



EU HIGH-LEVEL EXPERT GROUP ON
SUSTAINABLE FINANCE



FINANCING A
SUSTAINABLE
EUROPEAN ECONOMY

Interim Report, July 2017
By the High-Level Expert Group on Sustainable Finance
Secretariat provided by the European Commission

Foreword by

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Two years ago, the nations of the world chose a more sustainable path for our planet and our economy, with the adoption of the Paris Agreement on climate change and the UN 2030 Agenda for Sustainable Development. Following the US decision to withdraw from the Paris Agreement, the EU has pledged to take the lead in implementing this historic agreement and delivering the transition to a low-carbon, more resource efficient, and more circular economy.

Over the next two decades, Europe needs about €180 billion in additional yearly investment, notably in clean energy, to keep the increase in global temperatures to well below 2 degrees Celsius. This is a major challenge, but also an opportunity. By reorienting public and private financial flows towards green and sustainable efforts, we can help mitigate the risks posed by climate change, and create new jobs and sustainable economic growth in the process. As Article 2 of the Paris Agreement also makes clear, the financial sector is key to enabling this transition.

With the European Fund for Strategic Investments (EFSI), the EU is already working to accelerate funding for investments in renewable energy and energy efficiency, and other environment and resource efficiency projects. EFSI aims to unlock up to €315 billion of investment in combination with private funds, and in the future, our goal is to have at least 40% of EFSI funds contributing towards COP21 goals.

The commitment to hardwiring sustainability into EU policies and cross-cutting initiatives is already ingrained in the Mid-Term Review of the Capital Markets Union Action Plan. But a deeper re-engineering of the financial system is necessary for it to become truly sustainable from an economic, social and environmental perspective.

To develop the overall vision of sustainable finance that this requires, the Commission decided last year to appoint a High-Level Expert Group under the chairmanship of Christian Thimann. The work of this remarkable group of experts will ensure that our approach to sustainable finance is ambitious and at the forefront of innovation.

The expert group recommends reforming the EU's rules and financial policies to facilitate green and sustainable investment. We need to make sure that capital flows towards sustainable projects and serves our long-term goals. For this, as the first priority, we need to work on changing the investment culture and behaviour of all market participants. This includes providing more financial and other incentives to choose and offer green products.

The Interim Report provides a set of recommendations for action, which we welcome. In particular, we believe that suggestions for a classification system for sustainable assets and a European standard and label for green bonds have great potential. They should be explored further, as a step towards our long-term goal of establishing EU labels and quality standards for all sustainable assets. These labels will provide the confidence and trust in sustainable and green products needed for investors to fund the transition to the low-carbon economy.

Urgent action is needed. We very much look forward to the final recommendations, which will be elaborated by the expert group at the end of 2017. And we reiterate our commitment to act on these findings as soon as possible and by the first quarter of 2018 at the latest, as set out in the Capital Markets Union Mid-Term Review. Through a continued push from both policy-makers and the private sector on a global scale, we can ensure our financial system plays its part to keep us on the path towards a more sustainable and prosperous future.

Foreword by

Christian Thimann, Chair of the High-Level Expert Group

Sustainable finance is about two imperatives. The first is to improve the contribution of finance to sustainable and inclusive growth, in particular funding society's long-term needs for innovation and infrastructure, and accelerating the shift to a low-carbon and resource-efficient economy. The second is to strengthen financial stability and asset pricing, notably by improving the assessment and management of long-term material risks and intangible drivers of value creation – including those related to environmental, social and governance (ESG) factors.

In short, sustainable finance means 'better development' and 'better finance' – development that is sustainable in each of its economic, social and environmental dimensions; and a financial system that is focused on the longer term as well as material ESG factors.

Progress on sustainable finance starts not with finance itself; the first step is to describe the desired economic model of sustainability. The European Union has developed this model: a low-carbon, resource-efficient and increasingly circular economy characterised by high employment, technological innovation and sustainable growth.

The second step is to see how finance needs to change to move the economy towards the desired model. This implies adjustments in policy and financial regulation, as well as changes in financial market practices, norms and behaviour. To guide this second step, the European Commission has launched the High-Level Expert Group on Sustainable Finance.

The central challenges for the Group are three-fold. First, to identify more precisely the core areas of sustainability: this Report outlines an initial framework on sustainability taxonomy, standards and labels. Second, to foster longer-term orientation in finance and the wider economy: this Report explores ways to attenuate impatience in finance and avoid decision-making, in particular regarding investments, based on too short horizons. Third, to integrate ESG factors into financial decision-making: this Report examines key elements across the investment and lending chain.

Repositioning financial regulation towards sustainability cannot be done with one stroke of a pen. But neither does it require rewriting the whole system of financial regulation. Rather, it means identifying the key areas where adjustments are needed and developing specific and targeted proposals for change.

The High-Level Expert Group on Sustainable Finance has not started from scratch. It has built its considerations on a broad range of existing initiatives. The unique feature of the Group is that it is working with the EU's main financial regulator: the European Commission is providing the Secretariat to the Group and, though the Group works independently, supports the Group through its expertise.

The High-Level Expert Group has benefitted from invaluable support by the Commission. This includes exchanges on the overall policy context with officials, notably Valdis Dombrovskis, Jyrki Katainen and Olivier Guersent as well as the cabinets; it also includes a Secretariat team overseen by Niall Bohan and coordinated by Martin Koch and Michelle Kosmidis as project leaders. The Secretariat team has not only successfully coordinated the work of the group, but also ensured systematic linkages with current and evolving EU regulation. The Group would like to thank the European Commission, the Secretariat team, the Group's observers and the many experts that have provided guidance and feedback.

We hope that this Interim Report will help to stimulate debate on sustainable finance and create the basis for engagement by a wide range of stakeholders to inform the Group's final report due in December.

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Executive Summary

In the aftermath of the financial and sovereign debt crises, sustainable finance could provide the best opportunity for the European Union to reorient its financial system from short-term stabilisation to long-term impact. The EU has been leading on the global sustainability agenda, which seeks to combine economic prosperity with environmental and social sustainability. The EU also recognises that the goal of sustainability must be supported by a financial system that promotes growth in a way that is sustainable over the longer term.

The EU must now develop a clear strategy that unifies this ambition with one of its key achievements in terms of financial policy and regulation, and which also funds the path towards a low-carbon, resource-efficient and environmentally protective economy. To that end, in December 2016, the European Commission established a High-Level Expert Group (HLEG) on sustainable finance. The HLEG's objective is to help to develop an overarching and comprehensive EU strategy on sustainable finance to integrate sustainability into EU financial policy. It brings together experts with diverse profiles representing different approaches to this complex topic.

While EU reforms following the financial crisis managed to stabilise the financial system, the challenge is now to improve its contribution to sustainable development. The functioning of the financial system thus needs to be refreshed in the dual context of stimulating job creation, investment and prosperity in Europe, as well as making the transition to a sustainable model of development. Responding to the challenge of long-term sustainable development is also a powerful way for financial institutions to reclaim the positive role they can play in society.

This Interim Report of the HLEG identifies two imperatives for Europe's financial system. The first is to strengthen financial stability and asset pricing, by improving the assessment and management of long-term material risks and intangible factors of value creation, including those related to environmental, social and governance (ESG) issues. The second is to improve the contribution of the financial sector to sustainable and inclusive growth, notably by financing long-term needs such as innovation and infrastructure, and accelerating the shift to a low carbon and resource-efficient economy.

1. PROCESSES AND PARTICIPANTS IN THE FINANCIAL SYSTEM

Fiduciary duty and related concepts: The responsibility of directors and investors to manage long-term sustainability risks should be enshrined in their relevant duties, whether it is through fiduciary duty in common law or its equivalent in other legal systems. Updates should make clear that managing ESG risks is integral to fulfilling these duties. Policy and regulatory interventions will also have to promote the advancement of market-based tools essential to investment decision-making, such as benchmarks and credit ratings.

Disclosures: Clear, comprehensive and comparable disclosure of information on sustainability are essential to success. Better financial and ESG reporting by firms and financial institutions is urgently needed to reflect a truer picture. Developing broadly accepted standards for measuring performance, impacts on carbon, health and safety, and human capital would support better-informed decision-making. Investors should provide forward-looking analysis of how their portfolios are aligned with the energy and environmental transition, potentially via mechanisms comparable to France's recent Energy Transition Law, Article 173.

Putting sustainability at the heart of the financial system: To deliver systemic change, ESG factors and long-term sustainability risks and opportunities will be needed in corporate

governance, core indices, accounting standards and credit ratings. They will also need to be reflected in the role played by the European supervisory agencies (ESAs), such as through common guidelines and, subsequently, supervisory convergence on ESG disclosure.

The role of banks: As the largest asset pool, banks have an essential role in the transition towards a sustainable financial system. To date, however, their potential contribution to sustainable development has not reached its full potential. Green-supportive factors or brown-penalising factors could be investigated; the appropriateness of the capital framework for project finance and specialised lending should be assessed; while Pillars II and III of prudential regulation could be strengthened with regard to sustainability.

Insurance companies and pension funds: Prudential regulation for institutional investors will also have to be reviewed. For example, consideration of adjusting Solvency II to enable greater investment by insurance companies in sustainable equity and long-term assets should be explored.

Asset managers: As the last stage of the investment and lending chain before capital enters the markets, asset managers are uniquely placed to help capital flow towards more sustainable investments. Embedding sustainability into stewardship codes and asset management agreements, and requiring asset managers to disclose how they integrate ESG factors into their strategy and vote on ESG issues, are all part of the measures that could be pursued to strengthen the ownership chain.

Credit rating agencies and stock exchanges: It is time for long-term sustainability risks and opportunities to move from an 'add-on' consideration to a 'built-in' feature in ratings. While EU stock exchanges are global leaders when it comes to disclosure of ESG factors, much more can be done to promote sustainability. Exchanges could also support the integrity and growth of the green bond market by encouraging the development and application of robust standards.

Global financial centres: Given European expertise on sustainability, the EU is in an ideal position to take the international lead among such global financial centres. It could establish a network of EU sustainable financial centres to exchange best practices, align standards and achieve market scale.

2. MOBILISING CAPITAL FOR A SUSTAINABLE ECONOMY

Mobilising capital for a sustainable economy requires action on two fronts: the first is shifting the current capital allocation from an unsustainable pathway to a sustainable one; the second is filling the investment gap to ensure that objectives are achieved on time.

Clarity on policy plans: A coherent policy strategy is urgently needed to translate sustainable development ambitions into investment opportunities. Member states need to provide a plan indicating to investors how they intend to mobilise the capital needed to meet their 2030 goals and the long-term climate and energy obligations of the Energy Union and the Paris Agreement.

Sustainability taxonomy: Agreeing an EU classification system of 'sustainable' assets would boost investor confidence and give firms a better understanding of which assets qualify as sustainable investments. Establishing a common language also requires appropriation of the EU classification by market participants through its integration into process guidelines and assessment (product and process) standards. A European standard for green bonds, in particular, would help the EU green bond market reach its full potential.

Product standards and labels: The EU should encourage the development of sustainable financial products. This could be pursued by considering new political risk guarantees for sustainable infrastructure, and support for the development of green and social bond markets, as well as that of new sustainable financial products and services that use technology to deliver sustainable outcomes.

Fostering infrastructure: To support and facilitate these investments, the EU could create 'Infrastructure Europe', a dedicated organisation responsible for developing and structuring infrastructure projects and matching them with investors. This new entity would be responsible for match-making infrastructure projects with investors, focusing on sustainability projects in particular, and help countries in their efforts to access capital markets to finance their capital-raising plans.

Wider society: Last but by no means least, enabling greater engagement of society by increasing literacy on sustainable finance issues, which will stimulate informed demand. The EU should support the creation of a set of publicly available corporate sustainability league tables, ranking firms on their performance against the Sustainable Development Goals. We also recommend the creation of sustainable investment standards at the retail level as a simple way for citizens to demand sustainable investment with impact.

In summary, the early recommendations of the HLEG are to:

- Develop a classification system for sustainable assets
- Establish a European standard and label for green bonds and other sustainable assets
- Clarify that fiduciary duty encompasses sustainability
- Strengthen ESG reporting requirements
- Introduce a 'sustainability test' for EU financial legislation
- Create 'Sustainable Infrastructure Europe' to channel finance into sustainable projects
- Enhance the role of the ESAs in assessing ESG-related risks
- Unlock investments in energy efficiency through relevant accounting rules

3. NEXT STEPS

This Interim Report is intended to provide the basis for fruitful and constructive consultations as the HLEG engages in the next phase of its work. The HLEG welcomes comments, questions and discussions during the process of preparing its final report for publication in December 2017.

I. Introduction

1. CONTEXT AND POLICY AMBITION

Sustainability is the model for Europe's future development – and finance is an essential lever for achieving ambitious goals for economic prosperity, social inclusion and environmental regeneration. The origins of the European Union (EU) can be traced to the establishment of the European Coal and Steel Community in 1951 – a community focused on ensuring a smooth transition of member states' economies from coal to what was then the more modern fuel: oil. Now, more than six decades later, the Paris Agreement and the 2030 Agenda with its 17 Sustainable Development Goals (SDGs) provide the foundations for Europe's next transition. The EU has the opportunity to be the global champion of sustainable finance in support of that transition: action taken at the European level could help to deliver sustainable finance at scale across the world.

For the financial system, sustainability has a dual imperative. The first is to ensure that environmental, social and governance (ESG) factors are at the heart of financial decision-making. The second is to mobilise capital to help solve society's key challenges that require long-term finance: creating jobs, especially for young people, improving education and retirement finance, tackling inequality, and accelerating the shift to a decarbonised and resource-efficient economy. A sustainable European economy must be characterised not only by better protection of natural resources but also by higher employment levels and greater financial and economic stability.

The transition to a sustainable financial system has started, but urgent and transformational action is now required. The financial sector represents over €100 trillion of assets, or more than six times the EU's annual GDP. It provides services to Europe's households, firms and governments, safeguarding savings and deploying investments as well as protecting people and property from a range of risks. Positive steps have been taken, but they are clearly insufficient. For example, there is an annual funding gap of close to €180 billion just to deliver Europe's decarbonisation efforts, let alone other priorities for sustainable development.

In the aftermath of the financial and sovereign debt crises, sustainable finance could provide the best opportunity for the EU to reorient its financial system from short-term stabilisation to long-term impact. Indeed, the sustainability and stability of the financial system can be seen as two interrelated objectives. European policy-makers recognise that what is needed is a financial system that is not just momentarily stable but that is helping to deal with Europe's key strategic challenges: employment, education, technology, retirement funding, infrastructure – all of which now have a sustainability dimension.

Much has been done to strengthen the financial system following the crisis, but it still does not function as effectively as it should. Sustainability requires a long-term perspective – both in terms of providing long-term funding for critical infrastructure and responding to long-term threats. If the financial system can address the long-term yet pressing risks and opportunities related to climate change, it will have developed processes, approaches and thinking that can be drawn on to deal with other long-term sustainability challenges.

Incorporation of climate risks into financial decisions is therefore the litmus test for finance, a priority highlighted in the Financial Stability Board's Task Force on Climate-related Financial Disclosures. Ultimately, this would deliver a financial system that gains resilience, strength and stability by promoting a social and economic model that is sustainable in itself.

2. THE EU AGENDA

The EU has been leading on this agenda, taking ambitious steps towards decarbonisation and the transition to a sustainable European economy. Looking just at climate change, a fifth of the EU budget for 2014-2020 has been earmarked for this priority; the next phase of the European Fund for Strategic Investments (EFSI) is expected to have at least 40% of its funds allocated to climate action. Moreover, between 2007 and 2015, issuance of Climate Awareness Bonds for renewable energy and energy efficiency projects has grown from €600 million to €42.4 billion¹. The EU is also defining its overall 2050 decarbonisation goal, which will build on the existing 2030 climate and energy package. And there is an ambitious new Circular Economy Package to help European households and firms to make the transition to a stronger and more circular economy where resources are used in a more sustainable way.

The EU has taken sustainability concerns into account in its financial policies since 2013. Related flagship directives comprise the Non-Financial Reporting Directive and its related guidelines, which were adopted in June 2017; the Institutions for Occupational Retirement Provision (IORP II) Directive; the Shareholders' Rights Directive II; and the political agreement achieved on securitisation to include ESG requirements in the legal text. In addition, the EU promotes the integration of climate policies and instruments such as the emissions trading system (ETS), the Adaptation Strategy and the 2030 climate and energy package into financing decisions through relevant procedures and practices².

But what has been missing is an overarching strategy for delivering innovative solutions that respond to the scale of the task. For a long time, discussions between climate and energy transition experts and experts in financial regulation have taken place in 'silos'. While the G20 and other bodies have made significant progress on green and sustainable finance, the international context has become more uncertain. This requires Europe to develop a clear strategy that unifies its long-term economic, environmental and social ambitions with one of its key achievements in terms of financial regulation.

The European Commission has recognised the need to develop and strengthen an economic and finance strategy oriented towards long-term sustainable and climate-resilient development. For example, the Mid-term review of the Capital Markets Union (CMU) highlights that 'deep re-engineering of the financial system is necessary for investments to become more sustainable and for the system to promote truly sustainable development from an economic, social and environmental perspective'.

3. THE HIGH-LEVEL EXPERT GROUP

The European Commission decided to establish a High-Level Expert Group (HLEG) on sustainable finance in September 2016. The objective is to provide a roadmap towards a sustainable financial system that fosters sustainability in economic, social and environmental developments. The group will provide recommendations on how to 'hardwire' sustainability into the EU's regulatory and financial policy framework and how to mobilise more capital flows towards sustainable investment and lending.

The HLEG has been given the task of setting out the scale of the challenges and opportunities of sustainable finance, as well as recommending a comprehensive programme of reforms to the EU policy framework. The HLEG's focus is on informing and guiding the numerous regulatory and financial policy initiatives of the European Commission and related institutions as part of a broader retuning of financial policy for long-term economic prosperity, building on existing best practice, learning from experience and incorporating

1 UNEP, *Connecting Financial System and Sustainable Development: Market Leadership Paper, Inquiry: Design of a Sustainable Financial System*, Input paper to 'The Financial system we need – From Momentum to Transformation', 2016

2 European Investment Bank, *Mobilizing finance for the transition to a low-carbon economy and climate-resilient economy*, EIB Climate Strategy, 2016

the latest analysis and evidence. Specifically, the HLEG is charged with delivering policy recommendations that aim to:

- **Provide a vision for sustainable finance.**
- **Integrate sustainability into the EU's regulatory and financial policy framework.**
- **Mobilise capital for a sustainable economy.**

The group was formed by bringing together experts with diverse profiles and expertise representing different approaches to this broad and complex topic. The group was asked in the first place to have particular regard for harnessing financial markets in response to climate and environmental challenges. Members were selected by the European Commission from the finance, business, civil society and academic communities on the basis of their personal expertise, their contribution to the field of sustainable finance and the prominence of their affiliation in this area.

4. INTERIM REPORT

This is the Interim Report (Phase I) of the HLEG, with the Final Report to be provided by December 2017 (Phase II). The Interim Report outlines key areas where European policy-makers could further align financial practices with sustainable policy objectives. The report presents the initial analysis, options, dilemmas and trade-offs that the HLEG has identified. It is structured as follows:

- Chapter II provides **an overall vision for a sustainable financial system**, key barriers that will need to be addressed to achieve it, critical success factors and the opportunity ahead.
- Chapter III then explores ways of **integrating sustainability into the EU's regulatory and financial policy framework**, covering issues such as disclosure, accounting, fiduciary duty, corporate reporting and benchmarks.
- Chapter IV focuses on **market participants** (banks, insurance companies, pension funds and asset managers) **and market facilitators** (including credit rating agencies and stock exchanges).
- Chapter V focuses on **measures to mobilise more capital flows towards sustainability**, in terms of both public and private finance. It also addresses the issue of sustainability taxonomies, standards and labels.
- Chapter VI presents the **initial set of recommendations and policy areas** for consideration.

This report is aimed at readers in Europe and beyond, who are concerned about issues of sustainability, financial markets and the wider challenges for society. Beyond the European Commission and legislators and regulators in EU member states, including a global investor audience, non-governmental organisations, cities and regional governments, but also leaders in civil society, business and investment, as well as issuers, the corporate sector and advisers in the financial sector.

The hope with this report is to provide the basis for fruitful and constructive consultations as the HLEG engages in the next phase of its work.

II. Towards a sustainable financial system

The fundamental purpose of a sustainable financial system is to serve the economy and wider society. The activities and resources of the financial system are there to underpin balanced prosperity and competitiveness, as well as to promote innovation that generates social inclusion, respects the environment, protects the climate and delivers on objectives for human rights.

In strategic terms, a sustainable financial system supports sustainable development by 'meeting the needs of the present without compromising the ability of future generations to meet their own needs'. It enables households, firms and governments to store and access their incomes and assets reliably for present and future use. It ensures capital is available to support productive and sustainable financing, investment, innovation and consumption. And it is transparent and accountable, providing lenders, investors and society with information on both how their capital is being used and how to hold firms and asset managers to account.

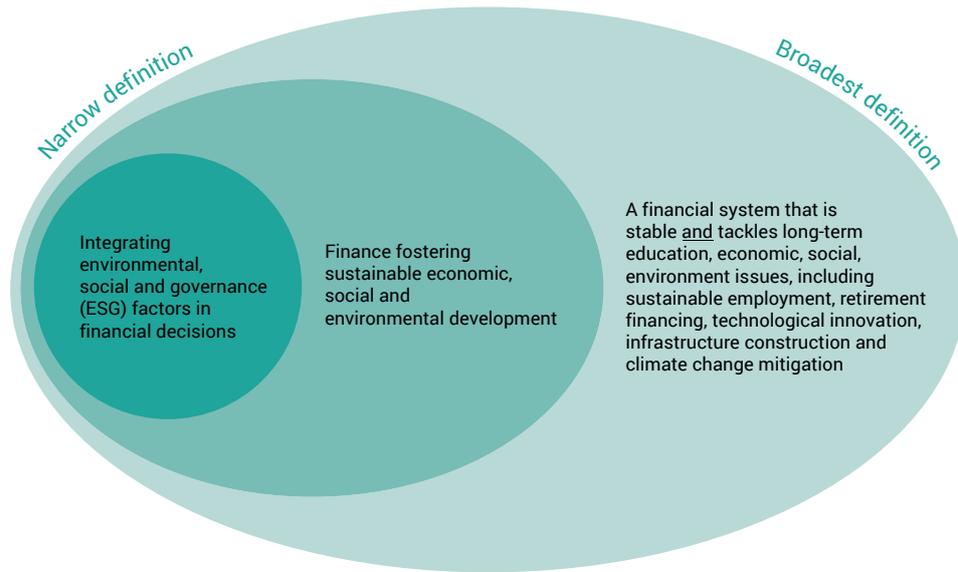
The EU has historically pioneered a number of key sustainable finance practices thanks to market and regulatory innovations, and early adoptions by issuers, investors and intermediaries. The first ever green bond was issued by the European Investment Bank (EIB) in 2007; between 2010 and 2014, as the largest climate financier globally, the EIB provided more than €90 billion for climate action projects, €13.8 billion financing for energy infrastructures and energy security in 2015 and over €150 billion since 2005 in the transport sector³. The allocation to climate-related issues in the European Strategic Investment Plan was recently raised to 40% and the most recent pension fund regulation strongly fosters consideration and disclosure of environmental, social and governance (ESG) impacts on investment strategies and risk management frameworks.

