Inquiry: Design of a Sustainable Financial System

UNEP

The United Kingdom: Global Hub, Local Dynamics

MAPPING THE TRANSITION TO A SUSTAINABLE FINANCIAL SYSTEM

January 2016

The Inquiry

The Inquiry into the Design of a Sustainable Financial System has been initiated by the United Nations Environment Programme to advance policy options to improve the financial system's effectiveness in mobilizing capital towards a green and inclusive economy—in other words, sustainable development. Established in January 2014, it published its final report, *The Financial System We Need*, in October 2015.

More information on the Inquiry is at: *www.unep.org/inquiry* and www.unepinquiry.org or from:

Ms. Mahenau Agha, Director of Outreach *mahenau.agha@unep.org*

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Comments

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EXECUTIVE SUMMARY

The UK's transition towards a sustainable financial system is shaped by a dynamic between domestic green economy priorities and its role as a global financial centre.

With financial assets worth eight times annual GDP, the UK financial system is disproportionately large when compared to the underlying domestic economy. The City of London is not only home to some of the world's largest financial markets, but also to a range of sustainable finance initiatives that are setting the agenda both domestically and internationally. Historically, it was the key location in the initial rise of carbon markets and a leader in the integration of environmental, social and governance factors into institutional investment. It is now a pioneer in confronting climate risk. The UK has also become a global centre for Islamic Finance, a striking example of how the public and private sectors have cooperated to develop a strategic competence in a growing area of values-based finance.

The crisis that followed the 2008 credit crunch had enormous costs for the UK economy, and profoundly impacted the structure and governance of UK financial markets. The continued prevalence of market abuse and high-profile scandals in the aftermath of the crisis has inspired a renewed vigour by regulators and legislators, with recent efforts to restore trust and public confidence focusing on market integrity and professional conduct. Importantly, the focus on stability risk has also changed the ways in which sustainability is being considered by firms and regulators – notably by shifting attention from the institutional to the systemic level.

Over the past 15 years, four "waves" of sustainable finance innovation have taken place in the UK, starting with ethical investment, moving to mainstreaming environmental factors into institutional investment, the surge of post-crisis reform and the current focus on climate and carbon risk. Across these, a UK model of innovation emerges – one starting with social entrepreneurs and civil society organizations raising expectations for financial institutions, practitioners competing to capitalize on new market expectations and finally regulation being introduced to universalize good practice.

Currently, there are six priority areas for sustainable finance in the UK:

1. Social innovation: aligning finance with individual values and social purpose – for example, from leading work on 'unburnable' carbon and stranded assets to new thinking about the overall purpose of the financial system.
2. Institutional stewardship: placing sustainability factors at the heart of mainstream financial sectors, most notably investment management – for example, the Law Commission's review of fiduciary duty.
3. Capital market mobilization: incorporating sustainability into equity and debt market disclosure, analysis and capital raising – for example, mandatory reporting of greenhouse gases on the London Stock Exchange. Green bonds are also critical growth area: the UK was the third largest green bond market in 2015.
4. Housing finance: improving the environmental and energy performance of the UK's housing stock through new ways to mobilize financing – for example, finding a practical successor to the Green Deal mechanism.
5. Prudential governance: embedding sustainability into the safety and soundness of key sectors and the system as a whole – for example, the Bank of England's review of insurance and climate change.
6. Public balance sheet: mobilizing fiscal and other resources to facilitate the transition to a low-carbon, green economy – for example, the launch of the world's first Green Investment Bank.

The UK's leadership in many areas is clear. But sustainability could perhaps be classified as a 'sleeping giant' of the financial system. Initial innovation is sometimes developed in the UK, but then deepened by fast followers in other markets. Many of the promising initiatives are also relatively new and will need careful nurturing to flourish.

Heading into 2016, the global momentum is likely to intensify, not least through China's decision to make green finance a core theme of its G20 Presidency, launching a new study group co-chaired by China and the UK, for which UNEP will act as secretariat. Domestically, the dialogues that contributed to this country report revealed significant enthusiasm for the development of a clear roadmap for sustainable finance in the UK. This would seek to build on existing innovations, overcome key bottlenecks and identify shared priorities for future action. A number of countries are introducing national roadmaps – notably China and Indonesia – and based on the findings of this report, a UK Sustainable Finance Strategy could take forward the following priorities:

- **Deepen sustainability disclosure and analytics:** Disclosure on UK capital markets is improving, but could be deepened on climate, food and water.
- **Confirm the sustainability dimensions of stewardship, fiduciary duty and investment structure:** Improving sustainability performance in the investment chain is not just a question of rules, but also developing pension funds with the scale and capacity to deliver.
- **Establish a Green Bond Hub:** A UK Green Bond Market Development Committee would help to consolidate existing market innovation and provide a platform for future growth.
- **Empower individual investors with the right information:** Innovative use of communications technology could bring information on the sustainability of investment funds to the consumer, strengthening financial literacy.
- **Build on the track record of the Green Investment Bank:** The Green Investment Bank has considerable potential to facilitate capital deployment as it moves into its next phase, addressing market failures that remain pressing issues.
- **Enhance financing for the greening of the UK's homes:** Breakthrough ideas are needed to develop ways of financing home retrofits that are attractive and compelling for the consumer.
- **Take a system-wide view on environmental risk:** The Bank of England's prudential review of insurance is world-leading, and the lessons could be applied to other sectors and parts of the system, such as banking and pension funds.
- **Explore the green potential of alternative finance:** The UK is Europe's leader in alternative finance – such as peer-to-peer – and this could be leveraged for the green economy.
- **Embed sustainability into financial culture:** Following the crisis, considerable attention has been placed on improving financial culture. The sustainability dimension could now be incorporated as an additional motivational driver for improved conduct over the long-term.

1 THE UK FINANCIAL SYSTEM: LARGE, GLOBAL AND CONNECTED

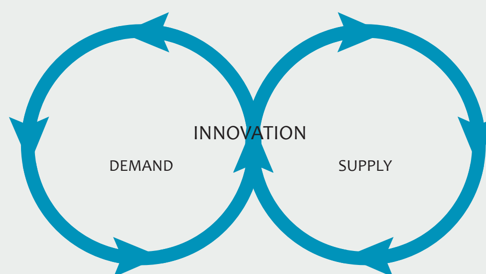
1.1 The Transition to a Sustainable Financial System

The purpose of the financial system is to serve the real economy – by facilitating transactions, enabling capital intermediation and managing risk. This is a dynamic task – and currently one of the critical challenges facing the financial system worldwide is to support the transition to low-carbon, resilient and sustainable development. For the UK more than most, this challenge has a dual meaning as the real economy that its financial system serves is both domestic and international.

The Dynamics of Supply and Demand for Sustainable Finance

Mobilizing capital to support the transition to sustainable development requires action on both the demand and supply sides of finance.

On the demand side, policies in the real economy need to price externalities, remove perverse subsidies and encourage long-term capital deployment towards the green economy through stable and cost-effective investment frameworks.



These steps need to be complemented by action on the supply side – to improve risk management within the financial system, encourage innovation in green financial services, strengthen resilience to environmental shocks and ensure coherence between financial rules and wider national priorities. The Inquiry's focus is on policy options that can improve the supply side of finance. environmental shocks and ensure coherence between financial rules and wider national priorities. The Inquiry's focus is on policy options that can improve the supply side of finance.

This paper provides an overview of the evolution of the UK's approach to sustainable finance and concludes with a set of priorities that could be included in a comprehensive national roadmap. Critically, the UK's approach to sustainable finance is informed by the structure of its financial system.

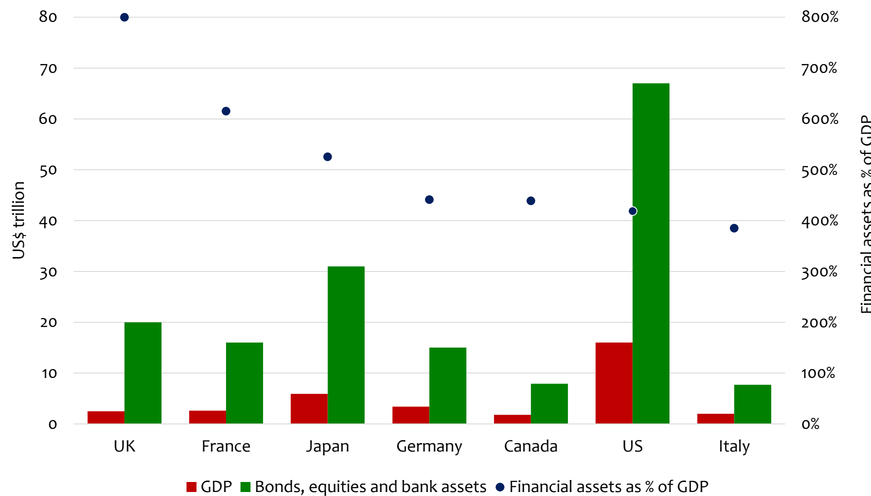
1.2 Key Features of the UK Financial System

The City of London has been ranked second only to New York as the world's leading financial centre,[1] and in terms of total financial assets, the UK is third behind the US and Japan. However, the UK financial system is disproportionately large when compared to the underlying economy, with assets eight times annual GDP, the largest in the G7 (Figure 1).

The financial and insurance service sectors contributed £126.9 billion in gross value-added (GVA) to the British economy in 2014, representing 8% of total UK GVA.[2] This share is large in comparison to other

OECD countries of similar size: slightly higher than the US, and in the EU area, only lower than that of the Netherlands and Luxembourg.

