



HM Government

2030 Strategic Framework for International Climate and Nature Action

March 2023



© Crown copyright 2023

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit nationalarchives.gov.uk/doc/open-government-licence/version/3.

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

This publication is available at www.gov.uk/official-documents.

Contents

Foreword	2
Executive Summary	4
The Case for Action	9
Challenge 1: Transition to clean technologies and sustainable practices across all sectors	17
Challenge 2: Build resilience and adapt to climate impacts, supporting communities, economies and ecosystems	21
Challenge 3: Increase protection, conservation and restoration of nature and tackle key drivers of nature loss	25
Challenge 4: Strengthen international agreements and cooperation to accelerate delivery of climate and nature commitments	29
Challenge 5: Align global financial flows with a net zero, climate resilient and nature positive future	33
Challenge 6: Shift trade and investment rules and patterns to support the transition to a net zero, climate resilient and nature positive future	37
Annex A – UK Actions on International Climate and Nature	42
Acronyms	68
References	70

Foreword

Just over a year ago in Glasgow, we agreed at COP26 to limit global warming to 1.5°C. World leaders agreed to decarbonise key sectors of the global economy, build resilience to climate impacts, protect nature and mobilise finance. And we led the agreement of ambitious country-led Just Energy Transition Partnerships with South Africa and Vietnam, which with G7 and other partners' support, will help drive a fair transition away from coal to a green economy. We are proud of what we achieved during our presidency before handing over to Egypt. At the end of 2022, we helped secure agreement to the ground-breaking Kunming-Montreal Global Biodiversity Framework to halt and reverse the destruction of nature. And in March this year, we negotiated a treaty to conserve biodiversity in the world's oceans. These landmark agreements provide a framework to deliver on the Paris agreement and reverse the destruction of nature.

Since the Glasgow Climate Pact was agreed, inflation has spiked globally. And war has returned to Europe following Russia's illegal invasion of Ukraine. Food and energy insecurity have risen – often in countries still recovering from a global pandemic. Action on climate and nature is key to our response to these global strategic challenges.

Last summer Europe experienced its hottest drought in 500 years with records set across the continent. China had its most severe recorded heatwave affecting 900 million people. The US had widespread heatwaves and wildfires. Devastating floods hit Pakistan. As the effects of climate change worsen, so do the risks for nature, increasing the risk of species extinction and loss of ecosystems, and as a result, decreasing nature's ability to buffer those effects and support our livelihoods.

We live in an interconnected world. More than 30% of emerging diseases are thought to be caused by changes in land-useⁱ. The linkages between nature loss, climate change, health, food security, economic security and prosperity have never been clearer.

Action on climate and nature is not just about avoiding threats. The transition to a net zero and climate resilient world is a huge opportunity. Cheaper yet more secure energy is just one benefit. We will also benefit from jobs, growth and export opportunities in fast growing global markets, cleaner air and water, a cleaner environment and flourishing natural ecosystems.

We are not alone in recognising the economic benefits the transition will bring. Since the publication of the British Energy Security Strategy, our Environmental Improvement Plan and Net Zero Strategy, the US has taken decisive action in allocating \$370 billion for clean energy and manufacturing in its Inflation Reduction Act. And the EU has set out its ambitious plans to grow its green industries through the Green Deal Industrial Plan.

We are well placed to benefit from the economic opportunities. Our ground-breaking science and technology sectors, hydrogen pilots, Environmental Land Management schemes, offshore wind expertise, and the world's green finance hub in the City of London are just some of the strengths we can draw on. There are huge opportunities to grow our industry, invest in local communities, create jobs across the whole country and further increase trade.

To deliver on the Glasgow Climate Pact and the Kunming-Montreal Global Biodiversity Framework, we must now move from words to action. This is why we are publishing our 2030 Strategic Framework setting out how we will drive forward international action on climate and nature in an integrated way. Alongside this we are also publishing our International Climate Finance Strategy, underpinning our commitment to double International Climate Finance (ICF) to £11.6 billion by 2025/26, including £3 billion on nature. The 2020s must be a decade of climate and nature action. Our common security and prosperity depend upon it.



The Rt Hon James Cleverly MP

Foreign, Commonwealth &
Development Secretary



The Rt Hon Grant Shapps MP

Secretary of State for Energy
Security and Net Zero



The Rt Hon Thérèse Coffey MP

Secretary of State for
Environment, Food and
Rural Affairs

Executive Summary

- 1. Climate change and nature loss are two of the defining challenges of our time, and the 2020s are the critical decade for action. We have a closing window to limit global temperature increases to 1.5°C and to halt and reverse biodiversity loss.** The science is clear. Climate change and nature loss result in extreme weather, sea level rise and ecosystem collapse, and these effects are accelerating and intensifying. These in turn will drive increasing food and water scarcity, pandemics, displacement of people, conflict, economic instability and reversals in development gains.
- 2. Climate change and nature loss are interlinked and mutually reinforcing:** climate change accelerates nature loss, in turn worsening the effects of climate change. In many cases they share common causes and the same solutions. They must be tackled together, as complex, whole economy, multi-generational issues that require long-term commitment and international collaboration. Strong and early action to tackle these challenges is economically beneficial, while delay only adds cost.
- 3. Action on climate and nature will not only protect against the worst impacts, it will allow us to take advantage of the huge opportunities in the transition to a net zero, climate resilient and nature positive future.** This economic transformation is expected to result in the largest flow of capital ever seen into clean technologies, net zero cities and green and resilient industries. It will help revitalise our economies, deliver energy security, improve our health and catalyse sustainable development. Global investment in the clean energy transition, the fastest route to affordable, secure energy, rose 30% last year, to over \$1 trillion for the first time, despite significant economic headwinds. The [Skidmore Review](#) set out how the UK can reap the benefits by remaining at the forefront of this transition.
- 4. To make rapid progress we need to realign financial flows, rapidly decarbonise key sectors of the global economy, e.g., power, transport and agriculture, and scale up efforts to adapt.** We must urgently reduce and phase out the most potent greenhouse gases such as methane through initiatives such as the Global Methane Pledge and fluorinated gases through implementation of the Montreal Protocol and Kigali amendment to phase out hydrofluorocarbons. And we must support poor and climate vulnerable countries to prepare for and deal with the consequences of climate change.

5. **The UK is well placed to continue playing a leadership role internationally, building on our strong domestic record.** Under the UK's COP26 Presidency, the Glasgow Climate Pact kept alive the ambition to limit the global temperature rise to 1.5°C, but the Intergovernmental Panel on Climate Change (IPCC) states that we need immediate and concerted action across all sectors for it to stay within reach. Under the Kunming-Montreal Global Biodiversity Framework (KMGBF) agreed at the COP15 UN Nature Summit, countries committed to halt and reverse biodiversity loss by 2030. This requires countries' decision making to take into account the true value of the goods and services we derive from our planet, as well as the burden we place on it through degradation, waste and pollution, as recommended in the [Dasgupta Review](#) on the Economics of Biodiversity.
6. **The UK's 2030 Strategic Framework sets out how this Government is addressing these challenges head on.** It follows the 2023 refresh of the Government's [Integrated Review](#) which affirmed tackling climate change, environmental damage and biodiversity loss as the UK's first thematic priority.
7. **The 2030 Strategic Framework outlines a vision to halve global emissions, halt and reverse nature loss and build resilience to climate impacts.** It identifies **six global challenges** that must be overcome to ensure that we remain on track to meet our commitments in the Paris Agreement, the Glasgow Climate Pact and the Kunming-Montreal Global Biodiversity Framework (KMGBF) this decade. And it describes how the UK will use the **levers** at its disposal to play its part in meeting those challenges (see Figure 1). It explains the UK's role and approach to international collaboration, drawing on our expertise, skills and leadership, and underpinned by our pledge to double UK international climate finance (ICF) to £11.6 billion between 2021/22 and 2025/26.
8. **The Framework forms a core part of the UK's wider foreign policy,** building on the International Development Strategy, and setting the context for the UK International Climate Finance Strategy. It complements our domestic plans, including those set out in the Net Zero Strategy, Powering Up Britain – the Net Zero Growth Plan and the Energy Security Plan, the 2023 Green Finance Strategy, the Environmental Improvement Plan (EIP23) for England, and equivalent strategies from the Devolved Administrations.
9. **The context in which we must make progress today has been affected by the global pandemic, war in Europe and rising inflation** – and events and global trends will continue to interact in ways which are not possible to predict. Our approach to delivery of this Framework will adapt in response, and we will monitor progress. This is an ambitious agenda which requires global collaboration to deliver, which we will seek to drive forward within the resources available.

10. Development of the Framework has been led by the Department for Energy Security and Net Zero (DESNZ), Department for Environment, Food and Rural Affairs (Defra) and the Foreign, Commonwealth and Development Office (FCDO), with input from across Government. It has been informed by discussions with stakeholders and a public [call for views](#) in spring 2022.

Overview of the 2030 Strategic Framework



Figure 1: Overview of the 2030 Strategic Framework

UK leadership opportunities over the next two years

Given the narrowing window for action, the next few years are critical if we are to peak emissions by mid-decade and reverse the destruction of nature. By focusing on areas where the UK has an advantage, we can seize the economic opportunities of the net zero, climate resilient and nature positive transition, promote UK solutions globally, develop high-impact partnerships and facilitate global cooperation on emerging technologies. The following are examples of what we will focus on over the next two years to drive progress towards the 2030 vision grouped within each of the six challenges:

1. **Challenge one: work to accelerate global sectoral decarbonisation.** For example, by building global momentum towards phasing out new petrol and diesel cars and vans by 2035 in leading markets and by ensuring clean technologies are affordable and accessible for all by 2030, through the Breakthrough Agenda. We will push to accelerate the phase out of coal including in emerging economies through initiatives such as Just Energy Transition Partnerships. We will enhance energy efficiency in refrigeration, air-conditioning and heat pump (RACHP) sectors while phasing down hydrofluorocarbons under the Kigali Amendment to the Montreal Protocol. We will deliver the Glasgow forest and land use commitments, including through establishing the Forest and Climate Leaders' Partnership as the essential platform for raising ambition and by scaling up finance for forests (including forest carbon markets).
2. **Challenge two: build resilience to climate impacts globally and support climate vulnerable countries** by doubling adaptation finance by 2025, securing global agreement on a fund for loss and damage, and working towards a new framework for the Global Goal on Adaptation in 2023.

3. **Challenge three: push for robust implementation of the Kunming-Montreal Global Biodiversity Framework (KMGBF) on land and ocean.** We will work with G7 and G20 countries to produce KMGBF aligned National Biodiversity Strategic Action Plans (NBSAPs) and ensure the launch of the new Global Biodiversity Fund meets the needs of the KMGBF before COP16 in 2024. We will support delivery of the 30by30 target¹ through our £100 million Biodiverse Landscapes Fund and up to £100 million of the Blue Planet Fund. We will reduce the UK's global environmental footprint through increasingly sustainable supply chains and production, leading by example and setting a standard for other countries to follow. For example, by introducing world-leading Forest Risk Commodities due diligence legislation to tackle illegal deforestation. We will also push for an ambitious international treaty to end plastic pollution, to be finalised by 2024, through our leadership as a founding member of the High Ambition Coalition to End Plastic Pollution.
4. **Challenge four: continue to champion ambition and the need for urgent action to keep 1.5 within reach, build climate resilience and reverse nature loss** by urging all countries to play their part.
5. **Challenges five and six: lead on greening finance and mobilising finance for climate and nature,** through our 2023 Green Finance Strategy; using the City of London's role as a leading global financial centre; reforming the international financial system to align with the goals of the Paris Agreement and the KMGBF; and pushing for collective delivery of the \$100 billion climate finance commitment by developed countries.

¹ The 30by30 target was agreed at CBD COP15. It requires at least 30% of all land and 30% of the ocean to be protected by 2030.

The Case for Action

Action on climate and nature is integral to UK and global security and prosperity – and is needed urgently this decade

1. Climate change and nature loss are the most serious multipliers of other global threats and these will continue to worsen over the next decade. Six of the top ten global risks for the decade ahead identified by the World Economic Forum relate to climate, the environment and natureⁱⁱ.
2. Globally since 1970 annual carbon emissions have doubled and continue to increaseⁱⁱⁱ. Up to 3.6 billion people now live in contexts highly vulnerable to climate change^{iv}; economic losses from climate related disasters have increased sevenfold^v. Over the same period, global biodiversity has seen an unprecedented decline. On average, monitored populations of mammals, fish, birds, reptiles and amphibians have decreased by over 69%^{vi}. At least 75% of the world's land surface and 66% of the ocean has been significantly altered and degraded by human activity, and an estimated one million species are facing extinction^{vii}.
3. The world must adapt to impacts that are already locked in. Climate change and nature loss increase the likelihood of food and water scarcity, pandemics, conflict and instability, displacement of people, economic shocks, supply chain vulnerability and reversals in development gains. Many of these impacts are already being felt and are disproportionately affecting marginalised groups, compounding poverty, and eroding resilience. We need to act now to limit future changes and mitigate their impacts.
4. The Glasgow Climate Pact agreed under the UK's COP26 Presidency of the UN Climate Summit and the Kunming-Montreal Global Biodiversity Framework (KMGBF) agreed at UN Nature Summit COP15 were landmark moments in the international approach to tackling climate change and nature loss. The global community now needs to focus on implementation of these agreements, alongside the UN Sustainable Development Goals.
5. We must follow through with action this decade if we are to secure a sustainable and liveable future – evidence shows that the window to achieve this is rapidly closing. As the IPCC has made clear: “without immediate and deep emissions reductions across all sectors, limiting global warming to 1.5°C is beyond reach”^{viii}.

Resilience to global shocks



Delivering energy security, protecting the global economy

Rapid deployment of clean energy is crucial to reduce reliance on volatile fossil fuels. It is also now the cheapest way of powering our economies across most of the world, enhancing energy access and security^x.



Maintaining food and water security

Climate change and biodiversity loss threaten food security (e.g., 75% of global food crops depend at least in part on pollination^x): action today will reduce future threats. Sustainable agriculture methods can improve soil productivity while minimising harmful effects on climate, soil, water, air, biodiversity and human health.



Protecting human health and global prosperity

Some of the underlying causes of pandemics are the same global environmental changes that drive nature loss and climate change, with land use change causing 30% of new disease since 1960ⁱ. Around 70% of cancer drugs are natural or inspired by nature^{xi}. 50% of global GDP is moderately or highly dependent on nature^{xi}. Protecting nature will help us protect our health.



Reducing exposure to future shocks (e.g. conflict)

Without significant investment into international climate adaptation, the UK remains highly exposed to climate change and nature loss overseas e.g. 46% of UK food is imported^{xii}.

Figure 2. The global benefits of action on climate and nature: building resilience to current and future global shocks and seizing potential growth opportunities.