Important questions about the role and functioning of the financial system and Europe's economic model remain. While reforms following the financial crisis managed to stabilise the financial system, they did not improve its contribution to the significant challenges of youth unemployment, funding for retirement, education, technological innovation, environmental protection and climate change. The functioning of the financial system thus needs to be refreshed in the dual context of stimulating job creation, investment and prosperity in the European economy and society, while simultaneously making the transition to a sustainable model of development and a stable model of financing. Indeed, responding to the challenge of long-term sustainable economic and social development is a powerful way for financial institutions to reclaim the positive role they can play in society.

This creates two imperatives for Europe's financial system. The first is to integrate ESG factors fully into financial decision-making to manage risks and seize investment and lending opportunities. This is key to delivering *better finance* – finance that is more long-term, more attuned to emerging risks and more efficient at delivering returns for the economy and wider society. The second, complementary imperative is for finance to contribute to *better development* – thus supporting the creation of good quality jobs, tackling inequality, delivering inclusive growth and accelerating the shift to a decarbonised and resource-efficient economy (see also Box 1).

³ European Investment Bank, *Better infrastructure, better economy*, 2017

Three definitions of sustainable finance

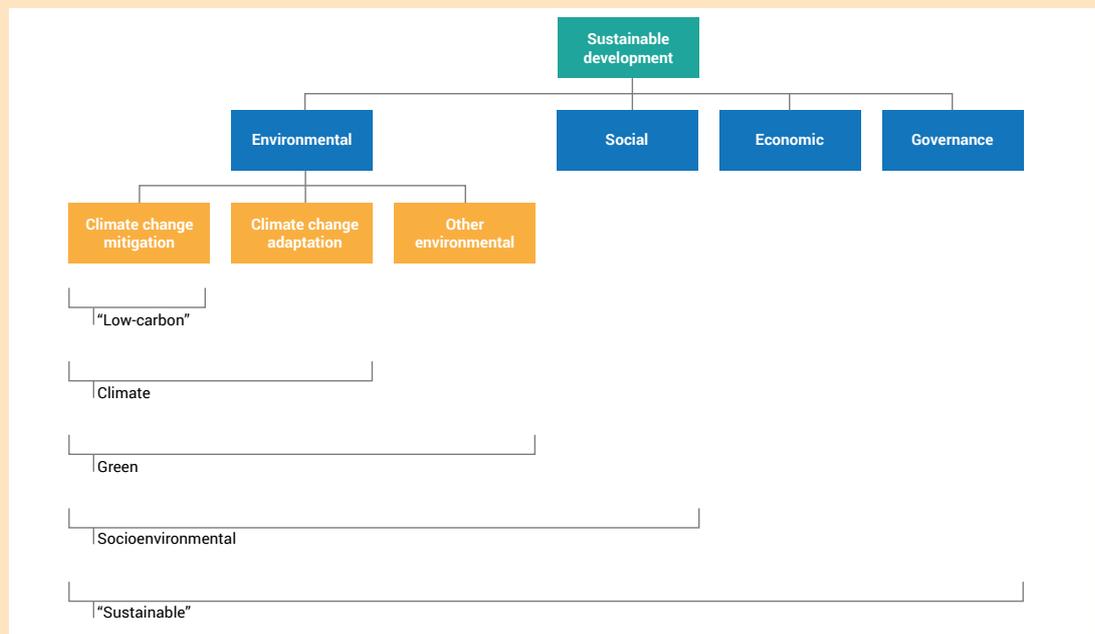


1. THE SCALE OF THE SUSTAINABLE FINANCE CHALLENGE

The scale of the sustainable finance challenge in terms of investment needs is undoubtedly very large. For the energy transition alone, additional investments of €177 billion per year have been estimated to be required to meet the EU's 2030 climate and energy targets (Box 2).

Box 1: Green finance: a subset of the sustainable finance agenda

Sustainable finance is a comprehensive approach that brings together different strategies for improving the social, economic and environmental performance of the financial system. Green finance can be seen as a subset of the more strategic sustainable finance agenda. China has popularised the term 'green finance' in its domestic work and within the G20; this refers to finance that generates explicit environmental benefits, which are specified beforehand. Sustainable finance is a more comprehensive concept, incorporating ESG factors.



A simplified schema for understanding broad terms - UNEP Inquiry, Definitions and Concepts: Background Note, 2016

It is essential to recognise that a large proportion of this represents productive investments, not costs – and may yield substantial returns in terms of jobs and new markets due to the development of new technologies and business models. Those that move fastest to seize these opportunities will be at an advantage in the new world economy. This argues for early action by the EU to secure a competitive advantage.

In the context of Europe’s financial system, these levels of investment are ambitious but not excessive. The average investment required to meet the EU’s 2030 climate and energy goals, for example, represents 2.5% of projected levels of annual capital formation over the same period.

Investment estimates for other sustainability priorities are available, but not always comparable. This is in part because they use different base years, timelines and methods of calculation. As such, they are only illustrative. Research by the Ellen MacArthur Foundation, for example, estimates the investment needs for the circular economy in the EU to be around €320 billion between now and 2025⁴.

Box 2: Climate and energy investment needs to 2030

Currently, the EU is not on track to deliver the €11.2 trillion required to meet its 2030 energy policy targets. The latest estimates put the annual investment gap at around €177 billion between 2021 and 2030, totalling €1.77 trillion.

The biggest gaps relate to investment in energy efficiency in buildings (74%) and transport (17%). Geographically, the biggest gaps are in central and eastern Europe. Investment needs for climate adaptation and resilience are generally not available. This is largely because most member states have not set out their climate adaptation requirements, and where they have, the quality of current national/regional adaptation plans vary considerably.

Closing the investment gap will bring significant benefits, including clean energy and reduced greenhouse gas emissions; it will also create new jobs in Europe, reduce energy poverty and improve air quality. Given the scale of the gap, unlocking energy efficiency investment in buildings must be the top priority. One key solution is for EUROSTAT to issue guidance to national statistical authorities on classifying energy performance contracts as services or as buy-and-leaseback contracts. This would enable governments to contract and finance energy efficiency investment programmes to the private sector off balance sheet. Along with reforms of state aid, this would be a significant step forward in boosting investment where it is most needed⁵.

While energy-related investments are mostly direct investment opportunities and attractive for private investors, other environmental goods and services might be difficult to finance. Where policy can be used to create a market price – for some air pollutants, water and waste – a direct investment case can be created. For other environmental goods and services, such as biodiversity or ecosystem services, it is less obvious ‘who pays?’ beyond taxpayers – since these are public goods and non-paying users cannot be prevented from accessing them. Two sectors that particularly require investments as well as strong policy guidance are sustainable fisheries and sustainable agriculture. Attempts have been made to develop innovative thinking on business models for these sectors and on financing non-excludable goods; further progress is strongly encouraged.

⁴ This is likely to be an upper bound as the study’s definition of a circular economy goes well beyond the EU’s. (Ellen MacArthur Foundation, *Achieving ‘Growth Within’*, 2017)

⁵ Buildings owned and/or managed by the public sector make up more than 10% of the overall EU building stock with an annual energy bill of €47 billion and a large cost-effective energy saving potential that remains untapped. Other public installations, as street lighting, are also significant as inefficient systems can account for 30-50% of their total municipal electricity consumption.

This has important implications for mobilising capital towards a sustainable economy. For policy-makers, it points to the key role of setting stable, predictable and supportive framework conditions for investments that can deliver many environmental outcomes. For example, use of blended public/private finance for development policy objectives by the European Commission has increased in the last seven years (€1.6 billion of EU grants financing more than 240 blended projects).

Since many environmental effects are interlinked and have a social dimension, addressing one area of concern will have positive spillovers between policy objectives. For example, air quality affects climate change and health, and water quality affects biodiversity. This suggests that artificially dividing objectives into ‘silos’ of investment needs is counter-productive. Investors can also take lessons from this since it argues for a wider view of ‘value’ for the users and providers of capital. It also argues for stronger engagement by investors with firms to raise environmental standards to deliver long-term value.

Improved tracking of the EU’s sustainable investment needs and financial flows is urgently needed. This would link government spending, bank lending, corporate investment and asset level data on capital investments. Progress has been made in some member states on mapping ‘climate finance’ landscapes, which track sources and financial instruments directing capital towards investments with climate mitigation or adaptation outcomes⁶. This could be extended across the EU and broadened to include all sustainable development priorities, the potential result being a fully functional and coherent EU sustainable finance statistical system.

The EU could also create a common framework for strengthening sustainable finance tracking at the member state level, starting with climate change. The support, dissemination and uptake by financial institutions of European labels for climate, green or sustainable projects would facilitate this process. While ownership of this process by the member states is key, a coordination effort at the EU level – through creating a new ‘observatory’ function – could be useful for developing a common language on methods and tools, to aggregate the data, to inform collective decision-making and to help to target further policy interventions (including public finance) in relation to climate change mitigation and adaptation that may be required.

This European Observatory could start with climate change, support member states by helping to monitor progress against policy objectives and provide recommendations to EU decision-makers on the risks of under-investment. This body could operate as a cross-agency collaboration staffed by experts from within existing institutions, or it could be a new body altogether.

2. PROGRESS TOWARDS SUSTAINABLE FINANCE

As the largest asset pool in the EU, banks play a key role, but the overall levels of sustainable lending are unclear. Banks remain the main source of external finance for European households and small and medium-sized enterprises (SMEs), as well as roughly 80% of green infrastructure finance⁷. The EU has a diversity of banking models, including public, shareholder-owned as well as stakeholder banks and a small group of sustainable banks. But better tagging and tracking of lending to green assets is still required. Likewise, a clear transition away from lending that damages natural capital is urgently needed.

Institutional investors in Europe are increasingly active in sustainable finance. As a group, they account for nearly half of the global PRI (Principles for Responsible Investment) membership. But while Europe’s investors have been leading the decarbonisation of investment portfolios, the combined exposure of their equity portfolio to carbon-intensive sectors remains large (45-47%)⁸. In fact, as the G20’s Green Finance synthesis report notes, ‘less than 1% of the holding by global institutional investors are green infrastructure assets’⁹.

6 Institute for Climate Economics (I4CE), *The landscape of climate finance in France*, 2016

7 OECD, *Investing in Climate, Investing in Growth*, 2017

8 Battiston, *A climate stress-test of the financial system*, *Nature Climate Change*, 2017

9 G20 Green Finance Study Group, *G20 Green Finance Synthesis Report*, 2016

The EU was one of the pioneers in the issuance of green bonds, although its global share has fallen in the past year. Until 2014, the EU accounted for over 45% of all green bond issuance. Since then, issuance in other regions – notably China – has significantly increased, bringing the EU down to around 30% in 2016 (Climate Bonds Initiative). The EU remains still far from its market potential, however, estimated at US\$74.6 billion of annual green bond issuance by 2020¹⁰ (vs. ~US\$20 billion issued as of mid-2016). Several studies and market specialists indicate that the use of green bonds could lead to at least US\$100-140 billion per year of additional investments in clean and efficient energy systems alone¹¹.

The EU's public equity markets have made progress in disclosure: capital-raising for firms with green revenues is the next priority. Stock exchanges in the EU are among the world's leaders in sustainability disclosure, comprising seven of the top 10 exchanges globally in 2016, according to Corporate Knights¹². EU firms also report comparatively well on ESG factors with a clear edge on environmental disclosure. According to Novethic, as of 2016, most of the 120 international investors (with a total of €8.8 trillion in assets) that had signed the Montréal Carbon Pledge are in Europe. Half of the signatories come from asset managers. Among them are 11 insurance companies, which account for more than 20% of assets held by the Montréal Carbon Pledge. Yet both North America and Asia Pacific outpace the EU in terms of proportions of firms with green revenues and a compound annual growth rate of green industries (both at 11% relative to the EU at 5%)¹³.

3. IDENTIFYING BARRIERS

As the European Commission rightly notes in its Mid-term review of the Capital Markets Union of June 2017, 'a deep re-engineering of the financial system is necessary for investments to become more sustainable and for the system to promote truly sustainable development from an economic, social and environmental perspective.' This will include updating its regulations, norms, incentives and responsibilities as well as its overall policy framework. It will also require overcoming barriers, of which the following are particularly noteworthy.

1. Europe's sustainability ambitions need to be translated into effective policy signals that mobilise the financial system. The EU's long-term policy objectives for sustainable development and climate action need to be translated into robust policy signals that provide incentives for the allocation of capital to sustainable investments. The persistence of external environmental and social costs that are not reflected in market prices and valuations means that sustainability is often not considered to be material now. This results in an insufficient supply of sustainable assets with attractive risk/reward characteristics – and in missed opportunities to invest in job creation, innovation and environmental improvement.

2. The financial system has become more stable, but is not fully connected with a real economy in transition. The system has been stabilised after the crisis, but is not yet fully effective at funding the real economy, society, new technologies and much-needed infrastructure and inclusive growth. Policy frameworks and market behaviour continue to favour a focus on liquid assets, short-term financial returns and instruments, as well low-yielding debt in times of low interest rates. By contrast, investment and lending in infrastructure (equity and debt), small-cap indices, SMEs, securitisation, private equity and real assets is more limited. Yet these assets are often the most critical for the transition to sustainable development.

3. The assessment and management of financial risks needs to integrate sustainability factors more effectively. The financial system and policy framework is focused on securing

¹⁰ UNEP Inquiry, *Analysing Potential Bond Contributions in a Low-carbon transition*, 2016

¹¹ Climate Bonds Market Roundup, 2016

¹² World Stock Exchanges Report, 2016

¹³ Climate Bonds Market Roundup, 2016

risk-adjusted returns, but the understanding of value often remains constrained to conventional elements rather than considering powerful intangible factors, including the ESG dimensions of performance and impact. Yet these factors are real and increasingly impinge on the financial risks facing individual assets as well as the system as a whole. They constitute a 'shadow materiality' generating the prospect of 'stranded assets' and wasted capital. Equally, most prudential rules and operations by policy authorities within the financial system have not been designed with sustainability in mind.

4. The financial sector's toolkit for sustainability remains incomplete. A range of practical issues within financial institutions and markets are holding back progress. There remains a lack of common definitions and metrics. The levels and quality of disclosure are insufficient to enable informed decision-making and oversight. Financial incentives and the business models of intermediaries are not yet fully aligned with sustainable development. Alongside this, financial institutions need to understand better the sustainability expectations of individual savers and investors. In addition, levels of sustainability literacy and expertise along the investment and lending chain are often inadequate¹⁴.

5. The financial system and policy framework risks succumbing to the 'tragedy of the horizon'. This arises when the financial outlook is too short to factor in the issues at hand – for example, climate change, demographics or technology, benefits of long-term investment – thus blinding financial institutions and policy-makers to their implications. Many firms and financial institutions that wish to invest in long-term value creation are often subject to short-term market and regulatory pressures and so under-invest in human, technological and natural capital. The result is maturity mismatches between long-term projects, long-term risk materialisation and their short-term market liabilities.

4. A VISION OF SUSTAINABLE FINANCE

The rapid evolution of the sustainable finance agenda could provide the best opportunity for the EU to reorient its financial system from short-term stabilisation to long-term impact.

In a narrow sense, sustainable finance means integrating the ESG criteria into financial investment decisions. In a broader sense, sustainable finance refers to a financial system that is promoting sustainable economic development rather than boom and bust; sustainable social development rather than inequality and exclusion; and sustainable environmental development rather than damaging the endowments of nature. Achieving this requires a clear vision – one that can be understood, implemented and measured in practice.

Box 3. A financial system that serves the sustainable development of the EU is one that:

1. Considers the **full value** of financial assets, incorporating sustainability factors into valuation and product design.
2. Is **productive**, serving its users in their projects and needs, notably households, firms and governments.
3. Is **resilient**, withstanding and recovering from a wide range of both external and internally generated shocks.
4. Demonstrates **alignment** between the sustainability preferences of its users and the outcomes of the decision-making process, ensuring accountability and transparency.
5. Takes a **long-term** perspective and overcomes the 'tragedy of the horizon'.

¹⁴ E3G, *Missing in Action: The lack of ESG capacity at leading investors*, 2017

Transformational change is clearly needed to realise this vision, yet many of the elements are already emerging. The five dimensions listed above frame the architecture of a sustainable financial system (Box 3). The task of delivering this can seem immense. But many of the changes can already be observed today. The challenge is to identify what can be scaled up, where fresh innovation is required and which special coordinated efforts are required at the European level to achieve the change required.

The development of a ‘sustainability test’ that measures the performance of EU legislation against sustainability criteria is key. Measurement is essential for understanding performance, the progress being made and the distance still to be travelled. Much work is being done to understand the sustainability of financial investments. What is lacking, however, is a more comprehensive ‘sustainability test’ that would provide a practical tool to measure performance at various levels of legislation, including rules on specific financial products or rules that affect the decisions of financial institutions. In addition, the ‘sustainability test’ could be formally applied to any EU legislation. As part of its Better Regulation Agenda, the European Commission carries out impact assessments for new legislative proposals with significant impacts. The ‘sustainability test’ could be put forward as part of future reviews of the Better Regulation guidelines; it could also be applied to ex-post evaluations of existing legislation.

The construction of a sustainable financial system in Europe is the natural next step in the EU’s current financial policy priorities, notably the CMU and the Investment Plan for Europe. It is also a foundational element in the realisation of the EU’s plans to build an Energy Union in harmony with the Paris Agreement. Of critical importance, therefore, is a detailed definition by 2018 of the EU and its member states’ plans to reach 2030 and 2050 climate and energy goals – and a clear articulation of the role that financial market reform is expected to play in meeting those objectives.

A sustainable financial system for Europe would promote the role of a well-functioning market and reconnect finance with society. Such a system would take ESG issues into account, it would continuously assess the most up-to-date, relevant and material information, and it would use performance indicators to track and communicate success. More importantly, it would enable individuals to know where their money is going and how it is being invested to contribute to sustainable development. It would provide them with the engagement tools necessary to ensure that they can hold firms and fund managers to account with respect to sustainability performance. The result would be a financial system that is both a catalyst for change and an alarm signal for misguided actions of issuers – thus exerting a disciplinary function that regulation can never achieve.

The building of a sustainable financial system would also enable the EU to take a leading role in shaping international frameworks. With a strong domestic platform, the EU would be able to support the expansion of sustainable finance within both the G7 and the G20, as well as within key international standard-setting bodies such as the BIS, the Basel Committee, the FSB, the IAIS, the IMF, IOSCO, the OECD and the World Bank. This would also enable the EU to strengthen bilateral relations with key partners across the world, to develop shared approaches and to encourage cross-border flows of sustainable financial services, particularly with developing countries.

The current international geopolitical context is extremely propitious for such a move and sustainable finance thus represents a strategic opportunity for the EU to assert global leadership. As the European Political Strategy Centre notes, the EU now has a ‘unique window of opportunity to take the global lead on sustainable finance and position itself as the investment destination for low-carbon technologies, securing a substantial competitive advantage’.

Capturing the window of opportunity requires a dual strategy that simultaneously seeks to mobilise capital for specific sustainability priorities while integrating sustainability factors across the financial system. Details of how these twin goals can be achieved are laid out in the following chapters.

III. Sustainability and the processes, incentives and culture of the financial system

A key function of the financial system is to match the supply of capital with demand in order to create sustainable value in the economy. Capital flows to and from the three main users of finance in the real economy – households, firms and governments – pass through a range of intermediaries in the investment and lending chain. Returns and accountability for the management of these funds then flow back to the ultimate beneficiaries.

The responsibilities, norms, incentives and regulations governing financial intermediaries in the investment and lending chain profoundly influence the direction of capital towards productive and sustainable investments. Influencing these governing characteristics is a fundamental lever for ensuring that the financial system is stable and productive in a social sense.

There are two misalignments at the heart of the sustainability challenge: one concerns the appropriate time horizon; the other concerns the appropriate conception of risk. Key objectives such as job creation, environmental protection, retirement financing and climate transition require a focus on the longer term and a broad perspective on potential risks to society. Yet much of the financial system is biased towards the short term and a relatively narrow view of financial risk.

These misalignments pose a challenge for the investors and firms entrusted with capital, conferring on them a duty to consider long-term sustainability risks. Taking account of sustainability risks should be enshrined in the duties of investors, whether it is through fiduciary duty in common law or its equivalent in other legal systems. These duties should be cascaded onto the other participants across the investment and lending chain.

From such duties, it follows that both the governance of financial institutions and the agencies that supervise them have to be developed simultaneously. In parallel, policy and regulatory interventions will have to go hand in hand with the advancement of market-based tools essential to investment decision-making, such as benchmarks and credit ratings.

Underpinning this objective are better financial and ESG disclosures by firms, which should converge over time eventually to reflect a truer picture of their performance. Developing broadly accepted standards for accounting for performance on measures of carbon, health and safety, and human capital would support better-informed decision-making.

This chapter and the next one explore how the current regulatory and financial policy framework can be adjusted to address the misalignments of time and risk. They set out a range of regulatory, financial policy and market changes that could make capital more productive through integrating ESG factors into day-to-day operations across the investment and lending chain. This, in turn, would help deliver more socially productive investment and make sustainability a core part of Europe's financial system.

1. MISMATCHED TIME HORIZONS ACROSS THE INVESTMENT AND LENDING CHAIN

The central problem of sustainability is a 'double compression': a compression of time and a compression of risk. The time horizon in finance is typically much shorter than the time horizon needed to address society's pressing challenges; and the conception of risk in finance is typically much narrower than one that effectively captures economic, social and environmental sustainability.

The policy priorities should therefore be to lengthen the time horizon and broaden the conception of risk. The most pressing economic, social and environmental challenges are long-term, with their impact and financial relevance stretching over years if not decades. But the financial system is structured around shorter-term frameworks affecting the time horizons of firms that depend on funding and continuous assessment by financial institutions to sustain their activities.