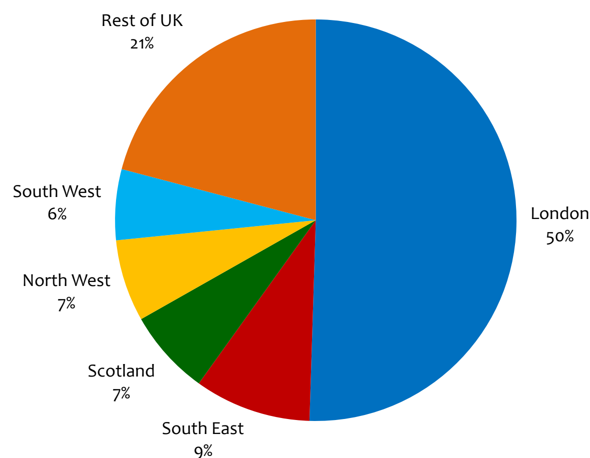
Figure 1: Financial assets vs. GDP



Source: World Bank data

The UK financial system is centred in London and the surrounding geographic area (the South East region), which together accounted for nearly 60% of total financial and insurance sector GVA in 2012 (Figure 2).[3] The next most important UK financial region is Scotland. Edinburgh has been the UK's primary Northern financial centre for centuries, and has for many decades played an important role in energy and commodities finance. Many prominent UK financial institutions remain headquartered in Scotland, including RBS Group (Edinburgh), Aberdeen Asset Management (Aberdeen), and the newly re-established TSB Bank (Edinburgh). Cities such as Leeds and Manchester act as regional hubs, with Bristol emerging as a hub for social and green finance.

Figure 2: Regional breakdown of UK financial and insurance industry GVA, 2012

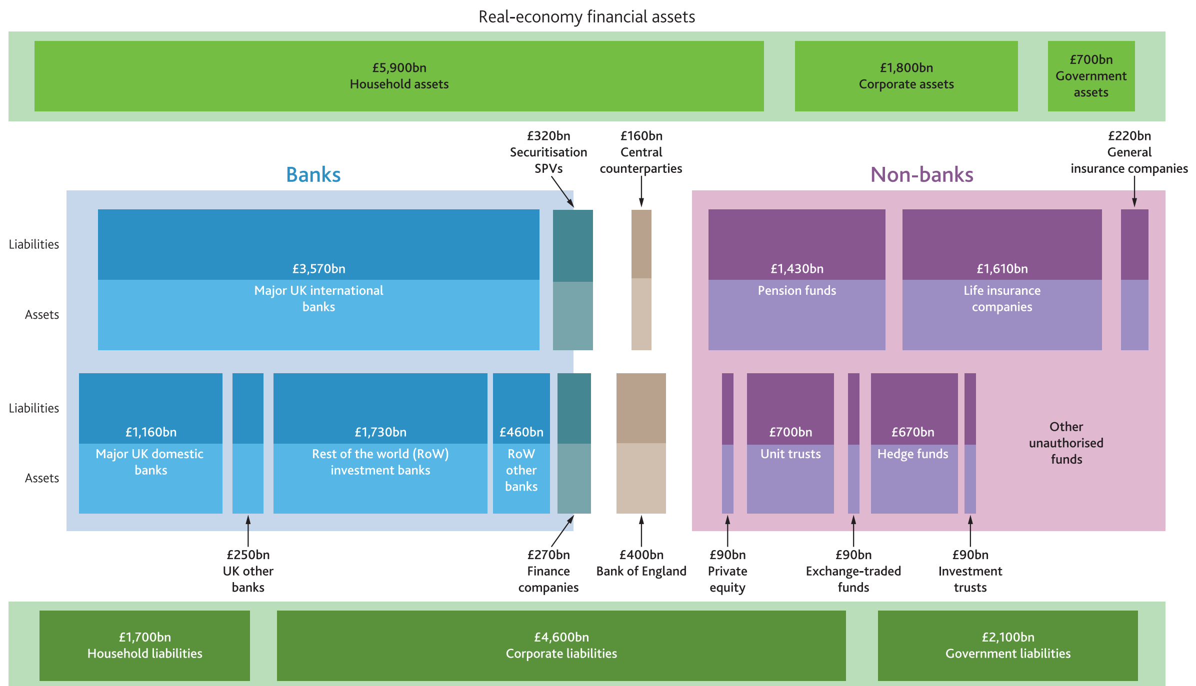


Source: HM Government, 2015[4]

The UK financial system is dominated by banking, with UK-domiciled domestic and international banks holding nearly £5 trillion in assets (Figure 3). Four major UK-owned banks (HSBC, Barclays, RBS, Standard Chartered – the "Big Four") have been designated as Global Systemically Important Banks (G-SIBs) by the Financial Stability Board (FSB).[5] Total UK banking assets were 450% of GDP in 2013, and have been projected to grow to over 950% of GDP by 2050.[6] The outsize nature of the UK banking sector is driven by a strong presence of both international UK-domiciled firms and foreign banks, with nearly 250 deposit-taking foreign branches and subsidiaries from 56 countries as of Q4 2014.[7] Beyond being highly international, the UK banking sector also has a broad spread of financial market activities beyond lending, notably in derivatives and trading.

Compared with other EU countries, the UK's domestic banking market is highly concentrated in terms of both ownership and business model. An increasing volume of regulatory intervention in banking has shifted the balance of certain banking and trading activities performed by non-bank institutions; shadow banking assets reached nearly 350% of UK GDP in 2013, the highest ratio of any G20 economy.[8] Both insurance and investment are less concentrated industries, with a higher prevalence of medium-sized firms.

Figure 3: UK total assets by sector/asset pool

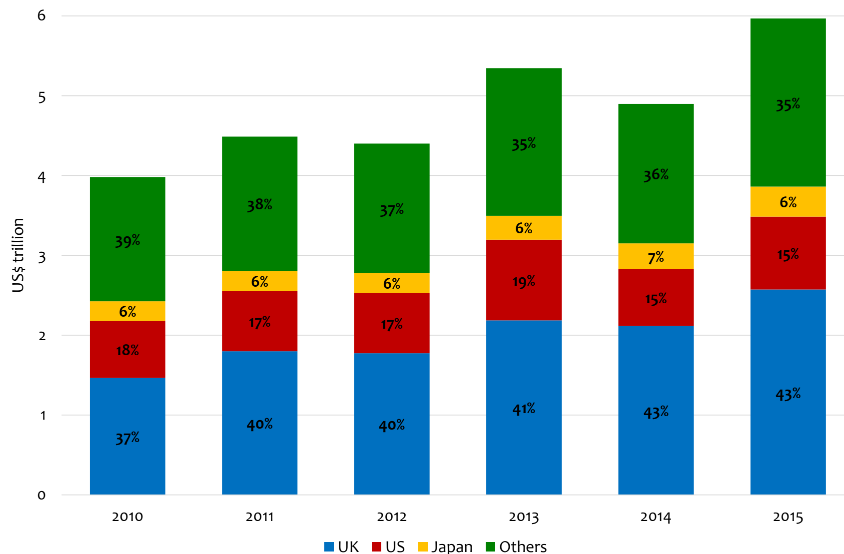


Note: Excludes cross-border exposures of foreign-owned bank branches and derivatives.

Source: Bank of England 2014[9]

The UK supports several global concentrations of financial market activity, with a significant presence in fixed income, currency, commodities (FICC) and various classes of derivative products. The UK is one of the largest concentrations of FICC markets globally, hosting nearly half of global daily foreign exchange market turnover and two-thirds of trading in international bonds (Figure 4). However, FICC markets have been the focus of regulatory reform following issues of significant market abuse.[10]

Figure 4: Foreign exchange market daily turnover



Source: City UK[11]

UK Banking: Market Structure and Institutional Diversity

The UK banking sector is different in size, market structure, and competition to those in other major European economies. Three characteristics are key:

- Asset allocation: Roughly half of the assets of UK-owned banks are loans to non-bank borrowers (retail customers) with the other 50% of assets held in securities, derivatives, interbank loans and other holdings.[12] International banks' assets are even more heavily weighted away from retail customers.
- Market Concentration: UK retail banking is highly concentrated with the Big Four banks holding combined market shares of 77% and 85% in individual and business accounts.[13,14] As a result of EU ring-fencing requirements under state aid rules some firms have been forced to divest retail banking businesses. The sector-wide impacts of these changes are expected to be relatively modest.[15]
- Competition: High market concentration has led to concern among government and regulatory authorities over the state of competition in retail banking. Despite multiple inquiries and interventions since 2000,[16,17,18,19] issues persist – an inquiry into retail individual and SME banking services is currently under way, with completion expected in 2016.

Overall, institutions in the UK banking sector are relatively homogenous in terms of ownership structures and business models. Importantly, the UK is characterized by a comparatively minor presence of public or cooperative banking institutions, compared with countries like Germany or France. The Deutsche Bundesbank reports that savings banks and credit cooperatives comprise more than 75% of all German credit institutions, but make up less than 25% of total German banking assets.[20] Roughly 60-75% of lending by savings banks, credit cooperatives, regional and other commercial banks is to non-financial institutions.[21] A paper prepared for the Inquiry examining experience from European markets suggests that stakeholder banks (such as co-operatives and savings banks) can be particularly equipped to service the financing needs of SMEs in the green economy.[22]

Underlying the UK's concentration of financial assets and capital market activity is a constellation of other service markets, populated by some of the world's largest legal and professional service firms.