We will take an integrated approach to tackling climate change and nature loss

6. This Framework sets out the integrated approach the UK will take to our international actions on climate change and nature loss, to maximise the benefits of tackling them together.
7. Climate change accelerates nature loss, which in turn worsens the effects of climate change. As temperatures rise, nature's ability to support livelihoods (e.g., through provision of food and water) and store carbon (to mitigate climate change) will continue to be degraded^{xiii}. Nature loss and climate change share many common causes such as land use change; deforestation; over-exploitation of resources, ecosystems and organisms; and pollution from chemicals, pesticides and waste.
8. In many cases, taking action in one area, whether mitigating or adapting to climate change, or protecting nature, can benefit all three. For example, protecting mangroves preserves vital coastal habitats, and helps to protect local communities from flooding and stores large quantities of carbon. However, although these agendas are complementary, there can be trade-offs to work through in determining effective policy responses.
9. For example, land is a finite resource with many competing demands, it is critical to food security, for allowing healthy ecosystems to thrive, and for economic development. While in some cases, effective land management practices can increase the scope for the same piece of land to provide multiple benefits (e.g. food production and enhanced biodiversity), in other cases there may be direct trade offs (e.g. irresponsible mining for critical minerals to support the energy transition can adversely affect biodiversity rich habitats). This is a global challenge. We are therefore promoting innovation, coordinated policy action and redirecting investment in agriculture and food systems and land use to identify, develop and scale approaches that can reduce emissions, restore biodiversity and increase productivity.

The UK will continue to drive forward action

10. While climate change and nature loss are global challenges that require global collaboration, the UK has much to offer and a great deal to gain by leading internationally on this agenda. Across the UK we have developed innovative policies and practices to address these challenges – for example, through Contracts for Difference, which have played a key role in driving down the cost of renewable energy projects. We can drive UK inward investment, create new jobs, generate export opportunities in fast growing global markets and place UK businesses at the forefront of the transition as set out in Figure 3. The transition is a huge opportunity to improve our health, revitalise our economies, deliver energy security and catalyse sustainable development. This is an ambitious agenda requiring global collaboration which we will seek to drive forward within the resources available.

UK opportunities



Figure 3. International action on climate and nature offers opportunities to UK businesses.

11. We have identified six urgent global challenges which the UK will focus on tackling throughout the rest of this decade, which must be overcome in order to meet our commitments in the Paris Agreement, the Glasgow Climate Pact and the Kunming-Montreal Global Biodiversity Framework (KMGBF) by 2030.

12. We have also assessed the levers available to the UK based on particular UK advantages and positioning. In light of these levers, this 2030 Strategic Framework identifies the specific actions the UK will take to address the six global challenges. These actions are summarised in the following chapters, and in Figure 4, and detailed in Annex A.
13. The following UK levers are those we have identified as particularly important in the UK's contribution to addressing the global challenges:
- a. **Finance.** The UK is a global hub for finance, responsible for 15% of cross-border bank lending in the second quarter of 2022^{xxi}. We are a global leader on green finance with £27.3 billion of green bonds issued in 2021, and a pioneer in green standards^{xxi}. At COP26 the UK committed to becoming the world's first net zero aligned financial centre, and at COP27, UK Export Finance committed to offer Climate Resilient Debt Clauses (CRDCs) – the first credit agency to do so globally. The UK is delivering on our commitment to double our International Climate Finance (ICF) to £11.6 billion between 2021/22 and 2025/26. As a key shareholder and donor to multilateral institutions, we are well placed to mobilise finance for climate and nature globally.
 - b. **International partnerships.** The UK has championed the need for urgent and inclusive action on climate and nature through the G7, G20 and UN bodies. We will harness our global diplomatic network, international development offer and partnerships² to drive forward action.
 - c. **Science, Innovation and Technology.** The UK is home to world-class science in sectors at the heart of the climate and nature crises (including agriculture, circular economy, behaviour change and renewables). We have a strong science and research base, ranking as one of the world's most innovative economies^{xxii}. We are recognised as a world leader in Natural Sciences, with world-renowned experts, institutions and assets including the Natural History Museum, Hadley Centre, UK Met Office, and Royal Botanic Gardens in Kew and Edinburgh. We intend to grow the UK's science and technology sector^{xxiii}. Global collaboration will help to increase the availability of new clean technologies and reduce costs.

2 For example, Just Energy Transition Partnerships, Breakthrough Agenda, Forest and Climate Leader's Partnership, Leader's Pledge for Nature, High Ambition Coalition for Nature & People, the Global Ocean Alliance and 10 Point Plan for Financing Biodiversity.

- d. **Expertise and Domestic leadership.** We have expertise in environmental protection, including trialling new approaches to natural capital accounting, climate governance and regulation of energy markets. We have introduced the Climate Change Act and the Environment Act and pioneered policies such as auctions to drive the scale up of renewables and Environmental Land Management Schemes. Under the Environment Act, new environmental targets enshrine in law our commitment to halt the decline of nature, improve air and water quality, and reduce waste. These world-leading environmental targets will drive action by successive governments to protect and enhance our natural world. Our Environmental Improvement Plan 2023 sets out how we will deliver against our environmental goals and targets.
- e. **Trade and Investment.** The global export market in low carbon products could reach up to £1.8 trillion by 2030. With our domestic track record and growing green industrial base, the UK is well positioned to lead in green trade, utilising our strengths in sectors like offshore wind and green finance, and supporting and incentivising free trading in sustainable goods and services. We will also work with trading partners at the WTO and the G7, and through plurilateral and bilateral trade agreements.

The UK will focus its international efforts on the following areas in order to tackle each of these challenges in the next decade

<p>Challenge 1: Transition to clean technologies and sustainable practices across all sectors.</p>	<ol style="list-style-type: none"> 1. Accelerate global adoption of clean technologies and sustainable solutions. 2. Support international research and development to scale up innovative climate and nature solutions. 3. Ensure the transition to clean technology and sustainable solutions supports our nature objectives.
<p>Challenge 2: Build resilience and adapt to climate impacts, supporting communities, economies and ecosystems.</p>	<ol style="list-style-type: none"> 4. Increase ambition, commitment and – most critically – action to respond to climate and environmental impacts at global, national and local levels. 5. Work to increase the amount, accessibility and effectiveness of finance for climate adaptation. 6. Build an evidence-based, demand-driven and inclusive approach to adaptation and resilience.

<p>Challenge 3: Increase protection, conservation and restoration of nature and tackle key drivers of nature loss.</p>	<ol style="list-style-type: none"> 7. Drive global ambition to protect and restore land and sea. 8. Support a global transition to address overexploitation and promote the sustainable management and use of natural resources. 9. Harness the role of nature in tackling climate change and work with others to make nature more resilient to climate change. 10. Collaborate with others to minimise pollution. 11. Tackle the threat of invasive non-native species.
<p>Challenge 4: Strengthen international agreements and cooperation to accelerate delivery of climate and nature commitments</p>	<ol style="list-style-type: none"> 12. Push to ramp up ambition and implementation of global environmental frameworks. 13. Promote climate and nature objectives through our wider multilateral engagement. 14. Support fair and inclusive climate and nature action globally. 15. Support other countries to deliver against ambitious goals and raise ambition in priority areas.
<p>Challenge 5: Align global financial flows with a net zero, climate resilient and nature positive future.</p>	<ol style="list-style-type: none"> 16. Build frameworks to align the global financial system with a net zero, climate resilient and nature positive global economy. 17. Catalyse public and private climate and nature investment, particularly in developing and emerging economies. 18. Respond to the financial needs of the most climate vulnerable. 19. Support international dialogue and cooperation that accelerates finance for the transition.
<p>Challenge 6: Shift trade and investment rules and patterns to support the transition to a climate and nature positive future.</p>	<ol style="list-style-type: none"> 20. Work to strengthen the UK's position as a major international market for environmental goods and services. 21. Use multilateral and plurilateral cooperation and trade agreements, to progress the UK's climate and nature commitments. 22. Support the development of sustainable trade through green and resilient supply chains, taking action to reduce the UK's global environmental footprint. 23. Support developing countries in adapting to climate change through trade.

Figure 4. The UK will focus its international efforts on the above areas in order to tackle each of these challenges in the next decade (further detail at Annex A)

Challenge 1: Transition to clean technologies and sustainable practices across all sectors

To reach net zero, keep 1.5 in reach and address nature loss, we need to tackle greenhouse gas emissions and drivers of nature loss across all sectors of the economy globally. Accelerating the transition to clean technology and sustainable practices is central to our climate and nature objectives, as well as energy and food security.

In the UK, we have demonstrated that an economy wide approach is effective at reducing emissions while driving growth. Between 1990 and 2021, we have cut our emissions by 48%, decarbonising faster than any other G7 country, whilst growing the economy by 65%^{xxiv}. Our Net Zero Strategy sets out policies and proposals for decarbonising all sectors of our economy to achieve net zero in the UK by 2050 and our Net Zero Growth Plan provides an update on how we will deliver on our ambition. Our Environmental Improvement Plan sets out our approach to sustainable farming and fishing.

The UK's strong research and development base and track record of decarbonisation, diplomatic network and international influence including through the G7, G20, UN Climate and Nature Summits, mean we are well placed to drive forward international action. We are committed to working with our international partners to scale up efforts to accelerate sectoral decarbonisation globally.

Innovation will also be central to ensuring that the UK and other countries can adapt to environmental and climate extreme events. Investing in new technologies and solutions such as weather forecasting systems, sustainable food production, water recycling and nature-based solutions will help us build resilience to climate impacts.

Scale of this challenge



Global solar and wind capacity needs to quadruple on 2020 levels by 2030^{xxv}.



By 2030 at least **60% of new passenger vehicles will need to be electric** (up from 11.4% in 2021)^{xxvi}.



Agriculture, Forestry and Land use account for 22% of greenhouse gas emissions and are a key driver of biodiversity loss^{viii}.

Improvements in the efficiency of food systems, and growth in low emission alternative proteins, such as legumes and pulses, could spare up to 5% of global land area by 2050^{xxvii}.



Hydrofluorocarbons from cooling and refrigeration are the fastest-growing source of emissions in the world. **Currently 7% of the world's emissions come from cooling** – including refrigeration for food and vaccine storage and air conditioning^{xxviii}.



Making clean technology accessible and affordable via the Glasgow Breakthroughs in power, road transport, steel, hydrogen and agriculture sectors **could create 20 million new jobs globally and add over \$16 trillion across both emerging and advanced economies**^{xxix}.

To meet this challenge the UK will:

1. Accelerate global adoption of clean technologies and sustainable solutions.
2. Support international research and development to scale up innovative climate and nature solutions.
3. Ensure the transition to clean technology and sustainable solutions supports our nature objectives.

Examples of how the UK will drive forward action against each of these commitments are set out in Annex A. Illustrative **case studies** of some of these actions are included below.

CASE STUDY: The Breakthrough Agenda

At the COP26 World Leaders Summit, 45 world leaders representing more than 70% of the global economy launched the Breakthrough Agenda to promote clean technologies and support the developing world to access the innovation and tools needed to transition to net zero. The initial set of Breakthrough Agenda goals cover five key emitting sectors that together represent more than 50% of global emissions. Progress will be reviewed annually to drive forward progress e.g. at COP27 the Breakthrough Agenda agreed 28 priority actions to decarbonise key sectors supported by 30 countries covering 50% of global GDP.

As one example, the Agriculture Breakthrough aims to use clean technologies and sustainable solutions to drive transition to climate-resilient, sustainable agriculture, sustainably increasing agricultural productivity and incomes, reducing emissions, safeguarding natural resources and ecosystems, and promoting adaptation and resilience to climate change. A lead group of 17 countries has endorsed a Policy Action Agenda for transition to sustainable food and agriculture. Redirecting just one tenth of the \$700 billion in annual global public support to agriculture to invest in productivity-enhancing and emissions-reducing technologies and practices, could increase global GNI in 2040 by over \$2 trillion. Our innovative programmes in the UK to reward farmers for environmental outcomes demonstrate how incentives can help drive a shift towards sustainable agriculture.



CASE STUDY: UK leadership through Mission Innovation

Launched at COP21, Mission Innovation is the intergovernmental platform for accelerating clean energy innovation. Its ambitious second phase, launched in 2021, focuses on catalysing a decade of action and investment to make clean energy affordable, attractive and accessible to all. Public-private cooperation is focused through seven global Missions targeting sectors responsible for approximately 50% of global emissions: Clean Hydrogen, Zero-Emission Shipping, Carbon Dioxide Removal, Urban Transitions, Net-Zero Industries, Integrated Biorefineries and a Green Powered Future. The UK co-leads the Green Powered Future Mission with China and Italy. This aims to enable the integration of up to 100% variable renewable energy into the grid by 2030. The UK also plays a leading role in the Clean Hydrogen Mission, which is aiming to reduce the cost of clean hydrogen to the end user to \$2/kg by 2030.



Challenge 2: Build resilience and adapt to climate impacts, supporting communities, economies and ecosystems

The frequency, severity and costs of the impacts from climate change and nature loss are increasing across the world. In all of this, the poorest and most vulnerable suffer the most and disproportionately. By 2030, climate change and nature loss will have pushed millions into extreme poverty and further deepened existing inequalities, making achievement of the SDGs more difficult than ever^{xxx}.

The science is clear that we must match rapid decarbonisation with swift, systematic adaptation action at scale to protect lives, societies and ecosystems from further shocks and loss. We must build resilience to future impacts and adapt and transform our societies and systems for a viable future. Despite progress in UN Climate and Nature negotiations, the action and finance needed to achieve systematic change – even if only measured against current impacts – falls far short of meeting the needs of the poorest and most vulnerable.

During the UK's COP26 Presidency, we raised the profile of adaptation and losses and damages and put nature at the heart of our response to climate change. We will build on this, using all levers available to achieve effective global, national and local action.

In parallel we will continue to strengthen the UK's resilience to the range of interlinked risks associated with climate change and environmental damage. This is firmly linked to our international aims to boost climate resilience worldwide, which will in turn increase the UK's resilience. The Government will continue to deliver UK-focused interventions, including through the upcoming Third National Adaptation Programme, which will protect infrastructure, homes and health, the natural environment and businesses from the effects of climate change.

Scale of this challenge



Globally up to 3.6 billion people already live in places highly vulnerable to climate impacts^{iv}. The World Bank has warned that by 2050, in six modelled regions, climate change could displace more than 216 million people within their own countries^{xxxi}. It is estimated that climate change will push 100 million people into poverty by 2030 and 720 million by 2050^{xxxii}.



Economic losses from climate related disasters have already caused \$3.6 trillion of damage since 1970^{xxxiii}. Without effective adaptation measures, global agricultural yields could decline by up to 30%^{xxxiv}; up to 183 million more people will go hungry^{iv} and the number of people without sufficient access to water will increase to five billion by 2050^{xxxv}. Some small island developing states (SIDS) may become uninhabitable in the foreseeable future^{xxxvi}.