The mismatch of time horizons is deeply embedded in the financial system. In theory, investor patience is rewarded: investors with long-term liabilities can invest in illiquid and more risky assets and wait until it is the right time in the business cycle to sell them, leading to better returns than short-term strategies¹⁵. Yet research suggests that the relatively long-term investment horizon of end-beneficiaries with long-term liabilities (pension fund beneficiaries, household savers, sovereign wealth funds, etc.) is not reflected across the investment and lending chain, due to principal-agent concerns, as well as inadequate performance metrics and incentives¹⁶. As a consequence, there is insufficient demand for long-term risk analysis.

The mismatch of time horizons makes certain social and environmental issues – such as resource depletion, which are likely to materialise only in the long term – become 'externalities'. They are deemed 'not material' for financial markets and are thus not sufficiently accounted for by asset owners and managers. But they do have financial consequences in the real economy and for end-beneficiaries.

The mismatch of time horizons means that when short-term performance is the priority, there are weaker incentives to address long-term opportunities and risks. Risks that are non-cyclical (past trends do not provide sufficient indication of future behaviour), non-linear (extrapolation of current trends is therefore misleading) and only likely to materialise after five years (that is, not material in a one- to three-year window) are likely to be missed by risk analysis that is focused on the short term. Past examples include the impact of the energy transition on German utilities and automakers' defeat device practices for pollution tests.

The double compression of time and risk drives a mismatch of investment objectives. The willingness of some beneficiaries to 'vote with their money' in favour of better social and environmental outcomes is often not translated into investment decisions at the other end of the chain. The failure to recognise beneficiaries' interests increases the misalignment of financial decisions with public policy goals and commitments, which require capital allocation and investments in climate transition and long-term opportunities. While there are notable exceptions among some pension funds, which consult with and express their beneficiaries' preferences in their investment policy and management, these are not yet the norm.

Europe has been actively working to promote sustainable finance in policy frameworks and financial practice. In November 2016, the European Commission expressed its full commitment to implementing the 2030 Agenda and the SDGs¹⁷. The EU started mapping

¹⁵ New Zealand Superannuation Fund, *White Paper: The Advantages of Being a Long-term Investor*, 2014

¹⁶ 2° Investing Initiative's, *All swans are black in the dark: how the short-term focus of financial analysis not shed light on long term risks*, 2017

¹⁷ Communication from the European Commission, *Next steps for a sustainable European future*, 2016

European policies to the SDGs, in particular through the following commitments: Investment Plan for Europe¹⁸, Towards a circular economy¹⁹, Energy Union, Capital Markets Union²⁰ and the EU budget Multi-Financial Framework (MFF)²¹.

Action within the EU and its member states has been focused in specific areas, notably on investment and securities, where actions on disclosure feature prominently. Recently, there has been an increase in system-level action, including assessments of how environmental risks (such as climate change) could affect the health of financial sectors and systems. Over the last two years, several actions have been taken in different member states, including Sweden and elsewhere²².

Policy direction

There is no single parameter that could switch off 'short-termism' and move finance to the long term, aligning it with all the major economic challenges that demand a long-term perspective. Nevertheless, progress can be made through, first, continued emphasis by policy-makers that what is needed in particular is long-term finance; second, a review of regulation and market practices to foster long-term decision-making (outlined below); and third, protection of those who take long-term investment decisions in the face of short-term pressures from financial markets.

2. DISCLOSURE

Disclosure is an essential instrument in helping the financial system steer firms towards a sustainable economy. This disclosure would include information on performance, position, risks opportunities and impact, as well as appropriate metrics of sustainability. The market economy and the financial system operate on the basis of transparent prices and risks. These essential signals influence economic activity, investment decisions and the use of scarce resources of all kinds. But there is clearly a problem if some longer-term risks are not transparent and thus not taken into account: improved sustainability metrics and disclosure offer a potential solution. Greater transparency is expected to make firms and financial institutions more resilient and perform better, both in financial and non-financial terms. Over time, this will lead to more robust growth and employment and increased trust among stakeholders, including investors and consumers.

A significant challenge with sustainability-related information and metrics is their breadth. They often encompass both economic and ESG criteria, which can be difficult to delineate and measure. The question of whether a given indicator is relevant for economic and investment decisions depends on the type of activities considered. It can vary across sectors, locations and other contexts. Compared with financial information, sustainability metrics may also be harder to summarise in a single indicator. But while material information related to sustainability might be difficult to express in monetary terms, it is nevertheless of essential financial relevance.

Another challenge is the time dimension. As sustainability is intrinsically linked to longer-term developments, relevant metrics should be forward-looking and take account of long-term horizons. This places an additional layer of difficulty and uncertainty on information relevant to sustainability. Forward-looking information, whether relating to financial or sustainability dimensions, is exposed to the criticism of being insufficiently objective. New types of disclosure may be needed to give sustainability-relevant information, including on long-term risks and opportunities, robustness, comprehensiveness, coherence and comparability. Scenario analysis, laying out a series of alternative business projections along some broadly established trajectories of variables, may be valuable for some themes and sectors (for example, climate change-related disclosures in the energy or extractive sectors).

18 Communication from the European Commission, *Investment Plan for Europe: evaluations give evidence to support its reinforcement*, 2016

19 Report from the European Commission, *Report on the implementation of the Circular Economy Action Plan*, 2017

20 Communication from the European Commission, *Action Plan on Building a Capital Markets Union*, 2015

21 European Commission, *Multiannual Financial Framework adjusted for 2018* (EC website)

22 France introduced the world's first mandatory climate disclosure requirements for institutional investors.

Many EU firms are global leaders on sustainability-relevant transparency in their respective sectors. Building on this, but also recognising the need for further improvement, in 2014, the EU adopted the Non-Financial Reporting Directive²³. This directive requires certain large firms (approximately 6,000) to disclose as of 2018 relevant information on environmental and social aspects, including respect for human rights and action against corruption and bribery. On 26 June 2017, the Commission adopted guidelines on non-financial reporting to help firms disclose environmental and social information.

The work of the Task force on Climate-related Financial Disclosures (TCFD), established by the Financial Stability Board (FSB), is a major international development. The TCFD has developed a framework for voluntary disclosures of climate-related financial information, including risks and opportunities, in the annual reports of firms and financial institutions. This climate-specific framework, published in June 2017, recommends disclosures on governance, strategy, risk management and metrics. One of the innovations in the TCFD framework is to propose scenario analysis to provide forward-looking disclosures that are particularly relevant to guide investments, seem both from within firms and by outside investors.

The question arises of how the EU should take account of the TCFD framework.

Although some argue that disclosures such as those proposed by TCFD may translate into administrative burdens, business risks and potential legal risks, the HLEG considers that enhanced transparency provides on balance significant advantages and a competitive edge, including better steering of business decisions based on a comprehensive and forward-looking scenario analysis. The European Commission's guidelines on non-financial information reflect the TCFD recommendations and the solutions proposed by other relevant national, EU-based and international frameworks. The political signal by the EU to stick to the Paris Agreement despite the withdrawal of the United States is very welcome. In the implementation of the TCFD recommendation, however, the EU should ensure that – including vis-à-vis US firms – European firms are not disadvantaged in terms of reporting burden and commercial risks. Moreover, care should be taken to avoid undermining the level playing field.

While the quality and quantity of sustainability disclosure is improving over time, overall reporting remains inadequate. For example, it is estimated that across 6,300 large firms worldwide, only 45% provide quantitative information on carbon emissions²⁴. While this represents progress, much of the information provided is insufficiently robust or forward-looking, and managers and investors may have difficulties when trying to incorporate it within valuation models, business strategies and decision-making.

The lack of relevant disclosure by firms and financial institutions makes it difficult for managers, investors and other stakeholders to analyse ESG risks and opportunities. Clear reporting of indicators, encompassing a broader definition of performance may also allow asset owners to fulfil their fiduciary duty more effectively, helping them to encourage asset managers to generate sustainable returns over the short, medium and longer term. This, in turn, would help capital flow towards sustainable solutions. Key considerations include how an entity's business model may be contributing to a sustainability objective, and assessing the ESG risks to its strategy.

Financial institutions should also disclose more systematically how they factor ESG risks and opportunities into their investment and lending strategies. This transparency is key for accountability and enabling clients and beneficiaries to make informed choices. This includes reporting on sustainability risks and opportunities at portfolio level and, more broadly, how financial institutions are contributing to sustainable development through their investments. Impact-oriented metrics and other targets are also needed from financial institutions to reflect fully their overall contribution to sustainable development. The objective is that financial institutions – including asset owners and asset managers in particular – align themselves with the long-term oriented decision-making required for financing sustainable economies and societies.

²³ Directive 2014/95/EU amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups, 2014

²⁴ Trucost, *Environmental Disclosure: The Second Major Review of Environmental Reporting in the Annual Report & Accounts of the FTSE All-share*, 2017

Policy direction

Strengthen disclosure on all sustainability dimensions by financial and non-financial firms to inform management, employees, lenders, investors and supervisors and other stakeholders about the considerations of such risks and opportunities. Integrate the TCFD recommendations in a way that advances EU leadership on these areas, while avoiding possible commercial risks and maintaining a level playing field globally.

Disclosure for retail financial products

The Packaged Retail and Insurance-based Investment Products (PRIIPs) Regulation requires manufacturers and distributors of packaged retail investment and insurance products respectively to draw up and provide retail investors with key information documents (KIDs).

The PRIIPs Regulation is applicable to a wide range of products, but not to non-retail collective investment funds, non-life insurance products or direct investments. The PRIIPs Regulation states that the KID should include 'where applicable, specific environmental or social objectives targeted by the product'. The Regulation contains a provision empowering the Commission to adopt delegated acts detailing the procedures to be used to establish whether a PRIIP targets specific environmental or social objectives (Art. 8(4)). The empowerment, however, does not foresee the specification of criteria for the label.

Furthermore, the PRIIPs Regulation states that its review (by the end of 2018), should include a survey of the practical application of rules herein laid down, taking due account of developments in the market for retail investment products and the 'feasibility, costs and possible benefits of introducing a label for social and environmental investments' (Art. 33(1)).

Should the PRIIPs Regulation be amended, it could be envisaged to include in the description of the investment strategy pursued by the PRIIP product how it is incorporating sustainability factors. Criteria for sustainability integration would have to be either described in a separate regulation or included in the product specific governance rules. In addition, the PRIIPs KID could be used to promote a potential European label for retail investment products (funds, structured products and insurance wrappers) that target ESG objectives by explicitly referencing to this label.

The collection of information on the application of this Regulation could only start as of January 2018 when the regulation enters into application. Furthermore, to cover all retail investment products (including those such as occupational pension products which are outside the scope of PRIIPs), the same disclosure standards and requirements for product governance should be introduced in other relevant legal texts.

Policy direction

References to sustainability factors should be incorporated into the Key Information Documents.

3. FIDUCIARY DUTY AND RELATED CONCEPTS

There is a growing consensus that financial intermediaries, which manage money on behalf of others or give advice, have an obligation to include considerations of sustainability as part of their duty to their beneficiaries and clients. The interpretation of fiduciary duty has profound implications for the consideration of sustainability factors across the investment and lending chain. But bringing this approach into the mainstream requires a number of important legal, conceptual and practical clarifications.

Fiduciary duty sets out the responsibilities that financial institutions owe to their beneficiaries and clients. Although fiduciary duty is originally a common law concept, its underlying principles of loyalty and prudence are prevalent in both EU and national policies and regulations, including avoidance of misrepresentation and conflicts of interests, disclosure requirements, transparency, best execution and duty of care. The central expectation is to be loyal to beneficiary interests, prudent in handling money with care and transparent in dealing with conflicts.

At the EU level, the duties of loyalty and prudence are partly codified in a number of directives, but standards differ greatly. Some offer possibilities for departures from acting in the best interests of clients in a way that is sometimes fuzzy and inconsistent across jurisdictions. Notions of fiduciary duty or related concepts are enshrined in Solvency II (insurance), IORP II (occupational pensions), MiFID (investment firms), UCITS (mutual funds) and AIFMD (alternative investment funds). Even though existing investment regulations allow material ESG factors to be incorporated into decision-making, the degree to which such considerations are mandatory and how potential conflicts with other considerations are resolved are unclear²⁵.

The central problem relates to the lack of appropriate standards in some instances as well as a lack of clarity of legal rules on the overarching investment objective in case of trade-offs and potential conflicts of interest. Such trade-offs and conflicts can occur across beneficiaries or between beneficiaries and third parties, including the fiduciary institution itself. And even where there is no legal conflict, evidence suggests that some investors, directors and pension trustees still misinterpret their obligations.

A further challenge is the pursuit of financial returns in the presence of market failures. This often leads to fiduciaries taking actions that avoid weaker short-term returns or losses while ignoring the long-term consequences or the directly or indirectly expressed preferences of their beneficiaries.

Many people, when asked, say that they do not want to exploit their fellow citizens or the planet in an unsustainable way²⁶. But fiduciaries currently tend to ignore these interests, and few beneficiaries are asked about their preferences at the time of investing. This leads to capital allocation that exacerbates market failures and undermines society's collective interests and, over time, the economy itself.

Among ESG risks, climate change and its related risks have become a crucial issue in fiduciaries' decision-making process. The FSB recently recognised the materiality of these risks (physical, transition and liability risks) whether in the short or long term. Among those risks, the liability (or litigation) risk can be considered as a piece of soft law that places an obligation on fiduciaries to consider climate-related risks as part of their fiduciary duty. Failure to do so could potentially lead to claims for damages by beneficiaries and clients of financial institutions who may not have acted in their best interests.

Some actions have already been taken by financial institutions and EU regulatory authorities to incorporate sustainability factors into the operation of fiduciary duty. Several member states require pension funds to disclose if and how they consider sustainability factors in investment decision-making (see section on pension funds). Leadership is also being displayed by the private sector, with pension funds such as the UK Environment Agency Pension Fund and Dutch asset owners ABP and PFZW taking an active role in promoting a vision of fiduciary duty with sustainability at its core. This includes active dialogue with beneficiaries on their responsible investment preferences.

A harmonised approach across EU financial regulation would be ideal so that high fiduciary standards can be applied across the investment and lending chain and the full array of financial instruments. Building on the existing principles already found in relevant EU legal texts will help in that regard, including improving the duty of loyalty, where necessary, and extending the definition of the prudent person principle, namely that 'Fiduciaries should throughout their decision-making process consider the broad range of long-term interests of their beneficiaries. In doing so, it should be made clear to financial actors that the long-term

²⁵ European Commission DG ENV, *Resource Efficiency and Fiduciary Duties of Investors*, 2014

²⁶ In a survey of 1,500 UK employees with direct contribution pension funds, nearly half expressed the desire to have their pension invested in organisation reflecting their social and environmental values. (Big Society Capital & ComRes, *Pensions with Purpose: an opportunity to drive deeper engagement with DC savers*, 2014)

interests of beneficiaries include not despoiling the planet and exploiting their fellow human beings.' It should clarify that the obligation is also to include material ESG considerations and encourage engagement with the client and ensure their concerns are integrated into the investment decision-making process.

This common framework could then be applied to the EU's legislative framework and the activities of the European supervisory agencies (ESAs). Implementing the clarification of fiduciary duty and sustainability would involve a review of provisions in key directives such as IORP II, the Shareholders' Rights Directive II and MiFID, as well as Solvency II, UCITS, AIFMD, EuVECA and EuSEF. In addition, it would involve the establishment of EU best practice in relation to corporate governance and long-term sustainable value creation, as well as the inclusion of sustainability in stewardship codes, thereby promoting convergence across the EU.

The new legal principles would be based on a common concept covering all the key participants in the investment and lending chain, according to their specificities. In addition to changes in the legal framework, as with any new legal principle, guidance would have to be provided to ensure the new concept does not stifle investments in the short term. Such guidance could build on existing rules and specify that fiduciaries should:

'Act with due care, skill and diligence, in line with professional norms and standards of behaviour. Act in good faith in the best interests of beneficiaries and clients, including preventing conflicts of interest across different classes of beneficiaries. Where such conflicts are unavoidable, balance such conflicts in a way that does not undermine long-term performance and sustainability objectives in favour of short-term returns.

Fiduciaries must not act in their interest or in the interest of a third party to the detriment of the interests of their client or, if such conflict is unavoidable, they must not act without the informed and explicit consent of the client.

Factor in ESG considerations in their investment processes and decision-making, encourage high standards of ESG performance in the firms or other entities in which they are invested, and support the stability and resilience of the financial system.'

A further step would be to embed sustainability within the mandates, investment policies and risk management frameworks of institutional investors. Mandates are the central legal document specifying how asset owners want asset managers to run their money. The International Corporate Governance Network has produced pioneering guidance for asset owners, covering the time horizon; the risk management framework; the integration of ESG into the investment process, the alignment of interests through fees; and the pay structure and culture. All of this seeks to ensure that the highest standard of stewardship is conducted on clients' behalf, with good standards of transparency that enable all this work to be scrutinised.

The EU could provide global leadership by promoting a common interpretation of fiduciary duty at the international level. A powerful way to do so would be to champion the idea of an OECD convention²⁷. The OECD's secretary-general has noted that 'if we want to get serious about unlocking green investment, we need to get serious about systematically integrating climate risks into our understanding of fiduciary duty'. The convention could supplement guidance at the national and EU level.

Establishing an international convention would give domestic regulators the confidence to improve the quality of regulatory drafting, which currently leaves much of the interpretation to the fiduciaries. It would also help to increase ESG integration and reduce liability risk – a 'win-win' for sustainability. Finally, it would make clear to all involved that managing ESG risks is integral to fulfilling fiduciary duty.

²⁷ Principles for Responsible Investment, UNEP Finance Initiative, United Nations Global Compact, *Fiduciary Duty in the 21st Century, Inquiry: Design of a Sustainable Financial System*, 2015

Investors need to become more engaged to ensure that sustainable investments are available. Many investors have lamented the lack of deal flow for green assets; actively engaging with governments so they develop adequate (sustainable) infrastructure plans can help to develop this pipeline. Ensuring that national capital-raising plans for climate change action are delivered consistently with what investors are seeking to put in their portfolios is key. Investors have an opportunity to act collectively on this issue through platforms such as the Principles for Responsible Investment (PRI), the Institutional Investor Group on Climate Change and the Green Infrastructure Investment Coalition (a joint project of the PRI, UNEP and the Climate Bonds Initiative, among others).

Policy direction

Establishing a single set of principles of fiduciary duty and all its related concepts that can then feed into the respective relevant laws according to the specificities of market participants. The regulatory authorities need to make clear to all involved in the investment and lending chain that managing ESG risks is integral to fulfilling fiduciary duty, acting loyally to beneficiaries and acting in a prudent manner.

4. INVESTOR GOVERNANCE AND CORPORATE GOVERNANCE

The interplay between corporate governance and sustainability is key to ensuring that those who lead institutions become fluent in sustainability risks and opportunities. Therefore, improving investor and lender governance is central to aligning financial markets with sustainability outcomes. Investors and lenders need to understand both the risks associated with unsustainable business practices, as well as the interests of their clients in taking account of sustainability considerations and adopting a long-term approach to investment.

It is important to build the governance skills necessary to anticipate and address long-term sustainability value drivers. To do so, the EU should actively encourage professional accreditation bodies to incorporate sustainability, and embed it as part of the requirements for continuous learning for directors and other investment professionals.

Research suggests that beneficiaries are better off when they are involved in the decision-making process of institutional investors. The study²⁸ shows a positive link between pension schemes performance and their size, business model and governance arrangements, as well as their adoption of leading practices for responsible investment.

Well-governed schemes exhibit the following characteristics²⁹: All beneficiaries are consulted on their ESG preferences and have a voice in the investment process; board or trustee members have suitable skills, knowledge and resources; and board decision-making is transparent and accountable. The findings also suggest that the funds that have moved furthest in their integration of sustainability considerations into their strategy have explicit sustainability expertise in their governing bodies.

In consultant/intermediary-led markets, the governance arrangements of pension funds can be a barrier. Since the members of governing bodies are often not financial specialists, reliance is placed on specialist financial advisers and outsourced investment managers. There is a question over the relevant competencies of investment consultants' field staff, which may be very separate and disconnected from 'responsible investment' specialists at the consultant. These governance arrangements often limit the ability of pension funds to deal with emerging risks, and especially long-term sustainability risks.

²⁸ F. Stewart and J. Yermo, *Pension Fund Governance: challenges and potential solutions*, OECD Working Papers on Insurance and Private Pensions No. 18, 2008

²⁹ Shareaction, *Realigning interests, reducing regulation: a vision for reforming UK workplace pensions*, 2015

On this note, the HLEG supports the recommendation that advisers to institutional investors should have a duty conferred on them to raise ESG issues pro-actively within the advice that they provide³⁰. This requirement would have to be established by the supervisory authorities, based on an extended definition of advisers' duties. More broadly, responsible investment, active ownership and the promotion of sustainable business practices should be a routine part of all investment arrangements, rather than an optional add-on.

Active responsible ownership is being exercised by growing numbers of investors, but much more could be done. A more explicit reference to sustainability issues in corporate governance and stewardship codes, for example, would help to increase the positive influence of the investment community. This has been addressed in some corporate governance codes, including in France, Germany and the Netherlands, and should be encouraged further. In addition, the EU could support the adoption of stewardship codes that are designed to make shareholders more effective in holding firms to account.

The dynamic relationship between firms and their investors could also be enhanced through the development of European principles for both corporate governance and stewardship. As providers of capital to public and private firms, investors have both the right and responsibility to hold firms to account and to call for change where needed. In line with actions that some investors have already adopted to promote a long-term perspective in the boardroom, European corporate governance principles could enshrine recommendations such as:

- Explicit board responsibility for sustainability, including capacity to determine long-term materiality from a wider perspective in terms of both stakeholders and non-financial aspects³¹.
- A board sustainability committee in certain industries or for firms above a certain size.
- Clear links between executive remuneration and key indicators of performance on sustainability measures.

Policy direction

Developing and promulgating a set of principles of corporate governance and stewardship that incorporate long-term value creation and improving investor governance should be central objectives at the European level. Sustainability needs to be embedded in the objectives and oversight of board directors and investment institutions/funds and their advisers.

5. CORPORATE REPORTING: FREQUENCY AND CONTENTS

The growing pressure on firms for reporting on both their financial and non-financial performance could leave some executives feeling torn between satisfying demands for long-term investments and financial market demands for short-term profits. Some executives describe this situation as having 'two speeches' in their pocket: one for market analysts focused on financial performance in the current quarter; the other for presentations at employee receptions, meetings with policy-makers and conferences like the World Economic Forum to discuss value creation and the firm's contribution to education, society and the planet. In a world of fully sustainable finance, there would be no disconnect between these two speeches.