Many studies suggest that English law is the most widely used legal standard in international contracts and commercial transactions,[23,24] including financial contracts.[25] The attractiveness of UK common law as a basis for financial contracts is supported by the strong reputation of the UK legal system and judicial process.[26] UK legal firms are highly international, with more than 30% of private practice firms in England and Wales carrying out work in the UK on behalf of overseas clients in 2010.[27] UK legal firms represented 25% of the global M&A market in 2014, with several UK firms represented in the top 10 of a recent global league table.[28] A blurring of the lines between major global firms across US and UK jurisdictions is further increasing a concentration of global legal power in London.[29]

In addition to legal services, the UK is one of the world's major hubs for major professional services firms, including accountancy and audit. However, high levels of market concentration in professional services among the Big Four audit firms (E&Y, Deloitte, KPMG, and PwC) have been an ongoing concern. A 2011 review by the House of Lords Economic Committee found near complete oligopolistic domination of audit services by the Big Four: in 2010 they audited 99 of the FTSE 100 firms, and 240 of the next biggest FTSE 250,[30] with firms only switching auditors every 48 years on average. The review also found auditors "disconcertingly complacent" in the defence of actions that led to the financial crisis.

1.3 The Crisis: Impacts and Responses

The financial crisis of 2007-8 brought unprecedented costs to the UK economy – and has resulted in the perhaps the most significant overhaul of the governance structure for the UK's financial system. New regulatory institutions were established with stronger powers – and with greater awareness of their accountability to government, parliament and society at large. A broad package of new requirements was imposed on financial institutions to reduce the potential for systemic risks. An area of continued focus has been the UK banking sector, with recent requests from the Financial Policy Committee (FPC) for powers to set leverage ratios and the ability set a counter-cyclical capital leverage buffer.[31] Multiple macroprudential measures have been implemented to counter risks stemming from household debt.

The continued prevalence of market abuse and high-profile scandals in the aftermath of the crisis has inspired a renewed vigour by regulators and legislators to prosecute infractions by individuals and firms. UK banks have paid almost £30 billion in fines and redress costs since 2009, roughly equivalent to the private capital they have raised in the same period.[32]

"A country can be prosperous only if it has a well-functioning financial system, but it does not imply that the larger the financial system a country has, the more prosperous it is likely to be. Many good ideas become bad ideas when pursued to excess."

Professor John Kay

Recent efforts to restore trust and public confidence in the financial system have focused on market integrity and professional conduct, such as the Bank of England's Fair and Effective Markets Review.[33] One unresolved issue is the question of the utility of finance for the wider UK economy – an issue highlighted in John Kay's latest book, Other People's Money.[34]

1.4 Implications for Steps towards a Sustainable Financial System

The structure of the UK financial system has four implications for its role in the shift to sustainable development:

- **First,** the UK is home to many pioneering sustainable finance initiatives that are setting the agenda both domestically and internationally on topics including green bonds, climate disclosure and risk, integrated reporting, responsible investment and stress testing. Many of these organizations are headquartered in London, including (as a non-exhaustive list) CDP, the Climate Disclosure Standards Board, the Carbon Tracker Initiative, the Climate Bonds Initiative, the Climate Markets & Investment Association, the Equator Principles Secretariat, the International Integrated Reporting Council, the UN-backed Principles for Responsible Investment, and the 1-in-100 Initiative (Willis Re). Other initiatives, such as the Asset Owners Disclosure Project, have moved to London. Outside of London, a number of UK-based universities are conducting cutting-edge research on sustainable finance, such as the Cambridge Institute for Sustainability Leadership and the Oxford University's Smith School on Enterprise and the Environment. This clustering of sustainability expertise creates network effects in terms of impact and innovation across the regulatory and policy sphere.
- **Second,** the challenge is not just facilitating the transition within the UK, but also enabling capital flows globally, most importantly for developing and emerging economies. These have the greatest sustainable development investment needs, some US$3.9 trillion of the US$5-7 trillion required globally per annum.[35]
More international banking is booked in London than anywhere else, and the UK also has the world's third largest insurance sector as well as the second largest asset management industry. The growth of Islamic finance in the UK provides lessons

"The UK, with London at its heart, is a world leader in finance, and there are great opportunities to lead on low-carbon investment."

UK Environmental Audit Committee

Islamic Finance – Supporting Market Creation for Values-based Financial Services

Islamic finance has a long history in the UK, with the first UK Islamic bank being established in 1982 and the emergence of Sharia-compliant niche funds in 1986. Government support to build the sector began in 2000 with the establishment of the Islamic Finance Working Group. Subsequently, various incentives and policies were implemented to level the playing field between Islamic and conventional finance in the UK, including tax relief on Islamic mortgages and arrangements for debt issuances.[36]

The UK is the largest Islamic finance market of any non-muslim country by total assets, with US$19 billion in reported assets.[37,38] As of 2014 there were more than 20 international banks providing Islamic finance services in the UK, 6 of which were fully Sharia-compliant.[39] The London Stock Exchange has become a leading global platform for the issuance of Sukuk, with over US$51 billion raised to date through 57 issuances.[40] The LSE also supports four Sharia-compliant Exchange Traded Funds (ETFs) based on Islamic indices.[41]

Islamic finance has become an important source of funding for UK infrastructure and property investment. The UK became the world's first non-muslim country to issue a sovereign Sukuk, or Sharia-compliant bond, in June 2014 – which was oversubscribed by £2.1 billion.[42] Beyond the provision of products and services, the UK has also developed a supportive ecosystem for Islamic finance transactions with the establishment of new professional qualifications and specialized professional services. Over 25 law firms supply Islamic finance-related legal services, and many UK universities teach Islamic finance courses – including the Institute of Islamic Banking and Insurance.[43]

"Issuance of Britain's first sovereign Sukuk delivers on the government's commitment to become the western hub of Islamic finance and is part of our long term economic plan to make Britain the undisputed centre of the global financial system."

George Osborne, Chancellor of the Exchequer, 2014

on the development of a niche financial market within the broader financial ecosystem – which could prove useful in the design of a UK green capital markets strategy.

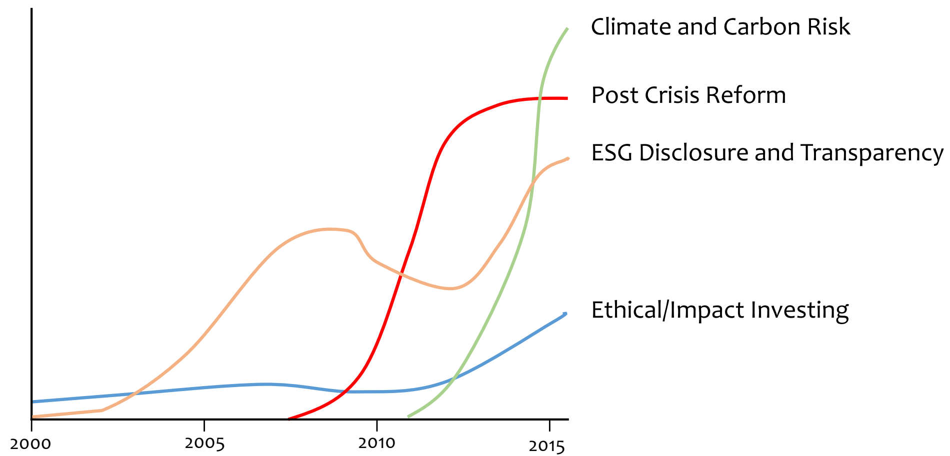
- **Third,** the global nature of the UK's financial system also means that specific attention is also needed to respond to the domestic transition needs of the British economy. The UK was the first country to introduce a dedicated Green Investment Bank to fill critical gaps in the investment chain. The UK has also pioneered green 'peer-to-peer' lending as part of a wider rise in local funding of renewable energy.
- **Fourth,** the UK plays an influential role in setting wider financial policies and rules, notably within the European Union (for example, the current development of a Capital Markets Union), as well as the Financial Stability Board and the G20.

1.5 A UK Model of Financial System Innovation

The UK was one of the first countries to introduce specific policy measures reflecting sustainability factors in the financial system. The 2000 Pensions Act kick-started a modest process of innovation, introducing requirements for funds to state whether they considered social, ethical and environmental factors.

Looking across the last 15 years, there have been four main waves of innovation, starting with ethical investment, moving to mainstreaming environmental factors into institutional investment, the surge of post-crisis reform and the current focus on climate and carbon risk (Figure 5).

Figure 5: Key waves of sustainable finance innovation in the UK, 2000-2015

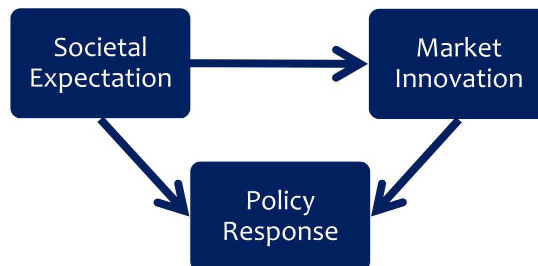


From these evolutions a distinctive approach to innovation on sustainable finance in the UK emerges. The cycle appears to work as follows:

- Social entrepreneurs and financially-focused NGOs often raise new expectations of the financial system;
- Leading market practitioners spread good practice; and
- Policymakers act to universalize good practice.

This cycle is not fixed – it can move in different ways, and can also get blocked (Figure 6).

Figure 6: UK Financial System Innovation Pathways



2 SIX STEPS TO A SUSTAINABLE FINANCIAL SYSTEM

Looking across the UK's financial system, there are six priority areas for sustainable finance:

- **Social Innovation:** aligning finance with individual values and social purpose, from socially responsible investment through fossil fuel divestment to new green peer-to-peer initiatives.
- **Institutional Stewardship:** placing sustainability factors at the heart of mainstream financial sectors, most notably investment management.
- **Housing Finance:** improving the environmental and energy performance of the UK's housing stock through new ways to mobilize financing.
- **Capital Markets Mobilization:** incorporating sustainability into equity and debt market disclosure, analysis and capital raising.
- **Prudential Governance:** embedding sustainability into the oversight of the safety and soundness of key sectors and the system as a whole.
- **Public Balance Sheet:** mobilizing fiscal and other resources to facilitate the transition to a low-carbon, green economy.

