House of Commons

Environmental Audit Committee

Our Planet, Our Health: Government Response to the Twenty-First Report of Session 2017–19

Second Special Report of Session 2019–21

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Environmental Audit Committee

The Environmental Audit Committee is appointed by the House of Commons to consider to what extent the policies and programmes of government departments and non-departmental public bodies contribute to environmental protection and sustainable development; to audit their performance against such targets as may be set for them by Her Majesty's Ministers; and to report thereon to the House.

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Second Special Report

The Environmental Audit Committee published its Twenty-First Report of Session 2017–19, *Our Planet, Our Health* (HC 1803) on 17 September 2019. The Government's response was received on 26 May 2020 and is appended to this report.

Appendix: Government Response

Health, the environment and agriculture are largely devolved matters in Scotland, Wales and Northern Ireland. The majority of practical measures referred to in the Government's response therefore relate to England. The Government will continue to work closely with the devolved administrations in Scotland, Wales and Northern Ireland to coordinate and join up measures, where appropriate to do so, and in line with the UK's international obligations, in tackling our shared environmental challenges.

Environmental change and human health

Recommendations 1 and 2

1. **Without rapid action to curb greenhouse gas emissions and efforts to safeguard the environment we risk causing irreversible damage to the planet. This is already having a significant and growing impact on human health, with impacts set to become more severe**. (Paragraph 21)

2. **We are concerned that the NHS and the pharmaceutical industry is not sufficiently resourced to deal with these projected changes. Non-communicable diseases (NCDs) kill 41 million people each year, equivalent to 71 per cent of all deaths globally. We note that more people now die from non-communicable diseases than communicable diseases. We also note the recent stalling in life expectancy in the UK as a result of lifestyle changes with increased pressure for NHS resources. Public Health England should broaden its key performance indicators to include climate resilience and adaptation measures to tackle emerging diseases. These should include guidance to general practitioners and the pharmaceutical industry on Lyme disease, malaria, the zika virus and other emerging tropical diseases. We repeat our recommendation from our toxic chemicals report that Public Health England should introduce a comprehensive UK wide human and wildlife bio-monitoring scheme to measure the effects of toxic chemicals. A focus on lifestyle change means that it does not prioritise the impacts that wider economic and ecological changes will have on human health. Secondly, Public Health England must work across Government to advise local Government on the impacts of heat stress and protecting vulnerable communities, particularly the elderly, people living in care homes and those with kidney failure**. (Paragraph 22)

There is no doubt that climate change is one of the greatest global challenges we face, and that action is urgently needed in the UK and across the world. Reducing carbon emissions and enhancing the environment are major government priorities. The UK is already a leader in climate change and clean growth, being the first major economy to legislate for net zero greenhouse gas emissions and having reduced emissions faster than any other G7

nation since 1990. Between 1990 and 2018, we have reduced emissions by more than 40% while growing our economy by three quarters. The government set out ambitious plans at the Budget, and will be focusing on continuing to develop our net zero strategy in advance of hosting the 26th Conference of the Parties to the UN Framework on Climate Change (COP26) – including through strengthening our plans for decarbonisation in key sectors.

Public Health England (PHE) leads on the United Kingdom's participation in the European Human Biomonitoring Project (HBM4EU)[1] in collaboration with the Department for Environment, Food and Rural Affairs (Defra). The initiative includes a project to harmonise procedures, generate exposure data and develop methodologies to improve chemical risk assessment. PHE and the wider Government recognises the importance of the issue and will continue to explore the best approach and practice in the field of human biomonitoring. This will be achieved, in line with 25 Year Environment Plan (YEP) commitments, through the Chemicals Strategy which will continue to support collaborative work on human biomonitoring and explore options for further biomonitoring programmes.

The COVID-19 pandemic highlights the importance of devoting resources to planning for contingencies that sit high on the Government's risk register, including climate change and biodiversity. It is critically important that the unique situation of a partial shut-down in industrial activity and travel is fully investigated to determine the effects that these inputs to the natural environment and the world atmosphere will/have had on weather, biodiversity, air quality, farming and a variety of other important areas. It is equally important to take advantage of the shutdown to prepare for a more sustainable (or green) re-start when the pandemic is sufficiently controlled to allow the restoration of economic activity and build future resilience. There is enormous potential for a boost to creating a sustainable future.

There will doubtless be additional insights from the investigations that are going to be undertaken to analyse how the management and planning for the pandemic was conducted to tease out the successes and weaknesses of the UK approach. It remains likely that there will be important insights for our future management of changes in global climate and our natural environment.

PHE coordinate and publish the Heatwave Plan for England[2] on behalf of the health and social care sector. It is a collaborative plan supported by NHS England and developed with the Local Government Association that sets out clear actions to be taken by the National Health Service (NHS), social care, local government, and the community and voluntary sector, as well as the public, to minimise the effects of severe heat on health. Advice is provided to protect those most at risk including older adults, especially over 75 years old or living alone; those with chronic and severe illness including heart and lung conditions; those taking certain mediations; and infants. PHE is currently reviewing its heat-health advice in light of the COVID-19 pandemic and the potential implications for vulnerable people.

PHE works across other government departments and with a range of partners to reduce the harm to health from high temperatures; for example, the Local Adaptation Advisory

1 https://www.hbm4eu.eu/
2 https://www.gov.uk/government/publications/heatwave-plan-for-england

Panel, the London Climate Change Partnership and the National Adaptation Programme (NAP) Health Steering group which is attended by Defra, Department of Health and Social Care (DHSC), NHS, Sustainable Development Unit (SDU) and PHE.

Under the actions set out in Government's second NAP[3] for climate change, PHE has committed to delivering a single adverse weather and health plan by 2022, working closely with partners including NHS trusts and local Government and updating the report "Health Effects of Climate Change in the UK" by 2023 (using UKCP18 data).

Recommendation 3

3. ***The NHS has shown some progress in reducing carbon emissions by 18.5 per cent since 2007. It is deeply disappointing that it will miss its Climate Change Act target of a reduction in emissions of 34 per cent by 2020. As the largest employer, and one of the largest consumers of goods and services in the UK, the NHS should bring forward its targets to end the use of coal (2023/24) and oil (2028/29) for primary heating on NHS sites. This target should now be revised to reflect the Government's commitment to achieve net zero greenhouse gas emissions by 2050 at the very latest. A new pathway for carbon reduction should be developed by April 2020 and communicated to all stakeholders. The NHS' carbon footprint should be clearly communicated to staff, patients and suppliers, with messages on how they can contribute***. (Paragraph 31)

NHS England and NHS Improvement recognise that climate change poses a major threat to our health as well as our planet. In January 2020 the NHS launched the 'For a greener NHS' programme to work with staff, hospitals and our partners to help cut the NHS' environmental impact and map a path to net zero.

As part of this programme, NHS England and NHS Improvement have established an expert panel to chart a practical route map to enable the NHS to get to 'net zero'. This panel will be chaired by Dr Nick Watts, Executive Director of the Lancet Countdown. The panel will submit an interim report in the summer, with the final report expected in the autumn.

As part of this work, staff and local NHS organisations are being encouraged to feed in ideas to the Expert Panel and evidence of steps they may have already taken within their own hospital.

In January, the NHS consultation on the new NHS Standard Contract included a call for hospitals to reduce carbon from buildings and estates, including removal of coal and oil for primary heating, whilst switching to less polluting anaesthetic gases, lower carbon asthma inhalers and encouraging more active travel for staff.

Recommendation 4

4. ***Fluorinated gases remain a major problem, with inhalers contributing to over 3 per cent of total annual emissions from the NHS. We reiterate our recommendation that Government should work with medical professionals, pharmacists, the pharmaceutical industry and patients to significantly improve the recycling of Metered Dose Inhalers (MDIs); this makes both environmental and economic sense. We encourage the***

3 https://www.gov.uk/government/publications/adapting-to-climate-change-national-adaptation-programme

Government to investigate all the means of removing the barriers to the safe re-use of those valuable quota-restricted gases. The Government should also ensure that by 2020, at least 50 per cent of MDIs are recycled. It should also set out how it will reduce medical waste, such as MDIs, in its waste strategy. (Paragraph 32)

NHS England and NHS Improvement have initiated a programme of work, led by the SDU, to work with medical professionals, pharmacists, industry and patients to support a clinically appropriate shift to lower carbon inhalers across the NHS in England. Measures have been included in aspects of service specification. The SDU is also working with patients' groups, industry and pharmacy to promote more effective environmentally safe disposal of empty inhalers. The most effective, rapidly scalable route to decommissioning residual f-gases is through incineration with medicines waste.

