EU HIGH-LEVEL EXPERT GROUP ON
SUSTAINABLE FINANCE

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by the High-Level Expert Group on Sustainable Finance

Secretariat provided by the European Commission

Foreword by

Valdis Dombrovskis, Vice-President for the Euro and Social dialogue, also in charge of Financial Stability, Financial Services and Capital Markets Union

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The signature of the Paris agreement on 12 December 2015 marked a milestone for the world and the global economy. We are now moving towards a low-carbon society, where renewable energy and smart technologies increase our quality of life, spurring job creation and growth without damaging our planet. The fact that over 170 countries have now ratified the Paris agreement sends a powerful signal: the low-carbon transition is here to stay.

The EU is already leading this shift, with our pledge to reduce CO2 emissions by 40% in all sectors of our economy by 2030. One by one, we are adopting the necessary policies to put our economy on a more sustainable footing and facilitate the transformation towards more resource-efficient and circular business models for European companies. But there is still a long way to go. We will need about €180 billion in additional yearly investments in sectors such as renovation and energy efficient buildings, renewable energy generation and transmission, and low-carbon transportation, to name a few.

The scale of the investment challenge is well beyond the capacity of the public sector alone. The European Union is providing massive impetus to help attract the required investments. The European Fund for Strategic Investments (EFSI) has already generated over €250 billion in investment. In 2017, almost one third of funds were channelled into energy, environment and resource efficiency, as well as social infrastructure. Now the EFSI 2.0 extends the lifetime of the Fund until 2020, and raises its investment target to €500 billion, with at least 40% of new investments helping to reach the Paris agreement objectives.

But to decisively address the funding shortfall, we are also looking into regulatory changes to mobilise the significant funding capacity of private capital. Reaching our Paris agreement goals requires no less than a transformation of the entire financial system, its culture, and its incentives. Europe should lead this change. That is why, at the end of 2016, the European Commission appointed the High-Level Expert Group (HLEG) on Sustainable Finance. The group was given a mandate to prepare a comprehensive blueprint for reforms along the entire investment chain, on which to build a sustainable finance strategy for the EU. And this is exactly what it has delivered.

Thanks to extensive collective expertise and the gifted chairmanship of Christian Thimann, we now have in our hands a manifesto for far-reaching change. Its recommendations show a way towards a financial sector that supports a more sustainable and inclusive economic system, in line with the EU's environmental and social objectives. The report is globally relevant, and we encourage other countries to make use of the recommendations to inform their own policy choices and help build sustainable finance at the international level.

This report is just the beginning. As part of our work to build a true Capital Markets Union, we will come forward in March of this year with a broad Action Plan on sustainable finance, building on the recommendations in this report. It will lay out a clear path towards making sustainability a guiding thread in Europe's financial system, and strengthening Europe's position as a frontrunner in the area of green and sustainable finance. This will be followed by legislative proposals. The goal is ambitious, but realistic: to make Europe the centre of gravity for global investment in the low-carbon, resource-efficient, and circular economy.

Foreword by

Christian Thimann, Chairman of the High-Level Expert Group

Sustainability is the theme of our time – and the financial system has a key role to play in delivering that set of ambitions. Sustainability means making economic prosperity long-lasting, more socially inclusive and less dependent on exploitation of finite resources and the natural environment.

This transition towards a more sustainable economic model requires large-scale investments in the economy. The European Commission estimates that to achieve the EU's targets for energy and climate policy alone, additional annual investments of €170 billion are required. The investments needed to meet the Sustainable Development Goals more broadly will be even higher. The current investment gap calls for rapid and substantial redeployment of capital towards sustainable activities that shall foster employment, productivity and competitiveness of the EU's economy.

Ensuring that the financial system contributes to economic sustainability is particularly important in the wake of the financial crisis. While the European economy has mostly recovered from the shock, it remains vulnerable. More efforts are needed to foster long-term investment, to protect the corporate sector against undue pressures to deliver short-term financial results and to create jobs across all regions of Europe.

This imperative of sustainable finance is nothing new; what is new is the momentum behind its implementation. The twin adoption of the 2030 Agenda for Sustainable Development and the Paris Agreement in 2015/16 has re-ignited discussions – and the impetus for action has been building since then. Most striking about this new drive is how many organisations and institutions are pushing together towards a single reform agenda.

The EU High-Level Expert Group on Sustainable Finance (HLEG) is an example of involving different stakeholders in financial reform. Composed of members and observers from banking, insurance, asset management, stock exchanges, financial industry associations, international institutions, civil society and other perspectives, the HLEG is a truly multi-stakeholder initiative focused on concrete measures that the EU can take to align one of the world's largest financial system with global objectives for sustainability.