The rest of this section examines each in turn, and concludes with a visualization of how the governance of sustainability is being addressed across the system.

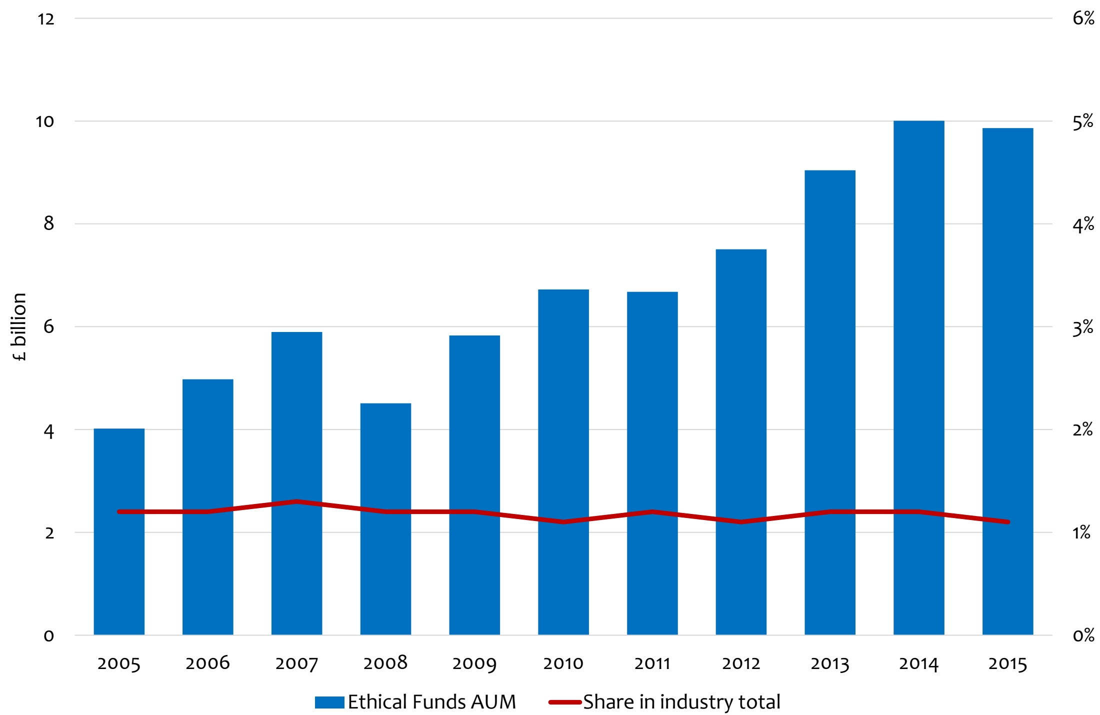
2.1 Social Innovation

The UK has a vibrant culture of social entrepreneurs and civil society organizations working on financial innovation. Ethical finance has strong roots in the UK – the first UK retail ethical funds came to market in the 1980s, and UK retail assets in ethical and socially responsible investment (SRI) funds reached £1 billion in 1996. The early development of the UK's corporate governance code (issued in 1992 as the final report of the Cadbury Commission,[44] with rules appended to stock exchange listing requirements on a 'comply or explain' basis in 1994) strengthened the presence of a systemic link between corporates, investors and broader civil society through multiple iterations in the 1990s and 2000s.[45] Organizations such as UKSIF were active in supporting the governance architecture that led to the Pensions Act reforms and SRI mandates of major pension funds. The introduction of disclosure requirements in the Pensions Act did not, however, lead to the expected growth in dedicated ethical funds, with their share remaining at around 1% of the industry total from 2005 to 2015 (Figure 7).

Social innovation is not just about the size of the retail SRI market, however. The financial crisis has led to an upsurge of interest from alternative finance entrepreneurs and civil society organizations on how to align the system with social purpose. Key examples include:

- Carbon Tracker's 'unburnable carbon' analysis, published in 2011, highlighted that the majority of fossil fuels cannot be commercialized if climate targets are to be met. This analysis has prompted a new debate on stranded assets amongst investors and analysts, as well as increasingly within the regulatory community worldwide. Started in the US, the divestment movement has been one response to these risks, prompting a number of UK investors, largely from universities and faith groups, to sell fossil fuel holdings.[46] Divestment, however, is one end of a continuum of

Figure 7: UK retail ethical fund Assets under Management (AUM) and market share, 2005-2015



Source: The Investment Association

approaches to carbon risk. At the global level, the Portfolio Decarbonization Coalition, hosted by the UNEP Finance Initiative, is overseeing the reduction in carbon emissions across US$230 billion in assets under management and includes a number of UK members, such as Hermes and the Environment Agency Pension Fund.[47]

- The Finance Innovation Lab has looked at the dynamics of financial system change, identifying three entry points: the landscape (the terrain in which the game is played), the regime (the rules of the game) and institutional innovation (the players in the game).[48]
- The New Economics Foundation has identified new ways of measuring the performance of the financial system through its Global Financial Resilience Index using seven metrics to assess resilience: diversity; interconnectedness; financial system size; asset composition; liability composition; complexity and transparency; and leverage.[49]
- Meteos and Leaders' Quest have convened the Banking Futures process, bringing together senior leaders in the UK banking sector with investors to set out a vision of Healthy Banking. The initiative has published an invitation to dialogue, with the starting point that "banks exist to serve the economy", setting out how this renewed sense of purpose could be delivered, including in the field of supporting the sustainability transition.[50]
- ShareAction has launched a 'Responsible Investment Manifesto' suggesting ways of changing the culture of pension provision so that it is more responsive to savers, for example, by holding annual meetings like companies, providing members with the opportunity to meet and question the people looking after their money.[51]
- Tomorrow's Company, a London-based global think tank, released a new report examining Tomorrow's Capital Markets in October 2015.[52] Focusing on investing in what society values, the report envisions a financial system that meets human needs on an intergenerational basis – achieved through the adoption of a wider view of value, enhanced stewardship, and public commitments to integrity to the needs of clients and beneficiaries.
- The Social Stock Exchange and Ethex have been established to give investors new ways of investing in social purpose businesses. Established in 2013, the SSE provides an information platform for investors seeking to access impact investing opportunities on the public markets, and currently lists 14 companies. Ethex offers investors a range of often unlisted investments in areas such as charity, community, fair trade and renewable energy businesses. Alongside this

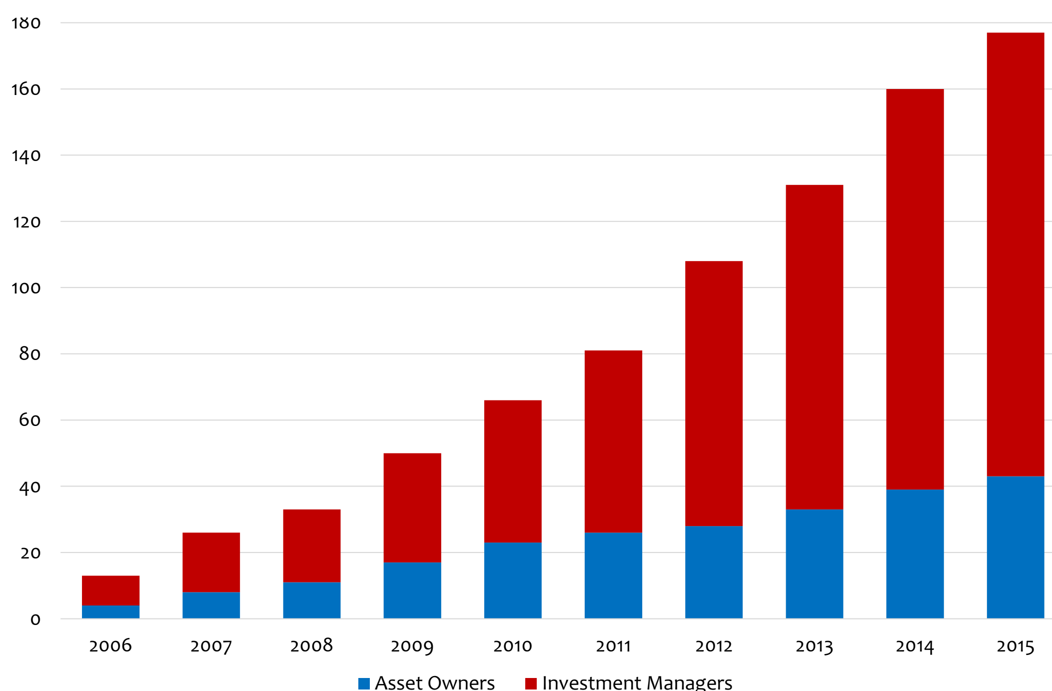
are new peer-to-peer platforms, such as Abundance for renewable energy. To date, the value of these investments remains small, but could grow with appropriate regulatory structures for consumer protection.

2.2 Institutional Stewardship

In the decade after 2000, the UK became a centre for environmental, social and governance (ESG) integration. According to one estimate, in 2003, 69% of European assets in socially responsible investment among institutional investors were held in the UK.[53]

One symbol of this was the launch of the UN-backed Principles for Responsible Investment in 2006, in which UK-based financial institutions played a significant shaping role. UK signatories to the PRI have grown steadily to 194 members, including 43 asset owners and 134 investment managers, giving the UK a disproportionate presence in this London-based initiative (Figure 8).[54] Of these, 32 publish Responsible Investment transparency reports detailing responsible investment policies and actions.

Figure 8: UK PRI Signatories (Asset Owners and Investment Managers), 2006-2015



Source: PRI

The financial crisis generated a realization that the investment chain was neither exercising appropriate control over corporations, nor overcoming market tendencies to short-termism, both of which could reduce returns to savers and beneficiaries. The response was the introduction of the world's first Stewardship Code in 2010 and the Kay Review into equity markets.