Firms typically report on their financial performance quarterly, which requires continuous attention to short-term indicators, potentially at the expense of a longer-term focus. When this happens, it is clearly an obstacle to promoting sustainable, long-term investments. At the

30 UNEP Asset Management Working Group, *Fiduciary responsibility Legal and practical aspects of integrating environmental, social and governance issues into institutional investment*, 2009

31 R. Eccles and T. Youmans, *Materiality in Corporate Governance: The Statement of Significant Audiences and Materiality*, Harvard Business School, 2015

same time, investors' demand for information is legitimate to oversee and steer the allocation of scarce resources. An important development in that regard is the establishment of the International Integrated Reporting Council, which seek to promote integration of financial and non-financial issues in reports and accounts as a way of identifying and communicating the ability of an organisation to create value over time.

The European Commission is also mindful of this challenge and that reporting regulation might influence the short-term behaviour of firms and investors. One response has been the 2013 amendment to the Transparency Directive, which removed the obligation from issuers of listed securities to publish financial information on a quarterly basis. It is now a member state option to require more frequent reporting: only Austria, Bulgaria, Croatia and Poland have used this clause to require quarterly information.

Market practices that continue to expect high frequency reporting by firms are an issue. Such reporting at higher frequency than annual or half-yearly might relate only to a few key business indicators. Nevertheless, anecdotal evidence suggests that given the time needed to prepare reports on large and complex corporate groups, many managers feel that they are trapped in a constant cycle of reporting.

Another challenge for corporate reporting relates to the time horizon of what is requested. While a small share of investors (executives typically mention 5%) are asking about long-term and ESG matters, the overwhelming amount of questions and probing of investors focus on the current year and financial metrics, such as sales and income trajectories, costs, cash flows, return on investment and current year dividends. This stands in contrast to other stakeholders who are interested in innovation, technology innovation, value creation to society, contribution to youth education, infrastructure and climate change.

In the context of sustainable finance, it would be valuable to analyse whether the removal of mandatory quarterly reporting has changed the actual frequency of reporting and the time dimension of issues asked. Empirical evidence of a positive impact would suggest a reduction in the 'executive's dilemma', while a negative impact would indicate the opposite. The European Commission could ask ESMA to investigate this matter and provide relevant evidence and examples. Reporting frequency and time horizon of issues demanded in reporting practices are after all very important in a context of sustainability.

Policy direction

Examine firms' current practices on corporate reporting since the possibility of imposing mandatory quarterly reporting was dropped. Collect empirical evidence and examples regarding the assessment of corporate reporting frequency by corporate management, lenders and investors, by sector and nature of activity.

6. MARKET INDICES AND BENCHMARKS

Indices and benchmarks are cornerstones of global capital markets. They play a central role in defining the reference points in terms of performance and in determining sector allocations for a large number of market participants. Both institutional and retail funds are not only benchmarked against indices but they are also structured as 'passive' funds that directly replicate or 'track' the index. The benchmark indices are reference points for portfolio performance and help to determine sector and geographical allocations.

The leading indices are typically weighted by market capitalisation and only reflect ESG risks to the extent that the listed equity or bond market does so more generally. It is important to note that given the international nature of most firms, a domestic benchmark covering securities listed in that country's stock market will usually not reflect the average exposure of the domestic economy as it will include only listed firms, including many large global firms but not smaller or non-listed ones³². For example, the share of the oil and gas sector in the

32 Based on ICB super sector classification. See also 2^o Investing Initiative, *Optimal diversification and the energy transition*, 2016.

FTSE 100 is 14% (as of April 2017), whereas it represents less than 3% of the UK economy³³. This is because multinationals like BP may be listed in one country, in this case the UK, but have global operations with only a minority of their operations and revenue coming from their country of listing.

Requirements by supervisors that institutional investors use common benchmarks can discourage investors, either explicitly or implicitly, from taking portfolio positions that deviate much from the index. This can run counter to portfolios built on sustainability convictions. As a starting point, therefore, supervisors and asset owners could encourage the use of multiple reference points by active managers and enhance their own ESG capacity.

The number of indices aligned with sustainability has increased, but their significance in overall portfolio allocation is still minimal. A growing number of alternative indices are being developed by all the major index and benchmark providers but, until recently, the uptake of low-carbon and ESG indices as benchmarks has been marginal, even for sustainable investment funds³⁴. Nevertheless, it appears that demand is now growing, especially for bespoke – as opposed to standard – sustainability benchmarks. There is a growing range of options available on both a standard and custom basis that enables different climate and sustainability parameters to be built into passive investment strategies. Moreover, some large asset owners are starting to integrate climate considerations into their core benchmarks (for example, the Norwegian Pension Fund and HSBC's UK Pension Fund).

Misalignment of standard market benchmarks with key ESG and sustainability objectives persists. Because the standard market benchmarks only reflect ESG issues and risks to the extent that the listed equity market (on average) more generally does, investment strategies based on them will follow the status quo.

Policy direction

The HLEG will review in greater depth the interplay between market benchmarks, indices and sustainability investment.

7. ACCOUNTING FRAMEWORKS

The accounting frameworks used to assess firms' financial position and performance have an important impact on investment decisions and on the extent to which managers and investors consider sustainability issues. There are two overarching considerations: first, the need to integrate sustainability more effectively into accounting standards as a way of tracking, for example, the economic reality of externalities; and second, the need to ensure that accounting standards (combined, in some cases, with prudential standards) do not present an obstacle to sustainability and long-term investment.

The EU has decided to adopt the International Financial Reporting Standards (IFRS) developed by the International Accounting Standards Board (IASB) for mandatory use by listed firms. The IFRS, which have been adopted in a large number of countries, treat investors (rather than managers) as the prime users of financial reporting. For multinationals and firms raising capital on financial markets, consistent and comparable corporate financial reporting across international jurisdictions is particularly relevant for investors and conducive to the 'allocational efficiency' of capital markets.

Better integration of sustainability into accounting standards is critical. Information about sustainability is increasingly relevant in the decisions of investors, lenders and managers. Integrating it will be essential to help them make proper investment decisions. There are two dimensions to this integration: one is whether standards should require a proper reflection of sustainability risks in accounting valuations; the other is whether standards should require more disclosure of relevant non-financial information on sustainability. With some exceptions,

33 Oil&Gas^{uk}, *Business Outlook 2017*, 2017

34 R. Briand, L. Lee, S. Lieblich, V. Menou and A. Singh, *Beyond divestment: using low carbon indexes*, MSCI, 2015

information on sustainability is not yet subject to the same standardisation and assurance of rigour as financial information, even though leading firms are starting to include such data in their reporting and have its quality assured.

While there are numerous initiatives on sustainability reporting, the ultimate ambition has to be the convergence of financial and sustainability information, supported by a more comprehensive set of accounting standards. Integrated reporting supports this convergence qualitatively through reporting that links sustainability factors with firms' strategy. Accounting standards can help advance the quantitative element.

The IASB has partnered with the International Integrated Reporting Council (IIRC) and issued a Management Statement akin to an Integrated Report of financial and non-financial information. Accounting for Sustainability (A4S), a CFO-network, has issued a guide to accounting for human capital³⁵. To make further progress in the convergence of financial and non-financial reporting, the European Commission could invite the European Financial Reporting Advisory Group (EFRAG) formally to ask the IIRC to work on how sustainability factors can be captured in dedicated accounting standards, in addition to those for financial reporting.

There is a perception in some quarters that certain accounting standards are making sustainability investment more difficult for sectors with a longer-term focus such as energy and insurance. These implications arise because of the difficulties in designing an accounting system that is used for yearly or even quarterly reporting which captures the long-term nature of certain businesses.

More specifically, IFRS 9 may have an impact on long-term finance, including both investment and lending. In its future work, the HLEG will explore evidence on the impact of this standard on the financing of ESG projects. This is with a view to ensuring that there will be no undue consequences from the adoption of IFRS 9 for the financing of ESG projects.

For the energy sector, the difficulty can arise, for example, when firms have to make large provisions related to the winding down of nuclear operations as part of the energy transition. From a business perspective, this may involve long-term investments in equity instruments that would be preferable over debt, given the favourable long-term risk-return profile of equities. But IFRS norms, strongly favoured by securities investors, require 'mark-to-market' valuations, which creates short-term fluctuations and a reporting maturity mismatch. The HLEG may look into whether or not this issue represents a material difficulty for the sector in the energy transition.

Similarly, the insurance sector, which due to the long-term nature of many of its liabilities, could well invest more in equities. But it is obliged through IFRS to report the current market value of its equity investments or to consider depending on the accounting classification, the equity as 'impaired' in case of a substantial downward movement. These features, combined with regulatory requirements under Solvency II, are seen by several practitioners as having contributed to the decline in the share invested in equities among European insurance companies, which is particularly striking compared with US insurers, which are under a different prudential and accounting regime. For the banking sector, preliminary evidence suggests that the issue may be more relevant for complex lending structures often entailed in infrastructure financing than for standard unsecured loans.

The European Commission's Mid-term review of the CMU recognises these challenges. The review calls for an 'assessment of the drivers of equity investments by insurance companies and pension funds' as well as a 'report on whether the accounting treatment of equity instruments in IFRS 9 is sufficiently conducive to long-term financing'. The HLEG believes that further research should be conducted to determine whether IFRS norms create barriers to sustainable finance in some sectors, including the energy sector, which is so central for addressing climate change.

35 The Prince's Accounting for Sustainability Project (A4S), *Essential guide to social and human capital accounting*, 2017

Refinements of the present guidance on accounting consequences of energy performance contracts are also important for unlocking investment for energy efficiency, as discussed in Chapter IV. Here, the EU is looking at Eurostat in relation to public sector accounting on energy efficiency investment.

Policy direction

Integrate sustainability into accounting standards to foster the convergence of financial and non-financial reporting. Undertake analysis and seek practitioner feedback as to whether accounting treatment can hamper long-term orientation and equity investments in some sectors, and whether adjustments might be desirable as a result.

IV. Sustainability and the participants and facilitators of the financial system

This chapter turns to the main institutions and facilitators of the financial system and analyses the extent to which policy measures should be contemplated on sustainable finance, particularly to encourage greater long-term lending and investment. The chapter also considers issues of positive or negative sustainability risks and the stability of the system as a whole.

1. BANKS

Financing the transition to a low-carbon sustainable economic model will require the full engagement of the banking sector, as banks are the backbone of the EU's financial system and the largest source of external finance for the economy. Early feedback suggests that by and large banks are keen on new lending activities and can see their role in the economy expanding. The reason is that they are in search of good assets, with abundant liquidity and capital not being a major issue as long as the current capital and liquidity requirements are not tightened further.

To date, banks' potential contribution to sustainable development has been underplayed. Some policy-makers think of banks as engaged only in shorter-term business and are concerned that sustainable lending means sector-specific (green) lending that could resemble unwarranted political steering. Banks themselves mostly seem to see ESG factors as a matter of reputational risk rather than financial risk, with considerations of sustainability not normally embedded in business decisions and governance. Therefore, a number of questions need to be addressed to develop the banking sector's potential contribution and attention to sustainability – with benefits for the sector and the economy³⁶.

1. How to foster long-term lending and project financing

Banks' primacy among lenders in assessing the credit risk of individual loans makes them particularly important in financing the origination of sustainable assets, such as longer-term infrastructure. This is especially true for the period when there is no income stream yet³⁷. Often, such lending does not remain on a bank's balance sheet, but is securitised or refinanced in capital markets directly. Ideally, capital and liquidity regulations would be supportive of the part played by banks in originating longer-term finance and encouraging of the securitisation of good quality long-term assets.

Yet there is the perception among banks that the current capital framework charges some lending operations and long-term exposures more than is warranted by risk considerations. Uncertainty about potential future changes to the capital framework might further discourage longer-term exposures. The most recent analysis from the European Commission suggests that an increase in target capital ratios can significantly constrain lending dynamics at the current economic juncture³⁸.

³⁶ A recent legislation passed in Italy allows banks that meet certain requirements to be granted tax exemption to promote their capitalisation. This entails further recognition of the social enterprise sector and increased possibilities of catering for the different financial needs of society.

³⁷ T. Ehlers, *Understanding the Challenges for Infrastructure Finance*, Bank for International Settlements Working Paper 454, 2014

³⁸ D.P. Monteiro and R. Priftis, *Bank Lending Constraints in the Euro Area*, European Commission Discussion Paper 043, 2017

There is also a perception that calibrations on project financing and specialised lending are high. Feedback from banks with a long history of project financing suggests that regulatory capital requirements far exceed economic capital calculations. The regulation is prudent because data points on defaults are rare. This situation resembles the calibration of infrastructure debt for insurance companies, which was initially very high due to few data points but eventually the Commission became convinced to lower it because higher intrinsic recovery values of infrastructure compared with corporate debt. There may be a case for reviewing whether the current capital framework properly assesses the risks of these activities. Such an assessment should also feed into the Basel Committee's continuing refinements of the international capital regime. In this context, it is important to recall that EU banks play a far more important role in project financing than, for example, in the United States.

Two factors seem to have a negative influence on long-term bank financing. The first is uncertainty about capital requirements, in particular the combination of high requirements for project finance type structures and the risk of an upward revision of capital weights in the future. The second is the history of some European governments withdrawing financial or regulatory support during the life of transactions that are only viable in a subsidised or protected competitive position (discussed in Chapter V). To maximise bank participation in a sustainable economy, the authorities need to maintain a stable regime of both financial and non-financial regulation and support.

2. A 'green adjustment' of minimum capital requirements?

It is sometimes suggested that there should be lower minimum capital requirements for asset classes such as green bonds and green loans.

- The arguments in support of this idea refer to the economic desirability of green projects, the need to integrate positive externalities and the fact that green projects could be seen by construction as less risky than other bonds, *ceteris paribus*, given that they contribute to more sustainable economic development. But most supporters acknowledge that the risk associated with a green loan/bond is only marginally lower than that of a non-green loan/bond. Nevertheless, they consider that the lowering of capital requirements (which might be larger than the risk differential) would represent an important policy signal to foster the green sector.
- The arguments against such a 'green-supportive factor' refer to the blurring of risk and policy considerations. A politically motivated supportive factor would be ignored by most banks, which would stick to their economic capital calculation, while a few banks could focus on such assets, which are then underpriced for the real risk they carry. Overall, it would weaken the link between risk and capital requirements and potentially reduce trust in the banking system. Moreover, there is as yet no well-identified 'sustainable assets' class to which different capital charges could be applied³⁹. Finally, there may be more effective ways to support a green sector than trying to steer capital flows through capital requirements.
- In any event, it would be useful to collect data for specific 'green' assets to gain more information on their risk profile. For example, initiatives such as the European Mortgage Federation/European Covered Bond Council's Energy Efficiency Mortgage Action Plan⁴⁰ could be one way forward.
- A 'brown-penalising' factor, raising capital requirements towards sectors with strong sustainability risks, would yield a constellation in which risk and policy considerations go in the same direction. Moreover, it would be more focused and easier to rationalise as capturing the risk of sudden value losses due to 'stranded assets'.

³⁹ Pillar I capital weights have been difficult to agree internationally, even for well-established assets and risks. An intense debate recently dealt with whether internal risk models should be allowed at all, and if so, for which asset classes. (Bank for International Settlements, *Reducing variation in credit risk-weighted assets – constraints on the use of internal model approaches*, Consultative document, 2016)

⁴⁰ European Mortgage Federation & European Covered Bond Council, *Energy Efficient Mortgages Action Plan*, 2016

3. Sustainability risks and the supervisory process

A number of European authorities are exploring how to incorporate sustainability factors into the supervisory review process (Pillar II). The aim of Pillar II is to enhance the link between an institution's risk profile and its risk management systems. It is also used by supervisors to encourage continuous improvement in banks' internal procedures for assessing their institution-specific risk situation and the adequacy of their capital.

Supervisors have numerous potentials tools at their disposal. Of particular relevance is their ability to set extra capital requirements dictated by forward-looking considerations or because of failings in risk management and/or governance. This could include stress tests that are extended to risks relating to sustainability⁴¹. The Bank of England, for example, is taking steps to look at sustainability issues through the risk lens (Prudential Regulatory Authority, 2015). An advantage of a Pillar II approach over Pillar I is that as long as sustainability risks are deemed significant, they should require no changes to legislation.

4. Disclosures (Pillar III)

Improving the transparency and disclosure by banks of sustainability factors and how these influence their risk profile is perhaps the most advanced consideration, but further regulatory action is needed. Pillar III of the prudential framework is designed to stimulate market discipline through the disclosure of information. Voluntary and regulatory initiatives have generated increasing disclosure of sustainability factors. To date, however, there has been limited focus in these disclosures in linking them to the financial risks that face banks – or the systemic risks they generate for the wider financial system. To be useful, disclosures need to be standardised across banks, to be reported consistently across time and to be sufficiently forward-looking.

Policy direction

Detailed analysis is required of whether long-term lending by banks and specialised/project finance is charged in terms of capital requirements over and above what is warranted by a risk perspective. Green-supportive factors or brown-penalising factors could be investigated, while Pillar II and Pillar III could be strengthened further with regard to sustainability.

2. INSURANCE COMPANIES

The business model of the insurance sector is particularly suited to supporting sustainability. Insurance products enable households and firms to focus on the longer term, knowing that they have financial protection against possible short-term misfortunes. Globally, the insurance sector plays a significant role in investments across different classes of assets amounting to a total of US\$29 trillion in assets under management⁴².

The insurance sector is also the largest institutional investor in Europe, accounting for nearly €10 trillion in assets, or about 60% of EU GDP. At the portfolio level, most sector liabilities are predictable and long-term. If regulation and accounting frameworks were to avoid creating disincentives, insurance companies could hold considerable assets in the real economy and act as stabilisers over the economic and financial cycle.

Insurance is regulated by Solvency II, which is probably the world's most advanced, comprehensive and complex framework for risk management. The move to a harmonised risk-based regime, combined with strengthened internal risk governance, has many positive points. But in the context of sustainable and long-term finance more broadly, the question

41 The European Systemic Risk Board's Advisory Scientific Committee has suggested that there should be options for increasing the requirements for high-risk assets if a prudential threat is revealed through forward-looking stress tests. (Joint task force of ESRB and ECB Committees, *Macprudential policy issue arising from low interest rate and structural changes in the EU financial system*, 2016)

42 UNEP, *Insurance 2030 – Harnessing insurance for Sustainable Development, Inquiry: Design for a Sustainable Financial System*, Inquiry Working Paper 15/01, 2015

arises whether the approach leads to excessive penalisation of long-term investments and/or illiquid assets.

Solvency II is based on a 'market-consistent' valuation of assets and liabilities, which is equivalent to an assumption that all the assets and liabilities of an insurance company should be available for trading at any time. This 'market-consistent' approach is strongly supported by the community of global securities investors. But many insurance sector practitioners believe that the implementation of the 'market consistency' principle in Solvency II discourages long-term investments due to the associated volatility in the balance sheet because it fails to recognise fully and appropriately the link between an insurer's assets and its liabilities.

The reason is that while the insurance business model is inherently long-term, the current approach exaggerates the valuation of liabilities and capital requirements for investment assets. They also lead to artificial fluctuations in the measure of both available and required capital by over-estimating the sensitivity of insurance companies to short-term changes in asset prices. These implications create pro-cyclicality and are particularly adverse for portfolios with long-term assets and liabilities. The so-called long-term guarantee package in Solvency II aims at attenuating such volatility and pro-cyclicality, but questions about its effectiveness remain.

As regards the notion of 'sustainability', the prudential regulatory regime for insurance companies set out in Solvency II does not as yet explicitly require sustainability issues to be addressed by firms or supervisors. Recognising sustainability issues more explicitly could facilitate investment in (green) infrastructure projects.

Sustainability factors could be incorporated into each of the three pillars of the prudential framework for insurance. Prudential frameworks could recognise more explicitly the long-term nature of insurance companies' liabilities and their long-term investment horizon. The amendment to Solvency II in 2016 to lower capital requirements for certain infrastructure investments is an important step, but it tackled only a specific part of the broader issue. One possibility would be to consider expanding this further, but it is important to note that promoting sustainability should not be done at the expense of undermining the stability of the financial system. It should also not be confused with a weakening of the capital framework under Solvency II.

Sustainability factors could also be made more explicit in insurance companies' risk assessments and stress tests. Under Pillar 2, European supervisors could insist and ensure that long-term sustainability factors be incorporated in the Own Risk and Solvency Assessment (ORSA) made by insurance companies. For larger firms with internal models, these already embody a stress-testing approach. European supervisors could ensure that risks related to sustainability issues, most obviously climate-related ones, are included in these stress tests once a robust and widely accepted method has been established. EIOPA could be encouraged to include 'good sustainability practices' in Pillar II.

Insurance companies are both preparers and extensive users of sustainability disclosures. Sustainability disclosures by firms in which insurance companies might invest enable the latter to enhance their risk analysis and identify specific cases where the former's business models could be exposed. Disclosures also enhance insurance companies' ability to understand the risk exposures associated with their own underwriting activity.

But there is currently no specific EU-wide regime requiring insurance companies to report on sustainability issues as part of Pillar 3 disclosures. Under France's Article 173, specific reporting obligations are set out for a range of financial institutions, including insurance

companies, on how they integrate ESG factors and, specifically, on how climate change considerations are incorporated. The incorporation of the final recommendations of the FSB's TCFD by the EU and the development of an EU-wide equivalent to Article 173 would provide strong foundations in that regard (see section on Disclosures). Insurance supervisors could then review the adequacy and usefulness of the resulting disclosures from a prudential perspective.

Policy direction

Possible implications of the 'market-consistent' valuation approach currently applied in Solvency II on long-term products and investments should be investigated. Attenuation of some constraints to enable investment in equity and long-term assets should be considered. European supervisors could insist and ensure that long-term sustainability factors are incorporated in the ORSA made by insurance companies.

3. PENSION FUNDS

The investment policies of pension funds focus on long-term time horizons, which are where the distinction between sustainable and non-sustainable assets becomes most visible.

Typically, sovereign wealth funds and endowments are liable to their beneficiaries over 50-year time horizons while pension funds and insurance funds commit to 20-year horizons⁴³. Given that the beneficiaries of these collective retirement schemes expect income streams over several decades, there is no need for pension funds to be overly concerned by short-term pressures or liquidity risks. Instead, they can adopt what might be described as the 'purest' approach to sustainable finance.