Recommendation 5

5. **We are concerned that, at current rates of progress, the NHS will fall far short of the Committee on Climate Change's recommendation of 100 per cent of low emission vehicles by 2035 at the latest. The current target of 66 per cent of vehicles being low emission by 2028 is not ambitious enough. The NHS should be taking the lead in the mitigation of climate change, given its size, budget and workforce, particularly when a major impact of climate change is likely to be a deterioration of several measures of population health. The Committee on Climate Change is clear that early uptake of electronic vehicles (EVs) brings co-benefits from reductions in air pollution. NHS direct fleet procurement and "Grey fleet" purchased through tax schemes should prioritise EVs. *We recommend that the NHS aligns its plans with the Committee on Climate Change's cost-efficient path for electric vehicle uptake to benefit from the financial savings and co-benefits (e.g. reduction in air pollution) of earlier EV uptake.*** (Paragraph 34)

NHS England and NHS Improvement highlight that the NHS Long Term Plan commits to at least 90% of the NHS fleet using low-emissions engines (including at least 25% ultra-low emission engines) by 2028. The NHS is looking to utilise all available levers and incentives to support a shift to low emission vehicles and will review the Committee's report as part of this work.

Appropriate investment from government in EV infrastructure is required to enable a shift to EVs across the NHS that includes staff and visitors.

Nature, wildlife and the environment

Recommendation 6

6. **Progress towards meeting the Aichi targets by 2020 falls woefully short, and meeting only five of them will not protect the UK's precious wildlife and fragile habitats. *We recommend that the Government engage with the public on the next set of targets before the 2020 UN Biodiversity Conference and set out clear priorities for action. The targets should be formally reviewed every four years and the Government should task Natural England and devolved administrations with the responsibility for their domestic delivery.*** (Paragraph 52)

Biodiversity policy is devolved in the UK. Commitments to the Convention on Biological Diversity (CBD) are delivered through separate plans and strategies on biodiversity and pollinators, and through country implementation of the UK Marine Strategy. UK countries coordinate on monitoring, reporting, knowledge sharing and international negotiating positions.

The CBD reporting timetable is adopted by the Conference of the Parties and national reports are currently published every four years. In January 2019, the UK published its 6th National Report.

The UK has made progress across each of our international targets but we fully recognise we need to do more. In England, the 25 Year Environment Plan marks a step-change in ambition for wildlife and the natural environment. We are already taking action to fulfil this ambition. For example:

- Our new Environmental Land Management scheme will reward farmers and other land managers for delivering a range of environmental public goods such as thriving plants and wildlife.
- We are investing in woodland expansion and peatland restoration.
- At sea, we have expanded our protected areas.
- We have introduced the first Environment Bill in over 20 years that will put environmental ambition and accountability at the heart of government.

However, biodiversity loss is a global problem that needs a global solution. We have increased our international spending on biodiversity, including the announcement of £220m in new funding for international biodiversity.

A new Global Biodiversity Framework for the post-2020 period will be agreed at the Convention on Biological Diversity Conference of the Parties (CBD COP 15). The UK is actively engaged in driving this agenda forward, pressing for greater global ambition to take us beyond business as usual. We are engaging with a range of stakeholders at home and abroad, including NGOs, the scientific community and the private sector, to consider potential global targets across a range of topics, based on the best available evidence. We are already seeking international support for a target to protect at least 30% of the global ocean within Marine Protected Areas by 2030.

Domestic delivery against the new global targets and other biodiversity goals will be implemented by the four countries of the UK. In England, we are developing a new Nature Strategy to replace Biodiversity 2020, our current strategy to implement international goals. We plan to publish the Nature Strategy as a response to the new global targets and we plan to engage with stakeholders and partners to benefit from their insight and expertise.

Natural England is already playing a central role in that engagement and will remain a key delivery body across our biodiversity goals, alongside other government agencies and external partners. We know that working in partnership across government, land managers and conservation groups is crucial to success.

Recommendation 7

7. **The Government's 25 Year Plan for the environment sets out actions that the Government intends to take but there are no SMART targets against which its performance can be measured.** ***Legislative targets are needed to drive action across Government Departments and not just DEFRA. We reiterate our previous recommendations that the Environment Bill must include a framework for statutory nature and biodiversity targets and interim milestones to be achieved by Government Departments, including by the Treasury, to help them achieve the Greening Government targets. Once these targets have been established through stakeholder collaboration, the Cabinet Office must issue guidance directing Departments to explain how their work programmes will achieve the delivery of these targets in their Single Departmental Plans and the next round of Greening Government Commitments.*** (Paragraph 55)

The Environment Bill introduces a comprehensive new environmental governance framework for England, which incorporates a suite of legally binding, long-term targets across priority areas, including biodiversity. Measures to deliver these targets will form part of Environmental Improvement Plans and, combined with other actions contained within the plans, will drive significant environmental improvement. The public and stakeholders will play a role in informing target development. The targets will be accompanied by 5-yearly interim milestones, allowing for monitoring of progress.

Single Departmental Plans are at the core of the Government's planning and performance framework. The Cabinet Office routinely issues guidance to departments on effective planning to deliver the government's commitments, including those relating to the natural environment. For example, the next set of Greening Government commitments from 2020–25 offer a good opportunity to better reflect the government's current environmental ambitions in the management of its estate.

Recommendation 8

8. ***We are disappointed that Natural England has lost half of its budget over the last 10 years. It needs a rapid increase in funding to achieve current objectives. Any new obligations placed under new legislation should be adequately resourced. The Environment (Principles and Governance) Bill is an opportunity to consider holistically the governance frameworks for planetary health in the UK. We recommend that a principle to achieve a high level of environmental protection is put on the face of the Bill and all public bodies be required to achieve this. The Government provided us with the draft version of the first half of the Environment (Principles and Governance) Bill, on which we reported earlier this year. Much of the detail of the Government's proposals for environmental protection, such as on biodiversity net gain, will be contained in the second half of the Bill and we urge the Government to make this available to the Committee for pre-legislative scrutiny as soon as possible, especially given the severe environmental and public health risks of a no-deal Brexit on October 31st.*** (Paragraph 63)

We agree with the principle of ensuring that any new obligations are adequately resourced. Funding decisions to enable this take place through Spending Reviews with HM Treasury.

The Environment Bill creates an ambitious framework that will ensure that the environment is both protected and improved. We note the Committee's recommendation to include an objective in the Bill and so have included objectives for the environmental principles policy statement and the Office for Environmental Protection as well as for the Environmental Improvement Plans. Since domestic legislation works in a different way than International Treaties, the approach taken is tailored for the UK context for these functions.

The timetable for the passage of the Bill will be agreed through the usual channels but the government will endeavour to support and facilitate scrutiny by Select Committees. Defra Ministers and officials involved in the drafting of the Bill will be happy to answer questions from the Committee and to engage regularly during passage.

Recommendation 9

9. ***The Environment (Principles and Governance) Bill should include provision for new targets to increase green and blue urban infrastructure. Our heatwaves report recommended that the revised National Planning Policy Framework should set a target for councils to achieve, which aims to increase urban green space to 2001 levels, and higher if possible. This should also be included in the revised National Planning Policy Framework to ensure space for nature and people to help adaptation to climate change.*** (Paragraph 64)

We note the Committee's recommendation to include provision in the Environment Bill for new targets to increase green and blue urban infrastructure. The Bill introduces a comprehensive new environmental governance framework for England. This includes a power for government to set long-term, legally binding targets relating to the natural environment, and a requirement to set at least one such target in each of the four priority areas of air quality, water, biodiversity, and resource efficiency and waste reduction. The targets will follow an evidence-based process, be set following public and stakeholder consultations, and subject to parliamentary scrutiny through the affirmative procedure. We do not want to prejudge where this process will take us.

The Government does not set a target for councils on urban green space as it is for local planning authorities to assess the need for open space and opportunities for new provision in their areas. However, the National Planning Policy Framework is clear that access to a network of high-quality open spaces and opportunities for sport and physical activity is important for the health and well-being of communities. Up-to-date assessments should be used to determine what open space, sport and recreational provision is needed, which local plans should then seek to accommodate. The Framework states that open green space should not be built on unless an assessment has been undertaken which has clearly shown the open space, buildings or land to be surplus to requirements; the loss resulting from the proposed development would be replaced by equivalent or better provision in terms of quantity and quality in a sustainable location; or the development is for alternative sport and recreational provision, the benefits of which clearly outweigh the loss of the current or former use.

