The UK's Green Finance Strategy

- Aligning private sector financial flows with clean, environmentally sustainable and resilient growth.
- Strengthening the competitiveness of the UK financial services sector.

GREENING FINANCE

Mainstreaming climate and environmental factors as a financial and strategic imperative

- Establishing a shared understanding
- Clarifying roles and responsibilities
- Fostering transparency and embedding a long-term approach
- Building robust and consistent green financial market frameworks

FINANCING GREEN

Mobilising private finance for clean and resilient growth

- Establishing robust, long-term policy frameworks
- Improving access to finance for green investment
- Addressing market barriers and building capability
- Developing innovative approaches and new ways of working

Green Finance Institute

CAPTURING THE OPPORTUNITY

Cementing UK leadership in green finance

- Consolidating the UK's position as a global hub for green finance
- Positioning the UK at the forefront of green financial innovation and data and analytics
- Building skills and capabilities on green finance

Executive summary

Climate change and the degradation of the world's natural capital assets are defining issues of our time. The world is getting warmer, sea levels are rising, pollution is costing lives and biodiversity is collapsing. The recent Intergovernmental Science and Policy Platform on Biodiversity and Ecosystems Services (IPBES) Global Assessment and the Intergovernmental Panel on Climate Change (IPCC) Special Report on 1.5°C are both timely reminders of the urgency of action.

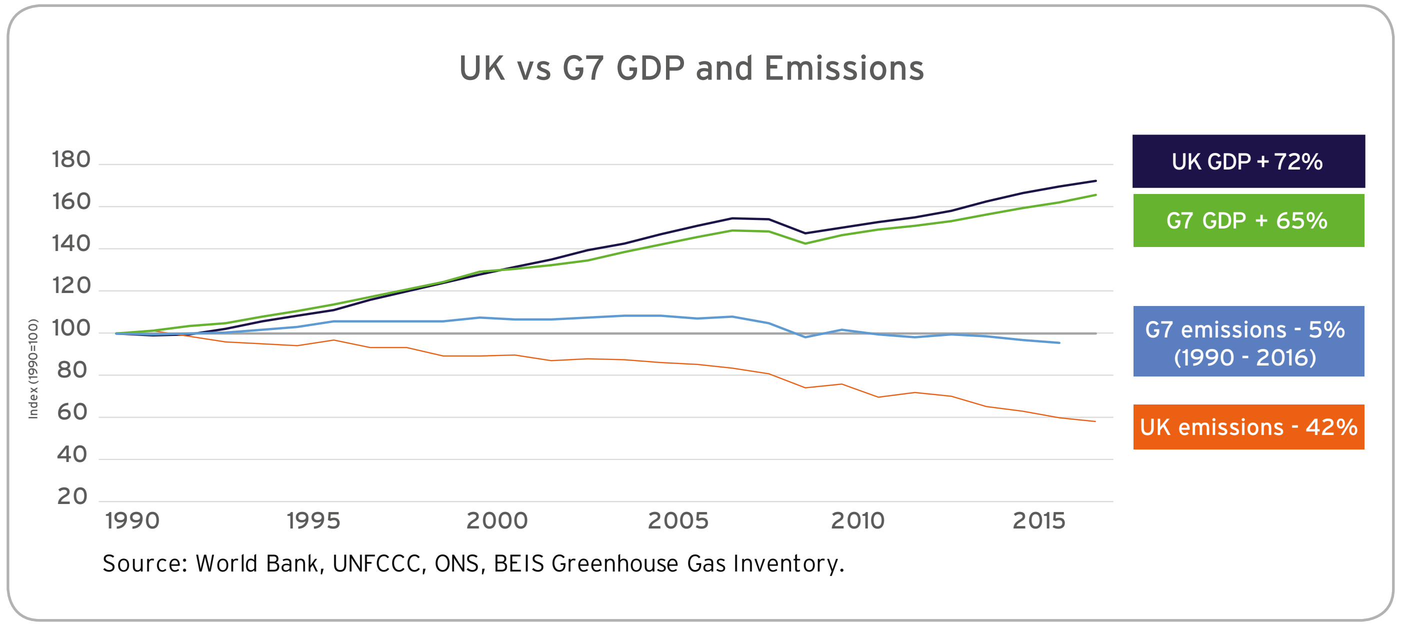
The UK's new target to reach net zero greenhouse gas emissions by 2050 means we are the first major economy in the world to set such a target into law. We are also introducing a landmark Environment Bill, which will place environmental ambition and accountability at the very heart of government and put our flagship 25 Year Environment Plan into law.

We need to shift to a world where we are at net zero emissions, and deliver our commitment that this will be the first generation in our history to leave the environment in a better condition than we found it. This means systemic changes across all parts of our economy; and in particular delivering a global financial system that supports and enables these outcomes. This strategy is our first step towards delivering that vision.

The global shift towards cleaner, resilient growth

As the international community begins to take the action that this challenge demands, a significant transformation is beginning in the global economy towards cleaner, more resilient economic growth. We expect that countries will increase their commitments and accelerate this transition at COP26 in 2020, which the UK has bid to host in partnership with Italy[1]. The re-allocation of tens of trillions of dollars of capital towards green investment offers the potential to reshape cities, energy systems and land use around the world. The nature of this investment over the coming decades will determine the future of our climate, the natural world and the resilience of our communities. It also presents a substantial commercial opportunity for the UK financial sector.

As recently noted by the International Energy Agency, the UK has led the way in the transition to a low carbon economy[2]. Since 1990, we have grown our economy by two-thirds while reducing our carbon emissions by over 40%, the strongest performance of any G7 country. There are already almost 400,000 jobs in low carbon businesses and



their supply chains across the country[3] and clean growth sits at the heart of the UK's Industrial Strategy as one of four 'Grand Challenges'.

The Government has a proud pedigree of climate and environmental leadership, such as the UK Climate Change Act, Clean Growth Strategy, 25 Year Environment Plan and the National Adaptation Programme and now this Green Finance Strategy. As we move towards a net zero economy, finance will play a crucial role in enabling changes to our homes, how we travel and our agriculture. The UK has the opportunity to lead the way in clean, climate resilient growth that protects our natural environment.

Transforming the Financial System

As the financial risks and opportunities from the low carbon transition become apparent, a second, equally important, transformation is also underway: that of the financial system. This transformation moves beyond just funding green projects to ensuring climate and environmental factors are fully integrated into mainstream financial decision making across all sectors and asset classes.

And here too, the UK has led the way. The Green Finance Taskforce report, published in March 2018, was a landmark in the development of UK green finance. The Bank of England has played a pivotal role, both domestically and internationally, to ensure climate change is considered a mainstream and far-reaching financial risk, as well as one that requires action today. UK firms have also played a leading role at home and abroad, with banks, insurers, asset managers and pension funds in the vanguard of green financial innovation, supported by a rich ecosystem of civil society, business, academia and technical experts.

Cementing UK leadership

With our track record on clean growth and a world-leading financial sector, the UK is well-placed to seize the economic benefits of green finance. As the Industrial Strategy demonstrates, this is a win-win for our climate and environmental ambitions, as well as further enhancing the competitiveness of the UK's real economy and financial services sector. Leadership on green finance will enable the UK to maximise the economic opportunities of the global and domestic shifts to clean and resilient growth.

Progress is undoubtedly being made. 70% of banks in the UK now consider climate change as a financial risk[4], and green financial products are increasingly becoming more widespread in the market. But much more needs to be done. Only 10% of banks in the UK are taking a long-term strategic approach to managing the financial risks from climate change[5], and the total global and domestic value of outstanding green bonds is only a fraction of the financing required. And more needs to be done to ensure the physical and transition risks from climate change are fully taken into account so as not to undermine the future resilience of individual investments and the wider economy.

Delivering an ambitious and credible Green Finance Strategy

Our Green Finance Strategy supports the UK's economic policy for strong, sustainable and balanced growth, the delivery of our modern Industrial Strategy and our domestic and international commitments on climate change, the environment and sustainable development.

It is informed by the private sector and wider stakeholders, and is, in part, a response to the recommendations of the Green Finance Taskforce, chaired by Sir Roger Gifford. The Taskforce is a leading example of the cross-sector collaboration that the strategy seeks to advance. To this end the Government has already taken action to implement its recommendations ahead of the publication of this strategy, such as announcing the establishment of the Green Finance Institute (GFI). As the UK's principal forum for collaboration between the public and private sector with respect to green finance, the GFI will play an integral role in supporting delivery of our Green Finance Strategy and driving the mainstreaming of green finance in the UK and abroad.