Under the Financial Conduct Authority's 'Conduct of Business Rules', the Stewardship Code contains seven elements to which UK-authorized asset managers must either 'comply' through a statement of commitment or 'explain' why the code is not relevant to their business. Nearly 300 signatories had committed to the code at the end of 2014. The Financial Reporting Council monitors implementation and in its latest review has stated that it will aim for "greater scrutiny of adherence to the Code".[55] The Code does not explicitly mention environmental or social factors as part of stewardship obligations – but some fund managers do include the sustainability dimension in their implementation. A 2015 survey of the 33 largest UK asset managers found that 42% of asset managers were disclosing policies on these issues, and 13% of respondents were disclosing strategies for the management of risks posed by

carbon and stranded assets.[56] Importantly, the launch of the Stewardship Code in the UK has triggered similar initiatives elsewhere, for example, in Japan and Malaysia – in both cases, interestingly with environmental, social and governance factors explicitly incorporated.

Alongside this, the Kay Review has stimulated a renewed focus on the sustainability dimension of fiduciary duty. Kay concluded that *"short-termism is a problem in UK equity markets and that the principal causes are the decline of trust and the misalignment of incentives throughout the equity investment chain".*[57] This produced the Law Commission review which published its final report in July 2014, making clear that pension fund trustees may take account of any financial factor that is relevant to investment performance, including issues such as poor governance or environmental degradation and should take account of financially material risks, including risks to a company's long-term sustainability.

A recent global review of fiduciary duty and stewardship in eight countries concluded that policymakers should "clarify that fiduciaries must analyse and take account of ESG issues in their investment processes", and with regard to the UK recommended that:

- the occupational pensions regulation should be amended to make clear that fiduciary duty requires attention to long-term factors, including ESG, and
- the Stewardship Code should be strengthened by making it clear that environmental and social issues are important drivers of long-term investment value.[58]

In 2015, the government undertook a consultation on how the Law Commission's conclusions might be reflected in pension regulation. In its response, the Department of Work and Pensions concluded that it would not propose any changes to the Investment Regulations, citing a lack of consensus on what should be done specifically regarding differences between financial and non-financial factors.[59] In addition, the response cited evidence that "pension schemes trustees now have a good awareness of their duty to consider ESG factors," and that "guidance can be more effective than regulatory change" in this context.

"I believe that the financial sector as a whole has a generational opportunity to build sustainable capital markets"

Mark Wilson, CEO, Aviva plc

In the private sector, leading investors have seen the value of a systemic approach to sustainable finance. Generation Investment Management has published a series of white papers on sustainable capitalism, highlighting measures to better align financial markets, including structures to reward long-term investor loyalty.[60] In addition, insurance firm Aviva has published white papers on a 'roadmap for sustainable capital markets' at the global level, and more specifically a manifesto for a 'sustainable capital markets union' within the European Union.[61] Aviva identifies inefficiencies within capital markets that prevent more sustainable practices, such as the lack of comparable information and misaligned incentives along the investment chain. It then makes specific recommendations on how incentives and transparency of different parts of the investment chain could be improved – including for its own business of investment management, proposing that "fund managers should publish a report to their clients showing how they have considered sustainability when voting" and that "fund manager bonuses should be based both on an evaluation of the fund manager's long-term ability to generate investment returns as well as a view on how they are performing as stewards of capital".

The transparency of institutional investors to their clients on climate change issues is rising up the agenda. The first 'carbon footprint' of an investment fund was produced by Trucost for Henderson Global Investors in 2005, and a number of UK investors are now signatories to the international 'Montreal Carbon Pledge', which aims to promote transparency, including Aviva, CCLA, the Central Finance Board of the Methodist Church, the Environment Agency Pension Fund and WHEB Listed Equities. In spite of this leadership, the UK asset owners collectively ranked tenth internationally in terms of climate disclosure

according to a recent global survey by the Asset Owners Disclosure Project.[62] If consumer choice is to be a driver of change in the savings market, new communication approaches are needed that make climate information easily accessible, comparable and relevant, particularly to young savers.[63]

One theme that emerged at the Inquiry's global institutional investor roundtable in London, co-hosted with CalPERS, is the question of 'right sizing' pension funds, particularly encouraging consolidation where funds do not have the scale to deliver beneficiary interests, including on sustainability matters. One estimate suggests that there are 50,880 occupational pension funds in the UK.[64] A recent international survey of pension funds by ShareAction has found that "the size of a pension fund is a strong indicator of good outcomes for beneficiaries", adding that "scale does not guarantee responsible investment will be pursued, but bigger schemes consistently take it more seriously".[65]

2.3 Greening Housing Finance

Housing finance is not just sizeable and critical for financial stability, but it is also vital for improving the sustainability of the built environment.

Housing finance is one of the most significant lending channels within the UK banking sector: 75% of UK bank credit is extended to households, and the largest share of this is mortgage lending; the remaining 25% extended to business is also largely allocated to funding commercial real estate.[66] In addition, the growth in household debt for property has become a key factor in the stability of the financial system. UK household debt has grown from roughly 40% of GDP in 1980 to around 95% of GDP in 2014, slightly below its pre-crisis peak.[67]

"The fundamental problem is that modern financial systems left to themselves inevitably create debt in excessive quantities, in particular debt which does not fund new capital investment but rather the purchase of existing assets, above all real estate."

Lord Adair Turner

The UK's building stock is one of the least energy efficient in comparison with European countries, with a higher share of household expenditure allocated to energy costs.[68] UK residential emissions – including household energy use – made up 14% of the UK's total GHG emissions in 2013.[69] Government analysis suggests that increasing the efficiency of the UK's building stock through retrofits and other improvements is likely to be more cost-effective at bringing down the cost of heating than energy price and income support policies.[70] In addition to reducing emissions, enhancing the efficiency and overall quality of the UK's domestic and commercial building stock may also improve the financial stability of these investments – recent research has shown that sustainability features are strongly associated lower default risk for commercial securitized mortgages.[71,72]

Financing household energy efficiency faces a range of institutional, behavioural and market barriers, which constrain the investment in profitable retrofits. Over the years, a number of policy measures have been introduced to scale up investment using a mix of subsidies, regulatory obligations on energy utilities and market-based mechanisms. The most recent of these was the Green Deal.

2.4 Capital Markets Mobilization

Efforts to incorporate sustainability into UK equity and debt markets have focused on disclosure, investment analysis and capital raising.

Founded in 2002, the UK-based CDP (formerly Carbon Disclosure Project) has mobilized investors worldwide to request disclosure on climate change risks and opportunities from listed corporations. Based on increasing participation by UK companies, in 2012 the government decided to make greenhouse gas reporting mandatory for all listed companies on the London Stock Exchange; 100% of the FTSE100

Lessons from the Green Deal

The Green Deal went live in January 2013, providing households with loans to make energy efficiency improvements, with repayments made through energy bills. The overall aim was to replace fiscal subsidies with a market-based mechanism. A key pillar of the Green Deal was the "Golden Rule" whereby repayments should not exceed the value of energy savings on an average bill. Significantly, the Green Deal was designed with the intention of aggregating these loans so that they could be ultimately issued as bonds and purchased by institutional investors. A non-profit Green Deal Finance Company (GDFC) was set up to act as a national aggregator to provide cheaper financing to individual Green Deal providers, with a government loan of £34 million loan. However, take up of the Green Deal was poor with just £60 million in Green Deal plans and applications and it was closed in July 2015.[73] Important lessons will need to be learned on how to make energy efficiency financing more attractive to consumers, potentially linking it more to core mortgage finance.

companies now disclose their GHGs, with 91% of the largest 206 listings as well. Importantly, this has enabled the London Stock Exchange to considerably improve its position in a global ranking of 45 stock changes according to sustainability transparency, rising from 11th in 2013 to 5th in 2015.[74] In 2014, the LSE joined the Sustainable Stock Exchange Initiative (SSEI).[75] Questions remain, however, whether disclosure is sufficient for investors to fully understand critical environmental risks stemming from climate change and water availability.[76]

Disclosure is an essential precondition to incorporating sustainability factors into market valuation and analysis. The UK was the home to the world's first dedicated SRI equity analysis ('sell-side') team at HSBC – and continues to be a centre for sell-side sustainability research from UK as well as international investment banks. According to the latest Extel survey of European fund managers, however, the top three investment banks in terms of investment research on sustainability are now all based in France; for UK fund managers specifically, only two of the top 5 brokerages were UK-based in 2015.[77] While the world's major credit rating agencies – Fitch, Moody's and Standard & Poor's – are based in New York, much of the innovative work on the relevance of sustainability factors has been conducted in London.