Global adaptation costs are estimated to reach \$160-340 billion per year by 2030, rising to \$315-565 billion by 2050^{xxxvii}. Currently, only \$1 billion of adaptation finance that is tracked comes from private sources^{xxxviii}. Action taken now to leverage the private sector to build in adaptation will improve our collective resilience. Investing in effective adaptation makes financial sense: an investment of \$1.8 trillion globally in early warning systems, mangrove restoration and adapting infrastructure, agriculture, and water systems by 2030 could generate \$7.1 trillion in total net benefits.



Where designed and implemented correctly, **nature-based solutions (NbS)³, can be a cost effective first line of defence against extreme weather events and other climate risks** such as desertification and sea level rise. Green-grey infrastructure projects (for example, coastal protection that mixes natural buffers like mangroves with conventional human engineered infrastructure such as dams and seawalls) can be more cost effective than human engineered infrastructure alone, saving an estimated \$248 billion annually^{xxxix}.

3 Such as tree-planting and ecosystem protection.

To meet this challenge the UK will:

4. Increase ambition, commitment and – most critically – action to respond to climate and environmental impacts at global, national and local levels.
5. Work to increase the amount, accessibility and effectiveness of finance for climate adaptation.
6. Build an evidence-based, demand-driven and inclusive approach to adaptation and resilience.

Examples of how the UK will drive forward action against each of these commitments are set out in Annex A. Illustrative **case studies** of some of these actions are included below.

CASE STUDY: Weather and Climate Information Services for Africa (WISER)

Since its inception in 2016, the UK's WISER programme, a collaboration between the Met Office and FCDO, has delivered transformational change in the quality, accessibility and use of weather and climate information at all levels of decision making for sustainable development in Africa. To date, WISER has helped to avoid over £200 million worth of losses in East Africa through application of climate information and helped to improve the resilience of over 8 million people who use WISER services. The programme has since expanded into the Middle East, North Africa and Asia.



CASE STUDY: The Adaptation Research Alliance (ARA)

Under the UK's COP Presidency, we launched the Adaptation Research Alliance, a global coalition now numbering over 180 organisations across the spectrum – from research to action – from 60 economies. The ARA supports action-oriented research that informs adaptation solutions and reduces risks from climate change at the scale and urgency demanded by the science. Besides giving a voice to its members in international policy fora, such as the UN Climate Global Stocktake, the ARA has supported evidence to be used on the ground. For example, it informed the development of an integrated urban climate risk assessment tool in Kenya and training for young women on responses to natural disasters in Haiti.



Challenge 3: Increase protection, conservation and restoration of nature and tackle key drivers of nature loss

Nature provides essential goods and services, such as clean air, clean water, food and climate regulation. Nature underpins our entire economic system, with around half of the world's gross domestic product being highly or moderately dependent on those goods and services^{xi}. However, human activity is driving biodiversity loss through direct (land and sea use, overexploitation, climate change, pollution and invasive species) and indirect drivers (demographic, sociocultural, economic, institutional, conflict and epidemics)^{vi}. The degradation of the free goods and services that nature provides is not only undermining our economies, but also our ability to tackle and adapt to climate change.

Addressing nature loss is as urgent and critical as addressing climate change. The challenges and responses are intimately linked and must be tackled together, and public and political awareness and accountability for nature loss needs to be increased. At the heart of the issue, as stated in the Dasgupta Review, is an urgent need to value the contribution nature makes to society. We must draw on the UK's strong technical and scientific knowledge and expertise to protect, restore and value nature while supporting continued economic and social development.

Scale of this challenge

The drivers of biodiversity loss are increasing. The global extinction risk is increasing at a rate several times higher than in the last 10 million years, with one million species at risk of extinction. In descending order of impact, the drivers of biodiversity loss include:



Land and sea use change – 75% of land surface and 66% of the ocean have been significantly altered by human impacts^{vii}. Agriculture and land use change are the leading cause of biodiversity loss in terrestrial and freshwater ecosystems^{vii}. Rapid and unplanned urbanisation leads to fragmentation of green areas, destruction of wildlife and biodiversity loss^{xi}.



Overexploitation – of nature is the main threat to wild species in marine ecosystems and the second greatest threat to those in terrestrial and freshwater ecosystems^{xii}. UNESCO estimates that 60% of marine ecosystems which underpin livelihoods are degraded or used unsustainably.



Climate Change – Agriculture, Forestry and Other Land Use (AFOLU) accounted for 22% of greenhouse gas emissions in 2019^{viii} and are the leading cause of biodiversity loss in terrestrial and freshwater ecosystems^{vii}. Nature-based solutions can help to mitigate between 5 and 11.7 Gt of CO₂ each year by 2030^{xiii}, if accompanied by rapid rollout and decarbonisation of the wider economy.



Pollution – plastic pollution has increased tenfold since 1980. 300-400 million tons of heavy metals, solvents, toxic sludge and other wastes from industrial facilities are dumped annually into the world's waters^{vii}. Fertilizers entering coastal ecosystems have produced more than 400 ocean 'dead zones'^{vii}, totalling more than 245,000 km² as early as 2008 – a combined area greater than that of the UK.



Invasive species – nearly 20% of the Earth's surface is at risk of plant and animal invasions, threatening terrestrial, marine, coastal and freshwater ecosystems^{vii}. Invasive alien species can cause disease introduction in new regions and transmission to wildlife, livestock and people^{vii}.

To meet this challenge, the UK will:

7. Drive global ambition to protect and restore land and sea
8. Support a global transition to address overexploitation and promote the sustainable management and use of natural resources
9. Harness the role of nature in tackling climate change and work with others to make nature more resilient to climate change.
10. Collaborate with others to minimise pollution.
11. Tackle the threat of invasive non-native species.

Examples of how the UK will drive forward action against each of these commitments are set out in Annex A. Illustrative **case studies** of some of these actions are included below.

CASE STUDY: Bringing countries together to halt and reverse forest loss

During the UK's presidency of COP26, we coordinated 145 countries, representing over 90% of global forest area, to agree to the Glasgow Leaders' Declaration on Forests and Land Use (GLD). The GLD commits signatories to halt and reverse forest loss and land degradation by 2030, while delivering sustainable development and promoting an inclusive rural transformation. This includes consideration of mangroves as 'blue forests'. Delivery of the GLD could protect some of the most species-rich habitats on the planet and contribute to a 10% reduction in global greenhouse gas emissions. To implement these commitments the UK helped to raise \$12 billion of public finance to protect and restore forests and critical ecosystems in critical forest basins. The finance will also support Indigenous Peoples and local communities and create partnerships to accelerate the transition to sustainable agriculture and land use. The UK is working with international partners to ensure that the political spotlight is kept on forests. We are building the Forests and Climate Leaders Partnership (FCLP) with a group of high ambition countries that endorsed the GLD. This group will drive delivery of the COP26 commitments, scale them, and collaborate to identify new policy areas where progress is needed.

CASE STUDY: Global Fund for Coral Reefs (GFCR)

Through the UK's £500 million Blue Planet Fund (BPF), the UK has contributed £33 million to the GFCR making it the largest donor. The GFCR supports transformative initiatives for climate-resilient reefs worldwide. It is the first Multi-partner Trust Fund delivering on Sustainable Development Goal (SDG) 14: Life Below Water. It is designed to encourage sustainably financed reef-positive revenue streams instead of a dependency on short-term grant funding. As part of the Investing in Coral Reefs and the Blue Economy project in Fiji, GFCR is funding interventions such as a non-synthetic fertilizer company that will reduce pollution from the sugar cane sector. This is expected to mitigate 6,600 MT of CO₂ per annum and improve the health of 8,000 HA of marine area. The GFCR also supports a waste management facility that will reduce solid waste that impacts Fijian coral reefs and will lay the foundation for large scale recycling in the Pacific. The project is expected to reduce 30,000 MT of CO₂ per annum, avoid mangrove forest loss of 0.5 HA per annum, and avoid tourism loss valued at \$1 billion per annum.



Challenge 4: Strengthen international agreements and cooperation to accelerate delivery of climate and nature commitments

There is a growing consensus on the importance of tackling climate change and nature loss globally. Through the Glasgow Climate Pact, the Kunming-Montreal Global Biodiversity Framework, and other key agreements, we have a framework to drive forward action on climate and nature globally. However, we are operating against a backdrop of continuing global instability.

We will continue to uphold the importance of international cooperation and consensus in this critical decade, and champion efforts to urgently scale up action. The UK will continue to play a prominent role in coordinating multilateral action through the three Rio Conventions – on Climate Change (UNFCCC), Biological Diversity (CBD) and Combatting Desertification (UNCCD) – as well as the Montreal Protocol on Substances that Deplete the Ozone Layer and through fora such as the G7, G20 and the UN Environment Assembly. Our strong track record in reducing emissions, technical expertise, international development offer, partnerships and extensive diplomatic network mean we are well placed to continue to drive forward collaboration. The UK has the 4th largest diplomatic network in the world across 178 countries and territories, including the world's first dedicated diplomatic climate and energy network meaning we are well placed to build lasting partnerships^{xxii}.



Scale of this challenge



While 90% of GDP is covered by net zero commitments, Nationally Determined Contributions (NDCs) need to be six to ten times more ambitious if we are to limit global temperature increase to 1.5°C^{xiii}.



Currently only around 17% of land and 8% of marine ecosystems are protected^{xiv}.



Global deployment and cooperation can drive rapid change. The costs of key technologies such as solar fell by 87% between 2009-2020^{xviii}. The Montreal Protocol led to the phase out of more than 98% of ozone depleting substances^{xiv}.

To meet this challenge the UK will:

12. Push to ramp up ambition and implementation of global environmental frameworks.
13. Promote climate and nature objectives through our wider multilateral engagement.
14. Support fair and inclusive climate and nature action globally.
15. Support other countries to deliver against ambitious goals and raise ambition in priority areas.

Examples of how the UK will drive forward action against each of these commitments are set out in Annex A. Illustrative **case studies** of some of these actions are included below.

CASE STUDY: Supporting transitions through Just Energy Transition Partnerships in South Africa

Just Energy Transition Partnerships (JETPs) are innovative partnerships that tailor coordinated international support to individual countries' plans for ambitious and fair energy transitions. They bring together domestic resources with support from developed countries and multilateral development banks, alongside private sector and philanthropic investment. The South Africa JETP is a ground-breaking agreement between South Africa and a UK-led group of partners (US, France, Germany, and the EU), committing an initial \$8.5 billion over 3-5 years to support the highest levels of climate ambition in South Africa's NDC. The agreement has a strong focus on the social impact of transition, leaving no-one behind. The agreement to accelerate decarbonisation (through coal decommissioning) and support green growth (green hydrogen and electric vehicles) could result in a reduction of 1-1.5 gigatonnes of CO₂ emissions over next 20 years. This provides a model for future partnerships with other developing countries e.g. JETPs have been agreed with Indonesia and Vietnam.



CASE STUDY: The Kunming-Montreal Global Biodiversity Framework and 30by30

The UK played a key role in securing agreement to the Kunming-Montreal Global Biodiversity Framework at the UN Nature Summit; the 15th Conference of Parties to the Convention on Biological Diversity, in particular, building international support for a global ‘30by30’ target (to protect at least 30% of the land and of the ocean globally by 2030). In support of this target, the UK established the Global Ocean Alliance and also became Ocean Co-chair of the High Ambition Coalition for Nature & People. The UK is now committed to supporting the global implementation of this critical target. The UK will play a key role in the establishment of a new mechanism under the High Ambition Coalition for Nature & People, HAC 2.0, through which we will support developing countries to contribute to achieving 30by30. We will also continue to lead the Global Ocean Alliance to support the implementation of the KMGBF, including 30by30, in the ocean.

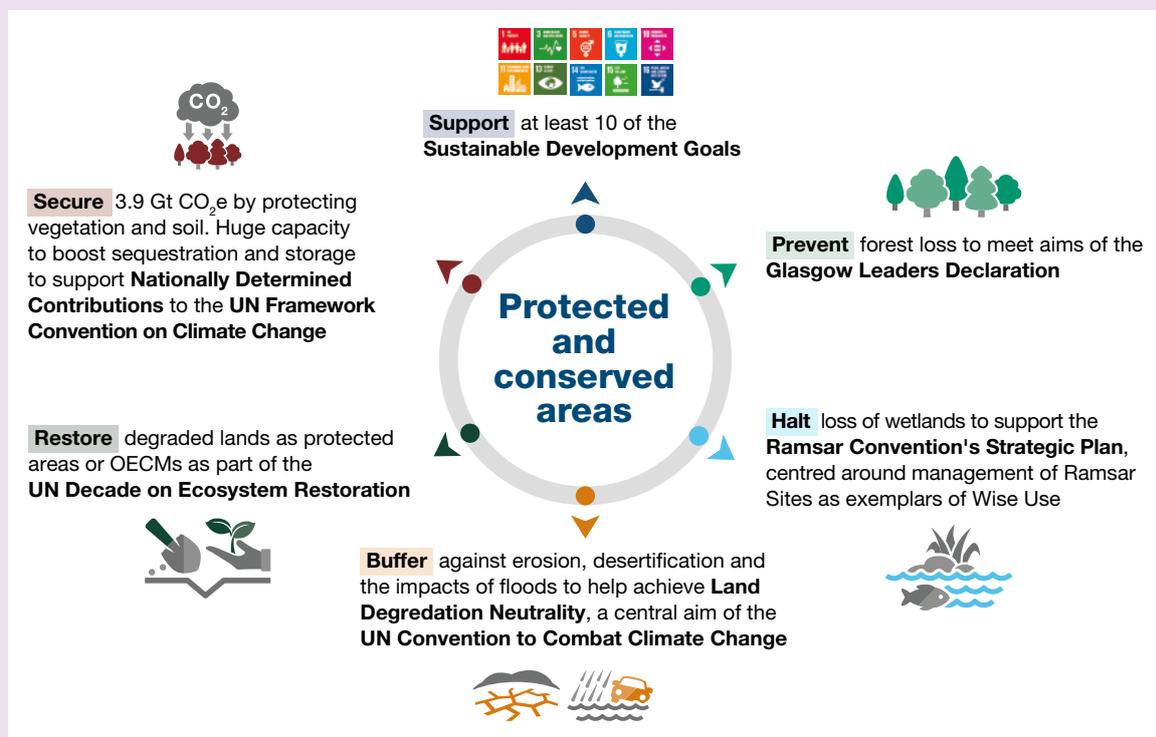


Figure 5. How protected and conserved areas are contributing to other global targets. Modified and updated from Dudley N, and Stolton S, 2022. ‘Best Practice in Delivering the 30x30 Target’. The Nature Conservancy and Equilibrium Research (2nd Edition, October 2022).