Strategy and Objectives

Our Strategy has two objectives, and three strategic pillars to achieve them:

OBJECTIVES

To align private sector financial flows with clean, environmentally sustainable and resilient growth, supported by Government action.

To strengthen the competitiveness of the UK financial sector.

STRATEGY

Chapter 1
Greening Finance

Ensuring current and future financial risks and opportunities from climate and environmental factors are integrated into mainstream financial decision making, and that markets for green financial products are robust in nature.

Chapter 2
Financing Green

Accelerating finance to support the delivery of the UK's carbon targets and clean growth, resilience and environmental ambitions, as well as international objectives.

Chapter 3
Capturing the Opportunity

Ensuring UK financial services capture the domestic and international commercial opportunities arising from the 'greening of finance', such as climate related data and analytics, and from 'financing green', such as new green financial products and services.

This Strategy is an ambitious package, bringing together work from across the Government, regulators and the private sector. We will be co-ordinating closely with our international partners to achieve our objectives.

Greening Finance

The transition to a green financial system means fundamental changes to the way decisions are made across the economy. To achieve the goals of the Paris Agreement and our wider environmental ambitions, all finance will need to incorporate the financial risks and opportunities presented by climate change and other environmental challenges.

There is increasing international recognition of the need to integrate climate and environmental factors into mainstream financial decision-making. One of the most influential initiatives to emerge is the Financial Stability Board's private sector Task Force on Climate-related Financial Disclosures (TCFD), supported by Mark Carney and chaired by Michael Bloomberg. This has been endorsed by institutions representing $118 trillion of assets globally[6]. An increasingly large proportion of the private sector is now beginning to implement the TCFD recommendations and in September 2017, the UK became one of the first countries to formally endorse them.

Alongside the private sector, central banks and supervisors are also taking action to address the far-reaching financial risks associated with climate change. World leaders also took notice in 2016, and welcomed the work of the G20's Green Finance Study Group[7], co-chaired by the UK and China.

Building on the UK's existing leadership, the first chapter of this strategy sets out the actions we are taking to ensure climate and environmental factors are recognised and acted upon as a matter of strategic and financial imperative. Our strategy focuses on four elements:

- Establishing a shared understanding;
- Clarifying roles and responsibilities;
- Fostering transparency and embedding a long-term approach; and
- Building robust and consistent green financial market frameworks.

The ambitious actions we are taking include:

- The Government setting out its expectation for all listed companies and large asset owners to disclose in line with the TCFD recommendations by 2022;
- Establishing a joint taskforce with UK regulators, chaired by Government, which will examine the most effective way to approach disclosure, including exploring the appropriateness of mandatory reporting;
- Supporting quality disclosures through data and guidance, such as that being prepared for occupational pensions schemes by a new Government and regulator sponsored working group;
- Clarifying responsibilities for the Prudential Regulation Authority, the Financial Conduct Authority (FCA) and the Financial Policy Committee to have regard to the Paris Agreement when carrying out their duties, and including climate-related financial issues in Government's allocation letter to The Pensions Regulator;
- Working with industry and the British Standards Institution to develop a set of Sustainable Finance Standards, and chairing a new International Organisation for Standardisation (ISO) Technical Committee on Sustainable Finance;
- Working with the FCA and Bank of England, including through the Fair and Effective Markets Review, to consider steps that can be taken to understand the potential or actual barriers to the growth and effectiveness of green finance markets; and
- Working with international partners to catalyse market-led action on enhancing nature-related financial disclosures. This will complement the recently announced global review of the economics of biodiversity by Professor Sir Partha Dasgupta.

Our ambition for bringing about the systemic change required will not happen overnight, and our strategy for greening the UK's financial system will evolve.

We will continue to explore actions Government can take to green the UK's financial system and will publish an interim report by the end of 2020. The report will examine progress on the implementation of the TCFD recommendations.

Building on the UK's international experience, including the Bank of England's involvement in the Central Banks' and Supervisors' Network for Greening the Financial System (NGFS), we will also use our influence to strive towards the greening of the global financial system. This will include:

- Playing an active role as a founding member of the Coalition of Finance Ministers for Climate Action;
- Co-leading, alongside Egypt, an adaptation and resilience strand at the UN Climate Action Summit;
- Partnering with the private sector to drive the phase-out of unabated coal power and develop sustainable supply chains;
- Exploring initiatives to accelerate the alignment of financial flows to the Paris Agreement's objectives; and
- Aligning the UK's Official Development Assistance (ODA) with the Paris Agreement.

As we move forward with this ambitious domestic and international agenda, the Government will call upon the GFI to provide on-going representation, insight and guidance from the financial sector to inform our strategy.

And while the focus of this Green Finance Strategy is on private financial flows, we recognise that the financial risks and opportunities of climate change are relevant for the public sector as well as industry. That is why:

- The Government will consider the financial risk exposure relating to climate change and the low carbon transition as part of the 2020 Managing Fiscal Risks report; and
- CDC and UK Export Finance will make climate-related financial disclosures in their accounts in line with the TCFD recommendations as soon as practicable, following the close of the 2020/21 financial year.

Financing Green

A strategy to green the financial system as a whole needs to be combined with specific actions to mobilise and accelerate flows of private finance into key clean growth and environmental sectors at home and abroad.

The UK has leading, long-term and legal policy frameworks, most notably the UK's Climate Change Act, which was the first of its kind, and plans to place the 25 Year Environment Plan on a statutory footing. These help provide the long-term certainty we know investors need and the foundation on which we are financing our clean growth ambitions.

Since 2010, there has been more than £92 billion invested in clean energy in the UK[8]. We have also made specific interventions to accelerate green financing, for example, through the Green Investment Bank (GIB). Working alongside over 100 private sector and third-party investment partners, GIB committed £3.4 billion of its own capital to 100 projects with a total value of over £12 billion[9]. And the transition to a clean and resilient economy will hugely expand the opportunity for green finance investments – from homes to power generation to our natural environment.

Our strategy for mobilising green investment will build on our excellent track record and has four primary elements:

- Establishing robust, long-term policy frameworks;
- Improving access to finance for green investment;
- Addressing market barriers and building capability; and
- Developing innovative approaches and new ways of working.

The ambitious actions the Government is taking within this include:

- Announcing a package of measures to mobilise green finance for home energy efficiency;
- Using the forthcoming Environment Bill to place the 25 Year Environment Plan on a statutory footing;
- Determining the steps necessary for landlords and businesses to understand and potentially disclose operational energy use;
- Strengthening engagement with local actors to accelerate green finance across the country;
- Working with the GFI to address market barriers to greater and more rapid deployment of green capital into priority sectors; and
- The National Infrastructure Commission examining the resilience of the UK's infrastructure to consider what action Government should take to ensure it is resilient to future changes, such as climate change[10].

The Government is also mobilising green investments internationally:

- Since 2011, our International Climate Finance has mobilised £910 million of private finance and £3.3 billion of public finance in key sectors including forestry and land use, industrial decarbonisation, sustainable infrastructure and energy transitions[11].
- We are working with governments such as China, Brazil and Mexico to develop green finance markets, through the UK Partnering for Accelerated Climate Transitions (UK PACT) programme and the Prosperity Fund.

Capturing the commercial opportunity

Green Finance brings together many areas where the UK has expertise, not just in financial services but also in encouraging innovation, analytics and low carbon technology, working with civil society and providing intellectual leadership in an evolving landscape. The Industrial Strategy set out our aim to make the UK the global standard setter for finance that supports clean growth and allow us to maximise the opportunities of the global and domestic shifts to clean growth.

The UK has a strong record in green financial innovation ranging from Yieldcos, green bonds and environmental, social and governance (ESG) Exchange Traded Funds listed on the London Stock Exchange Group to green mortgages and retail investment platforms.

To ensure the UK continues to capture the commercial opportunities arising from the 'greening of finance' and the 'financing of green', our strategy aims to:

- Consolidate the UK's position as a global hub for green finance;
- Position the UK at the forefront of green financial innovation and data and analytics; and
- Build skills and capabilities on green finance.