It has been a great privilege to chair this High-Level Expert Group, and I would like to express my gratitude to Valdis Dombrovskis, Jyrki Katainen and Olivier Guersent for entrusting us with this task and for their strong support of the Group from the very start. I would like to thank the HLEG members for the commitment to sustainable finance that they have demonstrated throughout the past 12 months of our work together: their zeal, dedication and productivity exceeded all expectations. I am also very grateful to the observers who participated so actively in all our deliberations and generously shared their expertise.

As Chair, I benefitted from outstanding support. The Commission experts, who are all listed at the end of this report, deserve our gratitude for being constantly available for insights, fact-checking and questions. And I would particularly like to thank the Commission secretariat – Niall Bohan, Martin Spolc, Felicia Stanescu, Martin Koch, Michelle Kosmidis, and Elia Trippel – and my AXA colleagues – Esther Delbourg and Amelie de Montchalin (up to June 2017) – for their invaluable assistance and advice. It has been a pleasure to work with all of them. I have also benefitted from many discussions with accomplished business leaders with profound convictions on sustainability and would like to thank Denis Duverne, as exemplary for this group, for exchanges that have been most insightful.

Table of contents

Executive Summary 5

I. Introduction 6

II. Renewing the purpose of finance 9
1. Building the world's most sustainable financial system 9
2. Accelerating the shift to sustainable finance 11
3. Summarising the recommendations 12

III. Key recommendations 15
1. Establish and maintain a common sustainability taxonomy at the EU level 15
2. Clarify investor duties to better embrace long-term horizon and sustainability preferences 20
3. Upgrade disclosure rules to make sustainability risks fully transparent, starting with climate change 23
4. Key elements of a retail strategy on sustainable finance: investment advice, ecolabel and SRI minimum standards 27
5. Develop and implement official European sustainability standards and labels, starting with green bonds 30
6. Establish 'Sustainable Infrastructure Europe' 34
7. Governance and Leadership 38
8. Include sustainability in the supervisory mandate of the ESAs and extend the horizon of risk monitoring 41

IV. Other Cross-Cutting Recommendations 45
1. Short-termism, sustainability and the 'tragedy of the horizon' 45
2. Empower citizens to engage and connect with sustainable finance issues 49
3. Establish an EU observatory on sustainable finance to support evidence-based policy-making 51
4. Benchmarks 53
5. Accounting 56
6. Accelerate action to finance energy efficiency investments 59
7. 'Think sustainability first' principle 61
8. Leverage EU action to enshrine sustainable finance at global level 63

V. Financial Institutions and Sectoral Recommendations 67
1. Banking 67
2. Insurance companies 70
3. Asset management 73
4. Pension funds 74
5. Credit ratings and sustainability ratings 75
6. Stock exchanges and financial centers 79
7. Investment consultants 80
8. Investment banks 82

VI. Social and Broader Environmental Sustainability Recommendations 85
1. Social dimension 85
2. Natural capital and environmental challenges 88
3. Agriculture 90
4. Marine resources 92

VII. Conclusion 95

Members of the High-Level Expert Group 96

Acknowledgments 97

List of acronyms and abbreviations 99

Executive Summary

The European Commission established the EU High-Level Group on Sustainable Finance (HLEG) to help develop an overarching and comprehensive EU roadmap on sustainable finance. It requested advice on how to 'steer the flow of capital towards sustainable investments; identify steps that financial institutions and supervisors should take to protect the financial system from sustainability risks; and deploy these policies on a pan-European scale'.

Given the complexity of the financial system and its policy and regulatory framework, there is no single lever to achieve these ambitions and 'switch' the financial system to sustainability. Improving the contribution of the financial system to sustainable and inclusive growth requires a comprehensive review, the identification of areas where changes are needed, and the development of specific recommendations in these areas. That is what the HLEG has sought to deliver.

As priority actions, the HLEG recommends: establishing an EU sustainability taxonomy, starting with climate mitigation, to define areas where investments are needed most; clarifying investor duties to extend the time horizons of investment and bring greater focus on environmental, social and governance (ESG) factors into investment decisions; upgrading disclosures to make sustainability opportunities and risks transparent; enabling retail investors to invest in sustainable finance opportunities; developing official European sustainability standards for some financial assets, starting with green bonds; establishing 'Sustainable Infrastructure Europe' to deploy development capacity in EU member states for infrastructure necessary for a more sustainable economy; and integrating sustainability firmly in the governance of financial institutions as well as in financial supervision.