Recommendation 10

10. ***In response to this report, the Government should set out the principles behind the design of the new environmental land management schemes, and the 'public money for public goods' principle, should the UK leave the EU as set out in the future for food, farming and the environment policy statement. These should include steps to minimise high pesticide use and actions to align land use, food production and mitigation and adaption to climate change***. (Paragraph 70)

As the UK has now left the EU, we have the opportunity to design a bespoke English agricultural policy tailored for our needs. The cornerstone of this is the development of a new Environmental Land Management scheme (ELM). Founded on the principle of "public money for public goods", ELM is intended to provide a powerful vehicle for achieving the goals of the 25 Year Environment Plan and commitment to net zero carbon emissions, while supporting our rural economy.

Land managers may enter into agreements to be paid for delivering the following public goods set out in the 25 Year Environment Plan: clean air; clean and plentiful water; thriving plants and wildlife; reduction in and protection from environmental hazards; beauty, heritage and engagement with the environment; mitigation of and adaptation to climate change.

ELM could pay farmers for delivering these public goods through providing funding for measures such as minimising high pesticide use.

We aim to take a more collaborative, less bureaucratic approach in developing this policy and the scheme administration, working with stakeholders across the environmental and agricultural spheres to develop the new scheme, and promote the important role of the agricultural community and the positive contribution it makes to our environment and to the food sector.

We believe that protecting and enhancing the environment and producing food go hand in hand. In fact, many land management activities benefit productivity as well as the environment. As such, ELM will not only help to deliver the goals of the 25YEP but will support farmers to produce world class food in a sustainable way.

In addition, we will introduce other measures that are focussed on making sure we have a food producing sector which plays its part in meeting the global challenges of a larger, richer population living on a hotter, less resilient planet. These measures include helping farmers to invest in equipment, technology and infrastructure to improve productivity in a way that's sustainable and supporting innovation in agriculture by putting farm businesses at the front of future research and development.

Recommendation 11

11. ***We were told that UK companies currently sell chemicals to countries with no regulation of pesticides whose use is banned here. UK policy should be consistent at home and abroad. In the event we leave the EU, the Government has said it will replicate the EU REACH system. Any new UK regulations should review pesticide laws. In the***

meantime, the Government should review pesticide export regulations and ensure that UK businesses protect planetary health and do not export toxic chemicals which are driving wildlife loss globally. (Paragraph 71)

The Rotterdam Convention on the Prior Informed Consent Procedure for Certain Chemicals and Pesticides in International Trade is a United Nations multilateral treaty to promote shared responsibilities in relation to the importation of certain hazardous chemicals and pesticides in international trade. The Convention facilitates information exchange on the characteristics of certain hazardous chemicals and pesticides, supporting national decision- making processes to achieve protection of human health and the environment.

The UK is a signatory in its own right to the Rotterdam Convention and is directly bound by its requirements. The UK is obliged to adhere to the Prior Informed Consent Procedure (PIC), which provides a mechanism for formally obtaining and disseminating the decisions of importing Parties as to whether they wish to receive future shipments of the hazardous chemicals listed in Annex III to the Convention.

EU legislation fully implements the Convention and goes further in applying prior informed consent provisions to any chemicals 'banned' or 'severely restricted' in the EU. This includes pesticide active substances that have not been approved by the EU.

In preparation for the UK leaving the EU, the Government laid a Statutory Instrument (SI) converting European legislation into UK law at the point of exit. A standalone UK PIC regime based on the existing EU PIC regime will come into effect at the end of the Transition Period; which will enable the UK to implement changes to the Rotterdam Convention so that the UK can continue to fulfil its international obligations as a Party to the Convention and apply existing requirements for notifying export and imports for certain hazardous chemicals for the protection of human health and the environment.

Arrangements have also been made to ensure that the REACH system for industrial chemicals and the EU rules for pesticides have been carried over into UK law. All EU restrictions on chemicals and pesticides continue to be in force.

Food systems

Recommendations 12 and 13

12. **Climate change poses significant risks to international food and water security that may lead to hunger and undernutrition for millions of people. Some commentators have drawn links between food insecurity, political instability and conflict. Others have identified the risk of up to one billion climate refugees by 2050.** (Paragraph 83)

13. ***The Government needs to work with UN bodies and national Governments to ensure the Department for International Development budget helps to guarantee national and international food and water security, environmental protection and climate resilience.*** (Paragraph 84)

The UK puts climate and environment at the heart of the UK aid agenda, working to achieve the Sustainable Development Goals. The Department for International Development (DFID) is at the forefront of international efforts to address the impact of climate change,

protect the environment and strengthen climate resilience. DFID is working closely with UN bodies and developing countries to strengthen national efforts in building much-needed climate resilience and environment protection.

But we know we need to do more. Over the past 12 months, the UK has amplified its international leadership on climate resilience, working closely with UN bodies, civil society organisations and governments from around the world. DFID works closely across HMG to strengthen the UKs leadership in engaging with the UN and developing countries.

During the UN Climate Action Summit (UNCAS) in September 2019, the UK sent a powerful signal to the global community with Prime Minister Johnson's announcement that the UK will double its contribution towards International Climate Finance (ICF). The UK will up its ICF support to at least £11.6 billion over the next five years, between 2021/22 to 2025/26. A key theme of this increased investment is a stronger focus on nature-based solutions that tackle climate change and biodiversity loss. This places us amongst the world's leading providers of climate finance. UK aid through ICF will support poorer countries to deal with the causes of climate change. But we are clear that public finance – still less donor ODA – will not be enough by itself. That is why the Government's Green Finance Strategy launched last year is important, and all the work that we are doing to mobilise private finance.

At the Summit the UK Government led on a major shift in the way the international community approaches resilience and adaptation. With Egypt the UK co-led the resilience and adaptation theme of the UN Climate Action Summit in partnership with Bangladesh, Malawi, St Lucia, the Netherlands and UN Development Programme. This yielded a Call for Action on Adaptation and Resilience for the world to step up preparations for the impacts of climate change. To date it has been endorsed by 117 countries and 86 organisations and institutions. This puts the need to adapt to the impacts of climate change at the top of political agendas. Countries have committed to supporting the most vulnerable and putting climate risk at the centre of their decision making.

Tackling climate change and protecting the environment is a global effort, and the UK continues to play a leading role in shaping and investing in the international system. We are major funders of the Global Environment Facility, and our pledge of £1.44 billion to the Green Climate Fund, made by the Prime Minister in August, will mean that the UK becomes a leading contributor to the Green Climate Fund.

DFID has launched a series of initiatives to support the Call for Action, these include the Risk-Informed Early Action Partnership (REAP), which aims to protect one billion people in developing countries from extreme weather, to help ensure they receive earlier warnings of potential disasters such as typhoons and hurricanes – and are better prepared to deal with them. They also include the Just Rural Transition (JRT) initiative to catalyse a growing global movement to drive transition to sustainable land use, food systems and eco-systems; through policy reform, technology innovation, investment and scale up of sustainable land use practices. In addition, £61 million of UK Aid was committed to support vulnerable farmers to adapt their crops to higher temperatures, whilst withstanding droughts or floods, and have natural resistance to pests and diseases. A new £220m International Biodiversity Fund which includes a £100m Biodiverse

Landscapes Fund, an uplift to the Darwin Initiative and additional funding to the Illegal Wildlife Trade Challenge Fund will secure environmental protection and help achieve the sustainable development goals.

Recommendation 14

14. ***We are concerned that the Government is complacent about the risks to food security posed by climate breakdown. The Government is due to publish an updated UK Food Security Assessment by the end of 2019. We recommend that the Government accepts the advice from the Committee on Climate Change about food security risks and set out how it plans to maintain UK food security in a changing climate. Government should publish immediately, in advance of the food security assessment due by the end of 2019, all information relating to food security and cost risks associated with no-deal Brexit.*** (Paragraph 90)

The UK has a high degree of food security, built on access to a range of different sources including robust supply chains across a range of countries, in addition to strong domestic production.

As demonstrated in the current Coronavirus situation the government has well-established ways of working with the food industry during disruption to supply situations. The food retailers have highly resilient supply chains and have implemented contingency plans to ensure people have the food and products they need. The food industry has demonstrated how it can adapt quickly to very significant changes in demand, working closely with government where we can support their plans with guidance and temporary regulatory easements.