The actions the Government is taking within this include:

- Launching the GFI to strengthen public and private sector collaboration and cement the UK's position as a global hub for green finance;
- Enhancing climate-related and environmental data and analytics and promoting dialogue with regulators and industry to support innovation;
- Promoting the adoption and mainstreaming of green finance products and services, including through the launch of a Green Home Finance Fund making £5 million of funding available to the private sector to pilot products such as green mortgages; and
- Engaging with professional bodies to drive green finance competencies - notably through the launch of a Green Finance Education Charter - upskilling the UK's diplomatic networks and building capacity on green finance across the public sector.

Conclusion

Green finance brings together many of the UK's strengths. This document builds on these strengths. It sets out a strategic framework for green finance, outlines the breadth and depth of activities already underway and sets out ambitious policy proposals to strengthen our global leadership and deliver on our vision of a global financial system fit to deliver a net zero future.

The Government recognises that delivering the systemic changes required to align private financial flows with clean, resilient and environmentally sustainable growth will require collaborative efforts across the public and private sector, and that leadership on green finance will in turn strengthen the competitiveness of the UK financial sector.

We will also explore actions Government can take to ensure a just transition and linkages with related policy areas, such as impact investing. We will formally review progress against the aims and objectives of this strategy in 2022.

Introduction

The environmental challenge

Our environment is changing. Human activity has increased the amount of greenhouse gases in the atmosphere to levels higher than at any time during the last 800,000 years. These trends are driving global average temperature rise at a current rate of about 0.2°C per decade[12] and accelerating the number of species that are becoming extinct.

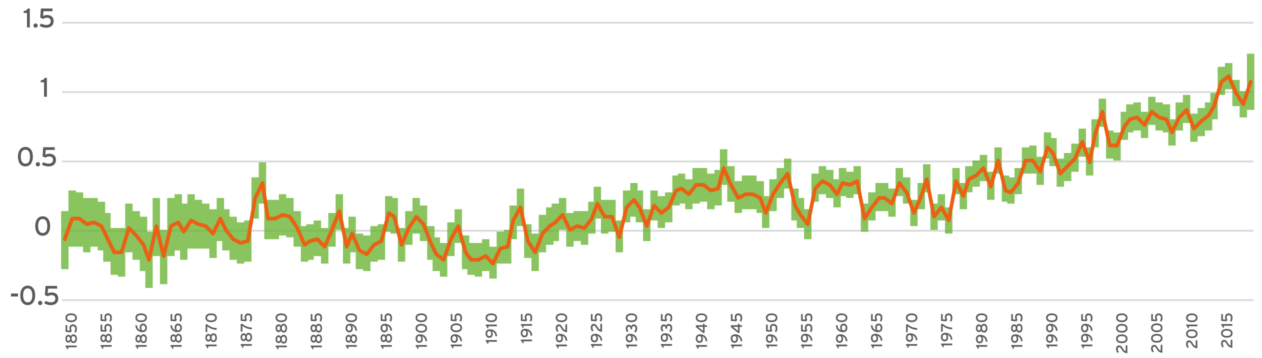
The Intergovernmental Panel on Climate Change's (IPCC) Special Report on Global Warming of 1.5°C showed that humans have caused around 1°C of global warming since the pre-industrial era (1850-1900), with much greater warming in some regions, particularly the Arctic[13]. Earth has experienced major climate shifts in the past, but since the 1950s, many of the changes are unprecedented over centuries to millennia[14]. If greenhouse gas emissions continue at their current rate, global mean surface temperature could rise by more than 4°C above pre-industrial levels by 2100[15].

And climate change is just one factor driving biodiversity loss, along with changes in land and sea use, direct exploitation, pollution and invasion of alien species. The recent Intergovernmental Science and Policy Platform on Biodiversity and Ecosystems Services (IPBES) Global Assessment Report showed how humans have significantly altered nature across the globe[16]. Some 75% of land surface is significantly altered, over 85% of wetlands (area) have been lost, and 66% of the ocean area is experiencing increasing cumulative impacts. An average of around 25% of species in assessed groups are threatened, suggesting that around 1 million species already face extinction – many within decades.

People and ecosystems worldwide are already feeling the impacts of these changes, as warming has contributed to more frequent and more intense extreme weather events such as heat waves and heavy rainfall[17]. This is already impacting our financial system. For example, direct and insured losses from weather-related disasters have increased significantly in recent decades - 2017 was the costliest year for insurers for weather disasters at $132 billion[18].

Within the UK, we have increased our understanding of the public health impacts and the costs to society resulting from poor air quality. Our latest set of appraisal tools indicate that the population health impacts of not delivering on our emission reductions could be around £1.7 billion per annum by 2020 and £5.3 billion per annum by 2030.

Global temperature change in degrees celsius since 1850



Source: Met Office Hadley Centre

Why finance is part of the solution

Limiting global warming to 1.5°C may still be feasible. In the next decade urgent, ambitious and concerted action is required across all countries and sectors globally to deliver emissions reductions, as well as directly remove some greenhouse gas from the atmosphere. To do this requires unprecedented change in how we invest, measure risk and assign value to assets. The IPCC estimate that for a 1.5°C trajectory annual average investments in low-carbon energy technologies and energy efficiency need to be upscaled by roughly a factor of six by 2050 compared to 2015, overtaking investment in fossil fuels globally by around 2025[19].

Recognising this need for urgent and coordinated action, 195 countries signed the Paris Climate Accord in 2015 which commits signatories to keeping a global temperature rise this century to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5°C. Signatories of the Paris Agreement also committed to making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.

The IPBES Global Assessment Report shows that the financial sector has a crucial role to play in the transformative change needed to restore and conserve nature, and this in turn helps us tackle climate change by storing carbon in our forests, wetlands and other ecosystems[20]. These form part of the world's natural capital assets and we need to value and manage them properly[21]. We need to build a sustainable economy that incorporates the multiple benefits that healthy ecosystems provide to people's lives. Our environment underpins our prosperity and we see the economic benefits that flow from natural capital in increased productivity and well-being.

And here too we are cooperating internationally alongside the 196 Parties to the Convention on Biological Diversity to develop a new global biodiversity framework for the post-2020 period to combat global biodiversity loss. This new framework will address major global challenges to biodiversity, including those identified by IPBES.

Global recognition of the importance of the financial sector in delivering an orderly transition to cleaner, more resilient economic growth, and delivering global climate and environment objectives has led to the rapid growth of green finance globally. This has been increasingly the case in recent years as the financial risks and opportunities are becoming better understood. The UK has played a key role in driving this growth and shaping the agenda on green finance (see Figure 1).

In recognition of the vital role of the financial sector in delivering global and domestic climate and environmental objectives, green finance is at the heart of the UK's Clean Growth Strategy, 25 Year Environment Plan and Industrial Strategy and supports the UK's economic policy for strong, sustainable and balanced growth.

Through the publication of our Green Finance Strategy we are clear in our ambition to align private sector financial flows with clean, resilient and environmentally sustainable growth and strengthen the competitiveness of the UK financial services sector.

Figure 1 – The UK's leadership on green finance

2001
- The UK Emission Trading System (UK ETS), the first national, multi-sector emission trading programme, was established (it was subsequently scaled up and replaced by the EU ETS).

2005
- UNPRI established and headquartered in London.

2006
- The Stern Review on the Economics of Climate Change was published, commissioned by the UK Government with analysis by the Treasury under the leadership of Lord Nicholas Stern.

2008
- The Climate Change Act was adopted by Parliament-making the UK the first country in the world to enshrine its carbon reduction targets into legislation.

2009
- The first green bond listed on the London Stock Exchange by the World Bank.

2011
- The UK launched its innovative £3.87 billion International Climate Fund

2012
- The Green Investment Bank was established, becoming the world's first such institution.
- UK Government establishes the world's first Natural Capital Committee.

2015
- Transport for London issued its green bond, the first by a UK public agency.
- The PRA publishes its report on the impact of climate change on the UK insurance sector setting out a framework for climate-related financial risks.
- Mark Carney delivers his "Breaking the tragedy of the horizon" speech at Lloyd's of London and spearheads the establishment of the Task Force for Climate-related Financial Disclosures (TCFD) as Chair of the Financial Stability Board.
- The UK commits a further £5.8 billion in International Climate Finance.