The HLEG also makes some cross-cutting recommendations. It advises the EU: to confront short-termism in financial markets so as to reduce its negative impact on long-term corporate investment and development; to consider ways to empower citizens to engage with sustainable finance; to monitor investment plans and delivery through a dedicated EU observatory on sustainable finance; to improve financial market benchmark transparency and guidance; to ensure that EU accounting rules do not unduly discourage long-term investment; to establish a 'Think Sustainability First' principle at the heart of EU policy-making; and to drive sustainable finance at the global level.

The HLEG also has recommendations for specific sectors of the financial system. Their purpose is: to promote real economy and sustainability lending in the banking sector; to enable insurance companies to have a stronger role in equity, long-term and infrastructure investments; to ensure that asset managers, pension funds and investment consultants grasp the sustainability preferences of their clients; to ensure that credit rating agencies lengthen the time horizon of risk analysis and disclose how they consider ESG factors; to have listing authorities promote disclosure of ESG information; and to obtain better long-term research by investment banks.

Finally, the HLEG is aware that there are many other social and environmental challenges to tackle. The HLEG recommends: supporting the growth of social enterprises and the financing of social-related projects; revaluing natural and environmental capital in economic and financial decisions; and re-orienting agriculture to a way that is more sustainable for the economy, the environment and public health.

The Group's recommendations in this final report aim to inspire and guide the Commission's action plan on sustainable finance. The art of implementation will be to not increase the overall regulatory burden and complexity, given that the ultimate purpose is to facilitate more investment. And the ultimate test of the HLEG will not just be the degree to which its recommendations are adopted, but the extent to which sustainable finance becomes a permanent feature of European markets and policy-making. The HLEG hopes to stimulate a wide public debate that helps shift Europe's financial system from post-crisis stabilisation to supporting long-term growth.

I. Introduction

This is the final report of the EU High-Level Group on Sustainable Finance (HLEG). The Group was established by the European Commission in late 2016 to help to develop an overarching and comprehensive EU roadmap on sustainable finance. To do this, the Group was asked to provide recommendations to 'hardwire' sustainability into the EU's regulatory and financial policy framework, as well as to accelerate the flow of capital towards sustainable development objectives. The Group began its work in January 2017, published an interim report in July 2017 and completed its work with this final report in January 2018.

For the Group, sustainable finance is about two imperatives. The first is to improve the contribution of finance to sustainable and inclusive growth as well as the mitigation of climate change. The second is to strengthen financial stability by incorporating environmental, social and governance (ESG) factors into investment decision-making. Both imperatives are pressing, given the rising climate-related risks and degradation in the environment and other sustainability areas.

The July 2017 interim report set out the Group's vision for a sustainable financial system. The report showed how sustainability could be integrated into the core processes of finance, how different participants in the financial system could take action, and how capital could be mobilised more effectively for a sustainable economy, with a particular focus on climate risk mitigation. The report closed with nine early recommendations and 12 priority areas for further analysis and discussion.

Following the publication of the interim report, a public consultation was launched to generate feedback on the HLEG's initial findings from Europe's citizens, the financial and non-financial sectors, and public authorities. Around 300 responses were received, and an overview of the feedback is available on the Commission's website under 'Sustainable Finance'. The consultation provided a rich body of analysis, which has strengthened the second phase of the Group's work programme.[1] The HLEG also reached out to a wide range of stakeholders, including through meetings in member states to connect with national-level institutions and to discuss their needs and priorities.

It is important to HLEG members that the Group's work leads to real changes in financial policy and improves Europe's sustainability performance. The Group has highly appreciated the openness of the Commission to its emerging thinking. The active engagement from both Commissioners and a wide range of officials from several Directorates-General has already helped to translate a number of the HLEG's priorities into policy action, including:

- **Capital Markets Union (CMU):** The HLEG made a wide-ranging submission to the mid-term review of the CMU. In the conclusions of the review, released in June 2017, the Commission for the first time recognised that 'a deep re-engineering of the financial system is necessary for investments to become more sustainable' and committed work on disclosure, credit ratings, accounting standards, supervisory processes and investment mandates.[2]

1 For example, while the interim report had a focus on the environmental ('green') pillar of sustainable finance, this final report encompasses wider issues of sustainability, notably the social dimension.