The Agriculture Bill includes a new requirement for the UK government to report on food security to Parliament at least once every five years, demonstrating the importance we place on this subject.

This report is likely to cover a range of current issues relevant to food security including global food availability; supply sources for food (including the range of supply sources and the availability to the public of food from domestic and other sources); the resilience of the supply chain for food (including in response to disruptions to supply chains such as the current Coronavirus pandemic, or significant price increases in supply chain dependencies; household expenditure on food (including in comparison to expenditure on other items); food safety and consumer confidence in food.

Trade deals may change the relationships and the nature of trade with our trading partners, perhaps by opening up new markets or access to products. This report will consider the overall security of supply which will include access to food from overseas alongside domestic production.

Food security is a complex issue and cannot be measured or defined by a single metric. Government works closely with the food industry to ensure that the nation has a secure food supply. Self-sufficiency does not equate to overall security. It is important that we have access to a diverse range of supply through international trade for consumer choice and to supplement domestic production and ensure any disruption from adverse weather or disease doesn't affect our overall security of supply.

Recommendation 15

15. **Environmental change is projected to have increasingly major impacts on global food systems which would affect the UK's food security and ability to deliver healthy, sustainably produced diets. The development of a UK National Food Strategy is an important opportunity to link national food production, international food trade, and environmental protection.** ***The Agriculture Bill should support this by incentivising a switch in UK agriculture towards more sustainably produced food, including agroecological farming methods, bringing about reductions in greenhouse gases associated with UK agriculture.*** (Paragraph 95)

The Government is committed to ensuring that the food system is built upon a resilient and sustainable agriculture sector. Defra has commissioned its lead Non-Executive Director, Henry Dimbleby, to lead an Independent Review to develop a series of recommendations that will help shape a National Food Strategy. The review will consider the impact of climate change on how we use our land, and how we can make farming and food production more sustainable. The strategy will take a joined up approach to tackling key challenges in our food system, including climate change, and will cover the entire food chain from field to fork. The National Food Strategy has been paused to focus on Covid 19 efforts. Work will resume as soon as possible, and the independent review will publish The National Food Strategy Part 1: Diagnosis and Vision. The Government has committed to publishing a White Paper in response within 6 months of the review being published.

Farming efficiently and improving the environment should go hand in hand. Our landmark Agriculture Bill recognises this by providing powers to give financial assistance to farmers and land managers in England who manage their land or water in a way which protects or improves the environment, or mitigates or adapts to climate change. The Bill also imposes a new duty on the Secretary of State when framing these financial assistance schemes to have regard to the need to encourage the production of food in an environmentally sustainable way.

Our Environmental Land Management (ELM) scheme is the cornerstone of our new agricultural policy, founded on the principle of "public money for public goods". ELM is intended to provide a powerful vehicle for achieving the goals of the 25 Year Environment Plan and commitment to net zero emissions, while supporting our rural economy.

Through the ELM scheme, land managers may enter into agreements to be paid for delivering the following public goods set out in the 25 Year Environment Plan: clean air; clean and plentiful water; thriving plants and wildlife; reduction in and protection from environmental hazards; beauty, heritage and engagement with the environment; mitigation of and adaptation to climate change.

We are working closely with a range of environmental and agricultural stakeholders to collaboratively design the new scheme so that it is fit for purpose. We are currently running a programme of Tests and Trials, the priorities for which are the building blocks we will need for the National Pilot. The National Pilot will provide a critical opportunity to test and refine the scheme design prior to full roll out of the ELM scheme across England.

The relative environmental impacts for a given agricultural commodity can depend more on farmers' management choices than on the general farming system employed.

Farming approaches are constrained by the local environment but there are opportunities to improve performance in all systems through improving skills and facilitating uptake of best management practices.

In the development of policy approaches, there will be trade-offs between greenhouse gas emissions, other environmental impacts on air and water, productivity and sometimes animal welfare to be considered. Accordingly, a broad examination of agri-food supply chains will be crucial to deliver the evidence required for informed choices.

The evidence base should be comprehensive and include comparative lifecycle assessments (LCAs), which can help to identify all greenhouse gas emissions and the environmental impact of food commodities - including from imported inputs produced overseas. Such holistic analysis of food production systems will allow due consideration to be paid to localised and whole supply-chain impacts which may not otherwise be clear and apparent to consumers.

It will be critical to ensure future policy developments to improve sustainability of the agri- food supply chain are underpinned by robust evidence. Defra therefore continues to develop and deliver a targeted farming research programme to ensure that the best available evidence is available to both government and stakeholders.

Recommendation 16

16. **Healthier, more sustainable diets can deliver co-benefits for people and the environment. The Government has a responsibility to raise public awareness of the Eatwell Guide and identify ways to promote the consumption of healthy and sustainable diets, including how they will achieve at least a 20 per cent reduction in meat and dairy consumption as recommended by the Committee on Climate Change's Net Zero report, and a shift away from intensive livestock production systems. There is a need to coordinate efforts across Government to ensure that healthy and sustainable diets are available and affordable to all in the UK**. ***This should be reflected in the Government's procurement policies and in the next set of Greening Government Commitments. Food provided by the Government should be "sustainable by default" and comply with the Eatwell Guide recommendations. This could lead to an estimated reduction of 30 per cent in the carbon footprint of the Government's purchased food. This is an important step in achieving net zero emissions by 2050.*** (Paragraph 108)

The Eatwell Guide underpins Government nutrition policy. It is embedded in all Public Health England's (PHE) public health nutrition campaigns and will continue to be actively promoted wherever possible. For example, it is currently a key part of PHE's flagship social marketing campaigns (Change4Life[4] and OneYou[5]) and suite of catering guidelines[6], and is promoted through NHS.UK.[7]

4 4 https://www.nhs.uk/change4life
5 https://www.nhs.uk/oneyou/
6 https://www.gov.uk/government/publications/healthier-and-more-sustainable-catering-a-toolkit-for-serving-food-to-adults
7 https://www.nhs.uk/live-well/eat-well/

The current Government Buying Standards for Food and Catering Services (GBSF)[8] help ensure food is produced to higher sustainability and nutrition-related standards. The nutrition-related standards are underpinned by the Eatwell Guide and supported by a range of guidance and tools published by PHE.

It is important that the public sector leads by example in creating a healthier food environment on its premises. The GBSF were introduced in 2011 as a means of meeting the Greening Government Commitments[9] when buying and providing food and catering services.

All central government departments and their agencies as well as prisons, the armed forces and the National Health Service (NHS) are required to apply the GBSF, either directly or through their catering contractors. Schools can also choose to use the GBSF, alongside the mandatory School Food Standards. The wider public sector is encouraged to apply these standards, and the government's Childhood Obesity Plan encourages local authorities to adopt the GBSF[10] This includes food and drink offered in vending machines, for example in leisure centres.

As committed to in the second chapter of our Childhood Obesity Plan[11], we have consulted on strengthening the nutrition standards in the GBSF to bring them into line with the latest scientific evidence. Once we have had the opportunity to consider the feedback to the consultation, we will publish a response.

The CCC identified dietary shift as one of a suite of measures necessary to release agricultural land to other uses [1] in order to realise a net zero ambition. It also identified that an increase in livestock stocking densities for extensive systems would also be required to enable sufficient release of land.

Livestock products tend to be more carbon intensive to produce than plant based products. Although well managed livestock systems deliver biodiversity, landscape and heritage value, changing diets in line with government health guidance could reduce GHG emissions. We recognise the contribution to greenhouse gas emissions made by the livestock and dairy sectors, whilst valuing the importance of our farmers in feeding the nation and managing our rural environment. The Agriculture Bill, our future farming policy, Food Strategy and 25 Year Plan will consider measures to address climate change.