2016
- The G20 Green Finance Study Group, co-chaired by UK and China, holds its first meeting under China's G20 Presidency. The Group's synthesis report is welcomed at the 2016 Leaders' summit in September.
- Launch of the City of London's Green Finance Initiative and publication of its first report 'Globalising Green Finance'. The Green Finance Initiative also forms a partnership with China's Green Finance Committee.
- Over £12 billion total capital (£3.4 billion direct commitment) mobilised by the Green Investment Bank (GIB), supporting 100 projects across the UK with almost 75% of investment coming from non- GIB sources.

2017
- The TCFD publishes their final recommendations - endorsed by UK Government.
- The Green Finance Initiative hosts its first Green Finance Summit.
- Government establishes the UK Green Finance Taskforce and publishes the Clean Growth Strategy.
- Central Banks and Supervisors Network for Greening the Financial System (NGFS) is announced at the One Planet Summit – with the Bank of England as a founding member.

2018
- The Green Finance Taskforce, chaired by Sir Roger Gifford, publishes its report 'Accelerating Green Finance'.
- The Parliamentary Environmental Audit Committee publishes two reports on green finance following their green finance inquiry (and Government publishes its responses).
- The world's first Green Finance Certificate launched by the Chartered Banker Institute.
- Chancellor announces the establishment of the Green Finance Institute - co-funded by Government and the City of London Corporation.
- Department of Work and Pensions (DWP) clarifies trustees' fiduciary duty in relation to Environmental, Social and Governance (ESG) factors, including climate change.
- UK hosts first Green Great Britain Week - with Green Finance as a core theme.
- The PRA publishes its report "Transition in thinking: The impact of climate change on the UK banking sector".
- The Financial Conduct Authority publishes a discussion paper on climate change and green finance.

2019
- The PRA and FCA jointly establish the Climate Financial Risk Forum.
- The PRA publishes its supervisory statement: "Enhancing banks' and insurers' approaches to managing the financial risks from climate change".
- UK becomes a founding member of the World Bank's Coalition of Finance Ministers for Climate Action.
- The Treasury Select Committee launches new inquiry into the decarbonisation of the UK economy and green finance.
- The Bank of England announces plans to undertake a stress test of the financial system's resilience to climate-related financial risks.
- Government sets a net zero greenhouse gas emissions target for 2050.
- Government publishes its Green Finance Strategy.
- The Green Finance Institute is launched with Dr. Rhian-Mari Thomas appointed as CEO.
- The UK and Egypt will co-chair the global effort to promote resilience and adaptation to climate change at the UN's Climate Action Summit in September 2019.

2020
- Government will review progress in greening the UK's financial system and publish an interim report, including progress on TCFD implementation.

2022
- Government will conduct a formal review of progress against the Green Finance Strategy.

Chapter 1: Greening Finance

Overview

The transition to cleaner and more resilient growth is reshaping the global economy as countries, industries and institutions seek to mitigate and adapt to the effects of climate change and environmental degradation. This economic transition is having significant and far-reaching implications for the financial sector as the financial risks and opportunities become more apparent. Momentum to green the financial system has grown significantly in recent years. There is now widespread support for the Task Force on Climate-related Financial Disclosures (TCFD) recommendations and an increasing number of high-profile global initiatives, such as the Sustainable Insurance Forum and the Central Banks' and Supervisors' Network for Greening the Financial System (NGFS), have been established.

However, this transformation must accelerate and proliferate in order to match the scale of the challenge faced, particularly as we move to a net zero economy. Consideration of the financial risks and opportunities from climate and environmental factors needs to move beyond 'corporate social responsibility' to become a financial and strategic imperative and normalised as good business. This chapter sets out how we will:

- Mainstream climate and environmental factors into the UK's financial system; and
- Help drive forward the greening of the global financial system.

In taking forward our strategy, we will work closely with the Financial Conduct Authority (FCA), the Financial Reporting Council (FRC), The Pensions Regulator (TPR) and the Bank of England (including in its capacity as the Prudential Regulation Authority (PRA)). When we refer to 'the UK regulators' in this Strategy we are referring to all four of these bodies.

And while the focus of the Green Finance Strategy is on private sector flows, we recognise the integration of climate and environmental factors also has relevance to financial decision-making in the public sector.

Mainstreaming climate and environment factors

The UK's position as an international financial centre means the leadership we demonstrate in greening the UK financial system can have a wide-reaching impact, contributing to an orderly global transition towards a cleaner, more resilient and environmentally sustainable economy. Our strategy focuses on four elements:

- Establishing a shared understanding;
- Clarifying roles and responsibilities;
- Fostering transparency and embedding a long term approach; and
- Building robust and consistent green financial market frameworks.

Establishing a shared understanding:

Recent years have witnessed a 'transition in thinking' on climate change as a core financial issue. For example, the PRA's 2018 review of the UK banking sector found that 70% of banks consider climate change as a financial risk, arising from both 'physical' and 'transition' factors (Box 1)[22].

However, in its first comprehensive report, published in April 2019, the NGFS, of which the Bank of England is a founding member, highlighted that climate change is not only a source of financial risk but also has distinct characteristics (Box 2)[23].

The Government supports the findings of the NGFS report, and recognises these characteristics make climate change different from other sources of structural change and mean it needs to be considered and managed differently. The PRA's 2018 review also found only 10% of banks surveyed were managing the financial risks from climate change comprehensively and taking a long-term strategic view.

Managing these financial risks and delivering an orderly transition to a clean, resilient and

Box 1 – Climate related financial risk

Physical Risk:
Physical risk resulting from climate change can be event-driven (acute) or longer-term shifts (chronic) in climate patterns. Physical risks may have financial implications for organisations, such as direct damage to assets and indirect impacts from supply chain disruption. Organisations' financial performance may also be affected by changes in water availability, sourcing, and quality; food security; and extreme temperature changes affecting organisations' premises, operations, supply chain, transport needs, and employee safety.

Transition Risk:
Transitioning to a lower-carbon economy may entail extensive policy, legal, technology, and market changes to address mitigation and adaptation requirements related to climate change. Depending on the nature, speed, and focus of these changes, transition risks may pose varying levels of financial and reputational risk to organisations.

Box 2 – Distinct characteristics of climate change that require a different approach

Far-reaching impact in breadth and magnitude: climate change will affect all actors in the economy, across all sectors and geographies. The risks will likely be correlated with and potentially aggravated by tipping points, in a non-linear fashion. This means the impacts could be much larger, and more widespread and diverse than those of other structural changes.

Irreversibility: the impact of climate change is determined by the concentration of greenhouse gas emissions in the atmosphere and there is currently no mature technology to reverse this process. Above a certain threshold, scientists have shown with a high degree of confidence that climate change will have irreversible consequences on our planet, though uncertainty remains about the exact severity and horizon.

Foreseeable nature: while the exact outcomes, time horizon and future pathway are uncertain, there is a high degree of certainty that some combination of physical and transition risk will materialise in the future.

Dependency on short-term actions: the magnitude and nature of the future impacts will be determined by the actions taken today, which thus need to follow a credible and forward-looking policy path.

environmentally sustainable economy will require the reallocation of tens of trillions of pounds of capital, presenting significant opportunities for the UK's financial sector.

Establishing a shared understanding of the financial risks and opportunities presented by climate and environmental factors is in our view necessary to set the foundation to deliver our green finance ambitions. The UK regulators recognise this too, which is why:

- **The Financial Conduct Authority, Financial Reporting Council, The Pensions Regulator and Prudential Regulation Authority have today published a joint statement on climate change, which the Government fully supports. The Statement recognises the relevance of climate-related financial factors to their mandates and the importance of a collective response.**

The Government is also taking action. We are working with partners, including the Green Finance Institute (GFI), to host a series of roundtable discussions with Board and Executive level representatives from across the financial sector to reinforce the relevance of the financial risks and opportunities arising from climate change, highlight the importance of urgent action and exchange views and experiences. We call on senior leaders from across the UK financial system to use their signalling and convening power to promote this shared understanding and to catalyse progressive action on climate change within the financial sector.

The Government recognises that environmental degradation and the decline of natural capital, including biodiversity loss, can also be a source of financial risk. As co-chair of the G20's Green Finance Study Group[24] in 2017, the UK led work to advance Environmental Risk Analysis [25] (ERA) and the need for better data. We welcome research, including from central banks[26], to further examine the financial significance of these issues.

The Government is also taking action to deepen collective understanding in this area. For example, through the Government's recent commission to assess the economic value of biodiversity, as discussed further in Box 3.