2 Mid-term review of the CMU action plan.

- **Accounting for energy efficiency:** An early recommendation in the HLEG's interim report highlighted the need for a change to the accounting treatment of energy efficiency investments. On 19 September 2017, Eurostat clarified the treatment of energy performance contracts in national accounts, bringing them in line with the Group's proposal and unlocking considerable public capital flows towards a sector that currently accounts for three quarters of the EU's 2030 clean energy investment gap.[3]

- **European Supervisory Authorities (ESAs):** The HLEG made a contribution to the Commission's review of the role of the ESAs, which oversee banking, insurance, occupational pensions and securities markets. On 20 September 2017, the Commission issued the results of its review, proposing that the ESAs will now 'promote sustainable finance, while ensuring financial stability'.[4]

- **Investor duties and sustainability:** The HLEG's interim report recommended that the Commission clarify that the fiduciary duties of institutional investors and asset managers explicitly integrate material ESG factors and long-term sustainability. On 13 November 2017, the Commission opened a public consultation to collect the views of interested parties on this issue in order to inform the impact assessment process.[5]

- **Non-Financial Reporting Directive (NFRD):** The HLEG's deliberations on non-financial reporting, and support for the Financial Stability Board's (FSB) Task Force on Climate-related Financial Disclosure (TCFD) have been fed into the revised guideline of June 2017.

- **Comprehensive action plan:** At the One Planet Summit on 12 December 2017, the Commission announced that it would present a comprehensive action plan on sustainable finance in March 2018. This would draw extensively from the HLEG's recommendations. Vice-President Dombrovskis referred to action on investor duties, the possible introduction of a 'green supporting factor' in prudential rules and the incorporation of ESG factors into the mandate of supervisory authorities. In addition, further work on a sustainable finance taxonomy for Europe alongside EU quality standards and labels would be explored.

These early actions are important steps that need to be built on. The Group believes that the recommendations presented in this report provide the framework for further action. The result will be a more sustainable and inclusive Europe, which is able to provide prosperity for its citizens without compromising the ability of future generations to meet their own needs. It is important to note that the implementation shall not augment the regulatory burden and complexity but facilitate more investments.

The work of the HLEG has only been possible through the tireless efforts of many distinguished groups and individuals. The Group would first like to acknowledge the continued leadership of the Commission, notably Vice-Presidents Valdis Dombrovskis and Jyrki Katainen as well as Director-General Olivier Guersent. The Commission secretariat from DG FISMA as well as the Commission experts from DG FISMA, DG ENV, DG CLIMA, DG ENER, DG JUST and DG ECFIN provided outstanding support to the Group, and the Group would like to thank each and every one of them. The Group would also like to thank the hundreds of stakeholders who contributed to its deliberations through the consultation, panels and other interactions. Finally, the Group would like to extend its appreciation to their own teams that helped underpin the production of this final report.

The publication of this final report marks the end of the HLEG's mandate. The Group may choose to gather informally to take stock of progress on sustainable finance during 2018.

3 European Commission Fact Sheet – 'Eurostat clarifies how to record energy performance contracts in national accounts', 2017.

4 European Commission press release 'Creating a stronger and more integrated European financial supervision for the Capital Markets Union', 2017.

5 'Public consultation on institutional investors and asset managers' duties regarding sustainability'.

Italy: Bosco Verticale (Vertical Forest) sustainable architecture in Porta Nuova district, in Milan.

II. Renewing the purpose of finance

1. BUILDING THE WORLD'S MOST SUSTAINABLE FINANCIAL SYSTEM

Sustainable finance offers Europe a powerful tool for achieving its goals of 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. Today, more than six decades later, the Paris Agreement on climate change and the 2030 Agenda with its Sustainable Development Goals (SDGs) provide the inspiration for Europe's next economic transformation. In the aftermath of the financial and sovereign debt crises, sustainable finance provides a unique opportunity for the EU to re-orient its financial system from short-term stabilisation to long-term impact.

Sustainable finance is a question of core strategy for the EU, with interlocking opportunities, challenges and imperatives. Sustainable finance is about a joined-up approach to the development of financial services that integrates the ESG dimensions across market practices, products and policy frameworks. It will involve reallocating large-scale investments to close the sustainable development financing gap. In the climate and energy space alone, the Commission estimates that at least €170 billion of additional investments is needed each year for priorities such as renewable energy generation and efficient buildings. Achieving a sustainable financial system can help to deliver these investments.