Challenge 5: Align global financial flows with a net zero, climate resilient and nature positive future

Achieving our global vision will require a complete economic and financial transformation. The scale and speed of action will require all forms of finance: public and private; domestic and international. Every company, bank, insurer and investor, alongside governments and regulators, will have to adjust their operating models and develop credible plans for the global transition. Significant progress has been made, but major, rapid steps are still needed.

In recognition of this, the UK has championed the role of finance in international agreements. We placed finance front and centre throughout our COP26 Presidency, where developed countries came together to set out how they would make good on their goal to mobilise \$100 billion per year in climate finance for developing countries through to 2025 (with commitments made during our Presidency meaning the goal is due to be met in 2023). More recently, at the UN Nature Summit COP15, the UK partnered with Gabon, Ecuador and the Maldives to launch the Ten Point Plan for Financing Biodiversity. This aims to mobilise private, public, international and domestic finance to close the finance gap and has now secured the endorsement of more than 40 countries. The UK is also fully engaged with the Bridgetown Initiative which seeks to reform the global financial system to respond better to current crises and meet future development and climate financing needs.

The UK is committed to maintaining and growing our leadership. Our world-leading green finance capability, coupled with our pioneering approach to climate finance and global advocacy, means that we are positioned to play an instrumental role in aligning the global financial system for a net zero, climate resilient and nature positive world.

Scale of this challenge



The global economy depends upon a stable climate and thriving biodiversity, and the consequences of failing to confront these challenges at the scale and speed required will be catastrophic.

More than half of the world's GDP is generated in sectors that rely on the ecosystem services that nature provides^{xi}, and the estimated cost of their collapse is \$2.7 trillion annually by 2030^{xvi}. Moreover, \$178 trillion could be lost from global economies between 2021-2070 if warming reaches 30C^{xvii}.



In comparison, the vast economic opportunities of building a cleaner, greener economy could not be starker.

If we achieve Net Zero by 2050, we could increase the world economy by \$43 trillion over the same period^{xiv}. **However, to set the global economy on course we must mobilise significant upfront capital.** Total infrastructure investment of an average of \$2-2.8 trillion per year is required up to 2030 to meet climate and development objectives, with \$275-400 billion per year needed by 2030 for increased protection and restoration of nature^{xlviii}.



These investments can unlock significant returns and economic opportunities:

every dollar spent on investing in more resilient infrastructure in low- and middle-income countries provides \$4 in benefits^{xlix}, and every dollar spent in transforming the global energy system provides a payoff of \$3-7^l. Phasing out financing that's harmful to climate and nature will also significantly reduce the initial investment – generating trillions in available capital. Furthermore, investments across climate and nature are also mutually reinforcing – reducing the overall investment need. **The economics are clear, there is no case for inaction. As the cost and difficulty of action increases, the world must seize the opportunity to invest for our common future.**

To meet this challenge the UK will:

16. Build frameworks to align the global financial system with a net zero, climate resilient and nature positive global economy.
17. Catalyse public and private climate and nature investment, particularly in developing and emerging economies.
18. Respond to the financial needs of the most climate vulnerable.
19. Support international dialogue and cooperation that accelerates finance for the transition.

Examples of how the UK will drive forward action against each of these commitments are set out in Annex A. Illustrative **case studies** of some of these actions are included below.

CASE STUDY: Joint Donor Statement on International Finance for Biodiversity and Nature

The Joint Donor Statement on International Finance for Biodiversity and Nature was launched by a group of 14 donor countries at the UN Nature Summit COP15, led by the UK, France, Germany and the EU. It is a commitment to collectively increase and realign international finance flows with the Global Biodiversity Framework. The statement lists billions of dollars of commitments from 11 donors committing them to work together to: increase the amount of international public finance for biodiversity, implement the Global Biodiversity Framework, work with MDBs to increase investment for the restoration of biodiversity and mobilise private investment and domestic funding.

These commitments help to deliver on the 10 Point Plan for Financing Biodiversity, developed by the UK in partnership with Ecuador, Gabon and Maldives, to close the biodiversity finance gap. The plan defines the role of all sources of finance: public, private, international and domestic, with a particular focus on how international public finance can support developing countries to accelerate the transition to become nature positive. It has now been endorsed by more than 40 countries spanning six continents.



CASE STUDY: UK-leadership at the Coalition of Finance Ministers for Climate Action

In 2019, the UK hosted a Coalition of Finance Ministers for Climate Action ('the Coalition') meeting in London which helped establish governance arrangements and work activities in the Coalition's early stages. In 2020, HM Treasury (HMT) led a Coalition workshop on climate-related financial disclosures under our leadership of the private finance workstream. In 2021, the Chancellor chaired a meeting of the Coalition at COP26 Finance Day in Glasgow, which put Finance Ministries at the heart of a UN Climate Summit for the first time. Last year, a seminal Coalition paper on 'nature-related risks and potential policy actions for Ministries of Finance' was published, under the direction of HMT. This year, HMT and the Transition Plan Taskforce (TPT) presented on net zero transition plans at the Coalition meeting in Helsinki, building knowledge and capacity of the over 80 Coalition Members on this important topic. The UK will continue to lead on the private finance workstream in 2023, working closely with the co-chairs and Secretariat to shape the direction of the Coalition in order to drive global action by Finance Ministries on climate and nature.



Challenge 6: Shift trade and investment rules and patterns to support the transition to a net zero, climate resilient and nature positive future

Climate and nature affect what we trade and how. Climate change will cause more frequent and severe weather events, leading to an increased likelihood of global supply chain disruption, and will lead to longer-term shifts in economic activity and trade. At the same time, nature loss can deplete natural resources and significantly shift supply and demand for traded goods and services. As a highly trade-dependent economy, the UK is particularly at risk from instability in trade. The UK's high environmental standards and ambition also puts domestic producers at risk of being undercut by imports from partners with lower environmental standards. Aligning our trade and environment ambitions will help all countries to build green growth and transition to a net-zero world. We will advocate for a rules-based system in which international trade and investment supports efforts to decarbonise the global economy, boost resilience and halt and reverse biodiversity loss, and maintains a level playing field which can diversify and strengthen global supply chains without undermining our collective transition to net zero.

International trade underpins the economy of today, driving unprecedented prosperity. At the same time, rising global consumption and production place a toll on our climate and natural ecosystems. The UK will look to future-proof its economic growth by attracting investment into the UK's green industrial base and promoting green exports while protecting the rules-based system of global free trade. Trade plays an important role in green growth, including by bringing down the cost of green goods, services and technologies, and expediting their uptake around the world.



All countries must work together to ensure the measures we take to tackle climate change promote our shared economic, security, nature and net zero objectives, and support resilience and sustainability within our supply chains. Sustainable production will also be needed to shift away from environmentally harmful practices, reduce direct emissions from trade, strengthen the resilience of critical supply chains, and produce better outcomes for climate, nature and people.

The UK is committed to being a global pioneer of green trade, in line with our international climate leadership and our commitment to free trade. Our high environmental standards and competitive strengths in low-emissions goods and services exports mean that we are well-positioned to lead this transition. The UK will also seek an international solution to carbon leakage risk. There is growing recognition that all countries with high ambition to decarbonise their industry may face carbon leakage risk, which could dampen international action and private investment to reduce industrial emissions and compromise efforts to avoid global warming of more than 1.5°C. Like some of our partners, we are also considering domestic mitigations to carbon leakage should an international solution prove elusive.

Scale of this challenge



Environmental cost of trade – Increased production, consumption and transportation of goods and services facilitated by international trade have contributed to higher greenhouse gas emissions and environmental decline, including degradation of habitats and decrease in wildlife populations, resulting from movements of invasive species, illegal harvesting of protected environments, and trade in environmentally sensitive goods (e.g. timber) and illegal, unreported or unregulated fishing.



Deforestation – Approximately 90% of global deforestation is driven by agriculture, much of it to produce the commodities which are internationally traded and which we use daily. Up to 95% of deforestation in some key forests is illegal. Action is needed at home and globally on sustainable commodity production, consumption and tradeⁱ.



Realising the economic opportunities of green trade – The global export market for low-carbon products grew by 68% between 2016 and 2020 and could be worth as much as £1.8 trillion by 2030^{xv}. By 2050, direct employment in the low carbon economy could increase sixfold based on 2018 figures, to 1.4 million in the UKⁱⁱⁱ.



Sustainability and resilience of global supply chains as the green transition accelerates – As an example, while mineral extraction generates emissions and pollution, and can place strain on ecosystems, access to critical minerals is and will be vital for the production of clean technology, such as batteries and wind turbines. Rising demand for minerals such as lithium, cobalt and graphite will lead to an increase in production of nearly 500% by 2050ⁱⁱⁱ.



Increased risk of carbon leakage – This refers to the movement of production and associated emissions from one country to another due to different levels of decarbonisation effort through carbon pricing and climate regulation. As a result, the objective of decarbonisation efforts – to reduce global emissions – would be undermined. We expect the risk of carbon leakage in the UK to increase over the next decade as industries adjust their business models to meet net zero goals. Government is launching a public consultation on potential domestic solutions to carbon leakage.

To meet this challenge the UK will:

20. Work to strengthen the UK's position as a major international market for environmental goods and services.
21. Use multilateral and plurilateral cooperation and trade agreements, to progress the UK's climate and nature commitments.
22. Support the development of sustainable trade through green and resilient supply chains, taking action to reduce the UK's global environmental footprint.
23. Support developing countries in adapting to climate change through trade.

Examples of how the UK will drive forward action against each of these commitments are set out in Annex A. Illustrative **case studies** of some of these actions are included below.

CASE STUDY: Forest, Agriculture and Commodity Trade (FACT) Dialogue

The Forest, Agriculture and Commodity Trade (FACT) Dialogue is a group of over 28 major producer and consumer governments that have agreed to work together to protect forests and other critical ecosystems, supporting the shift in the global trade in agricultural commodities towards sustainability. Given the role of international trade in meeting global demand action is required to put sustainability at the centre of commodity trade and reduce its environmental impacts.

At COP26 the FACT Roadmap of Action was launched by the UK and Indonesia as co-chairs of the Dialogue on behalf of the 28 governments. Collaboration is at the heart of the FACT Dialogue. FACT Governments have committed to work together, as well as with civil society and businesses, to address our shared challenges, and to make progress on the Roadmap.

The FACT Roadmap covers four key themes across trade and market development, transparency and traceability, smallholder support and research, development and innovation. It sends a strong signal globally that we are committed to work together on building a path that promotes sustainable trade and development.

CASE STUDY: Africa Food Trade and Resilience Program

The Africa Food Trade and Resilience Program works with regional private companies that source, process and trade food in the region to harness growing food demand. It also aims to address the constraints that prevent companies from sourcing more from local, poorer farmers, and from delivering the services that farmers need to meet buyers' quantity and quality requirements. It also works to strengthen their resilience to climate change driven hazards, to produce nutritious foods and to transform gender relations.

The program contributes to improving the transparency and predictability of government policies to unlock regional food trade. It is expected to increase the income of hundreds of thousands of families, and directly benefit millions more. It will provide access to climate resilience services for hundreds of thousands of smallholder farmers, as well as mobilise millions of pounds in private sector investment into enhancing smallholder farmers' productivity, resilience and nutrition. It aims to support companies to promote environmentally friendly practices, to integrate climate change considerations into national agriculture interventions; and to support regional and national agriculture institutions to develop and use climate information.



Annex A – UK Actions on International Climate and Nature

This annex sets out in further detail the 130 specific actions we will take to tackle the six challenges.

Challenge one: transition to clean technologies and sustainable practices across all sectors

To meet this challenge, the UK will...

1. Accelerate global adoption of clean technologies and sustainable solutions.

- 1.1. **Building on the COP26 Breakthrough Agenda to deliver clean and affordable technology everywhere by 2030.** Implementing this agreement to accelerate innovation and deployment will make clean technologies in key sectors (power, road transport, steel, hydrogen and agriculture) affordable and accessible to all. We will play our part with our Breakthrough co-lead countries and ensure all partners continue to deliver on this agenda via ongoing independent annual progress reports and by championing this work at key fora, especially the Clean Energy and Mission Innovation Ministerials and at COP Summits (see the Mission Innovation case study for more).
- 1.2. **Leading initiatives to accelerate the global transition to a decarbonised transport sector, with a particular focus on Zero Emission Vehicles.** We will continue to co-chair the Zero Emission Vehicles (ZEVs) Transition Council (ZEVTC) with the US and push to expand coverage of the Accelerating to Zero Coalition committing to all new car and van sales being zero emission by 2035 in leading markets and 2040 globally. We have taken a leading role in wider international transport decarbonisation initiatives, including through the UK's 2022-2023 Presidency of the International Transport Forum and the UK's leadership of the International Aviation Climate Ambition Coalition and Clydebank Declaration for Green Shipping Corridors, both launched under our COP26 Presidency.

- 1.3. **Sharing UK world-leading expertise and experience from our domestic decarbonisation**, including progress on policies set out in the Net Zero Strategy, 10 Point Plan for a Green Industrial Revolution, Powering Up Britain – the Energy Security Plan. The National Grid is making progress to ready the UK grid to be able to accommodate periods of 100% zero carbon power by 2025 and be zero carbon ready by 2035. They are sharing their expertise internationally.
- 1.4. **Utilising coalitions and partnerships to drive global clean energy transitions.** These include promoting development of green grid infrastructure such as the Green Grids Initiative – One Sun One World One Grid Initiative; accelerating coal phase out globally through our Powering Past Coal Alliance and Just Transition Energy Partnerships; and accelerating the move from fossil fuels to renewables through the Energy Transition Council.
- 1.5. **Improving the resilience of critical mineral supply chains** that are fundamental to accelerated deployment of new clean technologies. As set out in the UK's Critical Minerals Strategy, we will do this by accelerating the UK's domestic capabilities; collaborating with international partners and enhancing international markets. This includes working through international fora to improve global Environment, Social and Governance standards to support a more transparent, responsible and sustainable critical minerals industry.
- 1.6. **Supporting efforts to accelerate the phase-out of the most potent greenhouse gases such as HFCs and methane.** At COP26 the UK, along with more than a hundred other countries signed a pledge to cut methane emissions by 30% by 2030. We will continue to explore and implement further measures, including in energy, waste and agriculture sectors as set out in the UK's Methane Memorandum. We are investing £20 million to fund the Sustainable Cooling and Cold Chain Solutions' programme, supporting the implementation of the Montreal Protocol and its Kigali Amendment through the phase down of hydrofluorocarbons in developing countries. At home the UK is ahead of schedule in delivering its Montreal Protocol obligations to phase down HFCs 85% by 2036. Under the UK F-gas Regulation, we have already reduced the amount of F-gas coming onto the market by 55% and from 2024, this will increase to a 69% cut^{iv}.
- 1.7. **Promoting sustainable, efficient and resilient agriculture and land use.** For example, through the UK-World Bank convened Global Policy Dialogue for Sustainable Agriculture and emerging programme work, we will seek to bring together leading countries to support knowledge exchange and the transition to sustainable agriculture. We will share learning from domestic experience such as the Farming Innovation Programme and Environmental Land Management Schemes (ELMs) in England, and drive reform of subsidies to move away from supporting harmful agricultural practice.