Box 3 – The Economics of Biodiversity

In the 2019 Spring Statement the UK Chancellor launched a global review, led by Professor Sir Partha Dasgupta, to assess the economic value of biodiversity. The review will provide a basis in economic theory for moving the dial on global action on biodiversity, broadening the debate from science to the potential catastrophic impacts for global welfare if current trends continue unabated. The review will aim to facilitate increased international ambition, by identifying actions that will simultaneously enhance biodiversity and deliver economic prosperity.

Clarifying roles and responsibilities

The greening of finance covers a complex set of issues involving multiple actors across financial services and beyond. A clear understanding of the roles and responsibilities of the private sector, UK regulators and Government will be important as responses continue to evolve.

Further to their joint statement, the Government welcomes the actions UK regulators are taking to embed climate considerations into their supervisory practices and approach (see table overleaf). This includes the integration of environmental, social and governance considerations into codes and guidance, and setting expectations for firms to take a strategic, Board-level and long-term approach.

The UK Regulators and Climate Change

	The Bank of England - Prudential Regulation Authority	The Financial Conduct Authority	The Financial Reporting Council	The Pensions Regulator
Remit	The Prudential Regulation Authority (PRA) sits within the Bank of England and is responsible for the prudential regulation and supervision of around 1,500 banks, building societies, credit unions, insurers and major investment firms.	The Financial Conduct Authority (FCA) is the conduct regulator for 56,000 financial services firms and financial markets in the UK and the prudential regulator for over 18,000 of those firms.	The Financial Reporting Council (FRC) is the UK's independent regulator for accountants, actuaries and auditors, responsible for promoting transparency and integrity in business. It also sets the UK Corporate Governance Code and Stewardship Code.	The Pensions Regulator (TPR) is the public body that protects the UK's workplace pensions. TPR makes sure employers, trustees, pension specialists and business advisers can fulfil their duties to scheme members. It has a role in driving up standards of governance and trusteeship.
Joint statement on climate change	The UK's regulators have published a joint statement on climate change to set out how climate-related financial risks require a coordinated approach and collective action to address.			
Action on climate change	**Published reviews into the financial risks from climate change facing the insurance sector and banking sectors.** These reviews set out how climate change poses financial risks to these firms, and how these risks have distinct characteristics that require an enhanced approach. **Published a Supervisory Statement to enhance banks' and insurers' approaches to managing the financial risks from climate change,** setting out expectations for firm's practices across governance, risk management, scenario analysis, and disclosure. **Asked insurers to consider the impact of different physical and transition risks scenarios** as part of a UK market-wide insurance stress test. **Announced plans to test the financial system's resilience to climate-related financial risks** as part of the Biennial Exploratory Scenario (BES) stress test. **Established the Climate Financial Risk Forum, jointly with the FCA,** to build intellectual capacity across the private sector for assessing the financial risks from climate change. **Co-founded the Network for Greening the Financial System** and chair work stream two on macroeconomic and financial stability implications of climate change. **Promoted the importance of climate-related disclosures by supporting TCFD,** which was set up under the Governor Mark Carney in his role as FSB chair. **Announced its intention to undertake climate disclosures in line with the TCFD** that will outline how the Bank of England manages the financial risks from climate change, becoming the first central bank to do so across its entire operations. **Co-founded the Sustainable Insurance Forum** to bring together insurance supervisors and regulators to address sustainability challenges. **Undertook analysis on the green mortgage market,** considering the relationship between energy efficiency and credit risk.	**Extending the remit of the Independent Governance Committees** to cover consideration of firm's Environmental, Social and Governance priorities and how they respond to member concerns, subject to consultation. **Launched a Green FinTech Challenge** to encourage firms to develop innovative solutions to support the UK's transition to cleaner economic growth**.** **Established the Climate Financial Risk Forum, jointly with the PRA** to build intellectual capacity across the private sector for assessing the financial risks from climate change. **Published a discussion paper on climate change and green finance** setting out a range of proposals in relation to climate change. **Joined the IOSCO sustainable finance network** to collaborate with other IOSCO members on sustainable finance issues. **Introduced new requirements** to improve shareholder engagement and increase transparency around stewardship. **Launched a Discussion Paper on building a regulatory framework for effective stewardship,** jointly with the FRC, to consider how asset owners and asset managers can most effectively integrate climate change and other environmental, social and governance factors into their investment activities.	**The Corporate Governance and Stewardship Codes** encourage companies and investors to report on how they have taken into account long-term sustainability factors (including environmental factors) into their decision making**.** Jointly with the FCA, the FRC also published a Discussion Paper on building a regulatory framework for effective stewardship. **Through the Joint Forum on Actuarial Regulation**, the FRC highlights the risks to high quality actuarial work arising from climate change in the annual Risk Perspective. **The FRC monitors whether companies are complying with the statutory disclosure requirements of the strategic report** (which includes reporting on principal risks and uncertainties) as well as any financial statement implications of climate change. **The FRC's audit monitoring will** consider the adequacy of the auditors' work over principal risk disclosures (including climate risk) and the financial statement implications of climate change. **The Financial Reporting Lab** will produce a report this year that will provide practical guidance on best practice climate reporting. **The FRC's project on the Future of Corporate Reporting** will consider the need for improved sustainability information from companies.	**Updating Defined Contribution investment guidance** to reflect Government regulation to clarify and strengthen trustees' duties, including in relation to Environmental, Social and Governance considerations, including climate change. **Contributed to the revised Stewardship Code** consultation welcoming the code as a tool to improve investment governance and risk management on Environmental, Social and Governance issues, including climate change. **Co-established an industry working group on climate change** to produce guidance for pension schemes on climate-related practices across governance, risk management, scenario analysis, and disclosure. TPR expect to consult on this guidance in late 2019 with a view to putting it on a statutory footing during 2020 as part of the Governance Code required by the Occupational Pension Schemes (Governance) (Amendment) Regulations 2019. **Monitoring the landscape** through questions on climate change in annual governance surveys of Defined Benefit and Defined Contribution schemes.
Adaptation Reporting	The UK regulators will submit a report on actions they are taking to strengthen preparedness to climate change impacts in their respective remits under the Adaptation Reporting Power, along with 84 other organisations[27].		These reports will provide vital intelligence on the interaction between financial regulation and climate change and will provide the opportunity to collectively strengthen existing approaches as well as to inform future Government action.	

*The Prudential Regulation Authority published a Climate Change Adaptation Report as part of the second round of adaptation reporting powers under the Climate Change Act[28].

We recognise that the Government also has a responsibility to act. We have already delivered on the Green Finance Taskforce's recommendation **to strengthen and clarify trustees' investment duties so that from October 2019 occupational pension schemes will be required to publish their policy on financially material considerations, including those arising from climate change**[29]. This will also require relevant schemes to publish their policies in relation to the stewardship of investments. The Asset Management Taskforce, launched by the Government in October 2017, has recently established a stewardship sub-group that will consider how the Taskforce can promote and enhance the UK as a centre of excellence for sustainable stewardship[30].

The Government will be taking additional action to strengthen our response by clarifying the roles and responsibilities of the UK regulators to take account of these issues.

- **For the Prudential Regulation Authority and Financial Conduct Authority, we will ensure that the need to have regard to the COP21 Paris Agreement when considering how to advance their objectives and discharge their functions is reflected in the next Letter of Recommendations that HM Treasury issues to each authority[31]. Likewise we will ensure there is a similar provision in the remit and recommendations letter that HM Treasury issues to the Financial Policy Committee[32].**
- **For The Pensions Regulator, we will be including climate-related financial issues in the Government's allocation letter with a view to embedding considerations in other documents when the opportunity arises.**

The Government welcomes the actions that leaders from across the financial sector have already taken to galvanise action.

For example, the Transition Pathway Initiative (TPI) (see Case Study) helps asset owners research and track investments and engage with individual companies on how they manage their greenhouse gas emissions[33]. We encourage market participants to sign up to voluntary principles as relevant to their sector, such as the UN Principles for Responsible Investment, UN Environment Programme Finance Initiative's Principles for Sustainable Insurance and Principles for Responsible Banking[34,35,36].

Case Study: The Transition Pathway Initiative – pension funds going green

The TPI is a global initiative to assess companies' preparedness for the transition to a low-carbon economy. It was initially established as a joint initiative between the Environment Agency Pension Fund and the Church of England National Investing Bodies to support efforts to address climate change.