If climate action is highest on today's political agenda, the investment gaps for other sustainable development priorities — such as biodiversity, resource efficiency and the social economy — are equally significant; as is the urgent need to make the agricultural model environmentally sustainable. Damage in biodiversity is especially alarming. Sectors that need to be addressed urgently are agriculture and marine resources, as they are directly linked to natural capital. That is why the Group has added recommendations on these sectors in this final report. The transition to a sustainable economy also has a major social dimension, from tackling inequality to addressing regional disparities across the EU. To ensure that this spatial aspect is addressed and that financial flows go to the communities and places that need them most, the Group's final report also includes a set of recommendations on the social dimension.

Sustainable finance is axiomatically linked to the long term. Europe's wide-ranging sustainability challenges need sufficient, stable and committed capital and financing. This requires bringing the long-term consequences of financial practices into today's decisions – from their implications for biodiversity and climate change to the implications for social inequalities and regional disparities. It also means retuning finance to align it with the more capital-intensive model of economic development required by the sustainability transition.

Sustainable finance means a commitment to the longer term, as well as patience and trust in the value of investments that need time for their value to materialise. Invariably, sustainability involves the substitution of resource use and pollution with technology and know-how. In practical terms, this means more upfront capital in long-lasting assets – whether they are skilled labour, efficient lighting, clean energy infrastructure, productive soils or circular resource management – instead of the continuous throughput of energy and materials. This puts prime importance on the cost of capital, its time horizon and its quality — notably in terms of the sustainability factors being considered. In addition to deploying the best of today's sustainable technologies, it is also essential to invest in innovation, using vital public R&D funding to stimulate private financing and deliver transformational changes in technologies, business models and services.

Sustainable finance cannot thrive if it is undermined by short-termism. Short-termism is not finance with a shorter duration: liquidity management, treasury, trade credit and other financing of short duration all have their place in a sustainable financial system. Rather, short-termism arises from a practice of finance that is focused on near-term profits rather than strategic fundamentals. It is reflected in analysis, allocation and trading that seeks to extract value over a time horizon where the underlying economic returns do not have the time to materialise. Many companies and investors seeking to deliver sustainable outcomes feel undermined by this persistent short-term focus in financial markets and from some financial investors.

All of this points to the urgent need for a long-term policy framework for sustainable finance. The transformation of the EU economy towards a sustainable model will take years. Financiers need a stable regulatory environment that is aligned with long-term sustainability goals and that allows them to allocate Europe's savings with confidence. Serious losses can occur when abrupt policy changes are made (for example, in renewable energy incentives). To avoid stranded assets, financial institutions also need to apply forward-looking tools that enable them to factor future shifts in policy, technology, the natural environment and consumer choice into their investment decisions.

Value creation will be greatest in a transition where capital flows can be reallocated smoothly. For the financial system, this entails several imperatives, including: fostering investment in areas that will underpin the sustainability of the EU economic model; integrating ESG factors into financial decision-making; facilitating long-term thinking and investment; and discouraging short-termism.

Europe now has the unique opportunity to build the world's most sustainable financial system; it should use this moment to reconnect finance and investment with the real economy. Sustainable finance has evolved markedly over the past 25 years, with a particularly rapid surge in commitment and action over the past five years. Europe's banks, insurance companies, institutional investors and stock exchanges have often been leading this shift. Entrepreneurs in financial technology ('fintech') are now joining the search for new ways of making finance greener and more connected.

There is strong evidence that Europe's citizens overwhelmingly believe that social and environmental objectives are important for their savings and investments.[6] Europe's policy-makers and regulators have been among the pioneers in incorporating issues such as climate risk into the rules that drive financial disclosure and risk management. Nevertheless, an even stronger orientation towards mobilising investment to address the long-term needs of the real economy is essential, as are efforts to attenuate the short-termism that undermines long-term commitments.

The benefits of a sustainable financial system are sizeable and they now need to be seized. Sustainable finance is no longer a sideshow. Rather, it is the method by which Europe's financial institutions will become more resilient, Europe's businesses will access better priced and more patient capital, and Europe's citizens will see their sustainability values expressed in their financial choices. In clean energy alone, there is an €11.2 trillion investment pipeline waiting to be delivered in Europe by 2030.

Europe has been in the vanguard of sustainable finance, but it is by no means alone. Just as it did with clean technology a few years ago, China has made impressive structural commitments to this agenda – for example, moving quickly to dominate the green bond market. Fortunately, sustainable finance is not a zero-sum game and international cooperation is a natural part of the European way. But the EU should neither take its current strengths for granted nor overlook the barriers that might prevent it from taking further action.