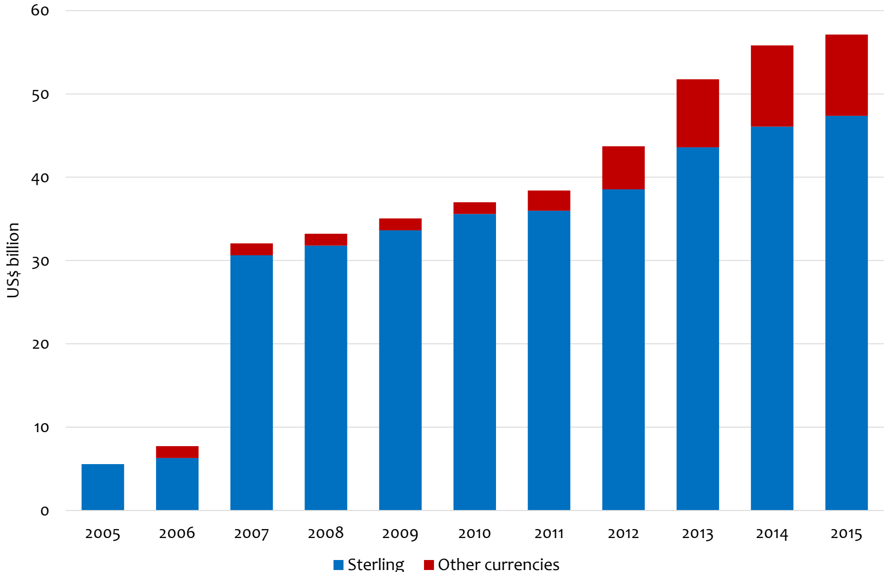
The market for sell-side sustainability research could be significantly impacted by the EU's forthcoming MIFID II regulation, which will change how research is paid for. In May 2014, the FCA implemented a ban on asset managers using dealing commissions as a way to secure in-person meetings with management ("corporate access").[78] In a February 2015 paper, the FCA retained a strong stance on unbundling, and is now undertaking consultation and engagement with trade associations. The Investment Association has expressed support for the unbundling of research fees and separate charging as a way to reduce conflicts of interest, as well as supporting an enhanced CSA structure between asset managers and investment banks to consolidate research payments deducted by brokers and dislocate payments from trading volumes.[79]

Finally, capital markets have a powerful role in raising funds for green infrastructure and innovation, notably through green bonds and green equity investment trusts. The UK is major green bond market – bonds whose proceeds are used to finance assets consistent with the transition to a low-carbon, green economy. The UK-based Climate Bonds Initiative has assessed the amount of 'climate-aligned' bonds in existing issuance, along with specifically labelling 'green bonds'. A recent report by the Climate Bonds Initiative found the UK to the third largest green bond market after China and the US as of July 2015, considering both labelled and climate-aligned bonds, with roughly 9% of total global issuance.[80]

Total outstanding UK-registered green bond issuance reached US$57.1 billion in July 2015. Most UK-registered green bonds have been issued in Sterling, but issuance of bonds in other currencies has been increasing since 2011, with 21% of outstanding issuance as of July 2015 in non-Sterling currencies (Figure 9).

In 2014, the IFC issued a 500-yuan Green Bond on the London Stock Exchange, marking the first green bond issued by a multilateral institution in an offshore Chinese market.[81] In October 2015, the China Agricultural Bank completed a sale of a dual currency RMB/USD bond on the LSE – the first offshore Green Bond from a Chinese bank.[82]

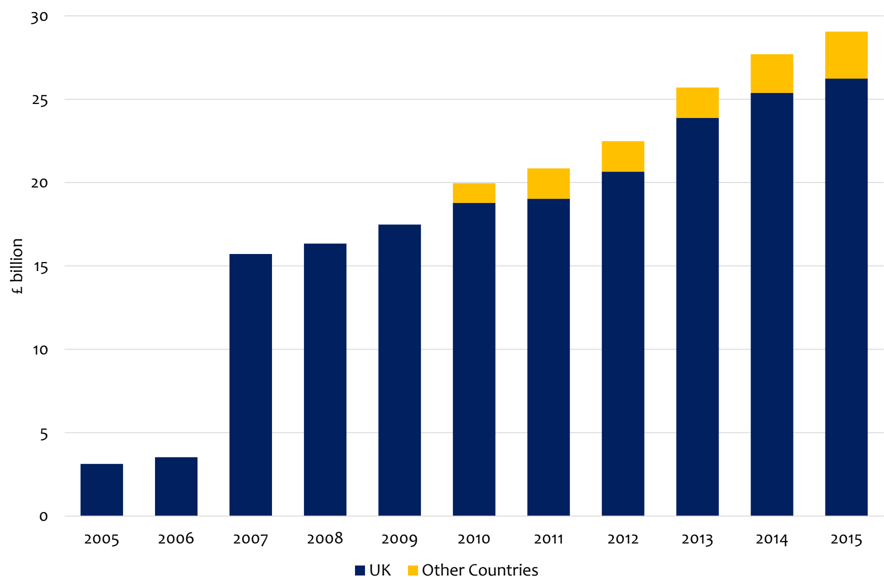
Figure 9: Cumulative UK-registered green bond issuance (by currency)



Source: Climate Bonds Initiative

Total outstanding UK Sterling-denominated climate-aligned bond issuance reached £29 billion in July 2015.[83] The majority of Sterling-denominated bonds are registered within the UK, with roughly 11% of Sterling-denominated bonds being issued in other countries, mainly from the rest of the EU (Figure 10).

Figure 10: Cumulative Sterling green bond Issuance by jurisdiction

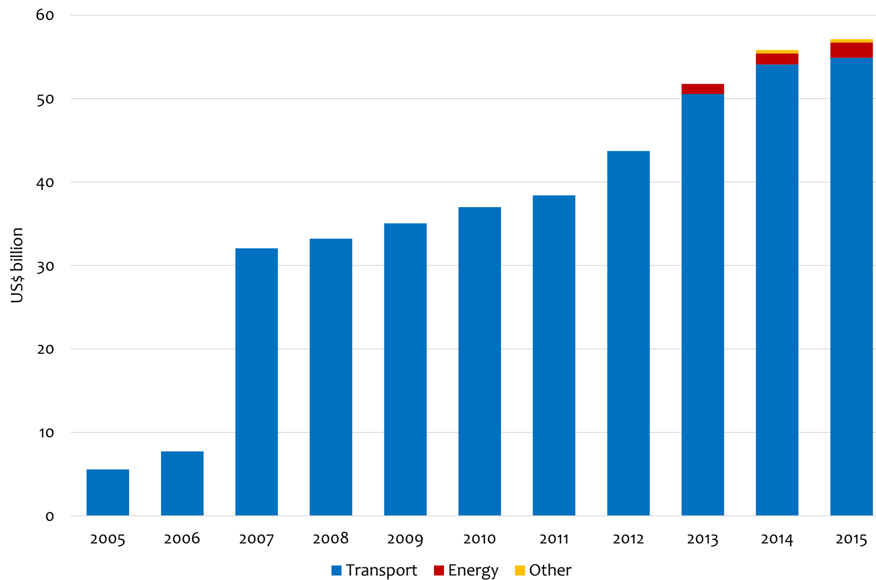


Source: Climate Bonds Initiative

Sectorally, transport-related bonds (notably rail) continue to dominate the UK green bond market – with inclusion based on superior environmental performance compared with road and air transport (Figure 11). However, an increasing number of clean energy-related bonds have been issued in recent years. A notable green energy refinancing example is Gwynt y Mor OFTO Plc's US$325 million issuance for an offshore wind power transmission link, developed with EIB project bond credit enhancement. In

May 2015 Transport for London issued a £400 million green bond, a notable issuance from a quasi-public entity.[84]

Figure 11: Cumulative outstanding UK-registered green bond issuance by sector



Source: Climate Bonds Initiative

A growing number of countries and regions are establishing Green Bond Market Development Committees, bringing together policy makers and market practitioners to identify key priorities for collaborative action, such as standards and incentives. These include Brazil, China, Canada, California, India, Mexico and Turkey. The People's Bank of China will also be issuing the first official green bond standard later this year, potentially a precursor to the provision of fiscal incentives.

Alongside the green bond market, the UK has seen an increasing use of investment trust structures used to finance renewable energy projects; these enable investors with a preference for liquid equity structures to invest in illiquid assets. According to the AIC, investment trusts focused on renewable energy infrastructure raised £773 million from new shares issued in 2014, up from £93 million in 2013.[85] As of March 2015 there were six UK renewable investment trusts focused on wind and solar energy.[86] The attractiveness of investment trusts as an asset class in the UK is thought to have increased after market reforms to commissions implemented under the Retail Distribution Review in 2013, which put investment trusts on an even level with open ended funds.[87] The Green Investment Bank has been particularly influential in kick-starting the renewable investment trust market.

2.5 Prudential Governance

In the wake of the financial crisis, the UK's prudential regulation has been expanded from the management of risks within individual financial institutions to encompass threats posed by institutions to the system as a whole, and to the wider economy. The Bank of England now manages the Prudential Regulatory Authority (PRA) and has set up a new Financial Policy Committee, alongside the long-established Monetary Policy Committee. Just as the crisis was getting under way, the UK passed the Climate Change Act in 2008, one of the world's most strategic legislative frameworks for both achieving the transition to a low-carbon economy and adapting to climate impacts. Over the past five years, these hitherto unconnected themes of financial system governance and low-carbon transition have become increasingly interlinked.

"The central bank time horizon is relatively short- 1.5-2 years – but the real challenges to prosperity and economic resilience from climate change will manifest well beyond this. We face a 'tragedy of horizon'."

Mark Carney, Governor, Bank of England

The connection between climate change and the Bank of England's mandate for financial stability were first made in 2012.[88] In 2014, the PRA began to review the implications of climate change on the UK's insurance sector, following an invitation from DEFRA to produce an adaptation report under the Climate Change Act. Published in September 2015, the review is an initial assessment providing a framework for considering the risks arising from climate change to the "safety and soundness of firms and protection of policyholders" – the PRA's statutory objectives.[89] The framework identifies three primary risk factors through which climate change could impact the insurance sector:

- **Physical Risks,** including direct impacts from extreme weather events and natural disasters, as well as indirect impacts such as natural capital degradation or disruptions to trade, which may challenge insurance markets and overarching industry business model.
- **Transition Risks,** primarily financial risks stemming from disruptive economic and policy changes affecting markets. On the investment side such risks may directly or indirectly affect carbon-intensive securities, resulting in capital market volatility, while underwriting business may be slightly affected by reduced premiums from certain sectors.
- **Liability Risks,** including the costs of climate change damages being passed onto insurers through third-party liability policies such as personal indemnity or corporate director's and officer's insurance. The transformation of low probability risks into large, unforeseen liabilities to insurers – such as the case of losses from asbestos – could be caused by or significantly exacerbated through dangerous climate change.