Today, over 40 investors globally have pledged support for the TPI. Jointly they represent over £10.3 trillion of combined assets under management. The online tool, which is free-to-use and open-to-all, has analysed the performance of 300 companies in 14 sectors, including the airline and car industries. This sort of information helps asset owners research and track investments and engage with individual companies on how they manage their greenhouse gas emissions.

"Businesses should be able to explain to investors how they plan to manage climate change risks, invest and innovate on the way to the zero-carbon economy of the future. With the launch of the Transition Pathway Initiative, asset owners from around the world are sending a strong signal that portfolios will align in the future with companies that are taking the transition to a low carbon economy seriously" – Emma Howard-Boyd, Chair of the Environment Agency and UK Commissioner to the Global Adaptation Commission.

Fostering transparency and embedding a long-term approach

One of the essential functions of financial markets is to price risk to support informed, efficient capital-allocation decisions. As firms develop their response to the financial implications of climate change their approaches must be built upon transparent and decision-useful climate-related information and a long-term approach. The Government will take action by:

- Setting expectations and ensuring a coordinated approach on TCFD;
- Supporting high quality TCFD disclosure and reviewing progress; and
- Building on TCFD to broaden action on transparency.

Setting expectations and ensuring a coordinated approach on TCFD

In 2015, in response to a call from G20 leaders, the Financial Stability Board (FSB) established the private sector TCFD to enhance transparency on the financial risks and opportunities from climate change[37]. One area of innovation the TCFD introduced was around scenario analysis which can foster a longer-term approach to considering climate-related financial risks and opportunities.

The Government formally endorsed the TCFD recommendations in September 2017[38]. We welcome the progress being made implementing the recommendations on a voluntary basis. **The Government expects all listed companies and large asset owners to be disclosing in line with the TCFD recommendations by 2022.**

Box 4 – The TCFD recommendations

The TCFD has established a globally recognised framework through which exposure to climate-related financial risk and opportunities can be disclosed. A total of 785 organisations are now supporters of the TCFD, including the world's largest banks, asset managers and pension funds, responsible for assets of $118 trillion.

Core Elements of Recommended Climate – Related Financial Disclosures

Governance
The organisation's governance around climate-related risks and opportunities

Strategy
The actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning

Risk Management
The processes used by the organisation to identify, assess, and manage climate-related risks

Metrics and Targets
The metrics and targets used to assess and manage relevant climate-related risks and opportunities

We also welcome the actions being taken by UK regulators with respect to disclosure. For example, in their October 2018 discussion paper on climate change and green finance, the FCA sought views on the value of introducing a requirement for financial services firms to report publicly on how they manage climate risks to their customers and operations as well as feedback on further steps it should consider to improve climate-related disclosures by issuers of securities admitted to trading on a regulated market[39]. The PRA have published a supervisory statement to enhance banks' and insurers' approaches to managing the financial risks from climate change, including setting expectations on disclosure[40].

To meet the ambition of this strategy, we believe there needs to be an improvement in the quality and quantity of climate-related financial disclosure. Consistent with the recommendation of the NGFS that policymakers and supervisors consider further actions to foster broader adoption of the TCFD recommendations, the Government will be:

- **Establishing a joint Taskforce with UK regulators, chaired by the Government, to ensure a co-ordinated approach on climate-related financial issues. The Taskforce will examine the most effective way to approach disclosure, including exploring the appropriateness of making reporting mandatory.**
- **Taking forward discussions with relevant international standard setters to promote internationally consistent disclosure.**

Supporting quality TCFD disclosure and reviewing progress

Disclosure is only useful if it guides decision-making. The Government recognises there are still challenges for industry in developing approaches to implementing the TCFD recommendations and that best practice will take time to develop.

Supporting the private sector to address these challenges, for example through climate and environmental related data and analytics, presents a significant commercial opportunity for the UK, as explored further in Chapter 3.

We recognise the Government can also play an important role in providing climate-related information to the market in a proportionate manner, as evidenced by our approach to streamlining the UK's energy and carbon reporting framework.

Case Study: The Streamlined Energy and Carbon Reporting (SECR) Framework

The Government has introduced a new Streamlined Energy and Carbon Reporting framework which came into force from 1 April 2019 to simplify carbon and energy reporting requirements for businesses. This new framework will extend the number of organisations required to report on their energy use and emissions in their company annual reports, as well as an intensity metric and energy efficiency action in the previous 12 months. This mandatory reporting obligation now falls on all large or quoted companies and large limited liability partnerships incorporated in the UK, an estimated 11,900 organisations, increasing the coverage from an estimated 1,200 quoted companies. This broadening and simplification of energy and carbon disclosures will provide a level playing field in reporting across large businesses.

We are working with the FRC to help facilitate digital reporting of SECR disclosures and to ensure the information is more accessible for external stakeholders.

We are also taking action to support the implementation of TCFD through guidance:

- **The Government and The Pensions Regulator have jointly established an industry group to develop TCFD guidance for pension schemes. The Pensions Regulator expect to consult on this guidance in late 2019 with a view to putting it on a statutory footing during 2020 as part of the Governance Code required by the Occupational Pension Schemes (Governance) (Amendment) Regulations 2019.**

The Government will work closely with the GFI to build capacity on TCFD-related issues and welcomes the actions UK regulators, and other actors, are taking, including:

- The PRA and FCA's initiative to establish a Climate Financial Risk Forum to build capacity and share best practice across financial regulators and industry in order to advance financial sector responses to the financial risks from climate change[41];
- The NGFS taking forward work to provide a small number of high-level scenarios which can be used by industry to support implementation of the TCFD's recommendations[42]; and
- Initiatives such as the TCFD Knowledge Hub[43], which provides resources to support TCFD implementation, powered by the Climate Disclosure Standards Board.

The Government also recognises we have an important role, working closely with other stakeholders, in reviewing progress. That is why:

- **The Government will continue to explore actions we can take to advance the greening of the UK financial system and will publish an interim report by end of 2020, including progress on TCFD implementation.**

Building on TCFD to broaden action on fostering transparency

The TCFD recommendations have been instrumental in developing a framework for disclosing climate-related financial risks and opportunities. Actions to foster transparency can also support the Government's domestic and international commitments on the environment and sustainable development. That is why the Government is supporting the work of the World Benchmarking Alliance to develop transformative benchmarks that will compare companies' performance on key areas of sustainability and impact on the UN Sustainable Development Goals.

Recent reports such as those from the Intergovernmental Science and Policy Platform on Biodiversity and Ecosystems Services (IPBES)[44] and the OECD[45] are strengthening the evidence base on the potential systemic economic and financial impacts of nature-related issues such as biodiversity loss and the private sector have highlighted the need for a complementary approach to TCFD on these broader issues[46].

To accelerate progress, the Government will:

- **Work with international partners to catalyse market-led action on enhancing nature-related financial disclosures.**

Work in this area will help companies understand what financial markets require from disclosure in order to measure and respond to nature-related financial risks, building on a report[47] presented to the G7 Environment Ministers' meeting in May this year. It will also complement the global review of the economics of biodiversity led by Professor Sir Partha Dasgupta, discussed earlier in Box 3.

Catalysing market-led action will mirror the success of the TCFD's approach by supporting the private sector to develop consistent and comparable disclosures in order to better manage, measure and respond to nature-related financial risks.

Improving financial risk understanding related to biodiversity loss and natural capital degradation will also support financial institutions and policymakers to differentiate between companies and projects that are aligned with the implementation of international biodiversity commitments, the UN Sustainable Development Goals and the UK's 25 Year Environment Plan.

Building robust and consistent green financial market frameworks

Clear and consistent frameworks, such as green definitions and standards, will be important to ensure confidence in the effective functioning of green financial markets. The Government will be taking action through matching the ambition of the objectives of the EU's Sustainable Finance Action Plan, creating Sustainable Finance standards and working with the Fair and Effective Markets Review.

The EU's Sustainable Finance Action Plan

The Sustainable Finance Action Plan was launched by the European Commission in May 2018 as part of the EU's response to the Paris Climate Agreement[48]. Its three objectives are:

- To reorient capital flows towards sustainable investment;
- To manage financial risks stemming from climate changes by considering environmental and social goals in financial decision-making; and
- To increase transparency in financial products so that citizens can make informed decisions about their investments.

The UK has formerly endorsed these objectives and will continue to use its knowledge and expertise to support the EU's objectives on Sustainable Finance.