As noted above (response to recommendation 15) farming approaches can be constrained by the local environment, requiring appropriate choices of system, management choices and husbandry practices. Life-Cycle Assessments (LCAs) show that in limited specific circumstances, total emissions (on-farm and pre-farm gate) of some individual extensive ruminant production systems could out-perform a typical intensive system in respect of net emissions intensity.[12] However, this is not typical and would only be the case where soils were able to actively sequester carbon, for example, where a change in grazing practice or stocking density created conditions that allowed more carbon to be stored within the soil. So long as those conditions were maintained, carbon sequestration would

8 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/418072/gbs-food-catering- march2015.pdf

9 https://www.gov.uk/government/collections/greening-government-commitments

10 Department of Health and Social Care (2016). Childhood Obesity: a plan for action

11 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/718903/childhood-obesity-a-plan-for-action-chapter- 2.pdf

12 http://randd.defra.gov.uk/Default.aspx?Module=More&Location=None&ProjectID=11442

offset a small proportion of the enteric emissions from animals grazed on the land, with the rate of storage slowing and then stopping as the upper storage limit of the soil was reached, over e.g. 20 years. As noted by the CCC, uncertainty of future land uses and the reversibility of soil carbon storage means changing grazing practices do not offer a long-term way to offset ongoing methane and long-lived GHG emissions from livestock raised on that land [2]. The current best available evidence suggests that there is limited capacity to mitigate GHG emissions associated with the livestock sector in the UK by any increase to soil carbon in existing well-managed pastures.

Because the evidence base must be robust, Defra is currently developing updated LCAs for ruminant livestock systems accounting for on-farm and off-farm emissions. The work will include consideration of domestic and overseas off-farm feed production. This and other work will ensure the best available evidence to inform policy decisions on trade-offs between different production systems.

Since 1990 we are producing a litre of milk with 20% less GHG emissions, and a kg of pork with 37% less GHG emissions. Efficiency gains in dairy farming mean that we are now producing 9% more milk than we were in 2000 with 23% fewer cows (Defra, 2020). Precision feeding of livestock means that resources such as high sugar-content grass species and nutritious by-products from the food system such as distillers grains can be utilised to optimise food chain sustainability. This allows us to take advantage of valuable sources of nutrients and calories which would otherwise be absent from the production chain for human-edible food, though a mix of different production systems.

Through the Beef Feed Efficiency Programme, Defra-funded research has identified that we can successfully measure livestock and breed to select genes for feed efficiency in cattle on commercial farms. Breeding more feed-efficient cattle can have positive environmental impacts such as reducing the greenhouse gas footprint associated with producing a unit of human-edible meat product. Defra is proud to continue this research, which will further develop tools providing valuable economic benefits to farmers and additional environmental benefits.

In addition to this, Defra and other Government Departments are working together with UKRI via the Strategic Priorities Fund to help transform the UK food system by placing healthy people and a healthy natural environment at its centre. This initiative will take a systems approach, linking healthy and accessible diets with sustainable food production and supply to help drive food system transformation.

Recommendation 17

17. ***Consumer information, including clear labelling, can help shift diets. The Government should expand the restriction of advertising on high fat, sugar and salt products and consider using financial incentives to promote access to, and consumption of, healthy and sustainably produced food.*** (Paragraph 119)

Specific nutritional information must, with some very few exceptions, be presented in the same format on all prepacked food. In addition, this information on the label is often summarised through the UK-wide voluntary front-of-pack nutrition labelling scheme. This is popular with consumers and plays a vital part in our work to encourage healthier

eating and to reduce levels of obesity and non-communicable diseases such as diabetes. By helping consumers to better understand the nutrient content of food and drinks, the scheme enables them to make healthier and more balanced choices.

The colour-coded ('traffic light') labelling scheme, introduced in June 2013, displays in an easy-to-read intuitive format, the calories and levels of specific nutrients contained in 100g/ml of the product or a portion/serving; red, amber and green colours are used to denote whether the levels of nutrients are high, medium or low and can be compared to the adult daily reference intake.

We have previously committed to explore what additional opportunities leaving the European Union presents for front-of-pack food labelling. As part of exploring this, in chapter 3 of the Childhood Obesity Plan, published in July 2019 as part of "Advancing our health: prevention in the 2020s" we announced that we will consult on how we can build on the successes of our current front-of-pack nutritional labelling scheme once we have left the European Union. Our consultation, which will be launched as soon as possible, will consider the evidence underpinning the many different forms of front-of-pack labelling, in the context of factors that influence the purchasing decisions of different types of consumers. It will focus on ensuring that the UK continues to be world-leading in providing UK shoppers with simple nutritional information that they need to make healthier decisions, while taking into account the UK's ambitions for trade now that we have left the EU.

The Government is concerned that despite strict restrictions across TV and online, children remain exposed to significant levels of high fat, salt and sugar (HFSS) advertising across the media they enjoy the most. This is a concern as evidence suggests that exposure to HFSS advertising can affect what and when children eat, both in the short term and in the longer, term by shaping children's food preferences from a young age. Over time, eating more than they need can lead to children becoming overweight or obese which is putting their future health at risk.

As part of delivering the key measures outlined in chapter 2 of the Childhood Obesity Plan, we have consulted on further advertising restrictions on TV and similar protection online as well as other possible options and the definition of products high in fat, sugar and salt. The consultation closed in June 2019 and received a high level of interest. It is important we take the time to consider the feedback carefully. We will be setting out our responses as soon as we can.

Recommendation 18

18. ***We recommend that the Government establish a National Council for Food Policy similar to the work of the Nordic Council of Ministers - to bring together the bodies responsible for food production, nutrition, public health, citizens' representatives, and environmental experts to share data and expertise, and ensure greater alignment around promoting healthy diets from sustainable production***. (Paragraph 124)

The Government acknowledges the need to work together with experts from industry and academia as well as with citizens on key issues around the food system. The National

Food Strategy is leading the way in taking a joined-up approach, working with other government departments, industry experts, academia, businesses and citizens to develop recommendations for how we can transform the food system.

As part of its engagement programme, the National Food Strategy team are conducting an extensive series of visits across the country to gain greater understanding of how our food system works and meet with those working throughout the food system. This includes bodies responsible for food production, nutrition, public health and environmental experts. The review is also working closely with the Food and Drink Sector Council. The Council is a formal industry partnership with Government which aims to create a more productive and sustainable food and drink sector. It is an industry-led board composed of businesses from every part of the food chain. Among the Council's priorities are agricultural productivity, nutrition, exports, workforce and skills, innovation, logistics and planning.

This work will build a foundation which could support future joined-up working across the food system.

Recommendation 19

19. ***The National Food Strategy and other Government policy actions relating to food and diets, must place equal emphasis on the importance of healthy diets produced sustainably and national food security. Public Health England's Eatwell Guide should be revised to emphasise foods with lower environmental footprints and make clear recommendations to help the public choose healthy and sustainable diets. To deliver the transformational changes necessary in UK diets the Government should establish a National Food Council as part of its upcoming Environment (Principles and Governance) Bill. It should lead on the roll out of the National Food Strategy.*** (Paragraph 125)

The Government needs to take a balanced approach to improving diets, considering the steps we can take to create a fair food environment that does not drive excess consumption and which makes the healthy choice the easy choice; whilst ensuring access to food options that are affordable, healthy and sustainable.

The last review[13] of the Eatwell Guide in 2016 revised the protein food group segment to place greater emphasis on more sustainable alternatives to meat and encourage more sustainable food choices. Following this, a review of the sustainability of the Eatwell Guide confirmed the environmental benefits that would be secured by moving diets toward that depicted in the Guide. The evidence base on diet and nutrition is kept under review by the Scientific Advisory Committee on Nutrition's (SACN)[14], and further revision of the Guide will be considered in the light of SACN's assessment of this evidence.

The National Food Strategy will address the challenges of supporting people to eat healthy diets, producing food sustainably and protecting national food security, whilst also looking at related issues such as food price and trade. The independent review will recommend appropriate action which seeks to strike a balance between these issues. The Government

13 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/579388/eatwell_model_guide_repor t.pdf

14 https://www.gov.uk/government/groups/scientific-advisory-committee-on-nutrition

has committed to responding to this report within six months of its publication in the form of a White Paper. It is not possible at this stage to detail any specific recommendations that will be included.

Recommendation 20

20. ***We recommend that the National Food Strategy***:

a) ***Recognises the risks to national food security from the UK importing 40 per cent of the food we consume, and explores policies to mitigate these risks and ensure that the UK delivers healthy diets to all, especially in the event of a no-deal Brexit.***

b) ***Works with farmers, supermarkets and the food industry to deliver transformational shifts in access to and affordability of healthy and sustainable diets.***

c) ***Sets out annual targets to reduce food waste at every level of the food supply chain consistent with the Government's aim to achieve net zero emissions by 2050 at the very latest. This target should be consistent with SDG 12.3 (reduce food waste) to halve food waste by 2030.***

d) ***Recommends policies made by the Committee on Climate Change including shifts towards lower meat and dairy consumption, to achieve the net zero target. The Strategy should set out how public procurement teams, as well as the food and agriculture industry can deliver this goal.***

e) ***Incentivises production of fruit and vegetables using sustainable methods in the UK to close the fresh fruit and vegetable trade gap and reduce food security risk.***

f) ***Set out clear guidelines for Government procurement of food in schools, hospitals and prisons to be sustainable by default.***

g) ***Alongside this, increase teaching within schools around food production, nutrition, food preparation and the environmental impacts associated with the food system***. (Paragraph 126)

Food is an essential part of our economy. The food sector accounts for 12 percent of GB employment, and no decisions have such a direct impact on our lives and wellbeing as the choices we make about what we eat. We do not want to prejudice the outcomes of the National Food Strategy Independent Review at this stage, but thank the Committee for these recommendations.

