Foreword
Lord Deben and Baroness Brown

It has been a remarkable 12 months. Globally, the impacts of the changing climate have become increasingly visible. Public protests have led to widespread awareness of the risks of further climate change - and the remedies. And we have seen a renewed desire from governments around the world to step up their response.

Here in the UK, there are grounds for optimism. In May, the Committee’s Net Zero report offered compelling analysis of the need to reduce greenhouse gas emissions in the UK effectively to zero by 2050 – and provided evidence that we could meet this new goal at a cost already agreed by Parliament. The net-zero target meets the UK’s obligations under the Paris Agreement and responds to the urgent need for action highlighted by the IPCC in last year’s landmark Special Report on 1.5°C of global warming.

We welcome strongly the UK Parliament’s decision to make net zero law – and the corresponding decisions of the Welsh Assembly and the Scottish Parliament. These are positive steps which are of fundamental consequence for the future path of our economy, our society and the climate. Carbon neutrality has now become a mainstream goal.

But tougher targets do not themselves reduce emissions. New plans must be drawn up to deliver them. And even if net zero is achieved globally, our climate will continue to warm in the short-term, and sea level will continue to rise for centuries. We must plan for this reality. Climate change adaptation is a defining challenge for every government, yet there is only limited evidence of the present UK Government taking it sufficiently seriously.

It is time to act. Next year may see the UK host the most important global climate summit since Paris in 2015. Our credibility in the COP26 Presidency rests on real action at home.

The Adaptation and Mitigation Committees have reviewed the UK Government’s approach to climate change adaptation and emissions reduction. Our reports are published in parallel, as required under the Climate Change Act. We find a substantial gap between current plans and future requirements and an even greater shortfall in action.

Planning for climate change adaptation is a statutory obligation but the National Adaptation Programme (NAP) is incomplete. Of the 56 risks and opportunities identified in the UK’s Climate Change Risk Assessment, 21 have no formal actions in the NAP. Furthermore, we have been unable to give high scores for managing risk to any of the sectors we have assessed in this report. We are now seeing the substantial impacts of a global temperature rise of just 1°C. The Paris Agreement targets a threshold of well below 2°C, ideally 1.5°C, but current global plans give only a 50% chance of meeting 3°C.

In these circumstances, although the UK is committed to working for global action to parallel our own adoption of a net-zero statutory target, it is prudent to plan adaptation strategies for a scenario of 4°C, but there is little evidence of adaptation planning for even 2°C. Government cannot hide from these risks.

The Clean Growth Strategy, the UK’s plan for emissions reduction, provides a solid foundation for the action needed to meet a net-zero GHG target but policy ambition and implementation now fall well short of what is required. Last June, we advised that 25 headline policy actions were needed for the year ahead. Twelve months later, only one has been delivered by Government in full. Ten of the actions have not shown even partial progress. Government continues to be off track for the fourth and fifth carbon budgets – on their own appraisal – and the policy gap has widened further this year as an increase in the projection of future emissions has outweighed the impact of new policies.

The central premise of the Climate Change Act is that the Government of the day holds the responsibility to act to protect future generations. This principle is at risk if the priority given to climate policy is not substantially increased over the next year and the next Government spending review.

The need for action has rarely been clearer. Our message to government is simple: Now, do it.
Climate change is here today

Global average temperature has already risen by around 1°C since pre-industrial levels and climate risks are increasingly apparent.

Annual average temperature in England has also increased by 1°C and will keep increasing – by only 0.5°C by 2100 if the world acts quickly and decisively to cut emissions, but by 4°C+ if current trends continue. We must therefore plan adaptation strategies for a minimum of 2°C and up to 4°C.

UK global leadership on climate change must go hand in hand with domestic action

In line with the Paris Agreement, the UK has legislated to become the first major economy to set a net-zero greenhouse gas emissions target by 2050.

Other countries (e.g. France, New Zealand, Sweden) have moved to adopt net-zero targets of their own, while still more (e.g. the EU) are considering them for the future.

As expected host of the COP in 2020, the UK’s credibility rests on more effective action to reduce greenhouse gas emissions to net-zero, and effective planning for climate change adaptation at realistic temperature scenarios.

Only a handful of sectors have plans that consider a minimum of 2°C – water supply, road and rail, flood defences and flood risk planning for infrastructure.

Of 33 sectors have no plans for long-term climate change at all, including aspects of agriculture, the natural environment, health, infrastructure and business.

None of the 33 priority areas score well in reducing vulnerability and exposure to climate risk.

Preparing for Climate Change

England is not prepared for the impacts of a 2°C increase in global and UK temperature, let alone a 4°C temperature increase.

Tackling Climate Change

Current policies and plans are insufficient to meet the fourth or fifth carbon budgets (covering 2023-2027 and 2028-2032).

The required annual rate of emissions reduction for Net Zero is 50% higher than under the UK’s previous 2050 target and 30% higher than has been achieved on average since 1990.

Key messages to Government on preparing for climate change:

1. Climate change will impact the majority of Government’s key objectives. All relevant policies should include plans which take into account a minimum of a 2°C temperature increase, with consideration of more extreme scenarios.

2. Leaving adaptation responses to local communities and organisations without a strategic national plan will not manage the risks from climate change. That strategic plan is still missing.

3. The Government must raise the profile, and ramp up resources for adaptation. It should take action on all of the urgent risks set out in the UK Climate Change Risk Assessment, and improve monitoring of risk, action and the impacts of climate change.

Key messages to Government on tackling climate change:

1. Embed net-zero policy across all levels and departments of government, with strong leadership at the centre.

2. Provide a clear and stable direction for policy to ensure it is business-friendly. People must be engaged in the challenge and policy designed with their needs in mind.