- **The Government commits, in relation to green finance, to at least match the ambition of the three key objectives included in the EU's Sustainable Finance Action Plan.**

In accordance with the EU Sustainable Finance Action Plan, the EU proposed three legislative files. These are on disclosures, benchmarks, and a new sustainable finance framework (commonly known as a taxonomy). The UK has been closely involved in all three files and continues to participate in Council discussions on the taxonomy file and the Member States Expert Group.

To ensure the Government has the option of onshoring the EU's proposals into UK law, regardless of the EU Exit outcome, all three files are included as part of the Financial Services (Implementation of Legislation) Bill.

Creating sustainable finance standards

Together with the private sector, we have funded the British Standards Institution (BSI) to design and roll out a programme of internationally relevant standards on Sustainable Finance, starting with the development of three new Publicly Available Specifications (PAS). The scope of the three PAS documents has been established following an extensive industry engagement exercise, and the BSI continues to coordinate with industry leaders as these documents are developed. Two of the Sustainable Finance PAS standards currently in development are:

- **PAS 7340: Sustainable Finance Framework:** A guide to outline a framework for, and provide guidance on, implementing principles and approaches to sustainable finance within financial services organisations. It establishes guiding principles and common terms and definitions related to sustainable finance to help organisations of all sizes and sectors.
- **PAS 7341: Sustainable Investment Management:** A specification setting out requirements to establish, implement, and manage the process of integrating responsible and sustainability considerations into investment management. It includes stewardship and the levels of engagement needed to demonstrate ongoing sustainable investment management and practices.

The BSI are currently refining the scope of the third PAS which will seek to set out requirements for the assessment, governance, labelling and communication of funds presented as having sustainable credentials.

The Draft PAS 7340 is expected to undergo public consultation in July-August, and we expect PAS 7341 to open for consultation soon thereafter. **The Government encourages all interested parties to respond to the consultation** to help ensure the standards are robust and drive increased alignment of activity with our global sustainability goals.

The International Organisation for Standardisation (ISO) has established a new Technical Committee on Sustainable Finance which is chaired by the UK[49]. The Technical Committee will develop international standards on the topic of sustainable finance, and the UK-led PAS work will look to inform and feed into this activity.

The Fair and Effective Markets Review (FEMR)

The FEMR is a working group, led by the Bank of England and co-chaired with HM Treasury and the FCA[50]. Putting good conduct and accountability at the heart of financial markets, the FEMR will:

- **Work to understand the potential or actual barriers to the growth and effectiveness of green finance.**

This will engage a broad range of market participants to gather views on the level of transparency and disclosure. It will also explore metrics for measuring the impact of green finance and assess the availability of comparable data. This exercise will feed into the work of the PRA/FCA's Climate Financial Risk Forum and inform the continued development of the Government's Green Finance Strategy. Overall, the work is intended to support the development of the green finance market, which will play a vital role in the UK's transition to a clean and resilient economy.

Driving the greening of the global financial system

The UK has taken a leading role in shaping the global agenda on climate change and green finance, including through our representation in international forums and our extensive diplomatic network. These include for example:

- Establishing the G20 Green Finance Study Group with China in 2016 which provided options to G20 members on how to scale up green finance globally[51]. The Group's synthesis report was welcomed at the leader's summit in China and provided global signalling to policymakers and financial markets worldwide of the need for green finance. The UK has continued to chair the group with China under Germany and Argentina's G20 Presidencies;
- HM Treasury recently became a founding member of the Coalition of Finance Ministers for Climate Action and endorsed the Helsinki principles with 21 other finance ministers. The Coalition, which was formed in April 2019, convenes finance ministers committed to taking collective and domestic action on climate change and achieving the Paris Agreement's objectives;
- The Governor of the Bank of England chaired the Financial Stability Board (FSB) during the development of the TCFD recommendations and the Bank of England was a founding member of the NGFS; and
- UK financial services expertise has contributed to the EU Sustainable Finance Action plan.

Recent years have witnessed significant progress. Through the actions of central banks and the private sector there is increasing momentum to integrate climate and environmental factors more comprehensively into the global financial system. The real-world economic changes needed to shift investment, supported by global initiatives such as the Green Climate Fund, are underway.

At the same time, we recognise further urgent action is required to meet the challenge set in the 2015 Paris Agreement to align financial flows with low carbon and resilient growth.

The Government commits to using the UK's global influence to promote the greening of the financial system internationally. This includes playing an active role in the Coalition of Finance Ministers for Climate Action; leading on the adaptation and resilience strand at the United Nations (UN) Climate Action Summit; and exploring initiatives to accelerate alignment of finance ahead of COP26 in 2020.

To drive the greening of the global financial system, the Government will:

- Champion the resilience agenda;
- Drive action through international collaboration;
- Partner with the private sector;
- Explore initiatives to accelerate alignment to the Paris Agreement; and
- Align the UK's Official Development Assistance (ODA) spending with the Paris Agreement.

Championing the resilience agenda

Building resilience to the physical risks from climate change will be essential as global temperatures increase. More fully integrating physical risks into the financial system and ensuring adaptation as well as mitigation is sufficiently addressed will be a key focus of our strategy. That is why the UK and Egypt will co-chair the global effort to promote resilience and adaptation to climate change at the UN's Climate Action Summit in September 2019.

The Government aims to promote systemic shifts in the way that public and private financial actors plan and invest their resources to adapt to current climate impacts and build resilience for the future. These build on a number of the recommendations outlined in this strategy. The governments of Bangladesh, Malawi, the Netherlands and St Lucia are working with us to achieve this supported by the United Nations Development Programme, and working closely with the Global Commission on Adaptation, the World Bank, the World Economic Forum and the UN Environment Programme.

Driving action through international collaboration

Addressing the financial risks and opportunities arising from climate change and environmental degradation is a global challenge, and requires a collective, global response. We will drive international collaboration through our bi-lateral partnerships, our long-standing relationships with international organisations and our international network.

Partnerships are key to our work. The UK's regular Economic and Financial Dialogues with China (see Case Study), Brazil and India include green finance as an area for collaboration in financial services. In 2018, we also strengthened our relationships with China, Colombia, and Mexico and Colombia though

Case Study: UK and China partnership on green finance

At the 9th and 10th UK-China Economic and Financial Dialogue (EFD) the UK and China recognised each other as their primary partner in green finance for capital raising, product innovation and thought leadership. We agreed a set of joint priorities which are now being supported by the UK PACT programme. At the 10th EFD, the UK-China Green Finance Centre, launched by the City of London Green Finance Initiative and the China Green Finance Committee in 2018, was formally recognised by both governments.

This will build on the work of the UK-China Green Finance Taskforce, which launched in 2016 with the aim of increasing areas of collaboration on greening the Belt and Road Initiative, TCFD implementation, ESG investing, green asset securitisation, and green standards, as well as capacity building. The group jointly launched a three-year TCFD-implementation pilot where ten leading financial institutions committed to adopting TCFD recommendations under the coordination of PRI and published an Action Plan setting clear expectations for the pilot.

The group has also developed a series of Green Investment Principles to promote sustainable infrastructure investment. As part of this work, a joint secretariat in the UK and China has been established to further develop the principles, ensure robustness, and raise ambition for green, low-carbon and climate-resilient investment. The joint Taskforce has also partnered on green and clean technology and agreed to set-up the London-Beijing Green Technology Investment Gateway.

the UK Partnerships for Accelerated Climate Transitions (UK PACT) programme.

The Government continues to support the greening of financial sector and building resilient outcomes through our long-standing collaboration with key international organisations. We will do this, in part, via our role in the Coalition of Finance Ministers and in partnership with the World Bank as its secretariat.

The UK amplifies its international assistance by collaborating with multilateral development banks (MDBs) and driving their climate ambition through Board and investment engagement. MDBs often have unrivalled reach in developing country finance ministries, national development banks and others.

As a Board Member and shareholder of the MDBs, the UK is using its expertise to drive ambition on increased leveraging of financial flows from private sources and in-country policy support for greening economies. This includes pushing MDBs to: raise ambition to align with the Paris Agreement, using their existing climate leadership to encourage climate action; adopt stretching private finance mobilisation targets where appropriate; and advocate to raise awareness of climate-related financial risks. This is especially important in their work establishing capital markets in the developing world – starting with implementing the TCFD recommendations across their own portfolios. We will also work with other institutions, including for example the International Monetary Fund, to achieve these objectives.