Pension funds' assets should be less prone to short-term financial risks, but they are potentially more exposed to substantial long-term risks related to the real economy and the environment. Failure to consider such long-term risks as the threat of climate change could lead pension funds experiencing lower returns and valuation losses if, for example, they are invested in 'stranded assets', such as fossil fuel reserves that may never be exploited. Estimates of the total value of stranded assets – defined as 'those which do not recover all or part of their investment during the time that they are operational' – US\$852 billion between 2014 and 2050 (US\$320 billion for power and US\$532 billion for production facilities including US\$120 billion for gas, US\$400 billion for oil and US\$12 billion for coal)⁴⁴. There is a strong public policy interest in pension funds' ability to deliver on their promises to beneficiaries since shortfalls could have large negative implications for national welfare systems.

Pension funds in the EU are highly heterogeneous, as member states have different mixes of retirement funding between state-based pensions, occupational pensions and personal pensions. At about €3 trillion, the balance sheets of pension funds in the EU correspond to about a tenth of banks' balance sheets and somewhat more than a quarter of insurance companies' balance sheets. Two countries – the UK and the Netherlands – account for 80% of pension fund assets in the EU. But despite their relatively small size, pension funds still play an important role in several other EU economies and their importance is rising.

The three sources of retirement funds are subject to different degrees of regulation at the EU level. State-based systems are sometimes referred to as 'Pillar I' of retirement financing; occupational pension schemes linked to an employer constitute 'Pillar II'; and private voluntary plans or personal pensions form 'Pillar III'. Of these, only Pillar II schemes have been subject to EU regulation, but on 29 June 2017, the European Commission proposed a 'Pan-European personal pension product' (PEPP) – a voluntary personal pension scheme that will offer consumers a new pan-European option to save for retirement.

43 2° Investing Initiative, *All Swans are Black in the Dark: How the short-term focus of financial analysis does not shed light on the long term risk*, 2017

44 OECD report, *Investing in climate, investing in growth*, June 2017

Regarding Pillar II pensions, sustainability reporting and ESG integration of pension fund investment have been the subject of intense debate, culminating in a new Institutions for Occupational Retirement Provision Directive (IORP II). The directive was adopted in December 2016 and will be transposed by January 2019. The balance reached in the IORP II text is that occupational pension funds are encouraged but not obliged to take account of ESG factors in their investment policies; but they must publicly disclose whether and how they do so; and they must include such factors in their risk management systems. This does not preclude a pension fund from stating that ESG factors are not considered in its investment policy or that the costs of a system to monitor the relevance and materiality of such factors and how they are considered are disproportionate to the size, nature, scale and complexity of its activities.

If ESG factors are considered in investment decisions, a pension fund's own risk assessment must include an assessment of new or emerging risks, including those related to climate change, use of resources and the environment, as well as social risks and risks related to the depreciation of assets due to regulatory change. Pension funds must review a written statement of their investment principles at least every three years with information how the investment policy takes ESG factors into account and make this statement publicly available. They must also inform prospective members whether and how ESG factors are considered in the investment approach.

Regarding Pillar III pensions, the PEPP proposal adopted in June 2017 follows the same logic. PEPP providers are encouraged but not obliged to take account of ESG factors in their investment policies; but they must publicly disclose whether and how they do so; and they must include such factors in their risk management systems.

Some member states have already moved in this direction in parallel to the new European directive and before it enters into force. In the Netherlands, pension funds are already required by law (Article 135.4 of the Dutch Pension Act) to adopt a policy setting out how ESG issues are considered in investment decision-making. In France, Article 173 of the Energy Transition Law requires pension funds among other financial institutions to report how their investment policies align with the national strategy of energy and ecological transition. Funds need to provide forward-looking analysis of how their portfolio is aligned with the energy and ecological transition. Such analysis could reveal assets that might lose value over time and highlight how the fund is invested in the 'target operating model' of a low-carbon, more environmentally friendly economy.

The new Shareholders' Rights Directive requires both pension funds and insurance companies to establish and disclose publicly an engagement policy. This means that these institutional investors have an impact not only through their investment decisions but also through their voting decisions in firms in which they are invested and through their overall monitoring of these firms. They must focus on strategy, capital structure, and financial and non-financial performance and risk. In exercising their voting rights, they must also manage conflicts of interests in relation to their engagement.

Stress testing is an important tool of risk assessment and its future coverage could extend to ESG risks. EIOPA's stress test of pension funds could potentially cover ESG risks in the future, but only once sufficient expertise on sustainability has been built up to avoid undue scenarios and outcomes⁴⁵. For ESG risks other than climate, the quantification of scenarios and metrics will be even more difficult. The HLEG considers that ESAs should build up sufficient expertise on sustainability issues, scenario analysis and general ESG-factors related to medium- and long-term risks.

Policy direction

Build up sufficient ESA expertise on sustainability, scenario analysis and ESG factors related to medium- and long-term risks. Consider how the Article 173 approach at the EU level could apply to all types of pension funds.

⁴⁵ If there was a blunt focus on stress-testing related to current carbon emissions, it could hurt activities that are enablers of climate transition (for example, production of insulation material for housing) and not duly discriminate between energy firms engaged in the energy transition and those not engaged.

4. ASSET MANAGERS

As the last stage of the investment and lending chain before capital enters the markets, asset managers have a special role. Like other capital collectors, asset managers receive money from the supply side of capital. They also act as capital allocators, defining appropriate investment strategies (whether active or passive, quantitative or fundamental, and so on) and ensure implementation within the scope given by regulators and their customers' preferences.

Asset managers are uniquely placed to help capital flow towards more sustainable investments, but they do not always do so. The short-term nature of mandates awarded by asset owners and the diffuse nature of the retail market mean that most asset managers have historically been focused on delivering short-term returns rather than the long-term preservation of capital and addressing longer-term sustainability issues. This means that many are not always concerned with engaging with firms on sustainable development issues – unless they are demonstrably relevant to a firm and a potentially material impact on its cash flows.

Many asset managers in Europe are broadly committed to responsible investment policies. Today, they account for nearly half of the PRI signatories in that category⁴⁶. Globally, according to a recent survey, half (54%) of asset managers who integrated ESG said they planned to market at least 50% of their funds as ESG products over the next two years⁴⁷. This increase is a welcome boost to an investable universe that has traditionally been tilted towards unsustainable products.

The current EU regulatory framework for asset managers has positive elements that could be enhanced to promote a more sustainable approach. In particular, the UCITS and AIFM Directives require asset managers to monitor short- and long-term risks relevant to the portfolio or investment strategy. Yet there is currently no obligation requiring asset managers to report on how they integrate ESG factors in their risk management or investment strategy. The only exception is when the asset manager specifically targets ESG investments. An EU-wide equivalent of France's Article 173, or an obligation to disclose how sustainability is taken into account could boost sustainability investments⁴⁸.

Many large publicly-listed firms complain that asset managers pressure them on short-term results even if they have long-term mandates. Analysts focus their forecasts on the short term: according to a Bloomberg survey, three quarters focus on the first three years and about 95% in the first five years, leaving only a fraction of analysts with a long-term horizon⁴⁹. Some even see a gap between what executives of asset managers say, for example, in public letters where they stress the need for long-term orientation and broad notions of value creation, and the focus on the current year and financial metrics by their analysts and portfolio managers. Finally, firms frequently report that the bulk of questions by asset managers are about short-term financial information and only a fraction of investors want to hear about the firm's sustainability strategy. This long-term/short-term 'splits' is one of the most fundamental challenges to overcome for long-term finance.

A lack of accountability and transparency is breaking the ownership chain. There are fundamental problems with today's ownership chain of influence⁵⁰. For example, although asset managers are expected to 'comply or explain' against the UK Stewardship Code, they are not held to account on it by asset owners. By contrast, firms are held to account for delivery on the Corporate Governance Code by investors voting at their AGMs. This means that investors can

46 According to PRI's database, as of June 2017.

47 BNP Paribas, *Institutional Investors plan to double investment in ESG Strategies over the next two years*, Press Release, 2017

48 There is also a need to mainstream climate-related financial risk disclosure and scenario testing among asset managers. There should be a requirement on fund managers to demonstrate how investment products are, or are not, aligned with the low-carbon transition/sustainability objectives more broadly.

49 BNP Paribas, *Institutional Investors plan to double investment in ESG Strategies over the next two years*, Press Release, 2017

50 The capital market's ownership influence over corporate sustainable development originates mainly from the ownership rights associated with equities. However, debt holders do not have the legal ownership rights that are associated with equities.

evaluate the explanation and take action accordingly. Currently, there is no such equivalent forum where investors' explanations for their own stewardship work can be formally evaluated by their clients.

Asset owners should make clear what they expect from their asset managers when it comes to sustainability. The best way for them to do so is to list those expectations in the asset management agreement when appointing their asset managers. Policy-makers can help by providing model contracts. Asset owners should follow up on these expectations by engaging both asset managers and the firms themselves. For example, one asset owner now polls firms to know how its asset managers engage with them on long-term issues and whether its asset managers provide active, informed and constructive engagement to firms in which they invest as part of their mandate.

Asset managers should also be required to disclose their voting record publicly and pension trustees to report to their beneficiaries on how their ownership rights have been exercised. Some have actually started to do this on their own and asset owners are increasingly demanding it⁵¹. For example, the world's largest pension fund has recently announced it would require its asset managers to disclose details on their voting records for each investee firm on an individual AGM agenda item⁵².

The creation of a sustainability stewardship standard could help create a 'race to the top'. Such a standard would list minimum standards and procedures in stewardship to which asset managers would adhere. Building on the Principles for Responsible Investment and the UK Stewardship Code, this standard and benchmark for best practice could be developed to improve accountability and good practice among asset managers.

Responsible ownership is a public good. Benefits of responsible engagement are enjoyed by all owners, regardless of whether they behave as responsible long-term owners by investing in stewardship. Consequently, the vast majority of short-term, profit-maximising commercial fund management institutions are 'free-riders' and either do no real stewardship at all, or invest only token resources in this work. As with any public good, intervention is required to preserve and maximise it.

Policy direction

Strengthen the ownership chain by providing model sustainability clauses that asset owners can include in their asset management agreements. Move away from a short-term focus to long-term orientation on the firms in which they are invested. Promote a race to the top by creating a sustainability stewardship standard. Embed sustainability into stewardship codes and require asset managers to report on how they integrate ESG factors into their strategy. Maintain accountability by requiring asset managers to disclose how they voted on sustainability issues.

5. CREDIT RATING AGENCIES

Credit rating agencies play an essential role in the investment and lending chain. They help increase understanding of the credit risks associated with an investment or financial instrument and reduce information asymmetry in credit markets. They provide an opinion regarding the creditworthiness of an entity, asset or instrument – that is an assessment of a given entity's ability to meet its financial obligations, usually for the tenor of the debt. But as yet, these core institutions are not playing a full role in helping the financial system align with the objectives of sustainable development.

51 Bloomberg BNA, *BlackRock Sheds Light on Proxy-Voting Decisions When Boards Balk*, 2017

52 ShareAction, *Asset Manager Voting Practices: In Whose Interests?*, 2015

Today's credit ratings only partially account for long-term sustainability risk. Some credit rating agencies take account of ESG criteria, but only to the extent they consider these risks material for the credit risk of the instrument or issuer that is being rated. Since the timeframe of a credit rating is usually short-term (typically three years), many long-term sustainability risks are not fully taken into account as a result.

Other methodologies have been developed to compensate for that limitation, but fall outside the credit rating space. Credit rating agencies have started to develop separate assessments specifically for environmental and ESG risks. These include, for example, Moody's Green Bond Assessments, and S&P Rating's Green Bond Evaluation and planned ESG Assessment. Specialised ESG rating agencies have also developed over the last 20 years, such as Sustainalytics, Oekom, Vigeo-Eiris, MSCI and Beyond Ratings. Other data providers, such as Trucost and Bloomberg, have developed tools to help assess specific ESG risks at the issuer and asset level.

The purpose of these ESG or environmental evaluations is to measure sustainability over the lifespan of an asset as well as the specific climate impact, mitigation and adaptation of that investment, regardless of whether they are relevant for creditworthiness. As a result, they are conceptually different from a credit rating and may not always lead to a credit rating action if those risks are not material to the time horizon of the credit rating, which is usually between 3-5 years. S&P Global Ratings, for example, clearly notes its 'ESG assessment tool is not a credit rating'⁵³.

There have been no specific attempts by regulators to embed sustainability considerations in credit ratings. Credit Rating Agencies are required to review their methodologies on a continuous basis, 'in particular where material changes occur that could have an impact on a credit rating', they are also required to 'take into account financial risks deriving from environmental hazards' where appropriate. However, there is no explicit mention of ESG criteria and long-term sustainability risks and opportunities.

Policy direction

Foster the integration of sustainability and long-term perspectives into ratings. At the very least, leverage the disclosure push that will follow the issuance of the TCFD guidelines by requiring all credit rating agencies to disclose how they consider TCFD-related information in their credit ratings – and updating ESMA guidelines to help them make the best of the newly available data. A comparative mapping to what extent ESG factors are included in rating methodologies would be useful.

6. STOCK EXCHANGES

Stock exchanges play a pivotal role in bringing together issuers and investors, and can drive the development of sustainable market-based solutions. In this context, stock exchanges can act first as platforms for disseminating ESG information; second, as providers of market infrastructure for sustainable asset classes; and third, as alternatives to bank finance for small and medium-sized enterprises. The combined market capitalisation of the over 10,000 domestic firms listed on the regulated EU stock exchanges is equivalent to 78% of EU GDP⁵⁴.

EU exchanges are global leaders when it comes to disclosure of ESG information, yet more could be done. Seven EU stock exchanges are among the world's top 10 – as measured by the ESG disclosure rate of their listed firms⁵⁵. At the EU level, nearly three in four of the largest firms disclosed their greenhouse gas emissions as of 2014, for example – by far the highest global average. These levels are likely to increase further in the EU with the introduction of the Non-Financial Reporting Directive, which will affect around 6,000 firms.

53 As of May 2016, the following credit rating agencies had signed the PRI 'Statement on ESG in credit ratings': China Chengxin International Credit Rating Co.Ltd, Dagong Global Credit Ratings Group Golden Credit Rating International Co., Ltd. Liberum Ratings, Moody's Corporation, RAM Ratings, Scope Ratings, S&P Global Ratings).

54 World Bank Indicators, 2016

55 Corporate Knights, *Measuring Sustainability Disclosure: Ranking the World's Stock Exchanges*, 2016

Disclosure by EU listed firms of information related to products and services from green industries, or 'green revenues', is also key to understanding the pace of the transition to a low-carbon economy. In the EU, 22% of market capitalisation can be linked with low-carbon sectors – compared to 37% in North America and 23% in Asia Pacific⁵⁶ – and this green share has increased by more than 7% annually since 2011.

The development of green bond markets has helped to enhance transparency in the fixed income market. Many EU exchanges have already established a green, social and/or sustainable bond display platform, segment or list: Borsa Italiana, London Stock Exchange, Luxembourg Green Exchange (LGX) and Nasdaq Nordics. European exchanges can support the integrity and growth of the green bond market by encouraging the development and application of robust standards. This might involve leveraging existing standards and guidelines, such as the ICMA Green Bond and Social Bond Principles, the Climate Bond Standard, to promote international harmonisation, comparability and overarching transparency. European exchanges should also consider opportunities for creating specialised segments for dedicated sustainable products and support the development of sustainable stock indices.

Providing SMEs with greater access to capital markets is a key objective of the Capital Markets Union. Exchanges can create market solutions that cater to the needs of early stage firms by providing equity capital or allowing private SMEs to raise medium- to long-term debt. Examples of programmes and markets set up by exchanges to bridge the gap between SMEs and capital markets include Borsa Italiana's ExtraMOT Pro, Deutsche Boerse's Venture Match, Euronext's AlterNext, Nasdaq's First North market, and the London Stock Exchange Group's growth market AIM and Elite pan-European programme.

Policy direction

Stock exchanges could support the integrity and growth of the green bond market by encouraging the development and application of robust standards.

7. GREEN FINANCIAL CENTRES

A growing number of financial centres have started to explore the implications of sustainable development for their competitiveness and contribution to sustainability. Within the EU, key centres such as London (Green Finance Initiative launched in January 2016), Luxembourg (Luxembourg Green Exchange launched in September 2016) and Paris (Green and Sustainable Finance Initiative launched in May 2016, recently renamed 'Finance for Tomorrow') have been among the most active. Other centres such as Dublin, Milan, Stockholm and Frankfurt have joined the race, with the Frankfurt Stock Exchange having launched its sustainable finance initiative in May 2017. Many of these initiatives have moved from an initial focus on stock markets and green bonds to a more systematic approach focused on developing an ecosystem of products, services and expertise around sustainable finance.

This competition between centres is a welcome race to the top; getting to scale will require collaboration and standardisation. Financial centres have a role to play in putting sustainable finance in the mainstream by: mobilising financial institutions on shared issues (measure, market infrastructure, research and innovation), creating a dialogue with other stakeholders (firms, households, NGOs, policy) and stimulating the creation of joined up innovative products and services. Cooperation between these centres will help to share best practice and build convergence on key definitions, principles and measurement. Such a network would also help to strengthen the pipeline of assets as well as help to provide the necessary capacity for other markets to develop⁵⁷.

⁵⁶ Analysis run by FTSE Russell on all large, mid and small cap firms' members of the FTSE Global All Cap Index.

⁵⁷ Similar networks have been established for green banks (for example, green bank network).

Given the global competition between financial centres and EU expertise on sustainability, the EU is in a great position to take the lead. Action today will help to position EU financial centres as global leaders of sustainable finance. Italy's proposal, made during the G7 Bologna Environment Ministers' Meeting in June 2017, to host the first meeting of an international network of financial centres is a particularly positive move in that regard.

Policy direction

The EU could establish a network of EU sustainable financial centres aimed at exchanging best practices, aligning standards and achieving market scale. It should also encourage IOSCO to work more closely with financial hubs to improve the disclosure of material and high-quality ESG information in the global marketplace. At the very least, the EU should encourage and support European financial centres in launching and strengthening green and sustainable finance initiatives.

V. Mobilising capital for a sustainable economy

Mobilising capital for a sustainable economy requires action on two fronts. The first is shifting the current capital allocation from an unsustainable pathway to a sustainable one. The second is to fill the investment gap to ensure that objectives are achieved on time. In the case of the EU climate and energy goals, the latest estimates put the annual investment gap at around €177 billion between 2021 and 2030, or €1.77 trillion by 2030. But the next few years should not just focus on climate. If a deeper re-engineering of the financial system and its functioning is undertaken, it should also include the support of fundamentally important sectors such as sustainable fisheries and sustainable agriculture. And it should support the full range of environmental issues, such as water and air quality, biodiversity, waste and resource efficiency, many of which are linked to the EU's Circular Economy Strategy.

It is not currently possible to measure accurately the share of green and sustainable assets in Europe, in part because of the absence of a generally accepted system of classification. One proxy is to track assets under management that integrate responsible investment approaches. Sustainability-themed funds designed to finance sustainability, such as green funds, have around €145 billion of assets under management⁵⁸, which is very low compared with the overall size of the European bonds and equity funds market (which were, respectively, €3.1 trillion and €3.4 trillion in 2016)⁵⁹. As for banks, only a small fraction of their lending is explicitly classified as green. While these numbers show that some have started to lead, much more needs to be done to mobilise the overall market.

The absence of a financially material carbon price prevents investors from differentiating carbon-intensive assets from carbon-efficient assets in their economic reasoning. The EU emissions trading system (ETS) price of carbon for a DEC17 EUA is currently about €5. The EIB, by comparison, uses a shadow cost of carbon of €32/tCO₂ today, rising €1 each year to €45/tCO₂ in 2030⁶⁰. A price signal that better reflects externalities is also needed for understanding and quantifying exposure to sustainability risk and opportunities. The need for a strong price signal is not new: in the case of carbon, firms, investors and civil society have been calling for it for years.

These and other barriers result in difficulties for market participants in assessing the risk/return profile of sustainable assets, with maturity mismatches between long-term projects, long-term risk materialisation and their short-term market liabilities.

A coherent policy strategy at EU level is urgently needed to translate sustainable development ambitions into investment-grade opportunities. A consistent approach in this sense would provide the incentives for all participants in the investment and lending chain to invest consistently towards a positive transition economy. Failure or delay in achieving this task would not allow for even the most ambitious tools to achieve a good result.

⁵⁸ Eurosif, *European SRI Study*, 2016

⁵⁹ European Commission, *European Financial Stability and Integration Review*, 2017

⁶⁰ The European Investment Bank uses a 'shadow carbon price' that is much higher than the current carbon price.

1. DEVELOPING A COHERENT EU STRATEGY TO MOBILISE INVESTMENTS

Different options are available to build a coherent strategy that mobilises capital towards a sustainable economy. Much of the following analysis is focused on mobilising capital to meet the EU's climate and energy 2030 and 2050 goals – but where applicable, the options are developed to cover wider environmental and social issues, including the SDGs. Other important areas where increasing sustainability would have a significant positive impact are the maritime environment and agriculture. Preservation of nature, better nutrition, avoidance of waste and circular use of materials need to be addressed in that context and there are few activities that – if conducted in the right way – are more sustainable than fisheries and agriculture. The HLEG will explore financing possibilities for investments in those areas in its Final Report.

1.1 Delivering long-term strategies and capital-raising plans

Member states need to provide a clear plan indicating to investors how they will mobilise the capital needed to meet their 2030 and long-term climate and energy obligations under the Energy Union and the Paris Agreement. One next step would be for member states to develop national capital-raising plans setting out how they expect 2030 and 2050 targets for greenhouse gas emissions reduction, renewable energy and energy efficiency to be financed.

The National Energy and Climate Plans (NECPs), to be developed by member states and on a timetable to be notified to the European Commission in 2019, are a unique opportunity to do this⁶¹. There would be immense value in the European Commission encouraging capital mobilisation plans to be developed and submitted by member state governments as part of their NECPs. The NECPs and forthcoming national long-term low emission strategies⁶² should therefore include – or at the very least refer to – detailed national capital-raising plans that combine the use of both public and private finance.

National capital-raising plans would represent a major investment programme to deploy sustainable infrastructure and technologies. They would provide clarity to investors over the scale of investment envisioned, signal where project pipelines will be developed, indicate what tools and funding streams will be used to attract private finance and credibly set out how the number of low-carbon projects is expected to grow as a result. This also makes national capital-raising plans a powerful tool in answering the rising investor demand for sustainable investments. Based on national capital-raising plans, an EU capital-raising plan can then be established to maximise cross-border synergies.