1.8. **Supporting the transformation of the food system.** We will do this through programmes such as the Global Action Agenda on Innovation in Agriculture. UK science will play a key role here, for instance through UK Research and Innovation's South Asian Nitrogen Hub, which brings together experts from across South Asia to improve nitrogen management in agriculture.

1.9. **Working with partners and multilateral organisations to address overfishing and combatting Illegal Unreported and Unregulated (IUU) fishing.** We will look to develop Ocean Partnerships through the £500 million Blue Planet Fund to support up to 15 countries including Mozambique, Ghana, Maldives and Belize, to sustainably manage their marine environment by cracking down on Illegal, Unregulated and Unreported fishing and managing marine protected areas and fish stocks sustainably. We will work through the IUU Fishing Action Alliance, collaborating with state and non-state actors to promote active monitoring, control and surveillance and encourage enhanced transparency and data sharing.

2. **Support international research and development to scale up innovative climate and nature technologies and sustainable practices.**

2.1. **Championing global investment and collaboration in science and R&D.** We will continue to play a leading role in developing low carbon solutions through, for instance, continuing to host the Mission Innovation Secretariat; co-leading the Green Powered Future and Clean Hydrogen Mission and contributing to the Zero-Emission Shipping Mission.

2.2. **Deploying UK R&D funding to develop scalable, innovative solutions this decade and those needed for the 2030s.** This includes developing critical new clean energy technologies (such as next generation batteries) in the UK; accelerating the development, demonstration and commercialisation of technology in developing countries through our up to £1 billion Ayrton Fund and constituent platforms and championing this approach internationally.

2.3. **Undertaking R&D on ways to deliver positive climate outcomes through nature in developing countries.** For example, the £40 million Global Centre on Biodiversity for Climate (GCBC) and £54 million to the Ocean Country Partnership programme address critical research gaps, ensuring the conservation and sustainable use of marine biodiversity can deliver climate solutions and improve livelihoods.

- 2.4. **Testing new methods to protect nature and support sustainable livelihoods with the potential for global adoption.** For example, the UK's Gilbert Initiative will coordinate investments in technology development with the aim of supporting a food system that, by 2030, feeds nine billion people with nutritious, safe foods.
- 2.5. **Utilising UK expertise to foster international collaboration, knowledge sharing and research.** For instance, UK Research and Innovation (UKRI) brings together global energy experts to address key challenges such as understanding energy networks and future supply and demand, decarbonisation of heating and cooling and food supply chain.
- 2.6. **Accelerating investment in research, development and demonstration of technologies which enable low-carbon, climate resilient and sustainable urban development.** The Climate Adaptation and Resilience (CLARE) initiative will include research on urban resilience as well as urbanisation in the changing climate (see Challenge 2 for more detail).
- 2.7. **Working with UK industry to support the design and building of resilient infrastructure both in the UK and abroad** through the [UK Resilience Framework](#) and [Supply Chain resilience framework](#).
- 3. Ensure the transition to clean technology and sustainable solutions supports our nature objectives.**
- 3.1. **Helping to properly value and integrate nature in decision making.** Through our Beyond GDP initiative with the Office for National Statistics (ONS), we will develop a model to incorporate data on natural assets into our standard economic reporting, allowing for better decision making that protects nature. Our contribution to the World Bank's Global Programme on Sustainability supports the development of cutting-edge data and analytical products on natural capital, supporting decision makers in over 20 countries to apply and implement natural capital accounting across the public and private sector.

3.2. **Working towards a more resource efficient and circular economy** in which resources are kept in use as long as possible and waste, and its impacts, are minimised. For example, we have been active contributors to the Resource Efficiency working groups in the G7 and G20, last year adopting the Berlin Roadmap on Resource Efficiency and Circular Economy, setting the ambition and a plan for action amongst G7 nations through to 2025.

3.3. **Supporting the deployment of new decarbonisation technologies and policies that assess and account for environmental outcomes** e.g., pollution, air and water quality, availability of natural resources.

3.4. **Playing a leading role in global efforts to drive up environmental, social and governance (ESG) performance** to help embed sustainability into decision making, supporting the realignment of financial flows in line with the Paris agreement and Global Biodiversity Framework and helping improve the resilience of supply chains, among many other benefits.

3.5. **Increasing the capacity of low and middle-income countries to safely and effectively manage chemicals, pesticides and waste pollution.** For example, our £25 million Sustainable Manufacturing and Environmental Pollution programme helps countries tackle plastics and manufacturing pollution and our £6 million Environmental Pollution programme promotes the sustainable use of pesticides and sustainable management of solid waste and wastewater in the world's poorest countries, complementing the work we are doing domestically to protect our rivers and seas from pollution.

3.6. **Leading targeted initiatives to support key sectors in their transition to sustainable practices.** For example, the Get Nature Positive campaign provides a toolkit for businesses to understand and improve their impacts on nature.

Challenge two: build resilience and adapt to climate impacts, supporting communities, economies and ecosystems

To meet this challenge, the UK will...

4. Increase ambition, commitment and – most critically – action to respond to climate and environmental impacts at global, national and local levels.

4.1. Using the UK's international relationships and influence to increase global commitment and capability for ambitious adaptation action and to further integrate the adaptation and nature agendas. We will advocate for this through international fora and institutions, including through UN Climate and Nature negotiations.

4.2. Developing progressive new UK negotiating positions and building broad coalitions to deliver on UN Climate Summit mandates on adaptation and losses and damages. These include on new funding arrangements and a specific fund for loss and damage to support countries impacted by climate change, and an effective framework for the Global Goal on Adaptation.

4.3. Supporting initiatives that provide learning and build capability to accelerate adaptation at national and local levels. We will scale up investments where resource allows into programmes that support adaptation, nature and resilience using an integrated approach. For example, the £35 million Reversing Environmental Degradation in Africa and Asia programme (REDAA) seeks locally led solutions to restore ecosystems and improve adaptive capacity of the local environment.

4.4. Building practice, evidence and financing needed to shift towards earlier and anticipatory action and integrated action on disaster response. This includes support to the Risk-Informed Early Action Partnership (REAP), which is working to make one billion people safer from disasters by 2025; scaling up our Disaster Risk Finance through the G7/V20 Global Shield against climate risk; and working with the Climate Risk and Early Warning Systems (CREWS).

4.5. Sharing UK expertise to strengthen international climate resilience through partnerships, including with the Met Office, the Hadley Centre for Climate Science, the UK Committee on Climate Change, Natural England, Kew Gardens, Natural Resources Wales and NatureScot.

4.6. **Leveraging the UK's investments and relationships with Multilateral Development Banks (MDBs)**, Development Finance Institutions, and private financial institutions to better integrate adaptation and resilience impact into their investment portfolios and to scale up their ambition for future investments.

4.7. **Building partnerships and catalysing action to address climate and environment drivers of food and water insecurity**, part of wider efforts to transform our agriculture and food systems to be more resilient and sustainable; including through the Global Policy Dialogue for Sustainable Agriculture (see challenge 1), Fair Water Footprint initiative and programme support for country led reforms, such as the Just Rural Transition (JRT) and Transforming Water Security programmes.

4.8. **Delivering on our commitments under the UN Climate Summit Gender Action Plan to push for more gender-responsive and socially inclusive approaches**, empowering women, girls, people with disabilities and other marginalised groups to access the tools, support and opportunities needed to build climate resilience and promote meaningful participation. We will seek to mainstream disability inclusion into all our international climate work, in line with the commitments in the FCDO's Disability Inclusion and Rights Strategy.

5. **Work to increase the amount, accessibility and effectiveness of finance for climate adaptation.**

5.1. **Tripling UK spend on adaptation internationally from £500 million in 2019, to £1.5 billion in 2025.** We will continue to press developed countries to double adaptation finance by 2025 (on 2019 levels) to \$40 billion through fora such as the Adaptation Champions Group, the G7 and G20 and through our relationships with MDBs, to help to close the gap in adaptation finance.

5.2. **Enabling faster access to finance for countries affected by climate change, by supporting the Taskforce on Access to Climate Finance**, expanding our Disaster Risk Finance, including through the Global Shield; and working to make it easier to access funding from climate and environment multilateral funds.

5.3. **Improving the delivery of finance direct to communities and local levels**, for example, we will support the LDC Initiative for Effective Adaptation and Resilience (LIFE-AR) programme to establish new mechanisms to deliver local climate finance.

5.4. **Increasing the volume of private finance for adaptation and resilience, including through our leadership in British International Investments and the Private Infrastructure Development Group.** Our work with the Adaptation and Resilience Investors Collaborative will help us better understand how to correct market failures that hinder private investments. We will also continue work to support sovereign institutions to better assess and manage national exposure to physical climate risks, enable investors to more accurately price physical climate risk, and to attract private finance into resilient infrastructure projects.

5.5. **Advocating for the majority of the Green Climate Fund's (GCF's) adaptation finance to be allocated to the most climate vulnerable countries,** including Small Island Developing States (SIDS), Least Developed Countries (LDCs) and African States, and providing technical assistance to support the GCF's adaptation work.

6. **Build an evidence-based, demand-driven and inclusive approach to adaptation and resilience.**

6.1. **Supporting vulnerable countries to assess their climate and nature risks, develop and implement effective national adaptation plans and policies,** and strengthen disaster risk management systems through political and financial support to bodies such as the National Adaptation Plan-Global Network (NAP-GN), the Climate Change Committee and REAP.

6.2. **Empowering communities to lead local adaptation action** by recognising and valuing local knowledge and expertise to address climate impacts. We will implement the Principles for Locally Led Adaptation and encourage others to do the same.

6.3. **Investing UK climate finance into cutting edge research, tools and partnerships to inform adaptation policy and practice.** Our support includes the CLARE Programme – an £100 million UK-Canada partnership that supports climate and nature resilience for people across the Global South. It also includes – expansion of state-of-the-art weather and climate information for partner countries through the UK's WISER programme (see WISER case study).

6.4. **Working with our international partners to integrate climate and nature issues into wider cooperation on international security.** Where possible, we will enhance our analytical, assessment and foresight capacity to address the risks posed by climate change. And we will develop complementary approaches between climate and environment and conflict and vulnerability that recognise the underlying drivers of fragility for climate vulnerable populations.

Challenge 3: Increase protection, conservation and restoration of nature and tackle key drivers of nature loss

To meet this challenge, the UK will...

7. Drive global ambition to protect and restore land and sea.

- 7.1. **Championing and supporting implementation of the Kunming-Montreal Global Biodiversity Framework (KMGBF) targets** to protect at least 30% of the land and 30% of the ocean globally by 2030 and ensure 30% of degraded ecosystems are under restoration by 2030 including through the following actions.
- 7.2. **Supporting countries to protect land and sea.** For example, the Darwin Initiative and Darwin Plus support locally based projects to protect and restore important ecosystems for local and international communities and our Overseas Territories. The £100 million Biodiverse Landscapes Fund will support improved management of six biodiverse landscapes across three continents. At the UN Nature Summit COP15, the UK announced £29 million of UK funding to support delivery of the global 30by30 target on land, and £100 million of the £500 million Blue Planet Fund will support this target in the ocean.
- 7.3. **Working through international agreements and in multilateral fora to drive up ambition and deliver improved protection and restoration of nature** (see Challenge 4). For example, we played a key role in concluding negotiations on an Agreement for the conservation and sustainable use of marine biological diversity in areas beyond national jurisdiction (the BBNJ Agreement). We will be at the forefront of working with other countries to ensure it is ratified and implemented quickly and effectively. This will support delivery of 30by30 in the global ocean (over 60% of which lies in areas beyond national jurisdiction).
- 7.4. **Drive the systemic changes needed to halt and reverse forest loss by 2030** while supporting sustainable development, delivering on international commitments agreed under the Glasgow Leaders' Declaration (see case study 'Bringing countries together to halt and reverse forest loss'). This includes tackling weak governance and illegal practices through Forest Governance, Markets and Climate; working with the private sector to mobilise sustainable investment through Investments in Forests and Sustainable Land Use (£140 million between 2015-2023); and working to scale-up forest carbon markets through support to the LEAF Coalition. The UK aims to scale-up this work through to 2030 and raise ambition further through the Forest and Climate Leaders Partnership (FCLP) and commitments of funding to key forest countries and regions, including Indonesia, £200 million to the Congo Basin and £300 million to the Amazon region.

7.5. Leading by example in protecting and restoring land and sea at home.

For example, we will protect and effectively manage the 175 Ramsar listed wetlands sites of international importance across the UK, its Overseas Territories, and Crown Dependencies. We will continue to support the Overseas Territories to protect and sustainably manage their natural marine resources through the Blue Belt Programme. We will also protect our land and sea through the Nature Recovery Network (England), Resilient Ecological Networks (Wales), and enhanced protections for our marine protected areas.

7.6. Supporting inclusive, local action to protect and restore land and sea.

We will continue to support Indigenous Peoples and local communities (IPLC) in their role as guardians of nature and biodiversity. This will include supporting delivery of the multi-donor COP26 IPLC Forest Tenure Pledge. We will also continue to support sub-national governments, cities and other local communities and their partners in order to enhance implementation of the KMGBF, as stated through the Edinburgh Declaration.

7.7. Supporting women and girls' empowerment and leadership within nature action, tackling barriers to participation.

This includes our work to ensure women's equal participation in forest and land management groups in countries such as Indonesia, Peru, Tanzania and Uganda.

8. Support a global transition to address overexploitation and promote the sustainable management and use of natural resources.**8.1. Championing and supporting the implementation of the KMGBF targets**

to end human induced-species extinctions of known threatened species by 2030; ensure the sustainable use of wild species, and the sustainable management of agriculture, aquaculture, fisheries and forestry including through the following actions.

8.2. Supporting countries to integrate nature into their economic and development planning.

For example, through the UK-led Nature Transition Support Programme and investing in global programmes such as the World Bank's Global Programme on Sustainability.

8.3. Promoting sustainable, efficient and resilient agriculture and land use.

For example, through the UK-World Bank convened Global Policy Dialogue for Sustainable Agriculture (see Challenge 1).