The Department for International Development (DFID) and the Bank of England are also scaling up their partnership to build the capacity of central banks in developing countries and the Government will explore using this as a platform to share the Bank's expertise internationally in managing climate-related financial risk.

The Government's international network, which includes climate attachés across 58 countries worldwide, accompanied by our extensive trade attaché network, promotes climate action and mutual prosperity with our partners. Promoting the greening of finance internationally will be a key part of the Government's diplomatic strategy, financial development and climate engagement, which is outlined in further detail in Chapter 3.

Partnering with the private sector

The Government recognises we can also play a role driving private sector action and collaboration as part of our international strategy. For example, through the Powering Past Coal Alliance (PPCA) the UK and Canada, supported by CCLA Investment Management, have worked with leading institutions to establish Finance Principles with commitments on restricting financial services for new unabated coal power projects and supporting the phase out of existing capacity by 2030 in the OECD and 2050 in the rest of the world. That is why the Government is:

- **Launching the Powering Past Coal Alliance Finance Principles, through which financial institutions can commit to support the phase out of unabated coal power within Paris Agreement timeframes.**

Aviva plc, Hermes Investment Management and the Church Commissioners for England have joined the Alliance as founding signatories of the Finance Principles, alongside CCLA and Storebrand as existing PPCA finance members. The UN-supported Principles for Responsible Investment initiative will be an official Partner to the PPCA.

The Government has also launched the Global Resource Initiative (GRI) to bring together thought leaders across business, finance and civil society on the issues of sustainable supply chains. These leaders will develop ambitious, practical recommendations for how the UK can reduce the 'imported deforestation' embedded in the commodities that we consume; improving the long-term resilience of our supply chains. The Taskforce, to be chaired by Sir Ian Cheshire, will shape the direction of the Government's policy on sustainable trade while creating a model of change that can inspire other countries towards the same ambitions. The GRI will also work closely with the GFI to support a shift towards investment that better accounts for the value of a healthy environment, a stable climate and natural capital.

Exploring initiatives to accelerate alignment to the Paris Agreement

The Government recognises these actions alone will not create the incentives to redirect finance towards clean and resilient investments at sufficient speed and scale to meet the challenge of the Paris Agreement.

Collectively governments need to be able to track economy-wide efforts to align financial flows and give political impetus to international activity. Further momentum is needed from the public and private sector, including clarifying fiduciary duties and strengthening corporate governance, developing green taxonomies, enhancing climate-related financial disclosure and improving climate-related data and analytics.

Ultimately, we need to strengthen and broaden the international coalition driving action to green the global financial system and to develop a common framework and roadmap around which leaders, governments, central banks, financial regulators and the private sector can take the collective action required.

As the Government implements this strategy, we will utilise opportunities such as at the UN Climate Action Summit in September and our G7 Presidency in 2021, to consider how best to champion action to align financial flows with the goals of the Paris Agreement.

Aligning the UK's ODA with the Paris Agreement

As the Government explores initiatives to align global financial flows, we will be taking action to ensure UK Government leads by example through **aligning the UK's Official Development Assistance spending with the Paris Agreement**, strengthening the existing provisions in the UK Government's guidance on considering climate and environmental factors.

In practical terms this will include:

- Using an appropriate carbon price in relevant bilateral programme appraisal;
- Ensuring any investment support for fossil fuels affecting emissions is in line with the Paris Agreement temperature goals and transition plans;
- Implementing a proportionate approach to climate risk assurance; and
- Ensuring that relevant programmes do not undermine the ambition in countries' Nationally Determined Contributions (NDC) and adaptation plans.

We will consider how to demonstrate that on aggregate, our ODA is delivering climate benefits and supporting implementation of the Paris Agreement. We anticipate this including identifying opportunities to work with countries to enhance and embed clean growth and climate resilience, incorporating what is included in NDCs and adaptation plans into their growth plans, to help meet the long-term goals of the Paris Agreement. We will encourage similar actions in relevant multilateral institutions and programmes, where appropriate.

Our actions to align the UK's ODA with the Paris Agreement also demonstrate the Government's commitment to leading by example by integrating climate and environmental factors into financial decision making in the public sector, as we discuss further below.

Government leading by example

The focus of this strategy is on aligning private sector financial flows with clean, resilient and environmentally sustainable growth. At the same time, the Government recognises the integration of climate and environmental risks and opportunities also has relevance to financial decision-making in the public sector. Therefore, while there is clear focus on the private sector, the public sector needs to remain alert to the impacts from transitioning to a cleaner economy, as our understanding in this area is enhanced by improved data. That is why, the Government will:

- **Consider the financial risk exposures relating to climate change and the low carbon transition as part of the 2020 Managing Fiscal Risks report;**
- **Undertake a review, led by HM Treasury, to understand the costs of achieving net zero GHG emissions by 2050 and to understand where these costs will fall across the economy;**
- **Ask Government departments to incorporate the updated 2018 Green Book focus on climate risks in their policy development, including at the Spending Review; and**
- **Embed TCFD reporting in publicly funded financial bodies.**

Our work in this area will build on an existing framework within the public sector which has already taken steps to consider the financial risks from climate change (Box 5).

Box 5 – Selected Government activities integrating climate-related financial risks and opportunities in decision making

- In 2018/19 we updated our guidance on the preparation of Annual Reports and Accounts with new reporting requirements for Climate Change Adaptation.
- HM Treasury's Green Book provides guidance on assessing the viability and value for money of policies and projects across government[52]. The Green Book is at the leading edge internationally, including when it comes to practical appraisal of climate change, natural capital and other environmental effects. It also requires that the Climate Change Risk Assessment (CCRA) be used to account for current and future climate risks along with vulnerabilities in appraising policies and projects.
- The National Infrastructure Commission will be examining the resilience of the UK's infrastructure, to consider what action Government should take to ensure it is resilient to future changes, such as climate change[53]. This will build upon the NIC's National Infrastructure Assessment which included recommendations on de-carbonising how the UK powers and heats its homes and deals with waste[54]. The Government will publish an Infrastructure Strategy later this year in response to the NIC's National Infrastructure Assessment.
- From 2020, the Office of National Statistics will publish comprehensive Natural Capital Accounts for the UK to guide policy development in line with our long-term goals. This will provide a robust metric alongside GDP to measure the sustainable growth of our economy and highlight future priorities for public and private investment.

Embedding TCFD reporting in publicly funded financial bodies

The Government recognises that as TCFD becomes mainstream in the private sector it is also right that publicly funded financial bodies, such as CDC and UK Export Finance (UKEF) also implement the TCFD framework, as appropriate to their individual mandates and financial models. That is why:

- **CDC and UK Export Finance will make climate-related financial disclosures in their accounts in line with the TCFD recommendations, as soon as practicable following the close of the 2020/21 financial year.**

CDC is the UK's development finance institution. Its mission is to support the building of businesses throughout Africa and South Asia, to create jobs and make a lasting difference to people's lives in some of the world's poorest places. CDC invests directly by providing equity, debt, mezzanine finance and guarantees to businesses; and also, indirectly through supporting fund managers who are aligned with its mission and who invest capital on its behalf. CDC invests in seven core priority sectors: infrastructure, financial institutions, manufacturing, agribusiness, construction, health and education.

CDC established its climate change policy in 2014 and has made a strong commitment in its 2017-21 strategic framework to further assess and address climate change risks and opportunities as a core part of its investing. Making climate change financial disclosures in its accounts in line with the TCFD recommendations is a logical next step in this process. **CDC will make climate-related financial disclosures in its accounts in line with the TCFD recommendations, as soon as practicable following the close of the 2020/21 financial year.**

UK Export Finance (UKEF) is the UK's export credit agency and a government department, reporting to Ministers in the Department for International Trade. Its mission is to ensure that no viable UK export fails for lack of finance or insurance from the private sector, while operating at no net cost to the taxpayer. UKEF provides insurance, guarantees and loans which help to make exports happen which might otherwise not, helping UK exporters and their supply chains grow their business overseas. UKEF has a total capacity of £50 billion to support UK exports.

UKEF has strong capability in the assessment of project specific risks across sectors and manages its risk profile as an export credit agency which assumes risks in line with the needs of UK exporters on a case by case basis. **UKEF will further strengthen this capability by making climate-related financial disclosures in its accounts in line with the TCFD recommendations, as soon as practicable following the close of the 2020/21 financial year.**