6 See, for example, Natixis Gobal Asset Management, 'Mind Shift – Getting Past the Screens of responsible Investing', 2017 and Schroders, 'Global Perspectives on Sustainable Investing', 2017.

Taking a leadership position will enable Europe to serve global markets seeking unprecedented flows of sustainable finance. Building a strong and sustainable finance market will enable the EU to develop the products, skills and innovations that are increasingly needed to deliver a healthy financial sector, promote growth and employment, and meet customer needs. It will also provide the platform for exports of sustainable financial services to the numerous countries now looking for capital and expertise to deliver the SDGs. This dual demand (European and global) gives the EU a unique opportunity to act as a champion of international policy reform for sustainable finance. This leadership role also needs to ensure that financial and trade flows into the EU consider sustainability appropriately and do not undermine fair competition that would hurt European employment.

2. ACCELERATING THE SHIFT TO SUSTAINABLE FINANCE

A roadmap for sustainable finance has to be multi-dimensional, reflecting the complexity of the system as well as the diversity of needs and capacities across the EU. As the HLEG deepened its work following the interim report, four common themes emerged that have informed the Group's final recommendations and which stress the importance of policy coordination, of finance as a service function, of connectivity with place, and of long-termism.

The first theme is the need for Europe to achieve a fully coordinated approach to sustainable development, one that synchronises changes in the financial system with action in the real economy. It is essential for governments to ensure that price signals reflect both positive and negative externalities. As the HLEG noted in its interim report, 'the need for a strong price signal is not new: in the case of carbon, companies, investors and civil society have been calling for it for years'. Equally, performance standards constitute a key driver of improvements in both production processes and products (including buildings).

Action in the financial system cannot substitute for these fundamental measures that may include changes in taxation and subsidies. Rather, financial system action can ensure that capital markets respond to these and other signals (such as technological change, physical disruption and social expectations), thereby anticipating change in the real economy and allocating capital faster and more efficiently. The HLEG has focused its attention on financial reforms, but recognises that these will only fulfil their full potential if they are matched with policy changes elsewhere, including in the agriculture, buildings, energy, industrial, transport, water and waste sectors.

The second theme addresses the central role of finance as a service function, responding to the needs and preferences of its clients and customers – notably Europe's citizens, entrepreneurs and public authorities. For decades, finance has lived by the principle of 'know your customer'. Yet too often this has not included the environmental and social preferences of Europe's households, businesses, municipalities or national governments. This needs to change.

A thread that runs through this report is the need for financial institutions to ask clients and beneficiaries about their sustainability preferences and ethical values. Developing a fuller sense of clients' needs in the context of sustainable development will help financial institutions to strengthen their business models as the transition intensifies. It will also re-establish trust in the financial sector and its ability to direct capital towards the real long-term needs of the economy and its citizens.

The third theme highlights the importance of connecting sustainable finance with the specific needs of places across Europe. For many, finance is seen as a sector concentrated in metropolitan hubs, remote from the priorities of growth, employment and environmental improvement that prevail in Europe's rural and (former) industrial areas. A critical part of mobilising finance for a sustainable EU economy will be to find new strategies that enable banks, investors, insurance companies and others financial institutions to design products that incorporate this spatial dimension, bringing capital to remote regions and delivering

inclusive sustainable finance. This will require a decentralised and responsive approach; one that could also make use of suitable local bank networks and the best aspects of fintech to connect the supply of capital with place-based priorities.

Sustainable finance has a key role to play in delivering a 'just transition', and in making sure that the shift away from high-carbon, resource-intensive and polluting sectors produces net benefits for workers and communities. This could be achieved, for example, by working with local authorities, communities and others to develop investable pipelines of green assets (such as property and infrastructure) in vulnerable regions.

The fourth theme is the imperative of extending the time horizons of financial decision-making so that apparently distant but transformational sustainability shifts can be anticipated, their associated opportunities captured and their related risks minimised. The HLEG's interim report highlighted that a central problem of sustainability is a 'double compression': a compression of time and a compression of risk.

The mismatch in time horizons is deeply embedded in today's financial system. At one end of the investment chain, the long-term horizon of end-beneficiaries (such as pension funds, household savers and sovereign wealth funds) is generally not reflected by financial intermediaries, due to principal-agent issues and misaligned performance metrics and incentives, including the lack of informed consent. Similarly, at the other end of the investment chain, the needs of businesses for patient capital are undermined by an excessive focus on short-term price performance, particularly on listed equity and bond markets.