8.4. **Working with partners to deliver the transition to sustainable production, consumption, and trade** to reduce pressure on forests and other ecosystems. This includes through the Forest, Agriculture and Commodity Trade (FACT) Dialogue (see FACT case study in Challenge 6); and through exploring how to support sustainable practices and countries who are breaking the link between the destruction of nature and commodity production.

8.5. **Leading by example to tackle deforestation in the UK's supply chains**, including through the UK's world-leading Forest Risk Commodities due diligence legislation to tackle illegal deforestation.

8.6. **Working through Multilateral Environmental Agreements (MEAs)⁴ and other international fora to promote the sustainable management and use of natural resources**, including strong and effective protection and sustainable and legal use of endangered and wild species, including through the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the Convention on Migratory Species (CMS).

8.7. **Tackling overexploitation of species and the significant illegal trade in wildlife** (also see Challenge 6). For example, through our Biodiversity Challenge Funds, including the Darwin Initiative and our Illegal Wildlife Trade Fund.

8.8. **Working with partners and multilateral organisations to strengthen cooperation in addressing overfishing and combatting Illegal Unreported and Unregulated fishing** (see Challenge 1).

9. Work with others to harness the role of nature in tackling climate change and make nature more resilient to climate change.

9.1. **Championing and supporting the implementation of the KMGBF targets** to deploy nature-based solutions and to reduce climate change impacts on biodiversity and increase its resilience including through the following actions.

9.2. **Delivering on our commitment to invest at least £3 billion** of the UK's International Climate Finance between 2021 and 2026 to tackle climate change through the protection, restoration and sustainable management of nature.

4 These include the Ramsar Convention on Wetlands, Biodiversity Beyond National Jurisdictions (BBNJ) negotiations, United Nations Environment Assembly (UNEA) and United National General Assembly (UNGA).

9.3. **Supporting countries to capitalise on nature's ability to tackle climate change through its ecosystem services, whilst also making ecosystems more resilient.** For example, through the UNDP Climate Promise, which supports countries to integrate nature into their Nationally Determined Contributions (NDCs).

9.4. **Promoting the application of Nature-based Solutions globally,** including through playing a leading role in ensuring the implementation of UNEA Resolution 5/5, defining Nature-based Solutions.

9.5. **Building a research and evidence base of what works in managing the natural environment to adapt to a changing climate.** For example, through the Reversing Environmental Degradation in Africa and Asia (REDAA) programme (see Challenge 2). We will continue to support the North East Atlantic Ocean Acidification Hub as part of the Global Ocean Acidification Observing Network, which plays an important role in documenting the status and rate of ocean acidification, furthering understanding of the impacts on marine ecosystems and societies.

10. Collaborate with others to minimise pollution.

10.1. **Championing and supporting the implementation of the KMGBF target** to reduce pollution risks and the negative impact of pollution from all sources by 2030.

10.2. **Working through Multilateral Environmental Agreements (MEAs) and other international fora to reduce the harmful effects of plastics, excess nutrients, chemicals, pesticides and hazardous waste on the environment.** For example, as a member of the High Ambition Coalition to end Plastic Pollution, we are committed to developing an ambitious legally binding treaty to end plastic pollution by 2040. We will work with international partners to establish a new framework for international chemicals management to reduce the environmental and health impacts of chemical pollution.

10.3. **Supporting countries to tackle pollution,** including through the Environmental Pollution Programme which is developing scalable solutions to tackle solid waste and wastewater, reduce open burning in agriculture and encourage sustainable pest management. Through the UK's Blue Planet Fund, we support the Global Plastic Action Partnership (GPAP) which brings together governments, businesses and civil society to drive action to reduce plastic pollution. We are working with the World Economic Forum to establish up to 25 National Plastic Action Partnerships in developing countries to set national targets and ambitious pathways to reduce plastic pollution.

10.4. **Leading by example on tackling pollution at home.** For example, by rolling-out HMG's Collection and Packaging Reforms, invoking the 'polluter pays' principle for packaging material, and working towards our targets under the Environment Act and the Environmental Improvement Plan (EIP23). We will deliver on the Government's manifesto commitment to ban plastic exports to non-Organisation for Economic Cooperation and Development countries, and tackle air pollution through the Forum for International Cooperation on Air Pollution and the UNECE Convention on Long Range Transboundary Air Pollution.

10.5. **Facilitating communication between scientists and policy makers to shape impactful policy.** For example, by playing a prominent and positive role in the negotiations for a new intergovernmental Science Policy Panel for chemicals, waste and pollution prevention.

11. Tackle the threat of invasive non-native species (IAS).

11.1. **Championing and supporting the implementation of the KMGBF target** to eliminate impacts of invasive alien species.

11.2. **Managing the threat that IAS pose to ecosystems, plants, animals and humans.** We will collaborate through the Bern Convention and the Convention on Biological Diversity to manage the impacts of IAS on biodiversity, health, ecosystem services and the economy. We will seek improved international co-operation, sharing UK expertise, including that of our Overseas Territories, on risk analysis, horizon scanning, biosecurity, prioritisation, rapid response and long-term control.

Challenge 4: Strengthen international agreements and cooperation to accelerate delivery of climate and nature commitments

To meet this challenge, the UK will...

12. Push to ramp up ambition and implementation of global environmental frameworks.

12.1. Advocating for high ambition implementation across all fora and agreements, including the Paris Agreement and the Glasgow Climate Pact to keep 1.5°C within reach and the Kunming-Montreal Global Biodiversity Framework to halt and reverse biodiversity loss by 2030 and the treaty on Protecting Biodiversity Beyond National Jurisdictions. We will continue to lead on and support effective implementation of the Montreal Protocol and Kigali Amendment to reduce HCFs globally. We will advocate for these and other climate and environment agreements to be underpinned by adequate and accessible finance and strengthened reporting and review mechanisms.

12.2. Deepening our partnerships and coalitions to drive global ambition – this includes using our seat in multilateral institutions, our close bilateral relationships and joint working with likeminded partners.

12.3. Advocating for transparency and accountability in global environmental agreements. We will lead by example through transparent reporting of progress against the UK's own ambitious NDC of an at least 68% reduction in all greenhouse gas emissions between 1990 and 2030 and by delivering on the commitments set out in our Environment Improvement Plan. We will also model best practice in implementing the strengthened accountability mechanisms we championed at the UN Nature Summit when reviewing and updating our National Biodiversity Strategy and Action Plans (NBSAPs).

12.4. Mainstreaming climate and nature into global governance institutions through our active membership of organisations such as the G7, G20, World Trade Organisation, OECD, Multilateral Development Banks, UN and International Energy Agency (IEA).

12.5. **Investing in research, monitoring and evaluation of the most cost-effective solutions** to ensure that evidence is at the heart of international policymaking and underpins crucial negotiations. We will build and share long-term knowledge and capacity through our programming, such as the Global Centre of Biodiversity for Climate (GCBC) and our participation in the IPCC and IPBES.

13. **Promote climate and nature objectives through our wider multilateral engagement.**

13.1. **Supporting partners to engage and raise ambition through multilateral fora.** This will include working with future Rio Convention and G7/G20 Presidencies, the UN and multilateral climate and environment funds such as the Green Climate Fund (GCF); GEF; and Climate Investment Funds (CIFs) whose convening power brings together Multilateral Development Banks, donor and recipient countries.

13.2. **Advocating for integrated approaches to climate and nature under multilateral frameworks and environmental agreements.** We will build on commitments in the Leaders' Pledge for Nature, and work with future Rio Convention and G7/G20 Presidencies to drive integrated approaches.

13.3. **Driving adoption and implementation of agreements that support our climate and nature objectives,** including through existing climate and nature initiatives and coalitions such as the G7 2030 Nature Compact; Clean Energy Ministerial; COP15 Joint Donor Statement; Adaptation Action Coalition; Under2 Coalition; Coalition of Finance Ministers for Climate Action; Network for Greening the Financial System; Global Ocean Alliance and High Ambition Coalition for Nature and People.

13.4. **Building on UK thought leadership to shape international standards and mainstream climate, biodiversity and nature.** For example, following on from the Dasgupta Review, the UK has led by committing to a world-leading target on species abundance to 2030.

13.5. **We will also drive forward initiatives at wider multilateral fora which can promote impactful change across all sectors.** These include for example the International Civil Aviation Organisation (ICAO), International Maritime Organisation (IMO), Food and Agriculture Organisation (FAO), the Organisation for Economic Cooperation and Development (OECD).

13.6. **Working to ensure Multilateral Environment Agreements are supported to deliver effectively**, including through the Global Environment Facility (GEF) and the Montreal Protocol Multilateral Fund.

13.7. **Working with and reforming the MDBs**, to scale up finance and ensure they more effectively deliver on their development, climate and nature objectives, in particular for the poorest and most vulnerable countries. This includes through key initiatives such as Bridgetown agenda, the World Bank Evolution Roadmap and the G20 MDB Capital Adequacy Framework Review. We are also supporting the MDBs to implement the commitments in the COP26 Joint Statement on Nature, People and the Planet to mainstream nature in their policies, investments and operations.

14. Support fair and inclusive climate and nature action globally.

14.1. **Helping to deliver on the International Just Transition Declaration, and Just Rural Transition**. This includes making sure that our actions and investments overseas support the creation of good green jobs that recognise and promote the inclusion of all, including Indigenous Peoples and local communities.

14.2. **Support the most climate vulnerable countries to increase their impact in UN Climate negotiations** as part of progressive alliances such as the Climate Ambition Support Alliance (CASA).

14.3. **Advocating for non-state actors who bring a range of valuable contributions** (including funding, research, evidence and innovation) to international environmental decision-making. For example, we will promote scientific advice mechanisms across the world, building on the work of the UK's own Climate Change Committee.

14.4. **Recognising the value of local knowledge and expertise to address the impacts of climate change and nature loss**. We will help to empower local actors to have equitable access to power and resources to adapt effectively, including by implementation of the Principles for Locally Led Adaptation. We will promote equality and inclusion in climate action, including by prioritising women's empowerment, disability inclusion, gender equality and through the implementation of the UN Climate and Nature Summit Gender Action Plan.

14.5. **Building capability of city governance institutions in developing countries to accelerate practical climate action**, integrate climate resilience into their policies and implement low-carbon urban infrastructure, including through the Urban Climate Action Programme (UCAP) and Climate Action for a Resilient Asia (CARA).

14.6. **Working with international partners to tackle climate change in and through education** so that young people everywhere can be protected from climate impacts and empowered through education to take positive climate action.

15. Support other countries to deliver against ambitious goals and raise ambition in priority areas.

15.1. **Deploying UK financial and technical support.** This includes supporting the NDC Partnership' UNEP's Montevideo Programme' chairing the Energy Transition Council; and working with partners on Just Energy Transition Partnerships and through our International Climate Finance (£11.6 billion to 2025/26) which supports programmes such as the UK Partnering for Accelerated Climate Transitions (UK PACT) programme.

15.2. **Engaging priority countries in key regions**, including the most climate vulnerable, major emitters and biodiversity-rich countries. The Integrated Review Refresh (2023) identified tackling climate change, environmental damage and biodiversity loss as our first thematic priority.

15.3. **Prioritising delivery of energy, climate and environment objectives through our overseas diplomatic network.** We established the world's first 'green' diplomatic network almost 20 years ago. This network was integral in supporting our diplomatic efforts in the run-up to COP26. We will build greater capability to deliver, including through the rollout of a Civil-Service wide foundational course on climate change and in due course a new FCDO International Academy faculty.

Challenge 5: Align global financial flows with a net zero, climate resilient and nature positive future

To meet this challenge, the UK will...

16. Build frameworks to align the global financial system with a net zero, climate resilient and nature positive global economy.

16.1. Ensuring investors have the necessary information to factor climate and nature impacts into investment decisions, by advocating for global sustainability reporting standards. We will work towards a global baseline corporate reporting standard for sustainability, to ensure consistent, comparable and reliable sustainability disclosures building on the work of the International Sustainability Standards Board. This will inform our own Sustainability Disclosure Requirements. We also support the work of the market-led Taskforce on Nature-related Financial Disclosures as the key vehicle for nature-related financial reporting in line with the KMGBF.

16.2. Facilitating an orderly, economy wide transition by driving the adoption of credible transition plans by financial institutions and large companies. The UK launched the Transition Plan Taskforce (TPT) to develop a gold standard for transition plans. Their work will inform and build on international disclosure standards and help financial institutions and companies to prepare rigorous plans to transition to net zero.

16.3. Improving tracking of financial flows and assessment of whether investments align with climate and nature objectives, to raise the integrity of financial commitments. We will work with organisations such as Glasgow Financial Alliance for Net Zero to grow the number of financial institutions with climate and nature targets, increase the breadth of institutions joining the UN Race to Zero and ensure these commitments are backed up by detailed, credible transition plans.

16.4. Supporting the development of green taxonomies to provide frameworks for aligning investment with climate and nature goals. Green taxonomies can prove an important tool in enabling the supply of relevant and reliable sustainability information into the market. They can support an increase in financing for activities supporting the transition to net zero and delivering on environmental objectives, and Government is committed to implementing a usable and useful Green Taxonomy for the UK.

16.5. **Effectively implementing regulatory frameworks and managing financial risk across the economy, empowering regulators such as the Bank of England**, a founding member of the Network for Greening the Financial System (NGFS) which seeks to enhance the role of the financial system to manage risks and to mobilise capital for green, low-carbon and transition investments.

16.6. **Integrating the cost of greenhouse gas emissions into economic decision making, supporting carbon pricing and developing high integrity carbon and ecosystem service markets.** We have committed to aligning the cap for the UK's Emission Trading Scheme to a net zero trajectory and are encouraging others to do so. We will continue to help developing countries benefit from a global carbon trading system which is rooted in environmental integrity and which respects the rights of Indigenous People and local communities. This will build on the financial support we have already committed to carbon funds like the Bio-Carbon Fund and the Partnership for Market Implementation.

16.7. **Supporting the Bridgetown Initiative to reform the global financial system to respond to climate and nature challenges and meet future financing needs more effectively.** The UK will continue to support and advocate for MDBs to implement the COP26 Joint Nature Statement (see Challenge 4); increase and report biodiversity finance alongside aligning their portfolios with the KMGBF, and to deliver on their commitments to align their sovereign operations with the Paris Agreement by the end of 2023, and non-sovereign by 2025.

16.8. **Ensuring development finance is consistent with climate and nature objectives.** All new bilateral UK Official Development Assistance (ODA) will be aligned with the Paris Agreement in 2023, and we will also build on our 2021 commitment to ensure all bilateral aid spending does no harm to nature by taking steps to ensure bilateral ODA becomes 'nature positive', aligned with the KMGBF. In March 2021 we started implementing a policy that ended any new direct financial or promotional support for the fossil fuel energy sector overseas, other than in limited circumstances. This applies to any new ODA, investment, export credit and trade promotion activity overseas.