3. Use the UK’s new net-zero target to help encourage increased effort elsewhere, including adoption of similar targets by other developed countries in the EU and beyond.
Preparing for Climate Change

The Government needs to be much more ambitious on climate change adaptation, to match the growing risks from climate change.

Of the 56 risks and opportunities identified in the UK’s Climate Change Risk Assessment, 21 have no formal actions in the National Adaptation Programme...

...and we have been unable to give high scores for managing risk to any of the sectors we have assessed in this report...

...Despite pockets of excellence and dedication from specific organisations and individuals, the risks from climate change are not being reduced quickly enough, and in some cases not at all.

The Government needs to enable the right action to be taken through strengthened policy. Priorities for the next two years are:

| Flood Risk Management | • Defra should approve the Environment Agency’s Flood and Coastal Erosion Risk Management Strategy and align to it in its Policy Statement on flooding.  
|                      | • MHCLG should update further the National Planning Policy Framework (NPPF) and planning practice guidance (PPG) to ensure that Sustainable Drainage Systems (SuDS) installations maximise their impact in terms of flood risk reduction and their co-benefits.  
|                      | • Defra should put in place near-term milestones for transitioning to the withdrawal of Flood Re in 2039, including joint strategies and targets to accelerate the implementation of property-level flood resilience measures in England. |
| Water               | • Defra should set ambitious targets and develop options to achieve greater progress in reducing water use by households and businesses and reducing the amount of water lost to leakage. |
| Infrastructure      | • Cabinet Office should ensure that data sharing arrangements are in place between infrastructure providers and Local Resilience Forums, and provide evidence to the CCC that this is happening.  
|                      | • The Government should ensure that the Adaptation Reporting Power is used effectively to present updated risks and adaptation actions to allow for an assessment of preparedness of all infrastructure sectors and their interdependencies. |
| Business            | • BEIS should undertake further research to understand the size of climate-related business opportunities.  
|                      | • BEIS should set clear deadlines for ensuring listed companies and large asset owners report on climate-related risks and opportunities. Both transition and physical risks need to be addressed, supported by appropriate climate scenarios and data. |
| Natural Environment and Agriculture | • Defra needs to integrate adaptation systematically into the 25-year Environment Plan goals and the Environmental Land Management Scheme (ELMS) outcomes |
| Health              | • MHCLG, DHSC and BEIS must publish an integrated plan to reduce overheating risk in existing and new homes, alongside decarbonising domestic heating, and planning for at least a 2°C increase in global temperature, with consideration of 4°C.  
|                      | • DHSC need to put in place a plan to address the risks of overheating in care homes and care facilities, including consideration of home-based care. |
| International risks to the UK | • Adaptation plans are needed to address the scale of climate risk that the UK faces from climate change impacts overseas. Cross-government working is required to develop and implement these plans – through Defra, FCO, DIT, DfID and Home Office. |
Tackling Climate Change
The Government has adopted a net-zero target for 2050. It must act now to strengthen policy to be on track to this.

UK emissions have fallen by 40% since 1990 and 18% in the last five years…

…but almost all progress in the last 5 years has been in electricity generation…

…new and strengthened policies are urgently needed in all sectors.

Of our 25 headline policy actions for the last year…

- only one has been delivered in full
- 14 were partly done
- 10 were not done

The Government must now back its net-zero emissions target with a coherent national policy package to deliver it. Priorities for the next year are:

| Surface Transport | • Sales ban on conventional vehicles moved to 2030-2035  
|                   | • Clearer approach to EU vehicle standards and testing  
|                   | • Stronger incentives to purchase cleaner vehicles  
|                   | • Plans for roll-out of zero emission HGVs and stretching targets for CO₂ reductions  
|                   | • Schemes to support walking, cycling, public transport  
| Aviation & Shipping | • Formal inclusion in Climate Change Act targets  
| Industry | • Detailed policy for +20% energy efficiency by 2030  
|          | • Funded mechanism for fuel switching and carbon capture and storage (CCS)  
|          | • Award of capital support for industry decarbonisation  
|          | • Policy to reduce methane leakage and venting and decarbonise off-road mobile machinery  
|          | • Plans for resource efficiency to help reduce demand for carbon-intensive products  
| CCS | • Preferred mechanism for CO₂ infrastructure  
| Hydrogen | • Plan for operational CCS by mid-2020s  
| Buildings | • Strategy for developing low-carbon hydrogen use, production and infrastructure  
|          | • Large-scale hydrogen trials to begin  
| Power | • Low-carbon heat strategy and plans to phase out fossil fuels in the 2020s from buildings not connected to the gas grid  
|        | • Policies to improve energy efficiency for all buildings  
|        | • New build standards to ensure new homes are ultra-efficient and use low-carbon heating from 2025  
|        | • Closure of the performance and compliance gaps  
| Agriculture & Land use | • Completion of 2019 offshore wind auction  
|                        | • Route to market for onshore wind and solar  
|                        | • Contingency plans for delayed or cancelled low-carbon generation projects  
|                        | • Plans for networks to be capable of meeting higher demand for electrical energy  
| Waste | • Firm policies to reduce GHG emissions  
| F-gases | • Development of an effective post-CAP framework  
|         | • Strategies across UK for 30,000+ hectares/year afforestation  
|         | • Publication of England’s Peatland Strategy  
| Public Engagement | • Commitment to ban landfill of bio-degradable waste by 2025  
|                   | • Plan to restrict the use of F-gases to the very limited uses where there are currently no viable alternatives  
|                   | • Strategy informed by Citizens’ Assemblies and Youth Climate Steering Group  

2019: Progress Report to Parliament | Committee on Climate Change