Europe's enormous investment needs may seem overwhelming, but in reality there is a great deal of private capital available and willing to invest in long-term infrastructure. What is more, a considerable part of the infrastructure needed for a low-carbon economy lends itself well to private capital. Private lenders and investors – including banks, insurance companies, asset managers and pension funds – essentially require three conditions: first, economic viability of the project; second, largely predictable cash flows; and third, a stable pricing/tariff environment over time.

A stable pricing/tariff environment is the condition that investors find breached most often. Because of changes in feed-in tariffs, remuneration, tolls and other prices after an infrastructure investment has been made, many long-term investors find themselves confronted with changes in investment conditions. In a number of EU countries, changes in the framework conditions for investments in renewable energies or infrastructure projects, either governed by renewable energy support or concession regimes have a negative affected on

61 European Commission, *Proposal for a Regulation of the European Parliament and of the Council on the Governance of the Energy Union*, 2016

62 Communication from the European Commission, *The Road from Paris*, 2016

existing and already financed projects, undermining investors' confidence (see also Box 4). The possibility of sudden, major changes in long-term, illiquid investments is a significant deterrent for many investors engaging in such projects.

Looking forward, and while respecting the fact that policy authorities and parliaments are sovereign in their decisions over time, the EU would be well advised to develop mechanisms to provide as much planning stability and pricing/tariff stability as possible over time.

Box.4: Investor experiences with pricing/tariff changes in long-term infrastructure projects in EU countries

- **'The government removed the climate change related levy exemptions for renewable energy producers by change of legislation. There was no grandfathering for existing projects and no compensation. It resulted in an unexpected increase of cost and reduced cash flows to pay debt service for those projects.'**
- **'The government introduced new unexpected taxes/levies, on different grounds and in different forms, for existing renewable energy projects. Suddenly, costs went up and cash flows fell.'**
- **'The government blocked concessions for toll roads, preventing road concessionaires from implementing the full annual toll increases which they were entitled to under the terms of their concession agreements to cover inflation and pass through of ongoing capital expenditure costs. We could no longer collect the agreed toll revenues.'**

Source: HLEG member discussions with banks and insurance companies, June 2017.

A further aspect that needs to be developed is a better 'match-making facility' between infrastructure developers and infrastructure investors. Today, many local mayors across the EU do not know to whom to turn to receive advice on how to structure, develop and bring on stream infrastructure projects in a way that is attuned to the needs of private investors. The current European Investment Advisory Hub (EIAH) at the EIB in Luxembourg is engaged in this function but with 10 staff, it is very small compared with the thousands of potential investment projects across the EU and also quite far away seen from many parts of Europe. Some countries that are far advanced on infrastructure development for private capital maintain organisations dedicated to this purpose.

Building on existing experience with the EIAH, the EU could for the next phase of the Juncker plan create a kind of '(Sustainable) Infrastructure Europe', a dedicated organisation responsible for developing and structuring infrastructure projects and matching them with investors. Because it would function at the EU level, perhaps with subsidiaries in the northern, eastern, southern and western parts of Europe to ensure closeness to public authorities, this organisation would be able to provide neutral advice on sustainable investment opportunities across member states, apply lessons learned throughout Europe and direct investors towards those matching their risk/return profiles.

In addition to the function of advising and match-making, 'Infrastructure Europe' would help structure capital-raising plans in a way that makes them appealing to investors, in terms of both scale (for example, via securitisation) and risk/return profiles. Staffed with sufficient resources and expertise, this organisation could play a key role supporting countries in their efforts to access capital markets to finance their capital-raising plans. The new organisation could be housed within the EIB or it could be an independent entity altogether.

Policy direction

Develop capital-raising plans at the member state and EU levels to provide investors with visibility over the role they are expected to play in delivering on sustainability objectives. Ideally include these plans in the NECPs as this would pave the way for an investable EU 2050 climate strategy shortly after, allowing the EU simultaneously to secure global leadership in both climate action and sustainable finance. Create 'Infrastructure Europe' responsible for advising public authorities, match-making infrastructure projects with investors and

structuring capital-raising plans in a way that makes it investable to institutional investors, in terms of both scale and risk/return profiles. Find ways to give private investors in illiquid long-term infrastructure investments greater pricing/tariff stability over time.

1.2 Aligning public funds with sustainability

Targets for the allocation of public finance to support investment in sustainable development priorities will also be needed. For example, the European Fund for Strategic Investments is currently sending mixed signals to the market: while 55% of signed and approved investments are low-carbon or low-carbon enabling (such as digital), 17% are high carbon⁶³. Repurposing EFSI 2.0 to have an explicit focus on a sustainable economy and then ‘tagging’ EFSI-funded investments as sustainable would enable private investors to identify and support these public-private sustainable investment opportunities. The current proposal to include an explicit 40% low-carbon target in EFSI 2.0 should be supported.

The EU Multiannual Financial Framework should be aligned with EU climate and energy goals and with the SDGs, and explicitly move away from financing fossil fuels to clean energy.

The forthcoming revised MFF proposal is a significant opportunity. Consideration should be given to increasing current levels of climate alignment from the current 20%⁶⁴, and explicitly excluding fossil fuels and other unsustainable projects and only supporting renewable energy and energy and resource efficiency. This could then be complemented with further earmarking of funds within MFF to support wider environmental and socially useful purposes. This would have the effect of making all EU funds (including the Common Agricultural Policy, the Common Fisheries Policy, Rural Development Funds, etc.) aligned with sustainability objectives as part of making the MFF more sustainable. There are also upcoming opportunities to link climate transition and employment impacts in a positive way through the proposed Just Transition Fund, which should be supported.

In addition, public banks (the EIB and national promotional banks, NPBs) should continue to innovate to scale up private sector investment. Again, the EFSI is key to enabling this, conferring as it does the ability of the EIB and NPBs, which have a key role to play in leveraging public capital to crowd in private capital, to finance higher value, riskier investments through, for example, risk-sharing structures. But it should be noted that many private investors are ready to take risks, and that NPBs are well advised not to take all (equity) risks or risk tranches and issue only low-risk debt for private investors. The latter would resemble government bonds, which are already in ample supply. But de-risking is useful in circular economy projects, where innovation is key. So is ensuring that investments no longer support or de-risk unsustainable investments such as fossil fuels. A focus on state aid treatment of sustainable public-private investment approaches should be a key component of the 2018 review of state aid.

Public finance can be a powerful tool to crowd in private capital to low-carbon energy infrastructure investment. Used properly, it can help to lower the level of risk associated with sustainable assets and funds held by the private sector. Typical tools for risk-sharing include public guarantees, purchasing subordinated debt and providing financial insurance. Risk-sharing arrangements can also be enhanced by technical assistance or financial support for the monitoring and evaluation of the impact associated with the investment. In addition to de-risking, public banks also play an important role in demonstrating, supporting and promoting market development. Some of the initiatives that could be pursued to crowd in private finance to sustainable investments by the EIB but also by NPBs include: support for a proof of concept role as cornerstone investors for new structures in the sustainable finance investment area⁶⁵; technical support programmes⁶⁶; risk-sharing structures through layered funds, risk-sharing facilities or guarantees⁶⁷; improving the risk-return profile of climate-friendly assets through credit enhancement initiative⁶⁸ or of credit insurance; and supporting aggregation platforms

63 European Investment Bank figures on the EFSI as of May 2017.

64 European Commission, *Statement of estimates of the European Commission for the financial year 2018, 2017*

65 The UK Green Investment Bank investing in the world's first listed offshore wind fund.

66 Since 2003 Estonia's KredEx supported energy efficiency through a grant scheme that provided up to 50% of the costs of energy audits/technical advice

67 Bpifrance provides low-cost loans to SMEs subsidised using public funds.

68 KfW Bankengruppe offers energy efficiency loans for new buildings with interest rates linked to energy savings.

(with and without public funds) that can either match interested investors with assets or hold greenfield assets so that they can be placed with institutional investors once assets are operational and have a track record⁶⁹.

Policy direction

Maximise the ability of public finance to mobilise private capital by demonstrating, supporting and promoting sustainable infrastructure opportunities and sustainable financial products. In parallel, ensure that public banks completely stop de-risking unsustainable investments as this would result in private capital flowing to stranded assets.

1.3 Tackling the social dimension

Efforts should also be made to mobilise private capital for the social dimensions of sustainable development. A high impact intervention would be to boost access to capital for social enterprises, which work in the space between the public and private sector. While some funding has been made available through the European Social Fund (ESF), investments have been relatively small so far. For example, the Programme for Employment and Social Innovation (EaSI) is due to provide €10-14 million per annum over the period 2014-2020 to promote social protection, social inclusion and improved working conditions⁷⁰. Its Microfinance and Social Entrepreneurship axis supports micro-enterprises and social entrepreneurship for vulnerable groups.

The EFSI could do more to invest in social enterprises, working to improve housing and integration of refugees and migrants in education and training. The European Investment Project Portal could also be used to provide higher visibility for projects in the social economy and health sectors. To facilitate this, a consistent definition of social enterprise used by the EIB, the European Investment Fund (EIF) and the European Commission would assist with targeting support for this sector of the economy. The Commission could also consider increasing the budget provided by the Horizon 2020 programme or allow for more investors to take an active role in funding projects that meet Europe's social objectives.

The EFSI is set to contribute to meeting the social objectives of the Europe 2020 Strategy (typically inclusive growth) by supporting social entrepreneurship and other areas of the social economy. The Commission is set to develop a Social Impact Instrument, which would focus on two pillars: catalysing the establishment of Social Impact Funds (SIFs) or investing in existing ones to support social entrepreneurship and the provision of social services by social enterprises targeting vulnerable groups. The Social Impact Funds are meant to mobilise investments from NPBs and the private sector.

Policy direction

Facilitate public funding for social investments by having a consistent definition of social enterprise across key public financing bodies. Promote the visibility of social investments on the European Project Portal.

1.4 Empowering citizens

Citizens are the least expert of investors: most do not have the time, skills or resources to engage in capital market investing. To encourage citizens to allocate their savings to sustainable ventures, retail funds for investment in sustainable securities with a range of risk-return profiles are needed. The functioning and risk-return profile of those funds should be transparently reported and easily understood by engaged citizens. This could be achieved by giving retail investors access to socially responsible investing (SRI) funds for SDG investing by classifying them as non-complex funds, for example.

⁶⁹ One of the key roles of the EFSI is supporting the development of national financing platforms for energy efficiency in 7 Member States.

⁷⁰ Among EFSI transactions approved by the European Investment Bank, just 4% are in social infrastructure.

Labels for sustainable investments would give confidence to savers and improve their access to these opportunities. In this context, the review of the regulation on key information documents for packaged retail and insurance-based investment products (PRIIPs) is an immediate opportunity. By the end of 2018, the review is legally required to include 'the feasibility, costs and possible benefits of introducing a label for social and environmental investments' (Art.33).

Given the growing interest in such investments, the European Commission should provide proposals for trustworthy labels supported by reliable supervisory and enforcement mechanisms. An important case study is the French Energy and Ecological Transition for Climate Label. Among other things, funds applying for the label must exclude 20% of the initial investment universe based on ESG criteria, or the average ESG rating of a portfolio must be higher than the rating of the benchmark index used to measure its financial performance. Ensuring an inclusive consultative process for designing the label will be key to rapid market growth.

Opportunities for citizens to invest safely and with impact can also be created by offering investment opportunities into dedicated funds that invest in sustainable or social projects, for example, through providing microfinance⁷¹. One attractive option could be to establish funds, either private or privately-led with the possibility of EU support (via the EIB or the EIF), that enable a wider community of savers and investors to take an active role in the funding of sustainable or social projects while increasing the scale and reach of finance.

Policy direction

Democratise sustainable investment opportunities by offering citizens the ability to invest in microfinance projects and in funds with labels that guarantee the sustainability of the associated investments.

2. AGREEING A CLASSIFICATION SYSTEM FOR SUSTAINABLE FINANCE

The lack of commonly agreed labels, standards and taxonomies in sustainable finance has been cited by many financial institutions as a barrier to more action. Such a classification system is key to boosting investor confidence, in both the institutional and retail markets, and it offers a protection against 'greenwashing' as well as a condition for effective public policy support. Classification is also important for a range of stakeholders: firms will have a better understanding of what is expected of them (for example, how to measure the 'green' share of their activity); policy-makers will be able to make clear their objectives for transition as well as flagging financial flows targeted towards those goals; and NGOs will promote the system strongly as a way of putting the issues they care about in the mainstream.

Labels, standards for products and processes, and taxonomies are complementary tools. Compliance with product standards certifies that a financial product meets certain characteristics (for example, that 20% of an equity fund is invested in firms with more than 50% of revenues in green activities). Taxonomies are a core reference for product standards as they define the potential pool of underlying sustainable assets (objectives and sectors) that may be financed by a sustainable product. Compliance with process standards certifies that procedures have been used throughout the investment process that respect ESG criteria. And labels provide investors with reassurance that a product respects the provisions of a given standard.

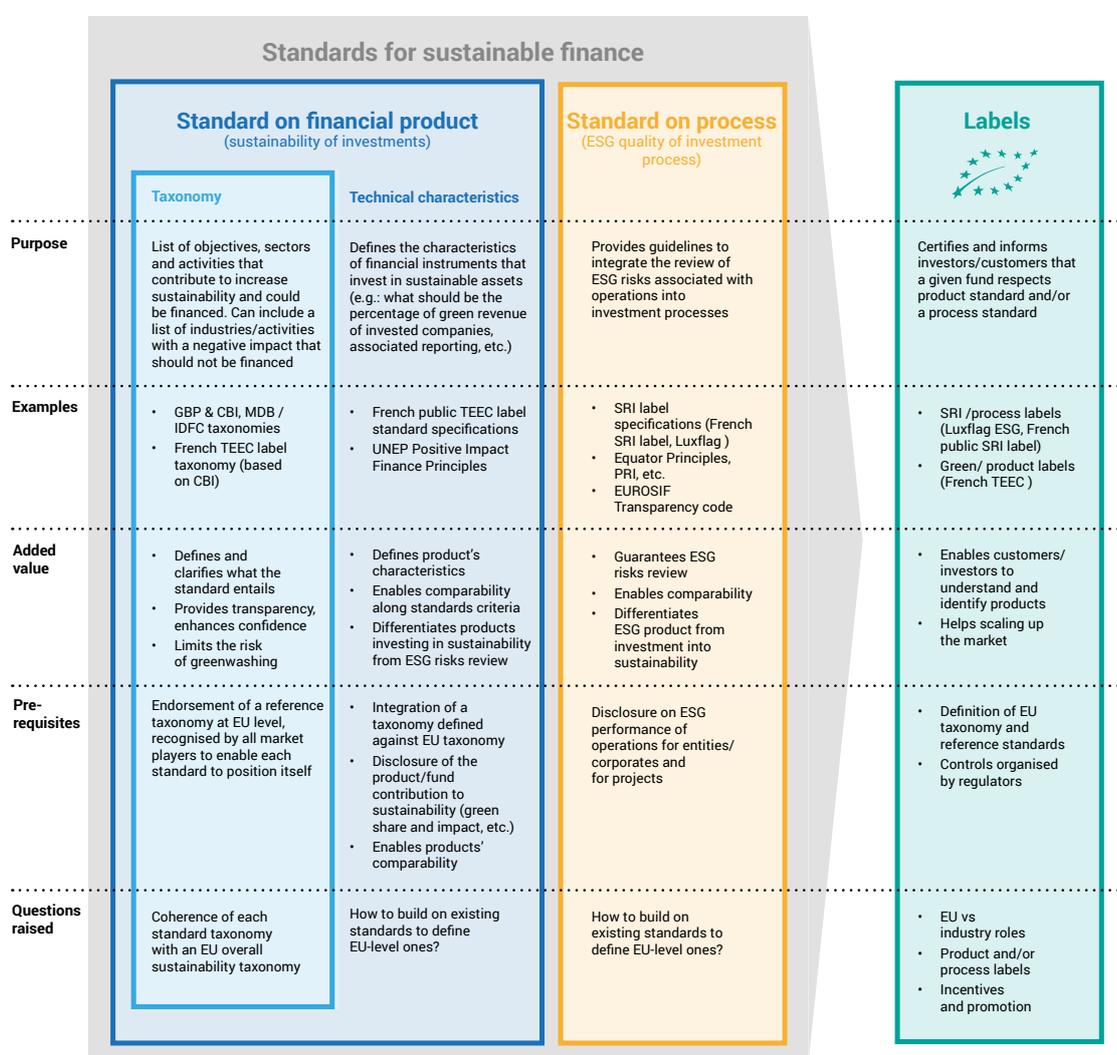
Classification of green bonds has made the most progress. Various taxonomies have been developed by leading industry associations and public institutions as well as by member states. The Green Bond Principles, high-level guidance established in consultation with

⁷¹ At European level, microfinance below € 25,000 was provided through the European Progress Microfinance Facility funded by the EU and the EIB and managed by European Investment Fund.

market participants, are complemented in the area of climate by the Climate Bond Standard & Certification Scheme as well as the MDB-IDFC Common Principles for Climate Finance Tracking⁷². Leading public institutions have developed their own green bond taxonomies, such as the EIB Climate Action Bonds (CAB) eligibility criteria (a sub-set of the MDB-IDFC taxonomy), the Nordic Investment Bank taxonomy and the China Green Bond Endorsed Project Catalogue endorsed by the People's Bank of China. Other taxonomies have been developed for equity products, such as the London Stock Exchange's FTSE Environmental Markets Classification System (EMCS) and its Low Carbon Economy Industrial Classification System.

Market participants' experience with green bonds confirms that the absence of a single accepted system of classification for project policy objectives and project sectors creates uncertainty and hampers efficiency. There is a lack of clarity for banks, investors and firms seeking to identify sustainable assets that should be financed in a way that is compatible with international sustainability goals and/or EU environmental policy objectives. The absence of an established classification system makes it difficult for them to adapt their decisions as well as their accounting and performance measurement tools. It also hampers comparability and it is a hurdle for any kind of policy implementation in sustainability.

Figure 3: Standards for sustainable finance



72 The Climate Bonds Initiative taxonomy has been used by the French Ministry of the Environment for its Energy and Ecological Transition for Climate, the Chinese green bond definitions and is the basis for green bond index providers (Solactive, MSCI and S&P).

Policy-makers and market participants would be best served by a single EU classification of sustainable assets that captures all acceptable definitions of 'sustainable'. A shared EU classification would allow policy-makers to match their policy goals and priorities with this taxonomy, clarify their national transition trajectories, and communicate them (and any related incentives) to capital markets and banks in the most effective way, so as to obtain maximum support. It would also enable market participants to describe what they themselves consider sustainable in a clear, unambiguous and comparable manner, while at the same time leaving them free to invest and lend in line with their own preferences.

As a first step, the objective should be a common classification for assets serving green policy goals such as climate change mitigation, climate change adaptation, biodiversity loss, natural resource depletion, pollution prevention and control. An initial focus on climate change of this kind would be preferable, given the progress already made in this area. The taxonomy should distinguish 'green objectives' and 'sectors' and provide a sufficient level of granularity to limit risks of controversies. These goals should be addressed step-by-step, with the help of multiple key stakeholders, taking stock and building on the work already done and in progress on green finance tracking definitions.

Establishing a common language also requires appropriation of the EU classification by market participants through its integration into process guidelines and assessment (product and process) standards. Standardisation of the market enables investors to compare different sustainable investment products and helps them to make informed choices. This can be done either through public or market standards.

To date, regulatory standards for sustainable products remain limited to general provisions on ESG integration within EU regulations for financial products (for example, ELTIF, EuSEF, UCITS, AIMFD, MiFID II, PRIIPS, etc.). These provisions do not specify what the integration of ESG factors means, and very different approaches are mixed under the same vocabulary (SRI, ESG, sustainable, green and social). This does not enable market organisation to reflect investment choices and should be clarified.

To compensate for the lack of regulatory standards, market standards have been developed by market participants, sometimes with the support of regulators. The most developed market standards have been developed for green bonds, mainly the Green Bonds Principles, which provide issuers with management guidelines for issuing a green bond, and the Climate Bonds Standard & Certification scheme, an assurance framework for investors, which, in the area of climate, incorporates the Green Bond Principles and adds a detailed taxonomy and sector-specific criteria. These have been key enablers of the development of green bonds. Standardisation is not yet complete, but it is within reach and should be leveraged by the EU institutions and addressed as a priority, as an early commitment of the initial Capital Markets Union Action Plan.

Aside from green bonds, there are few frameworks to define what should be the characteristics of a financial product that provides financing for sustainability. Their heterogeneity in terms of objectives and methodologies does not facilitate comparability. One of the most advanced product standards is the French TEEC label, in which the threshold requirements define how funds should invest in green industries. The Eurosif Transparency Code has been developed as the reference framework for SRI products⁷³ since its first launch in 2009⁷⁴: it could serve as the basis for standardised SRI funds in Europe. Other generic principles have been developed, such as the UNEP FI Principles for Positive Impact Finance (see Box 3), and could be used to define impact-oriented frameworks. The definition of taxonomies is a key aspect of product standards.

73 Through the integration of ESG criteria in the funds.

74 Today, over 700 SRI funds are registered to the Transparency Code and the Code has become the standard requirement for defining what is an SRI fund in France.

Associating an EU classification of sustainable assets with widely accepted guidelines, such as the Green Bonds Principles, would enable the development of European standards for sustainable finance products.

Labels are essential signals to facilitate the expansion of markets as investors become aware of the sustainable investment opportunities. To date, many heterogeneous and weak labels are available but none serves as a reference for the market⁷⁵. European labels could be developed to validate the quality of SRI funds and impact-oriented funds.

Trust in the market also requires dedicated governance to ensure credible quality controls or audits. To date, however, green assessments and label attributions (for example, by rating agencies and consultants) are not controlled by market supervisors, industry associations or public regulators. This creates uncertainty in the market and should be addressed through appropriate systems of control supervised by public authorities.

In addition to labelling earmarked financial products, assessing the sustainability of existing mainstream products is an important challenge and should be encouraged. Additional systems are starting to emerge: for example, Morningstar ratings, the MSCI ESG rating and the World Benchmarking Alliance (WBA), which aims to create a set of publicly available corporate sustainability league tables, ranking firms on the level of integration of sustainability issues in their strategy and management processes.

Policy direction

There needs to be an EU system of classification of financial products that captures all acceptable definitions of 'sustainable'. It should take account of existing principles established, for example, for green bonds. Furthermore, trust in the market for green or sustainable financial products could be built by establishing credible EU labels and quality standards.