This has real consequences in terms of the misallocation of capital away from long-term value creation. Ensuring that key market tools, such as benchmarks or credit ratings, are better aligned with sustainability – or at the very least better reflect their exposure to sustainability risks – and are not followed 'blindly' but used in a considerate way, will be essential. Financial market myopia makes it harder for companies to take the strategic steps necessary to invest in real assets that are amortised over many years and to develop the technologies and business models that will drive the transition to sustainable development. This problem has deep behavioural roots and it is often exacerbated by technology, financial regulation and market incentives.

There is nothing immutable about this situation. The state of today's financial system is the result of an evolution over decades of economic development and technological change: its misalignment is not by nature but a consequence of the environment in which it has evolved. Yet it is clear — and the Group's work has confirmed it— that there is no single solution. Instead, a comprehensive approach is needed to change the way in which the duties of financial institutions, their governance, risk management and supervision are delivered.

3. SUMMARISING THE RECOMMENDATIONS

This report presents the HLEG's final recommendations, which are mostly addressed to the European Commission. The choice of these recommendations has been guided by the following considerations:

- The importance of the problem to be solved and the recommendation's ability to solve the problem.
- A judgement about the likely impact of the proposed measure as part of the overall package of proposals.
- A view on how progress could be measured and how any remedial steps could be taken.

The recommendations have been drawn from the work undertaken by the HLEG, outreach as well as responses received through the consultation processes.

Chapter III profiles our priority recommendations. This is a set of measures that the HLEG believes are essential building blocks for wider action. The priority recommendations are:

- **To introduce a common sustainable finance taxonomy to ensure market consistency and clarity, starting with climate change.** If Europe is to mobilise capital at scale for sustainable development, it needs a technically robust classification system to establish market clarity on what is 'green' or 'sustainable'. Introducing a sustainability taxonomy, starting with climate-mitigation around mid-2018, will enhance market efficiency and help to channel capital flows towards assets that contribute to sustainable development.

- **To clarify investor duties to extend time horizons and bring greater focus on ESG factors.** Linking investor duties to the investment horizon of the individuals or institutions they serve and requiring, within institutional client relationships, informed consent on sustainability issues are essential. An EU omnibus proposal would ensure that these changes take place across the entire investment chain.

- **To upgrade Europe's disclosure rules to make climate change risks and opportunities fully transparent.** A transparent financial system is a prerequisite for sustainable finance. An interconnecting framework of effective sustainability disclosure covering financial products, financial assets, financial institutions and financial authorities is thus essential.

- **To empower and connect Europe's citizens with sustainable finance issues.** A sustainable financial system should be transparent and accountable to EU citizens. Improving access to information on sustainability performance and promoting financial literacy are essential elements of that effort.

- **To develop official European sustainable finance standards, starting with one on green bonds.** As a first step, the EU should introduce an official EU Green Bond Standard (EU GBS) and consider an EU Green Bond label or certificate to help the market to develop fully and to maximise its capacity to finance green projects that contribute to wider sustainability objectives.

- **To establish a 'Sustainable Infrastructure Europe' facility to expand the size and quality of the EU pipeline of sustainable assets.** Reliable, inclusive and high-quality infrastructure is a vital component of sustainable long-term economic growth. To ensure adequate investment in sustainable and resilient infrastructure, an at-scale solution is needed where existing public institutions and initiatives are used with maximum effect.

- **To reform governance and leadership of companies to build sustainable finance competencies.** The culture of the financial sector needs to be aligned more closely with long-term perspectives and the promise of a sustainable financial system that is useful to society. Strengthening director duties and stewardship principles are steps in that direction.

- **To enlarge the role and capabilities of the ESAs to promote sustainable finance as part of their mandates.** In September 2017, the Commission announced that the upcoming action plan on sustainable finance (Q1 2018) would include provisions to strengthen the regulatory and supervisory framework of the ESAs. The HLEG provides some specific recommendations on how to interpret the inclusion of sustainability in their mandates.

The report presents the rest of the HLEG's recommendations in the following chapters. These are structured as: horizontal areas of action (Chapter IV), financial institutions (Chapter V), and broader areas of sustainability (Chapter VI).

Denmark: Wind turbines generator farm along the coast of the baltic sea.

III. Key recommendations

1. ESTABLISH AND MAINTAIN A COMMON SUSTAINABILITY TAXONOMY AT THE EU LEVEL

If Europe is to mobilise capital at scale for sustainable development, it needs a technically robust classification system to establish market clarity on what is 'sustainable'. This system would cover a wide range of activities, investments and assets that can be clearly linked to the Paris Agreement and the Sustainable Development Goals (SDGs).