While the PRA finds firms "reasonably well-equipped" to deal with the current scope of physical risks, it acknowledges that "meaningful challenges" to insurance business models may arise as the low-carbon transition accelerates. Looking across these risks, a number of important business model and policy challenges are noted, including gaps in linking climate risk assessment across liabilities and assets (which the PRA terms a "cognitive dissonance"), rapid changes in investor sentiment, and the potential adverse evolution of the liability environment. Importantly, the review recognizes the increasing relevance of climate change to financial regulation, and provides a number of recommendations for international collaboration, including the establishment of a network for insurance regulators and associations to collectively tackle sustainable insurance policy challenges.

The PRA is not the first insurance supervisor to examine the implications of climate change – a number of US regulators at the state level carry out annual surveys of the sector – but the review is the most intensive to date. Importantly, the PRA has stated that its role as an insurance supervisor "brings challenges such as climate change much more clearly into focus", providing a "natural starting point" for central bank work examining systemic environmental risks more broadly.

The PRA's outlook reflects an increasingly engaged stance towards climate and environmental risk within the Bank of England. The Financial Policy Committee has included climate change as part of its regular horizon scanning of financial stability risks, but has noted that "the likely impact on the macroeconomy and any associated financial stability risks would depend on the speed of transition to a low-carbon economy" and that any "risks to financial stability were likely to be beyond the FPC's typical policy horizon."[90] In addition, the Bank has incorporated climate change into its new Research Strategy, as part of a series of fundamental changes that are impinging on the financial system, with the aim of identifying what role central banks could have in addressing systemic environmental risks.[91]

Governor Mark Carney has been taking an active role in developing national and international action on climate change and financial policy, including as FSB Chair, by leading its workshop on climate change at the Bank of England. Speaking at Lloyd's following the meeting, Carney commented on the need to mitigate risks stemming from stranded carbon assets and the need to enhance disclosure.[92] This is now being taken forward at the international level by the FSB; following a report to the G20, the FSB will establish a market-led Climate Disclosure Task Force to develop voluntary disclosure recommendations.

> **Risk Management: How Can Insurance Techniques Be Used Elsewhere in the System?**
>
> The UK insurance sector has been at the forefront of responses to natural hazards and environmental risks. The re/insurance sector has the longest history of incorporating environmental factors such as extreme weather events into their annual solvency assessments, testing their resilience against the worst combination of 1-in-200-year events. Importantly, progress has been achieved not through a single measure, but a series of interlinked regulatory metrics, financial regulation and reporting, credit ratings, accounting standards and investor analysis and accountability. Building on this, the Willis Research Network launched the '1 in 100 initiative', exploring how to extend this approach to the wider financial system. Its aim is to stimulate reform of banking and securities regulation, credit ratings and accounting standards to take account of weather and hazard risks on a 1 in 100 (1%) per year risk. For Willis, the experience of the insurance sector shows that "encoding natural hazard into capital has had a transformational impact", concluding that "without this reform it is impossible to imagine how we could have achieved a sustainable insurance system in the face of sharply increasing losses".[93]

2.6 The Public Balance Sheet

The fiscal constraints that followed the credit crunch have prompted a rethink of the role of the public balance sheet in supporting the low-carbon transition. In terms of the supply of capital, the focus has been on three main areas:

- **Green Investment Bank:** The establishment of the Green Investment Bank (GIB) in 2012 was a world first. The GIB was designed to address market failures within the financing of low-carbon investments, overcoming excess risk aversion by working on a commercial basis to crowd in private capital through co-investments.[94] Structured as a public liability company with a single shareholder, the Department for Business, Innovation and Skills, the GIB invests in innovative, environmentally-friendly areas for which there is a lack of support from private markets, on the basis of initial capitalization of £3.8 billion. As of November 2015 the GIB had backed 58 green infrastructure projects, committing £2.3 billion as part of transactions valued at roughly £10.1 billion.[95] In June 2015, the Government confirmed plans to bring private capital into the GIB as the beginning of a process of moving the GIB to private ownership, an intention first announced in 2013.[96] Going forward, policy for the GIB should be optimized to consider exactly what market creation role needs to be played – and the best ways for the GIB to fill these gaps.
- **Incentives for savings, pensions and enterprise:** The UK provides considerable fiscal incentives to encourage savings, pensions and investment, but these have not historically been examined from a sustainable development perspective. One proposal has suggested linking incentives for pensions to evidence of responsible investment.[97] Beyond these broad structures, targeted incentives such as the Enterprise Investment Scheme have attracted investment into solar energy before changes made in 2014; it is now focused on other technologies such as anaerobic digestion and hydropower.[98]
- **Unconventional monetary policy:** In response to the crisis, the UK introduced a number of unconventional monetary policies to kick-start the recovery. Although these have not been explicitly linked to financing the green economy, they could be adapted. For example, the Funding for Lending scheme was launched by the Bank of England and HM Treasury in July 2012 to incentivize banks and building societies to boost their lending to the UK real economy, notably the SME sector.[99] In addition, the Bank has engaged in successive waves of quantitative easing, creating £375 billion of new money to buy financial assets, such as government bonds, to directly increase private sector spending in the economy and return inflation to target.[100] The

Green New Deal Group[101] and others have argued that quantitative easing should include green assets. If future QE programmes were implemented, the Bank could buy a wider range of assets beyond UK government bonds, but such decisions would need to be agreed with government.[102]

2.7 The Governance of Sustainability in the UK Financial System

Traditionally, sustainability in the UK financial system has been driven by a combination of social and market innovation. Over the past five years, this dynamic has changed with a growing involvement of policy initiatives across three main areas:

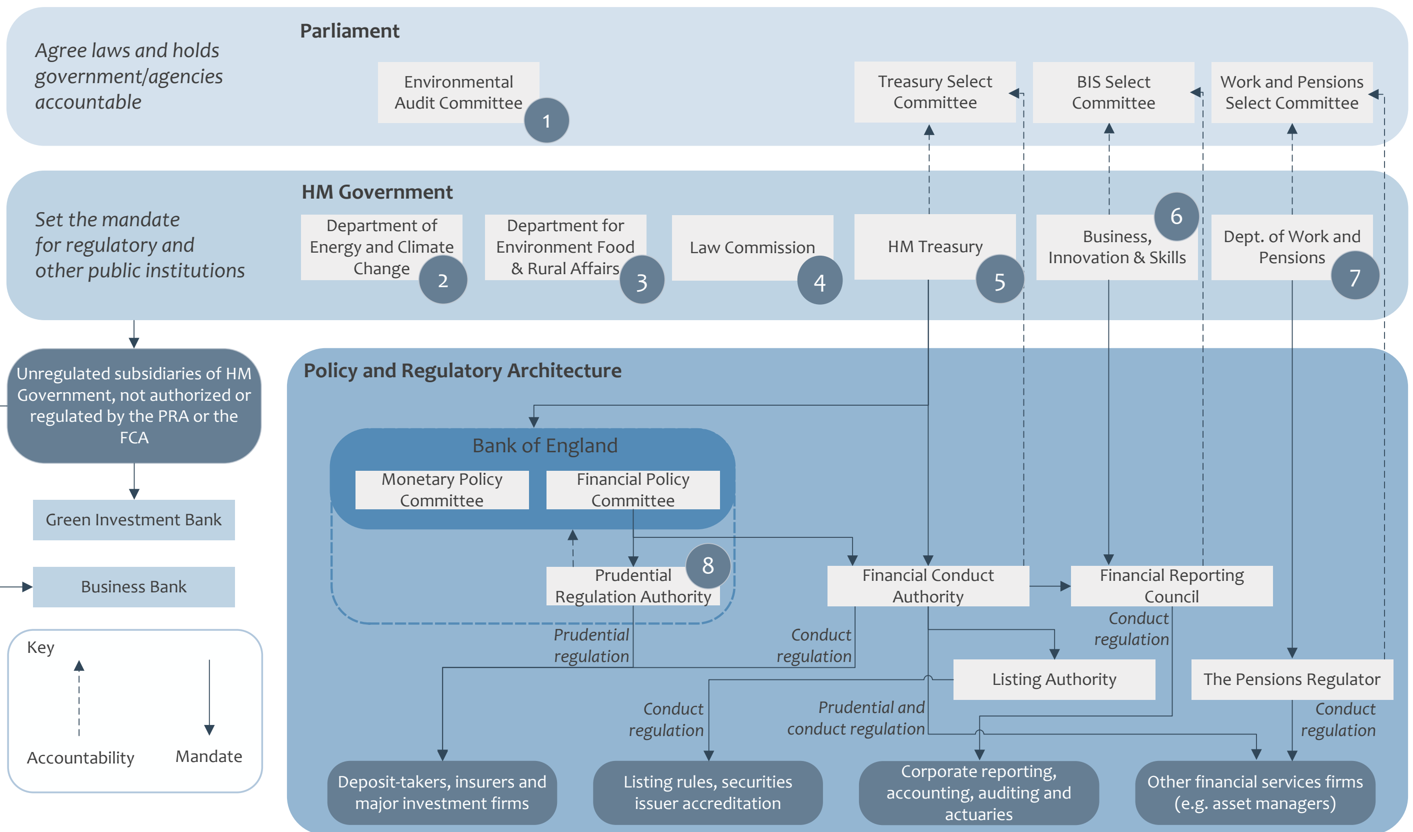
- **Universalizing good market practice:** The key example here was the decision in 2012 to make greenhouse gas reporting mandatory for all listed companies on the London Stock Exchange; this built on a decade of activity by investors and others to make reporting the norm.
- **Addressing systemic challenges:** The key example here is the PRA's decision to review the implications of climate change for the insurance sector – something that individual firms on their own may be unable to effectively manage.
- **Overcoming funding bottlenecks in new markets:** The key example here is the creation of the Green Investment Bank, designed to overcome excess risk aversion by private investors to allocate capital to profitable low-carbon projects.