16.9. **Aligning domestic public financial flows and frameworks**, including the integration of climate and nature considerations into policies and planning processes such as procurement, investment assessments and public financial institution mandates. The UK has built UK climate objectives into the mandate of the government-owned UK Infrastructure Bank and strengthened climate and natural capital considerations through supplementary Green Book appraisal guidance.

17. Catalyse public and private climate and nature investment, particularly in developing and emerging economies.

17.1. **Scaling up UK finance to developing countries towards meeting the KMGBF target of \$30 billion of biodiversity finance per year and exceeding the UN \$100 billion climate finance goal.** The UK will play our role doubling our ICF contribution to at least £11.6 billion between 2021/22 and 2025/26, including investing at least £3 billion in development solutions that protect and restore nature (with at least half of this spent on forests), and tripling adaptation finance from 2019 levels to £1.5 billion in 2025. British International Investment has also committed to invest at least 30% of total new commitments as climate finance.

17.2. **Using UK finance to build global capacity to transfer UK expertise and mobilise finance at scale,** including developing policy environments to incentivise net zero and nature positive aligned investments. We will expand use of financial instruments, such as guarantees which increase affordable private investment in green infrastructure, as well as increasing local market capital mobilisation for local currency climate investment. The UK is supporting these efforts through initiatives such as UK PACT (Partnering for Accelerated Climate Transitions – see Challenge 4), National Adaptation Plan Global Network (see Challenge 2), Financial Sector Deepening Africa (FSD Africa), MOBILIST, the Climate Finance Accelerator and BioFin programmes.

17.3. **Increasing our support for mobilising the private sector for climate and nature.** Through British Investment Partnerships (BIP) we will aim to mobilise up to £8 billion of UK-backed financing a year by 2025, including from the private sector, partnering with capital markets and Sovereign Wealth Funds to co-invest in projects and provide scale. BIPs will also use UK Export Finance support to de-risk and crowd in wider finance.

17.4. **Accelerating the development of new markets for climate and nature investment, including high integrity voluntary carbon and nature markets.** The UK Government will launch a consultation on the next steps and interventions needed to protect against the risk of greenwashing and mobilise additional finance through high integrity voluntary carbon and nature markets. This will draw on the forthcoming work of the Voluntary Carbon Markets Initiative, which will provide guidance on the use of carbon credits and associated claims, and the Integrity Council for the Voluntary Carbon Markets, which will provide greater clarity on the definition of high-integrity carbon credits. We will also investigate additional innovative mechanisms to fund biodiversity, such as biodiversity credits.

17.5. **Increasing the flow of finance from International Financial Institutions** and effectiveness of private finance mobilisation strategies. This includes through the effective implementation of the G20 MDB Capital Adequacy Framework review, which has the potential to release hundreds of billions of dollars in additional finance from MDBs. We will work with others to ensure that the World Bank Evolution Roadmap enhances the Bank's action on climate and nature and supports all MDBs to deliver on ambitious commitments to align their sovereign operations with the Paris Agreement by the end of 2023, and non-sovereign by 2025.

17.6. **Optimising the effectiveness of global climate finance funds**, including through our position as one of the largest combined contributors to the Green Climate Fund, Global Environment Facility and Climate Investment Funds. We will support the quick and effective establishment of a dedicated KMGBF Fund under the Global Environment Facility to provide funding to developing countries.

18. Respond to the financial needs of the most climate vulnerable.

18.1. **Working to strengthen relationships and co-ordination between providers of support, international financial institutions and local actors.** We will continue to work with emerging and developing markets to ensure the growth of green finance frameworks which are tailored to their specific investment needs, including through the provision of dedicated technical assistance through programmes like UK PACT and the NDC Partnership (see Challenge 4).

18.2. **Improving debt practices to tackle debt vulnerabilities**, by supporting the implementation of the G20-Paris Club Common Framework for Debt Treatments beyond the Debt Service Suspension Initiative and actively participating in the Global Sovereign Debt Roundtable. We will promote greater debt transparency and sustainability working with the International Financial Institutions. We will drive the uptake of Climate Resilient Debt Clauses (CRDCs) across all creditor groups, building on UK Export Finance's commitment to become the world's first export credit agency to offer CRDCs in direct sovereign lending. We will continue supporting the Resilience and Sustainability Trust, working to ensure it meets vulnerable countries' needs for increased fiscal space to deal with climate shocks.

18.3. **Enhancing access to climate finance** through the Taskforce on Access to Climate Finance, to ensure our global climate finance architecture effectively supports the countries and people most at risk from climate change. Our financial support will enable countries to trial a 'new approach' to climate finance access, enabling climate vulnerable developing countries to deliver ambitious, timely and high-quality national climate plans.

19. Support international dialogue and cooperation that accelerates finance for the transition.

19.1. **Supporting delivery and accountability of the \$100 billion climate goal**, following the publication at the request of the UK COP Presidency of the \$100 billion Delivery Plan ahead of COP26 and subsequent publication of the \$100 billion Progress Report ahead of COP27. We will continue to urge partners to make good on their commitments in the plan, and champion transparency of climate finance and high accounting standards in international fora including the OECD and the UN Climate Summit. We will lead by example, delivering our own ICF commitment of at least £11.6 billion between 2021/22 and 2025/26.

19.2. **Acting to set future global climate and nature finance goals** which incentivise the structural shifts needed to align global finance flows and mobilise finance for the needs of developing countries and maximise value for money. We will do this through our engagement in the COP26 work programme to deliver a new climate finance goal to replace the \$100 billion beyond 2025 (New Collective Quantified Goal), as well as supporting the delivery of the 10 Point Plan and Joint Donor Statement for financing biodiversity (see Joint Donor Statement case study).

19.3. **Utilising international partnerships to improve mobilisation of finance for the transition.** This is exemplified through our country-led approach to the Just Energy Transition Partnerships, through which we are working with fast growing developing countries with significant emissions, the G7 and other partners to establish a new collaborative model for mobilising finance to deliver their ambitious energy transition and climate goals. The first JETP with South Africa was launched at COP26 and further JETPs were launched with Indonesia and Vietnam in 2022 (see Challenge 4/Just Energy Transition Partnerships case study).

19.4. **Championing and prioritising climate and nature finance in international multilateral and bilateral engagement**, including by seeking tangible progress on climate and nature finance in the G7 and G20. We will continue to be an active member of the Coalition of Finance Ministers for Climate Action including through our co-leadership of the private finance workstream and the Bank of England is working to raise awareness of tackling nature-related financial risk reporting and management through their membership of the NGFS.

Challenge 6: shift trade and investment rules and patterns to support the transition to a net zero, climate resilient and nature positive future

To meet this challenge, the UK will...

20. Work to strengthen the UK's position as a major international market for environmental goods and services.

20.1. **Working to grow the UK's green industrial base by driving inward investment** to support green jobs and exports, which will help to lower the cost of environmental goods and services. We will continue to help galvanise foreign investment into UK green industries, as we have done by hosting events such as the Global Investment Summit and the Green Trade and Investment Expo.

20.2. **Removing barriers to green trade with, and investment into, the UK.** The green transition has been facilitated by the UK Global Tariff which has removed duties on over 100 environmental goods, lowering prices and boosting our green economy.

20.3. **Advocating for rules-based and open trade and tackling key market access barriers to UK exports** of environmental goods and services, including any arising from other countries' green industrial policies. For example, we will work with partner countries to shape emerging regulatory frameworks in offshore wind, so that UK exporters can benefit from market opening and support the global green transition.

20.4. **Resisting pressure, alongside other players, to achieve short-term economic advantage by raising barriers to trade and investment.** In the longer-term, the transition will depend on maintaining an open approach to maximise innovation in highly traded sectors like automotive.

20.5. **Promoting the export of the UK's green technologies and services to the rest of the world,** including working directly with UK businesses to find export opportunities overseas, utilising bilateral platforms such as Economic and Trade Committees or Dialogues, and the financing and underwriting capability provided by UK Export Finance.

21. Use multilateral and plurilateral cooperation and trade agreements to achieve the UK's climate and nature commitments.

21.1. **Playing a leading role in multilateral and plurilateral efforts to deliver change on a global scale**, including by working with G7 partners to drive investment into green sectors while avoiding measures that distort global markets, seeking the widespread removal of barriers to trade in green goods, services and technologies, and addressing environmentally harmful market distortions, including industrial subsidies.

21.2. **Engaging in WTO negotiations to address harmful fisheries subsidies that contribute to overfishing and overcapacity**, building on progress made at the WTO's 12th Ministerial Conference and participating in the Trade and Environmental Sustainability Structured Discussions (TESSD).

21.3. **Utilising the Coalition of Trade Ministers on Climate to provide a multilateral political forum for ongoing work on trade and climate change at the WTO and beyond**. This will enable join-up between climate, finance and trade communities and ensure maximum alignment between international objectives to reach net zero while maintaining economic security and preserving a rules-based trading system.

21.4. **Seeking an international solution to carbon leakage risk, promoting shared ambition on the pace of industrial decarbonisation, alignment of methodologies and standards and dialogue on carbon leakage measures, including carbon border adjustment mechanisms (CBAMs) and product standards**. The UK will engage through a wide range of fora and initiatives, including the G7 Industrial Decarbonisation Agenda (IDA); the WTO Trade and Environmental Sustainability Structured Discussions (TESSD); the Climate Club established by the G7 in December 2022; the Glasgow Breakthroughs; the Industrial Deep Decarbonisation Initiative (IDDI); and the Organisation for Economic Cooperation and Development's Inclusive Forum on Carbon Mitigation Approaches (IFCMA). In parallel, today we have launched a public consultation on potential domestic solutions to carbon leakage, which will inform decision making on which policies, if any, should be introduced.

21.5. **Recognising that bilateral trade can also play a vital role in tackling climate change and environment**, taking action to remove barriers to green trade and aligning our trade and environment agendas. For each of our Free Trade Agreements (FTAs), Government publishes a public mandate prior to negotiations. Mandates have previously included objectives to maintain the UK's right to regulate to meet net zero, reaffirm parties' international climate and environment commitments, seek ways to address barriers to trade in green goods and services, and prevent parties from failing to apply environmental laws for a trade advantage.

21.6. **Maintaining the UK's high environmental and animal welfare standards** by protecting the UK's right to regulate, to deliver the UK's ambitious domestic and international climate, environmental and nature agenda.

21.7. **Strengthening international collaboration and delivering direct interventions to tackle the illicit commodity and illegal wildlife trades** (see Challenge 3, and below).

22. Support the development of sustainable trade through green and resilient supply chains, taking action to reduce the UK's global environmental footprint.

22.1. **Identifying opportunities to support more sustainable and resilient global supply chains that reduce the impact of trade on the environment**, by working to shape an international trading system that supports and incentivises sustainable commodity production and reduces pressure on critical ecosystems. This includes addressing the agricultural expansion, which drives almost 90% of global deforestation. We founded the Forest Agriculture and Commodity Trade (FACT) dialogue to deepen collaboration on supporting sustainable trade and development while protecting forests and other vital ecosystems.

22.2. **Leveraging UK policy and expertise to promote sustainable global practice.** For example, the UK Environment Act's Due Diligence legislation for Forest Risk Commodities will help us tackle illegal deforestation in UK supply chains, as part of a wider package of domestic and multilateral measures to improve the sustainability of our supply chains. We will build on this package of measures to help accelerate the implementation of global approaches for supply chains that incentivise sustainable commodity markets.

22.3. **Working to maximise the value and benefits we get from our own UK resources**, including by doubling resource productivity by 2050, increasing timber supplies, and ensuring that food is produced sustainably and profitably (see Challenge 1).

22.4. **Promote sustainable trade that contributes to the delivery of global environmental targets at the WTO.** The UK is an active Member in four trade and environment forums: the permanent multilateral Committee on Trade and Environment; the plurilateral Trade and Environmental Sustainability Structured Discussions; the Fossil Fuel Subsidies Reform initiative and the Dialogue on Plastic Pollution.

22.5. **Exploring how trade can help us to meet our ambition of zero avoidable waste by 2050**, eliminating avoidable plastic waste by 2042, including through the WTO Dialogue on Plastics Pollution and intergovernmental negotiations on a new legally binding treaty on plastic pollution.

22.6. **Working to ensure international trade in endangered species is legal and sustainable**, including through ensuring robust domestic implementation of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) requirements, minimising the opportunities and reward from illegal trade and by playing a leading role (including through international engagement and ODA funding) in supporting other countries in building their capacity to address illegal trade.

23. Support developing countries in adapting to climate change through trade.

23.1. **Seizing opportunities for trade to play a significant part in helping developing countries tackle and adapt to climate change**, including helping to grow global markets for climate adaptation goods; boosting economic resilience to climate shocks and spreading the uptake of green goods, services, and technologies. Working in partnership with the World Bank and the WTO, the UK helps 72 developing countries to build the capacity, infrastructure and policies needed to successfully embed green export and trade through the Trade Strategy Programme.

23.2. **Working to ensure that climate and environment considerations are a key part of the WTO-led Aid-for-Trade Initiative**. The UK is already adapting our approach to trade and development, as well as wider programmes to support the green transition.

23.3. **Supporting developing countries in adapting to climate change through bilateral, plurilateral and multilateral fora**. This includes through priority trade and development initiatives; offering advice and technological solutions to development challenges through UK Centres of Expertise; and bringing businesses and stakeholders together to find solutions to resilience challenges, such as through British Investment Partnerships.

23.4. **Helping to ensure the voices of developing economies are heard on the international stage and engaged in negotiations**. We will ensure the circumstances of countries at differing stages of development, particularly those of least developed and low-income countries, are considered at multilateral and plurilateral fora, such as the WTO's TESSD, and in the development of any carbon leakage mitigation measures.