3. DEVELOPING SUSTAINABLE FINANCIAL PRODUCTS

Well-designed investment products, in which the proceeds are ring-fenced for sustainable investment, constitute a potentially powerful tool for closing the gap in sustainability investment. For example, a thematic 'green' market, as a subset of sustainability, can help to make the link between low-carbon infrastructure and the broader agenda related to climate change, the circular economy and sustainable development, while facilitating the connection between demand from investors and supply. The growing popularity of associated financial products can also help to demonstrate demand for more sustainable investment opportunities, to build investor confidence and to accelerate the mobilisation of capital to support a sustainable economy. There are many promising developments on which an EU Sustainable Finance Strategy could help to build.

Making mainstream financial products 'sustainable' could unlock substantial capital for the sustainable economy. Characterising the sustainable positive impact of generic bonds, public equities and bank loans is extremely challenging in the absence of appropriate disclosure by issuers on the one hand and of accountability and appropriate disclosure by capital allocators on the other hand. Passive management and ETF funds that are not linked with ESG or sustainable impact-oriented indices also have an unknown impact on sustainability. Tagging and disclosure of green loans has been encouraged in France with the implementation in 2017 of Article 173 of the Energy Transition Law. But there are no data at the EU and member state levels on the share of green loans on banks' balance sheet.

⁷⁵ Some are process-oriented and validate the quality of ESG review (French public SRI label, Luxflag ESG label), other labels are product-oriented and validate the financing of sustainability (Novethic Green Fund label, French Green, Luxflag Climate label).

3.1 Sustainable infrastructure

Sustainable infrastructure is essential for delivery on the SDGs and will determine the EU's collective chances of meeting its contribution to limiting global warming to 1.5/2°C⁷⁶.

According to the OECD⁷⁷, 60% of greenhouse gas emissions are hard-wired in infrastructure, so the next 15 years are crucial for realigning capital to support a sustainable economy. This is especially important as infrastructure can last from a few decades (in the case of power stations, for example) to centuries (in the case of buildings, ports, bridges and water infrastructure). In many ways, the EU 2030 climate and energy targets represent a clean energy infrastructure investment programme.

Investors are increasingly willing to put money into infrastructure funds. This is shown by the growth in popularity of renewable energy infrastructure funds (discussed in Chapter 2), and there are good examples of sustainable infrastructure funds that could be scaled up (Copenhagen Infrastructure Partners, for example). Host investors in infrastructure require policy stability. Public authorities must be mindful that changing the rules can deter investors and increase the cost of capital. Analysis by Agora also shows a highly differentiated cost of capital for renewable energy financing across member states, in part driven by policy uncertainty⁷⁸.

New political risk guarantees could be considered at the EU level, underpinned by EU funds, to reduce the highest costs of capital in return for voluntary agreements with member state governments to delivery policy stability. Reform of fossil fuel subsidies should also be a priority. For example, fossil fuel subsidies declined between 2012 and 2014, but were still valued at US\$372 billion in 2014⁷⁹.

As interest in infrastructure funds grows, consideration of ESG issues by these funds will increase in importance. Several initiatives have been developed to promote ESG practices for infrastructure projects, such as the Global Infrastructure Sustainability Benchmark (GISB) and its equivalent for real estate (GRESB – Global Real Estate Sustainability Benchmark). Currently around 90% of 185 infrastructure funds and assets from 53 countries across six continents have ESG policies and include ESG considerations in their investment processes⁸⁰. But more can and should be done to undertake quantified impact assessments and to tag sustainable underlying assets. Two areas to develop include measuring the current carbon footprint of existing infrastructure to understand whether it complies with EU climate targets, and providing incentives for the development of new sustainable infrastructure. This can include the retrofitting of existing high carbon infrastructure to high energy efficiency standards where this is economically feasible.

3.2 Bonds

As the best-known instruments of sustainable investment, green bonds are an excellent exemplar of how investor sentiment is changing on environmental investing. Having emerged in 2007, green bonds are market debt instruments with proceeds earmarked exclusively for financing and refinancing assets with environmental benefits – primarily climate mitigation and adaptation/resilience but also other positive environmental impacts such as biodiversity and pollution reduction, sustainable transport and water projects.

Market-led standardisation has been a key enabler of the growth of green bonds. The Green Bonds Principles, initially published in January 2014 and later amended in 2015 and 2016, provide issuers with guidelines on elements and processes required to issue a green bond, for example. The Climate Bonds Standard is also addressing this issue by developing a standardised assurance framework and definitions, reducing the work required by verifiers as well as the due diligence required from investors.

76 The New Climate Economy, *The sustainable infrastructure imperative – Financing for Better Growth and Development*, 2016

77 OECD, *Investing in Climate, Investing in Growth*, 2017

78 Agora Energiewende, *Reducing the cost of financing renewables in Europe*, 2016

79 Id.

80 GRESB Infrastructure, *Infrastructure Assessment Report*, 2016

The green bond market is benefiting from increasing policy support. This is happening both within and outside the EU, with green bond market development committees arising in several countries (Mexico, India and Brazil), guidelines being developed (for example, in China, India and Morocco), investors pledging their commitments (in Brazil and Mexico) and governments (in France and Poland) starting to issue green bonds in an effort to mobilise capital to meet climate targets. While the market was initially dominated by issuances from multilateral development and public investment banks, green bonds are now being increasingly issued by firms, banks, municipalities and governments.

Despite this progress, the market remains small (less than 1% of total world bonds⁸¹) and is marked by a tension between the need to guarantee its environmental integrity and the need to increase market depth. This can be illustrated, for example, by green bond transactions aligned with best market practice on transparency, but perceived as falling short on the level of their green ambitions.

Greater clarity over eligible assets, taxonomy and procedures for sustainable finance products issuance would help to strengthen investor confidence in the market. Achieving such developments in the EU would enable the market to reach its full market potential, estimated at US\$74.6 billion of annual issuance by 2020 (compared with ~US\$20 billion issued as of mid-2016)⁸².

Another area of innovation in the bond market is around social bonds. Examples of social investments include affordable housing, essential services (for example, health care and education), basic infrastructure (for example, clean drinking water, electricity/energy, and sanitation), employment, and food security. Given the focus of these investments, they will play a role in reducing inequality and delivering inclusive growth opportunities. As with the early stages of the development of green bonds, public investment banks are playing a major role in creating the market. In early 2017, the Council of Europe Development Bank (CEB) launched a new social inclusion bond of €500 million with proceeds that will go to financing loans to support social housing, education and vocational training, and jobs in small and medium-sized enterprises. More recently, the Dutch bank NBW issued a €2 billion social bond to finance social housing projects in the Netherlands, making it the largest issuance globally to date⁸³.

Policy direction

To help to spur market growth, the EU should consider introducing official European standards for green bonds⁸⁴; and could consider encouraging member states to subsidise the green transaction costs for issuers for an initial period for pioneer issuers in specific jurisdictions that have yet to see issuance. EU funds could possibly be used to cover some or all of these costs.

3.3 Loans

Most banks and primary lenders do not track whether loans are sustainable. There are a few exceptions, including Banca Etica, SEB and others that form part of the Global Alliance for Banking on Values, but addressing this gap would enable primary lenders to keep track of their exposure to sustainable investment and facilitate the securitisation of loans as asset-backed securities (for example, green bonds). This is especially important in certain key sectors of the economy, such as energy efficiency in buildings and finance for electric vehicles, as these investments are too small for institutional investors to access directly.

Tagging and disclosure of green loans has been explicitly encouraged in France with the implementation in 2017 of Article 173 of the Energy Transition Law – which is now stimulating a process of tagging and tracking sustainable lending among French banks.

81 G20 Green Finance Study Group, *G20 Green Finance Synthesis Report*, 2016

82 OECD, *A quantitative framework for analysing potential bond contributions in a low-carbon transition*, 2016

83 Responsible Investor, *World's largest ever social bond attracts Credit Agricole, APG, AP2 and Robeco*, 2017

84 The European Investment Bank's work with the Climate Bonds Initiative to develop a European taxonomy for green assets that contribute to meeting the EU's climate change objectives is a next useful step in this direction.

3.4 Equities and funds

There is growing interest among institutional investors in identifying and measuring sustainable (and more specifically, green) activity in equities. Emerging tools and data sets are being developed that enable portfolio exposure to green economy sectors to be measured and for increasing allocations to those equities to be made. FTSE Russell's Low Carbon Economy Database is an example. The Norwegian Pension Fund, APG, PGGM, HSBC PF, NEST are examples of pension funds that are targeting increased green economy exposure in their equities.

In the absence of appropriate disclosure for equities, green funds have developed mainly as equity funds invested in firms that have a positive environmental impact (for example, water, energy and waste management). While green funds have been available in Europe for several decades, the market really took off between 2006 and 2008 when green industries expanded considerably. The market is now gradually diversifying with the emergence of green bonds funds in 2015. In 2016, green funds represented €22 billion of assets under management⁸⁵. The European green funds market is also increasingly driven by investors' appetite for clear and readable strategies, which explains the success of environmentally themed funds such as 'water' or 'renewables'.

What is at stake for this segment's development is the pedagogy. The funds need to deal with complex issues but must be distributed and sold with easy-to-read messages. Should market dynamics get in line with the need for readability, this investment vehicle might soar and move beyond its current niche position (less than 1% of the European UCITS are considered green today).

The EU could accelerate the development of new green and sustainable assets and financial products through improved structuring, possibly delivered through blended public/private finance to encourage the development of sustainable securitisations, layered funds, green covered bonds and thematic sustainable funds.

Much has been made of the potential impact of fintech on the financial sector. It remains to be seen exactly how big the impact will be, but market practitioners and policy-makers should consider developments in fintech when designing their products, services and policies.

85 Novethic, *The European green funds market*, 2017

VI. Financing a sustainable European economy: early recommendations and policy areas for further discussion

More than seven years after the financial crisis, questions are still being asked about when the European economy will finally recover. Levels of investment and lending remain subdued. Lack of competitiveness remains an issue in many parts of the economy, and sub-optimal functioning of the financial system may add to that. While much has been done to strengthen the financial system following the crisis, it still does not operate as effectively as it should.

The European financial reform agenda, which is provisionally outlined in this Interim Report, is meant to deliver a stable and effective financial system. European policy-makers recognise that what is needed is a financial system that is not just momentarily stable but that is helping to deal with Europe's key strategic challenges: employment, education, technology, retirement funding, infrastructure – all of which now have a sustainability dimension. The goal is a financial system that promotes sustainable economic development rather than boom and bust; sustainable social development rather than inequality and exclusion; and sustainable environmental development rather than damaging the endowments of nature.

Proposed reforms will support the efforts of the Capital Markets Union initiative and create a sense of purpose for the financial system by harnessing its power to deliver the major EU agendas, including the Energy Union, the Circular Economy and the Digital Economy, boosting green and high quality jobs, sustainable growth and prosperity in an inclusive manner.

This chapter presents early recommendations from the High-Level Expert Group for policy action on sustainable finance. Given the emerging global policy context and the strong policy momentum within the EU on sustainability issues, the HLEG submits a set of early recommendations in the spirit of highlighting early policy orientations. These are submitted on a tentative basis and may be further elaborated by the Group in the months to come.

This chapter also presents policy areas for further work and discussion with a wide range of stakeholders. In addition to the immediate policy recommendations, the HLEG has identified a number of other areas in which the behaviour of firms and financial institutions could be directed towards a stronger focus on delivering a sustainable European economy. Considerations on what is appropriate action by market participants and policy authorities need to be discussed further, taking account of stakeholder feedback.

In summary, the early recommendations of the HLEG highlight:

- An EU classification of assets and products that captures all acceptable definitions of 'sustainable' – that is, that delivers a positive sustainable impact (environmental, social or economic) and is not detrimental to any these three pillars of sustainability.
- The introduction of an official European green bonds standard for green asset classes and labels for SRI and sustainable funds.
- The establishment of a single set of principles of fiduciary duty and related concepts of loyalty and prudence.
- Further strengthening of disclosures by firms and financial institutions of material information on sustainability issues that can also be reflected in stock exchange rules and benchmarks.
- 'Sustainability tests' of all future EU financial regulations and policies.
- Considerations around 'Sustainable Infrastructure Europe': a dedicated 'match-making' facility between private investors and public authorities seeking to build and finance infrastructure.

- Positioning the European supervisory agencies on sustainability issues.
- Publishing by Eurostat of revised guidance on how accounting standards for energy efficiency investments are interpreted to boost investments.

Furthermore, the HLEG suggests for discussions in the following policy areas:

- Providing a strong, credible and long-term policy framework to drive investments.
- Fostering long-termism in financial and real economy investment decisions; reviewing corporate reporting, stewardship and governance practices to ensure that they reflect ESG and long-term sustainability; and promoting integrated reporting.
- Integrating sustainability and long-term perspectives into ratings.
- Integrating sustainability into accounting practices more effectively and examining whether some aspects of current accounting frameworks aggravate undue balance sheet volatility of firms focused on the longer term.
- Fostering the potential of leading stock market and bond market benchmarks to reflect the overall policy orientation towards sustainability and become more outcome and impact-oriented.
- Strengthening the role of banks in the early phases of infrastructure development; facilitating project finance and specialised lending; considering green-supportive or brown-penalising factors; and strengthening the sustainability oversight of banks.
- Strengthening the role of insurance companies in equity and infrastructure investment; and exploring whether some aspects of Solvency II could be adjusted to facilitate long-term products and long-term investment, and to reduce pro-cyclicality.
- Developing national capital-raising plans that provide investors with visibility over the scale of investments envisioned and the role that they are expected to play in delivering on sustainability objectives.
- Enabling greater engagement of society on issues of sustainable finance via production of sustainability research and corporate sustainability practices that build awareness of current levels of performance, as well as the creation and promotion of sustainable investment standards at the retail level as a way for citizens to invest safely and with impact.

1. EARLY RECOMMENDATIONS

Recommendation 1: A classification system for sustainable assets

An EU classification of financial products that captures all acceptable definitions of 'sustainable' would be welcome. It should take account of existing principles established and initially focus on climate change given the considerable progress in this area. Trust in the market for green or sustainable assets will be built by establishing credible EU labels and quality standards.

The classification system should serve to identify projects contributing to EU environmental policy goals (climate change mitigation and adaptation, biodiversity loss, natural resource depletion, pollution prevention and control). It should build on progress already made in Europe and the OECD. The Commission's support is key to an appropriate and timely formalisation of the classification system. The approach should be supported by an inclusive consultation process to allow integration of stakeholders' considerations and build consensus around different constituencies. This work should be extended to other areas of sustainability (social), building on the existing work from relevant institutions.

Against this background, the HLEG recommends that the Commission:

- Organises the definition of a shared EU classification of sustainable assets applicable for all sustainable finance products, starting with assets serving green policy goals given the progress already made in this area. This development could be prepared rapidly with different steps described below so as to be finalised for the end of 2018 when the PRIIPs review takes place.

- First, invites the European Investment Bank to coordinate the development of an EU classification for climate change finance, conducted in consultation with relevant constituencies (technical specialists, market practitioners, policy-makers and civil society representatives) and taking account of work already accomplished or in progress in this area. This process could be completed by the end of 2017 and its integrity would be secured via monitoring by an independent party or appointed committee.
- Second, defines the scope and modalities for the development of an EU classification for other green policy goals (for example, biodiversity loss, natural resource depletion, and pollution prevention and control). This process could be completed by the end of 2018.
- In parallel, launches a multi-stakeholder process as a follow-up to set up a common EU classification of sustainable assets applicable for all sustainable finance products by December 2018.
- Participates in these processes through the direct contributions of DG FISMA and DG ENV.

Recommendation 2: A European standard and label for green bonds and other sustainable assets, as well as labels for sustainable funds

The EU green bond market has yet to reach its full potential and can serve as a basis for other sustainable asset classes. To spur market growth, the EU should consider introducing official European green bonds standards⁸⁶.

Market-led standardisation has been a key enabler of the development of the green bond market. Leading initiatives were convened, on the one hand, by the industry-led Green Bonds Principles providing issuers with a set of relatively broad and flexible voluntary process-oriented guidelines and, on the other hand, by the Climate Bonds Standard offering a science-based standard, including definitions, eligibility criteria and a robust certification framework – thus reducing due diligence by investors as well as work required by issuers and approved verifiers.

The development of an EU standard is now within reach, and the Commission's support can ensure that an EU standard for green bonds will be fully developed.

Against this background, the HLEG recommends that the Commission:

- Introduces official European standards for green bonds, based on the association of the EU green taxonomy (once defined) and existing and widely accepted Green Bond Principles as guidelines for market processes, promoting transparency and disclosure during the course of 2018.
- Supports the dissemination of these green bonds EU standards by helping member states engage in sovereign green bond issuance.
- Defines additional European sustainable product standards for other asset classes on the basis of the approaches developed for green bonds, associating the EU common sustainable taxonomy and market product standards such as the Green Bond Principles. The Eurosif transparency code could serve as a basis for the review of ESG aspects in the investment process.
- Develops a sustainable finance label for funds invested in standardised green bonds and/or in other sustainable finance products, with appropriate means of control endorsed by public authorities and sizeable development means to ensure their use across markets. The French TEEC and SRI labels could serve as a basis of reflection and feasibility should be assessed by 2018.
- Encourages the development of green securitisation and refinancing, layered funds, green covered bonds and thematic sustainable funds; and explores the potential promotion of such tools by incentives with sunset clauses.

86 See footnote 44 on EIB's work with the Climate Bonds Initiative.

Recommendation 3: Fiduciary duty that encompasses sustainability

The time has come to establish a single set of principles of fiduciary duty and related concepts of loyalty and prudence. These can then feed into the respective relevant laws according to the specificities of market participants. Furthermore, regulatory authorities need to make clear to all involved in the investment and lending chain that the consideration and management of ESG risks is integral to fulfilling fiduciary duty, acting loyally to beneficiaries and operating in a prudent manner.

The misinterpretation of fiduciary duty as requiring a focus solely on maximising short-term financial returns is still common. The problem is a lack of appropriate standards in some instances, as well as a lack of clarity of some existing rules. Some actions have already been taken by financial institutions and EU regulatory authorities to incorporate sustainability factors into the operation of fiduciary duty (for example, the IORPs II Directive on occupational pensions).

In the consultation for the Mid-term review of the CMU, the Commission ‘was urged to reflect on steps that could be launched now to begin the recalibration of the EU financial policy framework. Examples of issues that were identified include: clarification that fiduciary duties of asset owners and asset managers include integrating ESG considerations into decision-making’.

Against this background, the HLEG recommends that the Commission:

- Clarifies in upcoming legislation or regulatory reviews (of AIMFD, MiFID II, PRIIPs, UCITS, EuVECA, EuSEF, CRD V, credit rating agencies, etc.) that the duties of loyalty and prudence explicitly integrate material ESG factors and long-term sustainability. A certain level of flexibility and proportionality will be needed to ensure this clarified fiduciary duty can be applied across the investment and lending chain and its many different financial instruments, building on the existing principles in relevant EU legal texts. This should ensure that material ESG factors are integrated into the national definitions of fiduciary duties.
- Provides clarifications on the mandates of the relevant supervisory authorities to make sure that the above considerations are duly taken into account.
- Examines how to establish a single set of principles of fiduciary duty and related concepts of loyalty and prudence that could apply across the entire investment and lending chain, taking account of the specificities of market participants.
- Displays global leadership by promoting a common interpretation of fiduciary duty at the international level, including via an OECD convention on fiduciary duty.

Recommendation 4: Disclosures for sustainability

Disclosure by firms and financial institutions of material information on sustainability issues should be further strengthened. This information is critical to management, investors, employees, lenders, supervisors and other stakeholders. It should include relevant considerations of policies, risks and opportunities as well as performance and impacts.

The HLEG acknowledges the efforts made by many EU firms to strengthen transparency on ESG factors, and to improve reporting quality, comparability and relevance. Nevertheless, high-quality integrated reporting on these matters remains far from being mainstream. The recent TCFD recommendations should be integrated in a way that advances EU leadership on these areas, while providing legal certainty and maintaining a level playing field globally. The 2018 review of the Non-Financial Reporting Directive represents an opportunity.

Against this background, the HLEG recommends that:

- The EU should support further work on methodology and frameworks to help firms and financial institutions improve their ESG disclosures, and promote harmonisation of metrics.
- Financial institutions should disclose how relevant sustainability information is effectively factored into the way that the money of clients and beneficiaries is invested (for example, through mechanisms as those reflected in recent French legislation – Energy Transition Law, Article 173), including sustainability policies and targets, voting and engagement.

- Firms and financial institutions should improve their transparency on climate change aspects. In line with the TCFD recommendations or comparable frameworks, the disclosure rules should be principle-based and leave room for flexibility and innovation across four key elements: governance; strategy; risk management; and metrics and targets. Forward-looking information such as relevant climate scenario analysis should be encouraged, in particular for very large firms in sectors directly affected by the energy transition, such as fossil fuels, utilities, extractives, energy-intensive industries and transport.

Recommendation 5: A sustainability test in financial legislation

Sustainability has not yet been integrated properly into all the relevant EU financial legislation. It would be useful to develop a ‘sustainability test’ to ensure that sustainability is embedded across all future EU financial regulations and policies.

In the CMU Midterm review, the Commission made a step forward by committing to ‘develop an approach for taking sustainability considerations into account in upcoming legislative reviews of financial legislation’⁸⁷. As a concrete measure, DG FISMA should improve its methodology to conduct impact assessments that guide the Commission’s legislative and policy proposals.

More specifically, the HLEG recommends that the Commission:

- Implements more effectively a key requirement of the Better Regulation Guidelines⁸⁸, namely that impact assessments of proposed legislation and policies include ‘a description of the environmental, social and economic impacts and an explicit statement if any of these are not considered significant’ in order to guide legislative and policy options. Moreover, mitigating ESG risks should be one of the objectives of any proposed EU policy or legislation⁸⁹.
- Improves the methodology of environmental and social assessment by using and developing tools #24 to #30 of the Better Regulation Toolbox⁹⁰, as well as learning from the experience of sustainable impact assessments of trade agreements and the existing consultative process.
- Incorporates the ‘Think Sustainable First’ principle as a core component of the Better Regulation Guidelines. ESG assessment needs to be taken into account to ensure that a chosen policy or legislation proposal is contributing to the SDGs.

Recommendation 6: Create ‘Sustainable Infrastructure Europe’

A dedicated advisory and ‘match-making’ facility between public authorities and private investors would appear useful to boost Europe’s ambitious infrastructure plans, especially in the area of sustainability investments. Today, many local mayors throughout the EU do not know to whom to turn in Europe for advice on how to structure and develop infrastructure projects in a way attuned to private investors. The current European Investment Advisory Hub at the EIB in Luxembourg is engaged in this function but is very small compared with the number of potential investment projects across the EU and it is remote from many parts of Europe.

