodiversity. While substantial efforts are being made, there are clear indications that vulnerability to climate change is not yet being reduced. The condition and extent of most habitats is not improving at a rate that is in line with current Government targets, and species' populations continue to decline in many cases. For example, the target for 50% of terrestrial habitats to be in good condition by 2020 is unlikely to be met. Woodland planting rates are below the Government's 2013 target of 5,000 additional hectares per year. Only 20% of water bodies in England are meeting 'good' or 'high' ecological status. The Breeding Wetland Birds Index has dropped to its lowest level since it began in 1975. Most of the available indicators for the farmed countryside also continue to show long-term declines in species abundance.
- **Soil health.** Peat soils are one of our most precious resources for carbon storage and water regulation. The percentage of blanket bog (upland peat) Sites of Special Scientific Interest in good condition declined from 19% to 10% between 2003 and 2016. The last national surveys of soil condition in England in 2003 and 2007 suggest there have been losses in soil organic carbon since the 1970s. These surveys have not been updated. There is no plan in place to achieve the ambition for all soils to be managed sustainably by 2030.
- Flood hazard protection. Evidence suggests a significant and increasingly severe lack of capacity in the sewer network to cope with heavy rainfall events. The scale of the investment to tackle this issue has yet to be assessed and the ownership of the problem is fragmented between national and local government and the water industry. From the evidence available, there appears to be little confidence amongst industry professionals that current policy is delivering high quality sustainable urban drainage systems (SuDS) in new development. We also appear to be falling short of delivering systems that achieve a range of co-benefits and can be adapted to cope with future change. Meeting the challenge of increasing surface water, river and coastal flood risk requires a strategic approach that combines catchment management, flood alleviation schemes, development control, and property-level flood resilience.
- Marine environment and fisheries. Exposure to climate risks within the marine food chain is increasing due to changes in ocean biogeochemistry such as rising sea temperatures, deoxygenation and ocean acidification. Our understanding of this process is incomplete and its implications not yet known. There is no plan set out in the NAP or elsewhere to increase the resilience of marine fisheries and aquaculture to climate change. The proportion of UK fish stocks that are managed at full reproductive capacity and are being harvested sustainably varies over the long-term but remains low, at about 30%.

On the basis of the analysis set out in the 2017 progress report, the ASC made the following recommendations to Government:

- Recommendation 5. A critical part of the next National Adaptation Programme should be a long-term plan for the natural environment that takes climate change into account, builds on the level of ambition of current EU policies, and is consistent with the framework developed by the Natural Capital Committee. In line with the ASC's previous advice, there should be associated targets, actions, and a monitoring and evaluation framework (Owner: Defra Timing: by 2019).
- Recommendation 6. Action should be taken to enhance the condition of priority habitats and the abundance and range of priority species. This action should maintain or extend the level of ambition that was included in Biodiversity 2020. An evaluation should be undertaken of Biodiversity 2020, including the extent to which goals have been met and of the implications for resilience to climate change. (Owner: Defra. Timing: by 2021).
- Recommendation 7. Research on the risks to the marine food chain and ecosystem from rising sea temperatures, deoxygenation and ocean acidification should be undertaken over the course of the next National Adaptation Programme period, to inform future marine and fisheries policies. The research should assess the extent to which adaptive actions could increase the resilience of marine habitats and species to climate change. (Owner: Defra. Timing: by 2022).
- Recommendation 8. Goals and actions to achieve sustainable yields by 2030 should be included in new policies that will replace the Common Fisheries Policy. Indicators of sustainable management should also be reviewed to ensure they take account of changing distributions of fish species due to climate change. (Owner: Defra. Timing: by 2019).
- Recommendation 9. New agricultural land management policies should take account of the need to improve water quality and the condition of habitats and soils, in order to build resilience to climate change. Targets should be set that focus on outcomes, and monitoring undertaken to understand if these targets are being met. (Owner: Defra. Timing: by 2020).
- Recommendation 10. To support adaptation efforts, a plan should be put in place to deliver the aspiration for all soils to be managed sustainably by 2030. The plan should include a scheme to monitor uptake of soil conservation measures, and specific proposals to reverse the ongoing loss of lowland peat soils, in order to provide mitigation and adaptation benefits. (Owner: Defra. Timing: by 2019).
- Recommendation 11. A target for restoring all designated upland blanket bog habitats to favourable condition by 2030 should be adopted in order to contribute to both adaptation and mitigation efforts. (Owner: Defra. Timing: by 2019).
- Recommendation 12. More and better co-ordinated action is needed to manage the lack of capacity within drainage systems to cope with possible increase in the frequency and severity of heavy rainfall. Defra and the National Infrastructure Commission should initiate a comprehensive assessment to quantify the need for investment and other policy actions to manage surface water flood risk, including, but not limited to, retrofitting sustainable drainage systems (SuDS). Urgent investments need to be considered by water companies and Ofwat as part of the 2019 price review, and the comprehensive assessment should be

in place to inform local planning policy and major investment decisions in the 2024 price review.

- Recommendation 13. Policy is needed urgently to address the outstanding barriers to deliver high quality, effective SuDS in new development that achieve the full range of potential environmental co-benefits. In particular, there is a need for:
 - More comprehensive and ambitious national standards for SuDS.
 - The automatic right to connect new development to the existing sewerage network to be made conditional on the national SuDS standards being met.
 - A clear policy on who should maintain and adopt SuDS by default. (Owner: DCLG. Timing: by 2020).
- Recommendation 22. The Government should promote voluntary disclosure of climate change risks by both large and small companies, including the risks in relation to supply chains.
 - The investment community should further emphasise the need for meaningful disclosure of how companies assess and manage climate change risks, in line with the recommendations of the Task Force on Climate-related Financial Disclosures.
 - The Financial Reporting Council's UK Stewardship Code should ask investors to consider company performance and reporting on adapting to climate change.
 - As a form of disclosure, the Government should promote corporate natural capital accounting and reporting, as recommended by the Natural Capital Committee. (Owner: Defra/BEIS. Timing: by 2020).