At present, action to adjust the 'rules of the game' governing the UK's financial system on sustainability grounds are relatively new – in particular when compared with the wave of activity with regard to systemic risk, market abuse, sector competition, as well as professional ethics and behaviour. Figure 12 sets out how key regulatory bodies are reflecting sustainability factors in their operations and Figure 13 maps the key institutions involved, covering parliament, government, regulatory agencies and other public bodies. So far, these developments have evolved in an organic in the absence of a coordinated strategy for sustainable finance.

Figure 12: Regulatory Bodies, Mandates, and Sustainable Finance

Regulatory Body	Mandate and objectives	Current sustainable finance actions, and Next Steps
Financial Policy Committee (FPC)	Identifies, monitors and takes action to remove or reduce systemic risks with a view to protecting and enhancing the resilience of the UK financial system.	Exploration of climate change as a financial stability risk, with expectation of future continued monitoring.
Monetary Policy Committee	Sets interest rate it judges will enable the inflation target to be met	No current activities relevant to sustainable finance.
Prudential Regulation Authority	Prudential regulation & supervision of banking institutions, insurers & major investment firms by promoting the safety and soundness of firms, appropriate protection of policyholders, and facilitating effective competition	Review of risks to UK insurance sector posed by climate change. **Next Steps:** extend prudential reviews to other sectors, and undertake enhanced sustainability stress testing exercises.
Financial Conduct Authority (FCA)	Maintains and ensures the integrity of the market, regulate financial services firms so that they give consumers a fair deal, ensure the financial services market is competitive	Oversight of corporate reporting and the UK Listing Authority. **Next Steps:** Explore ways to integrate sustainability factors within financial culture through codes of conduct and professional standards.
Listings Authority (Subsidiary of FCA)	Monitors market disclosures by issuers and others, enforces compliance with the FCA Disclosure and Transparency Rules, reviews and approves prospectuses, enforces FCA Prospectus Rules	Supervision of the UK listing regime and compliance with the FCA Listing Rules, including GHG requirements. **Next Steps:** Introduce reporting requirements covering a broader range of sustainability factors.
Financial Reporting Council (FRC)	Sets the standards framework within which auditors, actuaries and accountants operate in the UK. Oversees reporting on the on the implementation of the stewardship code and the corporate governance code.	**Next Steps:** Integration of sustainability factors into Stewardship and Corporate Governance reporting, and strengthening the reporting frameworks.
Pensions Regulator	Statutory objectives include protection of beneficiaries, the promotion and improvement of understandings of good administration, employer compliance with employer duties and the employment safeguards, and to minimize adverse impact on sustainable growth of an employer.	Requirements to report on degree of ESG integration within statement of investment principles. **Next Steps:** Integrate sustainability factors into annual reporting and information for beneficiaries to enhance transparency; and clarify that fiduciary duty requires attention to sustainability factors through amendment of the occupational pensions regulation.

Figure 13: Governing the UK Financial System - A Sustainability Perspective



1. Environmental Audit Committee (EAC): 12th report on Green Finance
2. Department of Energy and Climate Change (DECC): Climate Change Act
3. Department of Environment, Food and Rural Affairs (DEFRA): Greenhouse Gas Reporting
4. Law Commission: Review of Fiduciary Duties of Investment Intermediaries
5. HM Treasury: Economic policy and fiscal policy, including for low-carbon incentives
6. Department for Business, Innovation and Skills (BIS): The Kay Review of UK Equity
7. Department of Work and Pensions (DWP): Pension policy and oversight of pensions regulation
8. Prudential Regulation Authority (PRA): Climate Change Adaptation Reporting

CONCLUSIONS: BUILDING ON THE MOMENTUM

The UK's leadership in many areas is clear. But sustainability could perhaps still be classified as a 'sleeping giant' of the financial system. The UK has been a source of considerable innovation in sustainable finance – but institutionalizing this has not always been straightforward. Practice is often developed in the UK, but then deepened by fast followers in other markets. For example, by 2014, the value of assets managed according to a variety of sustainability strategies in the UK had risen to €1.9 trillion, but its share of the European total had declined from previous highs to less than 20%, perhaps a more normal level.[103] As of May 2015, the UK had fallen behind France in terms of SRI funds under management.[104]

More broadly, in spite of considerable activity, it remains difficult to assess the overall extent to which sustainability factors are included in the UK financial system. In the investment chain, for example, self-reporting frameworks through the PRI or the Stewardship Code do not currently provide the depth of analysis to perform either comparative or aggregated analysis. In banking, there is no framework for assessing the allocation of lending to green assets (such as housing) or the environmental performance of loan books, either at the UK or global levels. Examples such as Lloyd's Banking Group "Helping Britain Prosper Plan" which puts forward multiple strategic goals for socially oriented business objectives is an example of how greater alignment could be achieved on sustainable finance.[105] Finally, many of the promising initiatives are also relatively new and need to be carefully nurtured.

Heading into 2016, the global momentum is likely to intensify, not least through China's decision to make green finance a core theme of its G20 Presidency, launching a new study group co-chaired by China and the UK, for which UNEP will act as the secretariat. Domestically, the Inquiry's process in undertaking this project has uncovered significant enthusiasm for a formalized space for collaborative, cross-sectoral discussion and collaboration on UK sustainable finance innovation and policy. A number of countries are introducing national road maps – notably China[106] and Indonesia[107] – which help to provide a coherent long-term framework for action. In the UK, a broad-based task force linking industry, regulators and civil society actors could identify key leverage points for scaling up finance for domestic and international investment needs. This task force would seek to build on existing innovations, overcome key bottlenecks and identify shared priorities for future action. Based on the findings of this country report, a ***UK Sustainable Finance Strategy*** could take forward the following priorities:

- **Deepen sustainability disclosure and analytics:** Disclosure on UK capital markets is improving, along with evaluation by the market. But progress on specific issues such as greenhouse gas emissions is not necessarily matched for other climate factors or other sustainability priorities, such as food[108] and water. A focused effort from investors to drive enhanced transparency from equity and credit analysts with regard to ESG factors could help to formalize existing practice.
- **Confirm the sustainability dimensions of stewardship, fiduciary duty, and structure:** Emerging practice is showing why taking accounting of sustainability is critical for investors to deliver their stewardship and fiduciary duties. Codifying this would help to spread good practice. In addition, improving sustainability is not just a question of rules, but also growing healthy markets and institutions. Building pension funds with the scale to deliver responsible investment for their beneficiaries is a key dimension.
- **Establish a Green Bond Hub:** The UK has many of the ingredients for being the centre of capital raising for the green economy worldwide. The competitive advantages of the UK as a capital markets hub have already been deployed to international specialist markets, such as Islamic finance. Applying these advantages to greening capital markets would be a natural step forward. Specifically, a UK Green Bond Market Development Committee would help to consolidate existing market innovation and provide a platform for future growth.
- **Empower individual investors with the right information:** Information on the sustainability performance of investment funds and other financial products has yet to reach the ultimate

consumer and saver. Steps are being taken to rate individual funds – Morningstar, for example, as announced it will rate funds around the world on ESG criteria.[109] However, efforts on the demand side will also be required to build financial literacy among end customers. Policies to channel resources to such an effort – for example, through the financial levy – could achieve significant results in this currently underresearched area. Similarly, the innovative use of communications technology, such as the development of mobile apps to compare the sustainability of financial products, could build customer knowledge and agency.

- **Build on the track record of the Green Investment Bank:** The Green Investment Bank has developed an impressive track record, inspiring the establishment of similar organizations across the world. Attracting capital from private investors can enable it to expand its funding capacity, while maintaining its unique mission and focus.
- **Take a system-wide view on environmental risk:** The Bank of England's prudential review of insurance is world-leading, and the lessons could be applied to other sectors (such as pensions, or banking) and parts of the system. A recent study by CISL and UNEP FI into sustainability risks within the Basel III framework identified considerable scope for deploying supervisory review (Pillar 2) and market discipline (Pillar 3) to embed environmental risks in the banking sector.[110]
- **Enhance financing for the greening of the UK's homes:** Breakthrough ideas are needed to develop ways of financing home retrofits that are attractive and compelling for the consumer. Engaging the UK banking sector through efforts to "green" domestic mortgage lending could help achieve multiple environmental and social objectives, including emissions reductions.
- **Promote technological solutions for sustainable finance:** The UK is a leader in the fast-growing alternative finance segment, with about 80% of European market.[111] There is considerable potential for leveraging the UK's leadership role in alternative finance for the green economy, building on existing peer to peer and crowdfunding experience.[112]
- **Embed sustainability into financial culture:** Following the crisis, considerable attention has been placed on improving financial culture – the values, norms, and incentives that guide practitioner behaviour and organizational decision-making. Until recently, the sustainability dimension has not been part of this agenda. Here, the UK could draw emerging domestic and international innovations. Recently, Hermes Investment Management implemented a pledge of responsibility and transparency for all staff which includes environmental values.[113] In the Netherlands, the banking sector has adopted a 'societal charter' in which the banks define their role as helping society to overcome challenges, such as climate change and health care.[114] Integrating long-term social and environmental values into public expressions of conduct could provide an additional motivational driver for culture change over the long-term.

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NOTES

Inquiry: Design of a Sustainable Financial System

International Environment House
Chemin des Anémones 11-13
Geneva,
Switzerland
Tel.: +41 (0) 229178995
Email: inquiry@unep.org - Twitter: @FinInquiry
Website: *www.unep.org/inquiry/*