These recommendations are within the scope of the Independent Review, and will be fed into its continuing work. The Review will work through its analytical component and these recommendations will be iterated through its engagement process.

Sustainable Cities

Recommendation 21

21. We look forward to the introduction of air quality legislation as soon as possible, and encourage the Government to draft it with cross-cutting planetary health outcomes in mind. ***We recommend that any new legislation on clean air brings UK legal limits for air pollution in line with WHO recommended limits (10ug/m³).*** (Paragraph 138)

The Environment Bill includes measures to tackle the most pressing environmental challenges, including improving air quality. We will do this by setting an ambitious, legally- binding target to reduce fine particulate matter, PM2.5, and by increasing local powers to address sources of air pollution, enabling local authorities to work with families to cut harmful pollution from domestic burning by using cleaner fuels. The government will also be empowered to mandate manufacturers to recall vehicles when they do not meet the relevant environmental standards.

Recommendation 22

22. ***We recommend that the Government adopts the Committee on Climate Change's recommendations on off-grid new housing in full. This would include stopping the connection of new homes to the gas grid from 2025. The Government should respond to each recommendation from the Committee on Climate Change's report on UK housing.*** (Paragraph 154)

In October 2019, the Government published the first stage of a two-part consultation on Part L of the building regulations. We proposed an ambitious uplift in the energy efficiency of new homes through the introduction of a Future Homes Standard from 2025. We expect that new homes built to the Future Homes Standard will have carbon dioxide emissions 75–80% lower than those built to current building regulations standards, which means they will be fit for the future, with low carbon heating and very high fabric standards.

As a stepping stone towards the Future Homes Standard we also consulted on a meaningful and achievable increase to the energy efficiency standards for new homes in 2020. To support the Government's intention to phase out high-carbon fossil fuels during the 2020s, the consultation proposed (paragraph 3.30 to 3.34) that off-grid homes will be held to the same performance standards as those on the gas grid. The preferred option set out in consultation is that a typical home, regardless of whether it is on the gas grid or not, should meet minimum energy efficiency standards equivalent to a 31% improvement over the current standard (which is based on a gas-boiler). We expect it will not be practical to meet this standard in off-grid homes heated by fossil fuels.

The Future Homes Standard consultation closed on 7 February and a Government response will be published in due course.

Recommendation 23

23. ***We note that the number of energy efficiency installations (e.g. loft and wall cavity insulation) has collapsed since 2012. A new energy efficiency scheme should be developed and implemented by no later than April 2020 to create warmer homes which are cheaper to run***. (Paragraph 155)

Levels of insulation peaked in 2012 under the Carbon Emissions Reduction Target (CERT) as energy suppliers delivered a significant proportion of their obligation in its final year. Government reduced the overall level of ECO funding by approximately half from the level in 2012 to reduce the cost burden on domestic energy bills. This funding reduction does not account for a reduction in insulation rates of 95%, where a decreasing potential for easy, low-cost insulation measures is a large contributor to fewer annual installations. The current Energy Company Obligation is focused entirely on low income and vulnerable households and will run until March 2022. Government will be setting out plans for future domestic energy efficiency policies later this year.

Recommendation 24

24. ***DEFRA should also manage risk of water security in cities and set a default 100 litres per capita per day consumption target for water as recommended by the Committee on Climate Change***. (Paragraph 156)

Water companies have a statutory duty within the Water Industry Act 1991 to maintain efficient and economical systems of water service provision which will provide security of supply for customers. To ensure ongoing compliance, they are required to maintain statutory water resources management plans, which set out how companies will meet this duty and manage water supply and demand for at least the next 25 years.

Defra's consultation and call for evidence on measures to reduce personal water use closed on 11th October. There were over 300 respondents. Measures consulted on include amending existing building regulations, water efficiency labelling and smart metering.

The majority of the measures we consulted on can be taken forward without the need for new primary legislation. We will publish a government position in late 2020. Our position will set out our intended next steps. The government is committed to ensuring resilience of water supply for the future, as outlined in our 25 Year Environment Plan[15] and the Strategic Policy Statement 2017[16]. The government's Strategic Policy Statement to Ofwat provides a clear steer on our expectations in key areas including improved water supply resilience.

Recommendations 25 and 26

25. **Air pollution (indoor and outdoor) from human activity is an increasing concern and harms public health. The Committee on Climate Change Adaptation Sub- Committee has provided expert guidance on ways to strengthen the building**

15 https://www.gov.uk/government/publications/25-year-environment-plan

16 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/661803/sps-ofwat-2017.pdf

regulations for new and existing housing. We welcome the Government's plans to update the building regulations, including reviewing whether the current enforcement regime is effective. (Paragraph 163)

26. ***We recommend that the Government's review of the building regulations takes an integrated approach to ensure that sustainability and public health are properly reflected in any new code. We recommend that, in line with advice from the Committee on Climate Change, the Government change building regulations (specifically part F and L) to mitigate negative impacts of indoor air pollution***. (Paragraph 164)

We agree with the importance of considering the impact of energy efficiency improvements on other parts of the Building Regulations, including ventilation. For this reason, our October 2019 consultation on the Future Homes Standard included proposals to revise the ventilation standards for new homes in the Building Regulations (Part F). The proposed Part F changes include updating and simplifying the design guidance to improve compliance, and proposals on minimising the ingress of external pollutants.

Alongside the Future Homes Standard consultation, we published our research on ventilation and overheating in new homes and we have committed to launching a consultation to consider methods for reducing overheating in new dwellings in due course.

Public Health England recently published indoor air quality guidelines for selected volatile organic compounds[17] and this work has supported the Ministry of Housing, Communities and Local Government's update on Building Regulations approved document F on ventilation.

Recommendation 27

27. **Urban green space can improve public health and mental health outcomes, particularly for disadvantaged groups**. ***The National Planning Policy Framework needs to be better updated to promote opportunities for active travel, green spaces and access to healthy, sustainable food in planning authorities' Local Plans***. (Paragraph 172)

The Government is committed to promoting healthy and safe communities and sustainable transport. The National Planning Policy Framework contains specific policies which expect planning policies and decisions to achieve healthy, inclusive and safe places which promote social interaction, are safe and accessible and support healthy lifestyles including cycling and walking. This is especially important where this would address identified local health and well-being needs.

This can be done through the provision of safe and accessible green infrastructure, sports facilities, local shops, access to healthier food, allotments, consideration of transport issues from the earliest stages of plan-making and development proposals, and layouts that encourage walking and cycling.

The design and use of the built and natural environments, including green infrastructure, are major determinants of health and wellbeing. Planning Practice Guidance has recently been updated (November 2019) to strengthen the importance of how positive planning

17 Guidelines: https://www.gov.uk/government/publications/air-quality-uk-guidelines-for-volatile-organic-compounds-in-indoor-spaces Full research study: https://www.sciencedirect.com/science/article/pii/S036013231930592X

can contribute to healthier communities. The new National Design Guide makes specific references to the importance of promoting opportunities for active travel, green space and food production. Planning Practice Guidance on sustainable and accessible transport is expected to be published shortly.

Public Health England will be publishing an update to its 2014 Improving Access to Green Spaces briefing with an extensive evidence base on the relationships between exposure to, use of, and perceptions of greenspace and a number of physical and mental health outcomes.