Acronyms

BIP: British Investment Partnerships

CITES: Convention on International Trade in Endangered Species of Wild Fauna and Flora

CMS: Convention on Migratory Species

COP: Conference of the Parties

CRDCs: Climate Resilient Debt Clauses

DEFRA: Department for Environment, Food & Rural Affairs

DESNZ: Department for Energy Security & Net Zero

EIP: Environmental Improvement Plan

ELM: Environmental Land Management Schemes

FACT: Forest, Agriculture and Commodity Trade

FCDO: Foreign, Commonwealth & Development Office

FTA: Free Trade Agreement

G20: Group of Twenty

G7: Group of Seven

KMGBF: Kunming-Montreal Global Biodiversity Framework

GCBC: Global Centre on Biodiversity for Climate

GDP: Gross Domestic Product

GHG: greenhouse gas

GLD: Glasgow Leaders' Declaration on Forests and Land Use

GNI: Gross National Income

ICF: International Climate Finance

IEA: International Energy Agency

IPLC: Indigenous Peoples and Local Communities

IR: Integrated Review

IUU: Illegal, Unreported and Unregulated

LDCs: Least Developed Countries

LIFE-AR: LDC Initiative for Effective Adaptation and Resilience

MEA: Multilateral Environmental Agreement

NbS: Nature Based Solutions

NGFS: Network for Greening the Financial System

ODA: Official Development Assistance

OECD: Organisation for Economic Cooperation and Development

R&D: Research & Development

SDG: Sustainable Development Goals

TESSD: Trade and Environmental Sustainability Structured Discussions

TPT: Transition Plan Taskforce

UKRI: UK Research and Innovation

UN: United Nations

UNCBD: United Nations Convention on Biological Diversity

UNEA: UN Environment Assembly

UNFCCC: United Nations Framework Convention on Climate Change

UNGA: UN General Assembly

WTO: World Trade Organisation

ZEV: Zero Emission Vehicle

References

- i IPBES (2020) ‘Workshop Report on Biodiversity and Pandemics of the Intergovernmental Platform on Biodiversity and Ecosystem Services.’ Daszak, P. and others, IPBES secretariat, Bonn, Germany, DOI:10.5281/zenodo.4147317.2
- ii World Economic Forum (2023). ‘The Global Risks Report 2023’. Available at: https://www3.weforum.org/docs/WEF_Global_Risks_Report_2023.pdf (Accessed: March 24, 2023)
- iii Data from Global Monitoring Laboratory – Carbon Cycle Greenhouse Gases (noaa.gov) available at <https://gml.noaa.gov/ccgg/trends/gr.html>
- iv IPCC (2022). ‘Summary for Policymakers [Pörtner HO and others]. In: Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change’. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 3–33, doi:10.1017/9781009325844.001
- v World Meteorological Organization (2021). ‘WMO Atlas of Mortality and Economic Losses from Weather, Climate and Water Extremes (1970-2019)’. Available at https://library.wmo.int/doc_num.php?explnum_id=10989 (Accessed: March 24, 2023).
- vi WWF (2022). ‘Living Planet Report 2022 – Building a nature positive society’. Almond REA, Grooten M, Juffe Bignoli D & Petersen T (Eds). WWF, Gland, Switzerland. Available at <https://www.wwf.org.uk/our-reports/living-planet-report-2022> (Accessed: March 24, 2023).
- vii IPBES (2019). ‘Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services’, Diaz S and others, IPBES secretariat, Bonn, Germany. 56 pages.
- viii IPCC (2022). ‘Summary for Policymakers [Shukla PR and others]. In: Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change’. Cambridge University Press, Cambridge, UK and New York, NY, USA. doi: 10.1017/9781009157926.001

- ix International Renewable Energy Agency -IRENA (2021). 'Renewable Power Generation Costs in 2020'. International Renewable Energy Agency, Abu Dhabi. Available at <https://www.irena.org/publications/2021/Jun/Renewable-Power-Costs-in-2020> (Accessed: March 24, 2023).
- x IPBES (2016). Summary for policymakers of the assessment report of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services on pollinators, pollination and food production.' Potts, S G and others. IPBES secretariat, Bonn, Germany. 36 pages.
- xi World Economic Forum (2020). 'Nature Risk Rising: Why the crisis engulfing nature matters for business and the economy'. Available at https://www3.weforum.org/docs/WEF_New_Nature_Economy_Report_2020.pdf (Accessed: March 24, 2023).
- xii Department for Environment Food & Rural Affairs (2021). 'United Kingdom Food Security Report 2021'. Available at <https://www.gov.uk/government/statistics/united-kingdom-food-security-report-2021> (Accessed: March 24, 2023).
- xiii IPCC (2021). 'Summary for Policymakers [Masson-Delmotte V and others]. In: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change'. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 3–32, doi:10.1017/9781009157896.001
- xiv Society of Motor Manufacturers, Jan 2023. SMMT News, UK Manufacturing. Available at <https://www.smmt.co.uk/2023/01/uk-car-production-down-but-electric-vehicle-output-surges-to-new-record/> (Accessed: March 24, 2023).
- xv Ricardo Energy & Environment for the Committee on Climate Change (2017). 'UK business opportunities of moving to a low carbon economy'. London. Available at <https://www.theccc.org.uk/publication/uk-energy-prices-and-bills-2017-report-supporting-research/> (Accessed: March 24, 2023).
- xvi Department for International Trade (2021). 'Net zero related inward investment in the UK: 18 November 2020 to 24 September 2021'. Available at <https://www.gov.uk/government/statistics/net-zero-related-inward-investment-in-the-uk-18-november-2020-to-24-september-2021/net-zero-related-inward-investment-in-the-uk-18-november-2020-to-24-september-2021-html-version> (Accessed: March 24, 2023).
- xvii UK Parliament (2022), 'BEIS written response to the BEIS Committee's Inquiry into the Government's plans to decarbonise the UK's power supply sector' Available at <https://committees.parliament.uk/writtenevidence/109605/pdf/> (Accessed: March 24, 2023).

- xviii McKinsey (2021). 'Opportunities for UK businesses in the net-zero transition'. Available at <https://www.mckinsey.com/capabilities/sustainability/our-insights/opportunities-for-uk-businesses-in-the-net-zero-transition/> (Accessed: March 24, 2023).
- xix Bloomberg New Energy Finance (2020). '2h-2020-levelized-cost-of-electricity-update'.
- xx World Bank Group (2021). 'A global Earth-economy model to assess development policy pathways.' Available <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/445311625065610639/a-global-earth-economy-model-to-assess-development-policy-pathways> (Accessed: March 24, 2023).
- xxi TheCityUK (2023). 'Key facts about the UK as an international financial centre 2022'. Available at <https://www.thecityuk.com/our-work/key-facts-about-the-uk-as-an-international-financial-centre-2022/> (Accessed: March 24, 2023).
- xxii World Intellectual Property Organization- WIPO (2021) 'Global Innovation Index 2021 Tracking Innovation through the COVID-19 Crisis'. Available at https://www.wipo.int/global_innovation_index/en/2021/ (Accessed: March 24, 2023).
- xxiii Cabinet Office UK Integrated Review (2021). 'Global Britain in a Competitive Age: the Integrated Review of Security, Defence, Development and Foreign Policy'. HM Government. The Integrated Review 2021 – GOV.UK. Available at <https://www.gov.uk/government/collections/the-integrated-review-2021> (Accessed: March 24, 2023).
- xxiv UK- DESNZ, 1990-2021 GHGI and ONS. Available at <https://www.gov.uk/government/statistics/final-uk-greenhouse-gas-emissions-national-statistics-1990-to-2021> (Accessed: March 24, 2023). For G7 data- see UNFCCC national inventories and World Bank.
- xxv IEA (2021), Net Zero by 2050, IEA, Paris <https://www.iea.org/reports/net-zero-by-2050>, License: CC BY 4.0
- xxvi International Energy Agency- IEA (2022). 'Global EV Outlook, 2022'. Global EV Outlook 2022 – Analysis – IEA. Available at <https://www.iea.org/reports/global-ev-outlook-2022> (Accessed: March 24, 2023).
- xxvii VividEconomics (2021). 'Global Innovation Needs Assessments (GINAs): Energy and land use synthesis report. Available at <https://www.climateworks.org/report/ginas/> (Accessed: March 24, 2023).

- xxviii Morlet, V, Dupont, J L and Coulomb, D (2017). 'The impact of the refrigeration sector on Climate Change, 35th Informatory Note on refrigeration technologies'. International Institute of Refrigeration. Available at: <https://iifiir.org/en/fridoc/the-impact-of-the-refrigeration-sector-on-climate-change-141135> (Accessed: March 24, 2023).
- xxix UNFCCC (2020-22). 'Breakthrough Agenda'. Available at <https://racetozero.unfccc.int/system/breakthroughs/> (Accessed: March 24, 2023).
- xxx Hallegatte, S and others (2016). 'Shock Waves: Managing the Impacts of Climate Change on Poverty' Climate Change and Development. World Bank, Washington, DC. World Bank. Available at <https://openknowledge.worldbank.org/server/api/core/bitstreams/aa3a35e0-2a20-5d9c-8872-191c6b72a9b9/content> (Accessed: March 24, 2023).
- xxxi Clement V and others (2021). 'Groundswell Part 2: Acting on Internal Climate Migration'. World Bank, Washington, DC. World Bank. Available at <https://openknowledge.worldbank.org/entities/publication/2c9150df-52c3-58ed-9075-d78ea56c3267>(Accessed: March 24, 2023).
- xxxii The Alan Turing Institute (2020). 'Climate aware and resilient national security: Challenges for the 21st Century'. Available at https://www.turing.ac.uk/sites/default/files/2020-12/august_2020_climate_aware_and_resilient_national_security_turing_designed.pdf (Accessed: March 24, 2023).
- xxxiii World Meteorological Organization (2021). 'WMO Atlas of Mortality and Economic Losses from Weather, Climate and Water Extremes (1970-2019)'. Available at https://library.wmo.int/doc_num.php?explnum_id=10989 (Accessed: March 24, 2023).
- xxxiv Global Commission on Adaptation (2019). 'Adapt Now: A global call for leadership on climate resilience'. Available at https://gca.org/wp-content/uploads/2019/09/GlobalCommission_Report_FINAL.pdf (Accessed: March 24, 2023).
- xxxv World Meteorological Organization (2021). '2021 State of Climate Services- Water'. WMO, Geneva, Switzerland. Available at [doc_num.php \(wmo.int\)](https://www.wmo.int/doc_num.php?explnum_id=10989) (Accessed: March 24, 2023).
- xxxvi UNFCCC (2005) 'Climate Change – Small Island Developing States'. Climate Change Secretariat (UNFCCC), Bonn, Germany.
- xxxvii United Nations Environment Programme (2022). 'Adaptation Gap Report 2022: Too Little, Too Slow – Climate adaptation failure puts world at risk'. UNEP, Nairobi. Available at <https://www.unep.org/resources/adaptation-gap-report-2022> (Accessed: March 24, 2023).

- xxxviii Climate Policy Initiative (2021). 'Global Landscape of Climate Finance 2021'. Available at <https://www.climatepolicyinitiative.org/wp-content/uploads/2021/10/Full-report-Global-Landscape-of-Climate-Finance-2021.pdf> (Accessed: March 24, 2023).
- xxxix World Resources Institute (2022). 'The Potential for Nature-Based Solutions Initiatives to Incorporate and Scale Climate Adaptation'. Working Paper. Washington, DC: World Resources Institute. Available at <https://www.wri.org/research/potential-nature-based-solutions-initiatives-incorporate-and-scale-climate-adaptation> (Accessed: March 24, 2023).
- xl Tan, L M and others (2021). 'Mapping resource effectiveness across urban systems'. *Urban Sustainability*. 1:20. doi: 10.1038/s42949-020-00009-3
- xli IPBES (2022). 'Summary for policymakers of the thematic assessment of the sustainable use of wild species of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services'. IPBES secretariat, Bonn, Germany.
- xlii United Nations Environment Programme and International Union for Conservation of Nature (2021). 'Nature-based solutions for climate change mitigation'. UNEP, Nairobi and Gland.
- xlili Fransen, T and others (2022). 'The State of Nationally Determined Contributions: 2022.' Report. Washington, DC: World Resources Institute. Available online at doi.org/10.46830/wrirpt.22.00043
- xliv UNEP-WCMC and IUCN (2021). 'Protected Planet Report 2020'. UNEP-WCMC and IUCN: Cambridge UK; Gland, Switzerland.
- xlv Birmpili (2018). 'Montreal Protocol at 30: The governance structure, the evolution, and the Kigali Amendment'. *Comptes Rendus Geoscience*, Volume 350, Issue 7, November 2018, Pages 425-431. <https://doi.org/10.1016/j.crte.2018.09.002>
- xlvi Johnson A and others (2021) *The Economic Case for Nature : A Global Earth-Economy Model to Assess Development Policy Pathways*. World Bank, Washington, DC
- xlvii Deloitte (2022). 'The Turning Point: A Global Summary'. Available at <https://www.deloitte.com/global/en/issues/climate/global-turning-point.html> (Accessed: March 24, 2023).
- xlviii Songwe V, Stern N, Bhattacharya A (2022). 'Finance for climate action: Scaling up investment for climate and development'. London: Grantham Research Institute on Climate Change and the Environment, London School of Economics and Political Science.

- xlix Hallegatte S and others (2019). 'Lifelines: The Resilient Infrastructure Opportunity. Sustainable Infrastructure'. Washington, DC: World Bank. Available at <https://openknowledge.worldbank.org/handle/10986/31805> (Accessed: March 24, 2023).
- I International Renewable Energy Agency -IRENA (2019). 'Global energy transformation: A roadmap to 2050 (2019 edition)'. International Renewable Energy Agency, Abu Dhabi. Available at <https://www.irena.org/publications/2019/Apr/Global-energy-transformation-A-roadmap-to-2050-2019Edition> (Accessed: March 24, 2023).
- li Food and Agriculture Organization of the United Nations (FAO) (2022). 'The State of the World's Forests 2022. Forest pathways for green recovery and building inclusive, resilient and sustainable economies'. Rome, FAO.
- lii Local Government Association. 'Local green jobs – accelerating a sustainable economic recovery'. Available at <https://www.local.gov.uk/local-green-jobs-accelerating-sustainable-economic-recovery> (Accessed: March 24, 2023).
- liii World Bank (2020). 'Minerals for Climate Action: The Mineral Intensity of the Clean Energy Transition'. Washington, International Bank for Reconstruction and Development/The World Bank.
- liv Regulation (EU) No 517/2014 of the European Parliament and of the Council of 16 April 2014 on fluorinated greenhouse gases and repealing Regulation (EC) No 842/2006. Available at: <https://www.legislation.gov.uk/eur/2014/517/contents> (Accessed: March 24, 2023).

Photo Credits

Cover: © Wan Yong Chong via iStock/Getty Images

Page 3: © UK Parliament Official Portraits

<https://members.parliament.uk/member/4098/portrait>

<https://members.parliament.uk/member/1582/portrait>

<https://members.parliament.uk/member/4366/portrait>

Page 17: © Eloi_Omella via iStock/Getty images

Page 19: © via vinzo iStock/Getty images

Page 20: © Urupong via iStock/Getty images

Page 21: © primeimages via iStock/Getty images

Page 23: © MarcelC via iStock/Getty images

Page 24: © ARA/Julio Araujo

Page 25: © Olga Gavrilova via iStock

Page 28: © Andythirlwell via iStock/Getty Images

Page 29: © Kiara Worth via flickr

Page 31: © 1715d1db_3 via iStock/Getty images

Page 33: © serts via iStock/Getty images

Page 35: © nicolamargaret via iStock/Getty images

Page 36: © CHUNYIP WONG via iStock/Getty images

Page 37: © choicegraphx via iStock/Getty images

Page 41: © hadynyah via iStock/Getty Images