87 European Commission, *Communication on the Mid-Term Review of the Capital Markets Union Action Plan*, 2017

88 European Commission, *Better Regulation : Guidelines on Impact Assessment*, 2015

89 This would reinforce improve the mandate that a proper and full social and environmental impact assessment has to be done.

90 European Commission, *Better Regulation Toolbox*, 2015

Against this background, the HLEG considers that:

- The EU could create ‘Sustainable Infrastructure Europe’, a dedicated organisation responsible for advising municipalities and other public authorities on structuring and developing infrastructure projects and matching them with investors, with a particular attention to sustainability investments and infrastructure developments needed to achieve Europe’s climate objectives.
- Because it would function at the EU level, perhaps with subsidiaries in northern, eastern, southern and western parts of Europe to ensure closeness to municipalities, this organisation would be able to provide neutral advice on sustainable investment opportunities across member states, apply lessons learned throughout Europe and direct investors towards those matching their risk/return profiles.
- In addition to this function of advising and match-making, ‘Sustainable Infrastructure Europe’ would help structure capital-raising plans in a way that makes them appealing to investors, in terms of both scale (for example, via securitisation) and risk/return profiles.
- This might also include considerations on whether there would be benefits from a greater standardisation of infrastructure projects in structure and process in terms of project acceleration and better accessibility of information for investors.
- Without becoming a large organisation, it should focus on expert staff, with expertise on the arrangement of larger and cross-country infrastructure projects as well as expertise on bundling together many smaller efforts. ‘Sustainable Infrastructure Europe’ could also play a key role in supporting countries in their efforts to access capital markets to finance their capital-raising plans. The new organisation could be housed within the EIB or it could be an independent entity.

Recommendation 7: Position the European supervisory agencies on sustainability

The role of the European supervisory agencies already includes considering systemic risk and addressing any risk of disruption in financial services, as well as contributing to better consumer protection and ensuring the orderly functioning of financial markets. ESG-related risks – for example, unprecedented and growing climate-related risks – are not yet properly integrated into financial risk assessment processes. The current review of the ESA operations provides an excellent opportunity to clarify and enhance their role in assessing ESG-related risks in order to secure the long-term stability of Europe’s financial sector and benefits for a sustainable economy at large, even without changing their current mandate.

The HLEG recommends that the Commission ensures that:

- The ESAs address sustainability issues within their existing objectives. In particular, they could develop common guidelines and supervisory convergence on ESG disclosure by investors and lenders at the EU level, creating a level playing field across borders and investor categories (pension funds, insurance, mutual funds, asset managers, banks and banks’ clients). This could be linked to the Non-Financial Reporting Directive and its 2017 guidelines, with the aim of improving ESG-related data to feed into risk assessment processes.
- The ESAs encourage a certain percentage of representatives in stakeholder groups to have expertise on sustainability issues in the financial sector.
- The ESAs play a role in facilitating general coordination between competent authorities on sustainability issues, as already set out in ESA regulations.

Recommendation 8: Accounting standards for energy efficiency

Eurostat’s interpretation of public sector accounting standards on energy efficiency investments needs to be improved.

Three quarters of the EU’s 2030 clean energy investment gap is in the energy efficiency sector. Public/private partnerships between governments/municipalities and energy service companies (ESCOs) will be key to closing this gap through the deployment of energy performance contracts (EPCs). Today, Eurostat’s guidance on the interpretation of IFRS rules relating to EPCs makes these investments appear on the public sector’s balance sheet even

though the private sector provides financing and takes on the operational and financial risk.

This narrow interpretation of public sector accounting standards on government budgeting for energy efficiency is one of the main drivers of under-investment in energy efficiency identified by the Energy Efficiency Financial Institutions Group (EEFIG), and it has led many public sector energy efficiency projects to be abandoned in member states. It does not recognise that risk and rewards deriving from the installation and use of the assets mostly belongs to the private sector (ESCO). As a result, energy efficiency investments are mostly on government balance sheets while roads, if built via PPPs or concessions, might not. This rule discourages governments and local authorities from developing energy efficiency investment programmes. Possible impacts on the Maastricht debt definition would need to be investigated.

The HLEG recommends that the Commission:

- Supports Eurostat in its reinterpretation, together with member states, of the present guidance on the accounting consequences of energy performance contracts in order to acknowledge the particular nature of EPCs. Given the economic owner of the assets installed is the private partner (ESCO), such assets should not be on the government balance sheet.

2. POLICY AREAS FOR FURTHER DISCUSSION

In addition to the policy recommendations described above, the HLEG is working on a number of other policy areas that require further discussion and analysis. Taking account of stakeholder feedback, additional recommendations will be considered in the final report on a wide range of issues, including those outlined below.

1. Long-term policy signals to the private sector

The central objective is to align Europe's financial system with the economic, social and environmental challenges that demand a long-term perspective: job creation, long-term growth, education, environmental protection, retirement financing, infrastructure, energy and climate transition. No single policy parameter can switch off 'short-termism' and move finance to the long term, but progress can be made:

- First, by continued emphasis from policy-makers that what is needed in particular is long-term finance.
- Second, a review of regulation and market practices to foster long-term decision-making.
- Third, protection of those who take long-term risks in the face of short-term pressure by financial markets.
- Clear, credible and long-term policy signals are needed to enable the private sector to identify where value is likely to be created and over what timeframe. Among a range of policy options to consider, the early definition by 2018 of the EU's 2030 and 2050 climate and energy goals seems particularly important.

2. Governance of firms and financial institutions

There is a strong link between good governance of both firms and financial institutions and their performance, including on sustainability matters. Developing and promulgating a set of principles of corporate governance and stewardship that incorporate long-term and sustainable value creation and improve investor governance should be a central objective at the European level. Ways of improving governance might include the following:

- Defining European directors' duties that incorporate value creation for the long-term and sustainability.
- Requiring suitable sustainability expertise on the governing bodies of asset owners above a particular size threshold.

- Developing a set of European corporate governance principles that address long-term value creation and sustainability; and reviewing the potential to incorporate long-term value creation and sustainability as part of the incentive framework in regulated industries.
- Developing a set of European stewardship principles (building on established principles) that incorporate active ownership and long-term value creation.
- Requiring consultation with clients and beneficiaries about their ESG preferences.

3. Integrating sustainability in ratings

The EU should lead by example and foster the integration of ESG factors into ratings and the tracking of long-term sustainability risk. At the very least, it should require all credit rating agencies to disclose whether and how they consider information based on the Taskforce on Climate-related Financial Disclosure in their ratings. The guidelines of the European Securities and Markets Authority (ESMA) should also be updated to help them make the most of the newly available data.

Credit rating agencies play an essential role in the investment and lending chain, but today's credit ratings only partially account for long-term sustainability risk. It is time for long-term sustainability to move from an 'add-on' consideration to a 'built-in' feature. Achieving this transformation will require political will.

4. Frequency of financial reporting

Listed firms typically report on their financial performance quarterly, which requires continuous attention to short-term indicators, potentially at the expense of a longer-term focus. European legislation has been amended in 2013 to remove the obligation from issuers of listed securities to publish financial information on a quarterly basis. Nevertheless, market practices continue to expect such reporting by firms.

To explore current practices in greater detail and how regulation might affect them, the Commission could invite ESMA to gather empirical evidence and examples on the assessment of corporate reporting frequency by management, lenders and investors, differentiated by sector.

5. Accounting frameworks

Accounting frameworks have an important impact on investment decisions. There is a need to assess how to integrate sustainability more effectively into accounting standards and to ensure that they do not prevent the pursuit of sustainability and long-term investment. Ways to achieve such adjustments might include:

- An invitation from the Commission to the European Financial Reporting Advisory Group (EFRAG) to set up a working group with a mandate to review how sustainability factors are currently factored into accounting standards and how they could be further captured.
- The Commission could examine the impact of accounting standards on sectors such as energy, banking and insurance and how accounting standards affect their ability to lend long-term and invest sustainably across a range of equity instruments as well as infrastructure.
- A request from the Commission to EFRAG to examine how to foster integrated reporting, as well as the integration of financial and non-financial/sustainability issues into firms' narrative reporting.

6. Benchmarks

Indices and benchmarks are cornerstones of global capital markets. Investors rely on them for measuring the market but also increasingly for capital allocation (passive investment strategies). Because the standard market benchmarks only reflect ESG issues and risks to the extent that the listed equity market (on average) more generally does, investment strategies based on them will follow the status quo. The number of indices aligned with sustainability has increased, but their significance in overall portfolio allocation, although growing, is still minimal at this stage.

- As a starting point, supervisors and asset owners could encourage the use of multiple reference points by asset managers as a way to better align with sustainability.
- The HLEG will review in greater depth the interplay between market benchmarks, indices and sustainability investment.

7. Banking

Much work has been done in Europe on financial regulation, but there may be opportunities to adapt prudential rules to better reflect long-term sustainability risks, opportunities and needs. Analysis is suggested into whether long-term lending by banks is charged in terms of capital over and above what is warranted by a risk perspective. Green-supportive or brown-penalising factors could be investigated; Pillar II and Pillar III could be strengthened with regard to sustainability.

8. Insurance companies

Possible implications of Solvency II on long-term products and investments should be investigated and attenuation of barriers to equity investment in long-term assets should be considered, as well as attenuation of factors fostering pro-cyclicality. In addition, European supervisors could insist and ensure that long-term sustainability factors are incorporated in the ORSA made by insurance companies.

9. Stock exchanges and green financial centres

Stock exchanges and financial centres have a key role to play in promoting the growth of sustainable finance and the disclosure of material information related to sustainability. They can also support the integrity and growth of the green bond market by encouraging the development and application of robust standards. The EU could establish a network of sustainable financial centres in Europe aimed at exchanging best practices, aligning standards and achieving market scale. It could also encourage IOSCO to work more closely with financial hubs to improve the disclosure of material and high-quality ESG information in the global marketplace. At the very least, the EU could encourage and support European financial centres in launching and strengthening green and sustainable finance initiatives.

10. A strong pipeline of sustainable projects for investment

Increasing the pipeline of sustainable projects, notably in energy efficiency, is a priority. Policy options might include:

- Developing aggregation mechanisms, notably through the EIB and the EIF, to bundle small and middle-scale projects and make them sizeable for the capital markets.
- The EU's state aid arrangements, due to be reviewed in 2018, need to be reconsidered in the light of the restructuring of the EU economy from an unsustainable to a sustainable one and to reflect and enable a stronger role for public/private partnerships. This is also an opportunity to address the non-level playing field relating to energy efficiency and demand side investment and revise state aid rules to enabled the crowding in of private capital to deploy the new business models and technology needed.
- The National Energy and Climate Plans (NECPs) being developed at EU and member state level could include a national capital-raising plan. These capital plans would be key in

providing investors with visibility over the scale of investment envisioned and the role they are expected to play in delivering on sustainability objectives. They would signal where project pipelines will be developed, indicate what tools and funding streams will be used to attract private finance and credibly set out how the number of low-carbon projects is expected to grow. Ideally these plans should be included in the NECPs as this would pave the way for an investable EU 2050 climate strategy shortly after, allowing the EU simultaneously to secure global leadership in both climate action and sustainable finance as a result.

- Creating a new 'European Observatory' function could be useful for aggregating the data, track investment needs and financial flows, inform collective decision-making and help to target further policy interventions in relation to climate change. This body could operate as a cross-agency collaboration or be a new body.

11. Involvement of society in sustainable finance issues

It is essential for the financial system to reconnect with the society it is meant to serve. Research-based public platforms and initiatives to increase global awareness of issues of sustainable finance would help to develop this capacity, along with enabling greater participation of citizens in sustainable investment opportunities. Initiatives might include:

- Creating a public goods research unit that monitors ESG disclosure by firms and financial institutions, provides public league tables of firms' performance on key sustainability issues and reports on the state of disclosure annually. This unit would initiate a collaborative research process, building on the existing reference frameworks to define a common set of financially focused metrics across the sustainability landscape and highlight R&D related to this area. It would also provide a powerful complement to macro-level efforts to evaluate member states' performance in meeting the SDGs.
- Securing a multiannual funding framework (2018-2020) in H2020 & Life budgets to finance research in the field of green and sustainable finance.
- Creating a dedicated EU website to promote leading developments in green and sustainable finance, including, among other things, initiatives, front-runners, and state-of-the-art methodologies.
- Updating academic and professional curricula to increase financial literacy on sustainability issues.
- Promoting sustainable investment at the retail level as a way for citizens to invest safely and with impact. Ways that could be explored in that regard include providing access to the European Progress Microfinance Facility to citizens, as well as exploring the role that peer-to-peer lending and investment could play in promoting social investments.

12. Social dimensions

Efforts should be made to mobilise private capital for the social dimensions of sustainable development. A high impact area would be to boost access to capital for social enterprises, which work in the space between the public and private sector. Initiatives might include:

- Promoting social bond issuance, based on newly developed principles such as the social bond principles.
- Establishing a consistent definition of social enterprise used by the EIB, the EIF and the Commission as a way to assist with targeting support for this sector of the economy.
- Increasing the budget provided by the Horizon 2020 programme or allow for more investors to take an active role in funding projects that meet Europe's social objectives.

VII. Next steps

This Interim Report captures some of the key elements identified by the High-Level Expert Group on sustainable finance. It lays out the issues identified by the group since it began working in early 2017, provides some early recommendations and sketches policy areas that need further discussion and examination.

The hope with this report is to provide a basis for fruitful and constructive consultations as the HLEG engages in the next phase of its work. No group, no matter how well composed, can capture all the facets of such a complex topic. Nor can it realistically claim to have identified all the solutions. We thus see stakeholder engagement as an important step in the next stage of the HLEG's work.

The engagement and consultation phase will start with a high-level stakeholder conference on 18 July 2017. It will be followed by a series of public consultations with key participants in the investment and lending chain. An online questionnaire will also be made available to ensure that everyone can provide input and comments.

All feedback is welcome and we look forward to insightful comments, questions and discussions. Following the engagement phase, the group will reconvene from mid-September onwards and develop further recommendations for inclusion in the final HLEG report to be presented in December 2017.

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Acknowledgements

Members of the High-Level Expert Group have benefitted from exchanges in the process of building the Interim Report and would like to thank the persons below for their insights and advice.

European Commission

Valdis Dombrovskis; Jyrki Katainen; Maroš Šefčovič; Olivier Guersent; Daniel Calleja Crespo; Paulina Dejmek-Hack; Elina Melnigaile; Marlene Madsen; Gerassimos Thomas; Martin Merlin; Benjamin Angel

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From the public and private sectors, and civil society

Lesley Alexander, Simon Howard, UK Sustainable Investment and Finance Association; **Anouk Agnès**, Association of the Luxembourg Fund Industry; **Annemarie Arens**, LuxFlag; **Ruulke Bagijn**, AXA Investment Managers; **Corso Bavagnoli**, French Ministry of Finance; **Johannes Behrens-Tüerk**, DekaBank; **Francesco Biciato**, Forum per la Finanza Sostenibile; **Marc Bichler**, Ministry of Foreign and European Affairs, Luxembourg; **Rintaro Tamaki, Timothy Bishop, Emmy Labovitch**, OECD; **Martijn Bos**, Eumedion; **Jean-Philippe Bouchaud**, Capital Fund Management; **Stéphane Boujnah**, Euronext; **Arnaud de Bresson**, Europlace; **Eric Dugelay, Guillaume Brousse**, Deloitte; **Wim Mijs, Sebastien de Brouwer, Denisa Mularowa**, European Banking Federation; **Adrien Bullier**, IEE and Horizon 2020 programmes; **Siobhan Cleary**, World Federation of Exchanges; **Ian Cochran, Hadrian Hainaut, Benoit Leguet, Morgan Nicol**, Institute for Climate Economics; **Philippine Cour**, HEC and SciencesPo; **Grégoire Cousté, Hervé Guez**, Forum pour l'Investissement Responsable; **Gérard de la Martinière; Benjamin Denis**, European Trade Union Confederation; **Karin Dohm**, European Financial Services Round Table; **Denis Duverne, Emmanuelle Nasse-Bridier**, AXA; **Douglas Elliott, Oliver Wyman; Doyne Farmer, Cameron Hepburn**, Oxford University; **Edouard Fernandez-Bollo, Laurent Clerc**, ACPR Banque de France; **Javier Garayoa Arruti, Jaime Silos**, Spainsif; **François-Yves Gaudeul**, Allianz; **Alain Grandjean, Jean-Marc Jancovici, Carbone 4; Laetitia Hamon**, KPMG; **Bianca Jagger**, B.J. Human Rights Foundation, Council of Europe Goodwill Ambassador; **Olav Jones**, Insurance Europe; **Philippe Joubert, Andrew Voysey**, Cambridge Institute for Sustainability Leadership; **Jean Jouzel**, CEA-CNRS-UVSQ; **John Kay**, LSE; **Isabelle Kocher**, Engie; **Caio Koch-Weser, Laurence Tubiana; Chris Barrett, Anna Müller-Debus, Benjamin Jullien**, European Climate Foundation; **Hans-Helmut Kotz**, Center for Financial Studies Frankfurt; **Jan Pieter Krahnén**, SAFE University of Frankfurt; **Angélique Laskewitz**, Dutch Association of Investors for Sustainable Development; **Mark Lewis**, Barclays; **Michael Mainelli**, LSE and Zyen; **Isabelle Mateos y Lago**, Blackrock; **Jeremy McDaniels, Simon Zadek**, United Nation Environment Program Inquiry; **Jochen Metzger**, Bundesbank; **Corinne Molitor**, Innpact; **Carlos Montalvo**, PwC Spain; **Xavier Musca**, Credit Agricole; **Wilfred Nagel**, ING; **Will Oulton**, Eurosif; **Olivier de Perregaux**, LGT; **Bertrand Perrin**, Vivendi; **Wolfgang Pinner, Claudia Tober, Volker Weber, Patrick Wirth**, Forum Nachhaltige Geldanlagen; **Marcus Pleyer**, Federal Ministry of Finance; **Michel Prada**, IFRS Foundation Trustees, Council on Global Financial Regulation; **Andrew Rose**, Global Infrastructure Investor

Association; **Verena Ross**, ESMA; **Jeffrey Sachs**, Columbia University; **Hans Joachim Schellnhuber**, Potsdam Institute for Climate Impact Research; **Dirk Schoenmaker**, Rotterdam School of Management; **David Shammai**, APG; **Alison Tate**, International Trade Union Confederation; **Julien Touati**, Meridiam; **Dariusz Winek**, Bank for Environmental Protection

The Group Members and Observers would like to thank their collaborators for their contributions:

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The Group wishes to thank the two editors of this Interim Report: **Elie Chachoua and Romesh Vaitilingam**.

Acronyms and Abbreviations

A4S	Accounting for Sustainability	Eusef	European Social Entrepreneurship Funds
ABP	Stichting Pensioenfond ABP	EuVECA	European Venture Capital Funds
AGM	Annual General Meeting	FSB	Financial Stability Board
AIFMD	Alternative Investment Fund Managers Directive	FTSE-100	Financial Times stock Exchange 100 Index
BIS	Bank for International Settlements	FTSE4Good	Financial Times stock Exchange 4 Good index
CAB	Climate Action Bonds	G20	Group of Twenty
CAC40	Cotation Assistée en Continu	G7	Group of Seven
CEB	Council of Europe Development Bank	GDP	Gross Domestic Product
CFO	Chief Financial Officer	GHG	Greenhouse Gas
CMU	Capital Markets Union	GISB	Global Infrastructure Sustainability Benchmark
CRD	Capital Requirements Directive	GRESB	Global real Estate Sustainability Benchmark
DAX	Deutscher Aktienindex	H2020	Horizon 2020
DG-FISMA	Directorate General Financial Stability, Financial Services and Capital Markets Union	HLEG	High-Level Expert Group
EaSI	Employment and Social Innovation Programme	HSBC	The Hong-Kong and Shanghai Banking Corporation
EC	European Commission	I4CE	Institute for Climate Economics
ECBC	European Covered Bond Council	IAIS	International Association of Insurance Supervisors
EEA	European Environment Agency	IASB	International Accounting Standards Board
EEFIG	Energy Efficiency Financial Institutions Group	ICMA	International Capital Market Association
EeMAP	Energy Efficiency Mortgage Action Plan	IDFC	International Development Finance Club
EFRAG	European Financial Reporting Advisory Group	IFRS	International Financial Reporting Standards
EFSI	European Fund for Strategic Investments	IIRC	International Integrated Reporting Council
EIB	European Investment Bank	IMF	International Monetary Fund
EIOPA	European Insurance and Occupational Authority	IORP-II	Directive on Institutions for Occupational Retirement Provision
ELTI	European Association of Long-term Investors	IOSCO	International Organization of Securities Commission
ELTIF	European Long-term Investment Funds	IPO	Initial Public Offering
EMCS	Environmental Markets Classification System	KIDs	Key Information Documents
EMF	European Mortgage Federation	LCE	Low Carbon Economy
ESAs	European Supervisory Authorities	LGX	Luxembourg Green Exchange
ESF	European Social Fund	MDBs	Multilateral Development Banks
ESG	Environmental, Social & Governance	MIFID	Markets in Financial Instruments Directive
ESMA	European Securities and Markets Authority	MTFs	Multilateral Trading Facilities
ESRB	European Systemic Risk Board	NECPs	National Energy and Climate Plans
ETS	Emission Trading System	NFR	Non-Financial Reporting Directive
MFF	Multinannual Financial Framework	NGO	Non-Governmental Organization
EUR	Euros	NIB	Nordic Investment Bank
EUROSTAT	European Statistics	NPBs	National Promotional Banks
Euro-Stoxx	50 European Stock Index 50		

OECD	Organization for Economic Co-operation and Development
ORSA	Own Risk and Solvency Assessment
P2P	Peer-to-Peer
PEPP	Pan-European Personal Pension Product
PFZW	Stichting Pensioenfonds Zorg en Welzijn
PIE	Public Interest Entities
PRI	Principles for Responsible Investment
PRIIPs	Packaged Retail and Insurance-based Investment Products
R&D	Research and Development
SDGs	Sustainable Investment Goals
SEB	Skandinaviska Enskilda Banken
SMEs	Small and Medium Enterprises
SRB	Single Resolution Board
SRI	Sustainable and Responsible Investing
TCFD	Task Force on Climate-related Financial Disclosures
TEEC	Energy and Ecological Transition for Climate
UCITS	Undertakings for Collective Investment in Transferable Securities Directive
UK	United Kingdom
UNEP	United Nations Environment Programme
UNEPFI	United Nations Environment Programme Finance Initiative