Recommendation 28

28. **Green space is proven to reduce the urban heat island effect, reducing the risks from heatwaves.** ***Our 2018 'Heatwaves: adapting to climate change' report recommended that national targets be set to increase urban green space back up to 2001 levels or higher. We repeat this recommendation***. (Paragraph 173)

The Government's 25 Year Environment Plan (25YEP) sets out our aim to improve the environment within a generation. It pays particular attention to urban environments in Chapter 3: 'Connecting people with the environment to improve health and wellbeing'. The Chapter highlights the range of important environmental, health and social benefits provided by green infrastructure in urban areas, and notes that as we build more homes, preserving, improving and creating green spaces in towns is more important than ever. In line with this evidence, the Government has committed to encouraging investment in green infrastructure (GI) in urban areas. As well as planting more trees in our towns and cities and clarifying planning policy for biodiversity net gain, the Government has committed to develop a National Framework of GI Standards to define what 'good' GI looks like.

The aim of the GI standards project is to develop a practical framework of easy to use GI standards to help GI planners, designers, managers and communities to deliver more good quality GI. Natural England is leading the development of the standards which will be published in 2020. A cross-Government steering group is overseeing development of the framework, led by Defra and Natural England, with the Ministry for Housing, Communities and Local Government, Department for Transport, Forestry Commission, Environment Agency, and Public Health England to provide insight from policy and practice. It also has an Advisory Group with representatives from organisations with planning, green space and health expertise, including the Parks Action Group.

We agree with the Committee's view that green spaces, and broader GI including street trees, are important for reducing the urban heat island effect and risks from heatwaves. Stage 1 of the GI standards project included a systematised scoping review of the health and well-being benefits of GI, which identified a considerable body of evidence demonstrating the links between GI, mental and physical health, wellbeing and quality of life outcomes in a range of different populations. This found that natural environments in urban areas are positively associated with heat reduction. A review of 89 studies of GI impacts on heat mitigation indicated a 'park cool island' effect of between 1.5–3.5°C. The review also indicated a stronger cooling effect of larger urban green spaces, and an important role for street trees in cooling and heat relief.

Stage 2 of the GI standards project will assess the potential for a simple set of quantifiable benchmarks to be included within the national standards. This will include a benchmark for accessible natural greenspace that provides for recreation and play, for social cohesion and potentially also for wider benefits including climate change resilience and respite during heatwaves. It will also consider other indicators that could be defined to enable monitoring and evaluation of how environmental hazards such as urban heating/ heatwaves are addressed.

As part of the GI standards project we are also considering how indicators could help us track progress towards our 25 YEP goal of creating more GI. With regard to the recommendation to increase the urban green space target to 2001 levels or higher, we do not currently have sufficient evidence to suggest that this would be the right focus. However, as part of the implementation of the new framework of standards, we will support Local Authorities to assess GI provision against the framework and increase provision where required. Once the framework has been published, Defra and MHCLG will work together to see how our commitments on GI can be incorporated into national planning guidance and policy, building on the inclusion of GI (including reference to the urban heat island effect and shading) in MHCLG's National Design Guide. For example, this could include asking local planning authorities in areas where the need for urban cooling is significant to demonstrate policies for increased provision of GI as part of their plan preparation.

Recommendation 29

29. **Increasing tree planting should be a priority to improve air quality, capture carbon and create green spaces in cities. Whilst we welcome the 'Urban Tree Challenge Fund', we note that tree targets are not being met, with only half the target number of trees having been planted in the last five years**. ***The Government should update targets to align with the recommendation from the Committee on Climate Change. The Government should review its Tree Challenge Fund and set out how it will meet the CCC's target of 30,000 hectares of tree planting a year. Councils should be mandated to state how many trees they will plant per house built with a minimum standard of one tree per house. Green infrastructure should be specified in planning permission.*** (Paragraph 174)

The Government is committed to increasing tree planting rates to 30,000 ha per year in the UK by 2025. To help achieve such a highly-ambitious target, we have recently announced a Nature for Climate Fund to increase planting in England, and are developing a programme to engage landowners, communities and businesses in this national effort to plant trees. Further, we have launched the £10 million Urban Tree Challenge Fund, allocated £5.7 million to grow 50 million trees in the new Northern Forest over the next 25 years, and announced a new Great Northumberland Forest, with a million trees to be planted this parliament. We also opened the £50million Woodland Carbon Guarantee in November 2019 to provide long term income support to new woodland creation projects, while pump-priming the domestic carbon market. We will also soon be consulting on a new English Tree Strategy which will consider changes to ambition and policies in light of the UK's commitment to achieve net zero greenhouse gas emissions, and are putting the protection and enhancement of biodiversity at the heart of the planning system, using the forthcoming Environment Bill to mandate biodiversity net gain for new developments through the planning system in England. Note that forestry is devolved in the UK.

The planning system also has an important part to play: the National Planning Policy Framework emphasises the importance of conserving and enhancing green infrastructure, including trees, and the Environment Bill will go further by mandating biodiversity net gains when development occurs. Our new Design Guide shows how street trees can be incorporated in new development, while the Environment Bill will require consultation with local communities before street trees can be felled. Taken together, these measures will have a significant impact in retaining and expanding our tree cover. Requiring Local Authorities to plant a minimum number of trees per house built would put the burden of providing trees in the wrong place (adding to the costs facing authorities), and fail to take the opportunities which environmental net gain provides to improve habitat value in the most effective way.

Recommendation 30

30. **The Government has a responsibility to increase equitable access to healthy, sustainable food for city dwellers**. ***The Government should review its planning policy guidance to measure how well the current restrictions on fast food outlets are working in practice and it should ensure that planning authorities are able to restrict the numbers of fast food outlets without stringent evidence requirements. The Government's forthcoming National Food Strategy should set out how the Government will work with food providers, including restaurants, fast food outlets and supermarkets to transform the way that people consume food in the UK.*** (Paragraph 183)

Planning can influence the built environment to improve health through improving access to healthier food for local communities. Local planning authorities can support opportunities for communities to access a wide range of healthier food production (e.g. allotments) and consumption choices (e.g. food markets and local shops). Planning policies can, where justified, seek to limit the proliferation of particular uses, such as hot food takeaways (A5), where evidence demonstrates this is appropriate (and where such uses require planning permission).

Planning policies and proposals can have particular regard to the following issues:

- proximity to locations where children and young people congregate such as schools, community centres and playgrounds;
- evidence indicating high levels of obesity, deprivation, health inequalities and general poor health in specific locations;
- over-concentration of certain uses within a specified area;
- odours and noise impact;
- traffic impact; and
- refuse and litter.

In February 2020 Public Health England published a guide[18] on the use of planning powers to promote a healthy weight environment, which includes a focus on the use, by local planning authorities of policies and supplementary planning documents to manage

18 https://www.gov.uk/government/publications/healthy-weight-environments-using-the-planning-system

the proliferation of hot food takeaways. PHE is supporting academic institutions to review how current guidance on managing proliferation are working in practice in local planning policy and planning appeals.

The Ministry of Housing, Communities and Local Government and other government departments continue to support the Department of Health and Social Care's Childhood Obesity Trailblazer Programme with five Trailblazer Authorities leading innovative action in their communities. They will be awarded £100,000 a year over a 3-year period. The funding will help them to test and refine their ideas for addressing childhood obesity and health inequalities.

The National Food Strategy is engaging with stakeholders, including food providers and supermarkets, in order to help develop recommendations to transform the food system. It is too early to detail specific policy interventions that might be included in the strategy, however the vision of the strategy is to ensure our food system delivers healthy, affordable food for all people, regardless of where they live. This is a cross-cutting issue, and Defra is working with other government departments to build on initiatives already in place, as detailed above, to help to transform the way that people consume food in the UK.

Wales has introduced ground-breaking legislation, which introduces the ecosystem approach as adopted by the CBD to maintain and enhance the resilience of our ecosystems. Our legislation recognises the value of biodiversity and a new biodiversity and resilient ecosystem duty was introduced on all public authorities operating in Wales. Our Natural Resources Policy highlights the significance of biodiversity and its role in nature based solutions.

Wales was a founding member of the Regions for Sustainable development – an international network of sub-national governments and a founding member of its Regions for Biodiversity Learning initiative, which enables the sharing of best practice on biodiversity actions. Wales also sits on the Advisory Committee of sub-national governments for the Convention on Biological Diversity.

Governance for Planetary Health

Recommendation 31

31. **To tackle the urgent concerns relating to public health, food security and the environment raised in this planetary health inquiry, strong national and international governance is required**. ***Continuing the global leadership shown by legislating for net zero emissions by 2050, the UK Government should now highlight planetary health at forthcoming international meetings, including the 2020 Conference of the Parties to the Convention on Biological Diversity. As host of the 2020 UN Climate Change Conference (Conference of the Parties) the Government should ensure that planetary health is a key theme of the discussions***. (Paragraph 188)

The scope of the Convention on Biological Diversity (CBD) provides an opportunity to consider planetary health broadly by integrating the biodiversity, climate change and development agendas. The UK is pushing for not only an ambitious and achievable Post-2020 Global Biodiversity Framework but for a step-change in delivery of actions under the framework.

As co-lead of the Climate Resilience and Adaptation theme at the UN Climate Action Summit 2019, the UK launched the 'Just Rural Transition' initiative bringing together public and private sectors, developed and developing countries to drive the transition to sustainable, climate resilient, low carbon food and land use systems. The UK is committed to advancing this agenda, including through the 26th Conference of the Parties to the UN Framework Convention on Climate Change (COP26).

Although COP26 has been postponed due to the global coronavirus pandemic, it will still be hosted by the UK in Glasgow, in partnership with Italy, and plans for a rescheduled conference in 2021 will be set out in due course. The UK and Italy are committed to an all- of-society approach to COP26 – working with nations, citizens, civil society, young people, business, academia, and sub-national actors to drive ambitious climate action together. COP26 will be a milestone for ambition; for cleaner energy, sustainable land use practices, a more resilient future and flourishing nature, supported by green financial systems.

Climate change and biodiversity loss, both significant threats to planetary health, are intrinsically linked and need to be tackled together. Consequently, the PM has committed to ensure that COP26 adopts a joint approach to biodiversity and climate, with a strong focus on nature-based solutions to climate change. As COP26 hosts, we will capitalise on the synergies between the development of the Post-2020 Global Biodiversity Framework, the Paris Agreement, and the UN Sustainable Development Goals.

The UK-Italy partnership will enable us to put climate change and biodiversity at the heart of the multilateral agenda - running through CBD COP15, UNFCCC COP26, and the UK G7 and Italian G20 Presidencies.

Wales has always recognised the link between climate change, biodiversity and sustainable development. Our Well-being of Future Generations and Environment Act provide a legal framework to ensure these interconnections are captured in policy making.

Wales has been involved in a number of international initiatives include the below 0 MoU and launched the Nature Based Climate Action MoU for sub-national governments at the Paris Agreement discussions.

Recommendation 32 and 33

32. **We note that Government departments and agencies are increasingly seeking to share data and work together to tackle planetary health concerns. However, more needs to be done. Improving public health in the UK while improving the environment will require significantly improved data sharing and cross-departmental working in the future**. (Paragraph 196)

33. ***To ensure cross-government working we recommend that the Government ensures single point accountability for planetary health at both ministerial and senior civil service levels. The Government should also establish a forum or joint unit to manage planetary health across Government. To support these meetings, health leaders and organisations must be in attendance: the Chief Scientific Advisers, Public Health England and the Chief Medical Officer all have a major role to play in providing advice on this crucial matter.*** (Paragraph 197)

The Prime Minister has established a Climate Action Strategy Committee (CASC), which brings together ministers responsible for domestic and international climate change policy, provide a forum to hold departments to account for their actions to combat climate change. The CASC will also oversee the UK's preparations to host the UN COP26 climate summit in partnership with Italy.

Recommendation 34

34. **We find it extraordinary that MHCLG had not had a Chief Scientific Adviser for 7 years, especially given that UK buildings are a source of significant harm to public health and make up nearly a third of the UK's carbon footprint. We note the crucial importance of scientific advice in policy making and support the Chief Scientific Adviser network in their excellent work**. We recommend that the Government Chief Scientific Adviser (GCSA) assumes respon***sibility for oversight of the Chief Scientific Adviser network to ensure that such personnel gaps do not happen again. The GCSA should also ensure that the Government's digital service makes its data available to researchers to map hunger, obesity and poverty so they can be incorporated into emerging policy solutions. The next round of research funding should include an element of planetary health research to combine the strong evidence base and expertise in this area from the UK research community.*** (Paragraph 198)

MHCLG's new Chief Scientific Adviser (CSA), Professor Alan Penn, took up post in September 2019.[19] The Government Chief Scientific Adviser (GCSA) was actively involved in the recruitment process and remains aware of all CSA positions and recruitment timelines across government departments.

The Government's digital service helps people interact with government, including setting standards for digital services, and building and maintaining cross-government platforms, which makes them one useful source for data to researchers. The GCSA supports availability of data and data sharing from numerous government sources, with a focus on the use of data for cross-government priorities. The GCSA works closely with the National Statistician on data sharing.

The GCSA has ongoing activities to support data sharing in government, and hosted a meeting between the Chief Scientific Advisers and Administrative Data research UK (ADR UK) Strategic Hub. ADR UK is a new investment in research infrastructure funded by UKRI that aims to work with ONS and the devolved administrations to strategically provide safe and secure access to administrative data to accredited researchers to support public good research projects.

Government policy and action should be based on the best-available scientific evidence. The Government Office for Science (GO-Science) is currently working with UKRI and the Chief Scientific Adviser Network to clarify research requirements and ensure research funding reflects current science priorities, via routes such as cross-departmental science bids to the Strategic Priorities Fund (SPF) and all government departments publishing Areas of Research Interest (ARI). GO Science also works with Research Councils and UKRI to understand its research landscape and to identify the key links between programmes including on planetary health.

19 https://www.gov.uk/government/news/mhclg-announces-chief-scientific-adviser-appointment

UK Research and Innovation (UKRI) also supports a range of research and innovation, which can support the Government to take action to promote planetary health. Whilst not explicitly described as planetary health, UKRI has funded a number of interdisciplinary projects in this arena in the past, as highlighted in our response to the EAC inquiry. Examples include:

- The Natural Environment Research Council (NERC), Economic and Social Research Council (ESRC) and DFID supported the Ecosystem Services for Poverty Alleviation (ESPA) research programme. EPSA explored the links between the environment and human wellbeing (including health) in developing countries.[20]

- The Global Food Security Food System Resilience Programme, a £14.5M investment to help ensure the UK food system is resilient to shocks in the future.[21]The programme highlights the potential impact of declining insect populations, which have been found to be worth are worth £430-£603m[22] per year to UK agriculture.

- The Biotechnology and Biological Sciences Research Council (BBSRC), NERC, Defra, Scottish Government and the Wellcome Trust jointly funded research programme on insect pollinators[23] that supported projects researching the causes and consequences of threats to insect pollinators and to inform the development of appropriate mitigation strategies to reverse the declines.

Current open funding opportunities in this area also exist, such examples include the Global Challenges Research Fund Health and Context call, which is led by the Medical Research Council[24] (MRC), which aims to address wider contextual factors contributing to the burden of infectious and non-communicable diseases (NCDs); and the NERC led funding call on Climate, Environment and Health,[25] which aims to improve understanding of the pathways between climate, environment, and health to protect and promote human health and well- being in the face of climate challenges through multilateral, inter- and transdisciplinary research projects.

Going forward, promoting research into Healthy Environments is a priority for NERC & UKRI as outlined in the NERC 2019 Delivery plan.[26] NERC has ambitions to support further research and innovation that sustains the healthy urban and rural environments in the UK and worldwide to benefit people, flora and fauna, by working with partners and experts from other disciplines such as public health and medicine.

The Department of Health and Social Care funds health and care research through the National Institute for Health Research (NIHR). This includes research to inform national policy making and to support mitigation and adaptation to climate change in relation to health and care. Recent NIHR research includes an evaluation of the Heat Wave Plan for England as well as multi-disciplinary work undertaken by the NIHR's Health Protection

20 https://www.espa.ac.uk/
21 https://www.foodsecurity.ac.uk/research/
22 http://researchbriefings.files.parliament.uk/documents/CDP-2017–0226/CDP-2017–0226.pdf
23 https://nerc.ukri.org/research/funded/programmes/pollinators/
24 https://mrc.ukri.org/funding/browse/ukri-gcrf/ukri-gcrf-health-and-context-call/
25 https://nerc.ukri.org/research/partnerships/international/belmont/ceh/
26 https://www.ukri.org/files/about/dps/nerc-dp-2019/

Research Unit (HPRU) in Environmental Change and Health. This HPRU is looking at three inter-connected research themes: climate resilience; healthy sustainable cities, and, public health and the natural environment.

The NIHR is the largest public funder of health research in the UK and welcomes funding applications for research into any aspect of human health, including health related to climate change. These applications are subject to peer review and judged in open competition, with awards being made on the basis of the importance of the topic to patients and health and care services, value for money and scientific quality.