Such a 'sustainability taxonomy' would identify under which conditions or criteria any given investment or financial product will contribute to the EU's sustainability objectives. The taxonomy would enable market growth by re-orienting capital flows towards assets that contribute to sustainable development; by creating much needed comparability across standards, labels, products and jurisdictions; and by enabling market participants to invest in sustainability with greater confidence and ease.

In its interim report, the HLEG recommended that the Commission set up a shared EU classification system for sustainable activities. As a first step, it invited the European Investment Bank (EIB) to coordinate the development of an EU classification of climate change finance, starting with definitions of activities that deliver climate change mitigation results consistent with EU goals.

Envisioning a sustainability taxonomy

The HLEG's vision of a taxonomy is one that provides a shared EU classification of sustainable activities that is applicable for all types of assets and capital allocation. It would build on existing frameworks; specifically, it would draw on resources such as those provided by the EIB, the Nordic Investment Bank (NIB), the Climate Bonds Initiative, APG and FTSE Russell, as well as referencing other sources, such as the Green Bond Principles, the international financial institutions' harmonized framework for impact reporting, the Natural Capital Protocol and the MDB/IDFC Common Principles for Climate Mitigation Finance Tracking.

The taxonomy should be aligned with the EU's declared public policy goals, including implementation of the Paris Agreement *and* the SDGs. It would allow policy-makers to link their policy goals and priorities to real economy assets, providing the foundation with which to turn their national transition trajectories into national capital-raising plans. This would enable them to communicate these plans (and any related incentives) to capital markets in the most effective way, thus obtaining maximum support from the private sector.

The taxonomy would also provide capital market participants with guidance on the relevance or contribution of specific activities. Each could then determine their investment decisions and allocations accordingly. The parameters of the taxonomy and the data underpinning them should be freely accessible, and should be developed through a multi-stakeholder process so as to ensure market buy-in.

Potential uses of the EU Sustainability Taxonomy include:

a. Measuring financial flows towards sustainable development priorities at the asset, portfolio, institutional, regional, national and European levels.
b. Identifying assets that qualify for financing under European climate and/or green and/or sustainable funding mechanisms.
c. Providing a consistent starting point for standard-setters and product developers — for example, Green Bonds or research/index providers.
d. Allowing investors to understand the green/sustainable industrial exposure of their portfolios and to design investment policies aligned with the preferences of their clients and beneficiaries.
e. Providing revenue or other activity-based breakdowns of companies according to various sustainability categories.
f. Supporting investor engagement with companies around their business models and transition plans.
g. Underpinning effective disclosure to the market, in line with the TCFD and hence informing further development of disclosure requirements of the Non-Financial Reporting Directive (NFRD).

While the taxonomy would be developed with a focus on EU sustainable policy priorities, it would be of broader global relevance given its alignment with international policy objectives, namely the Paris Agreement and the SDGs.

Table 1 summarises key features of the taxonomy.

Table 1: Key features of the taxonomy

What the Sustainability Taxonomy would be…	What the Sustainability Taxonomy would not be…
A classification system identifying activities, assets and revenue segments that deliver on key sustainability goals based on the eligibility conditions set out by the taxonomy. Designed as a 'meta' framework onto which existing (and future) definitions that are used in a variety of contexts can be mapped, enabling comparability of different standards and products.	A standard by itself. A standard will need a system of thresholds, reporting, management and oversight. Standard-setters are expected to use the taxonomy to inform their respective standards.
Designed to provide a level of granularity that minimises ambiguity to the extent possible.	Populated with specific, quantified metrics. More work would be needed to establish appropriate metrics for any EU standard.
An evolving tool. The science around sustainability is dynamic and evolving, as are social expectations as well as investor and market needs. Therefore, the taxonomy should be considered to represent the best of our currently available knowledge and will require continuous review.	Set in stone.
A neutral framework that can be applied to a variety of financial instruments, including but not limited to project finance, bonds and equity. It provides insight at the individual activity level.	The complete picture for a portfolio of assets or non-pure play companies. Decisions will need to be taken as to what proportion of assets need to meet the eligibility criteria in order for a bundle to be deemed sustainable, or whether to account solely for the parts that are.
Built on existing understanding schemes developed by hundreds of scientific, technical and financial experts.	Not a means of prioritising or ranking investments where multiple benefits are possible, or exploring potential optimal mixes of outcomes and impacts for individual investments.
Focused on assets, revenue segments and activities related to financial assets and services.	Covering the conduct or management of a company or entity.

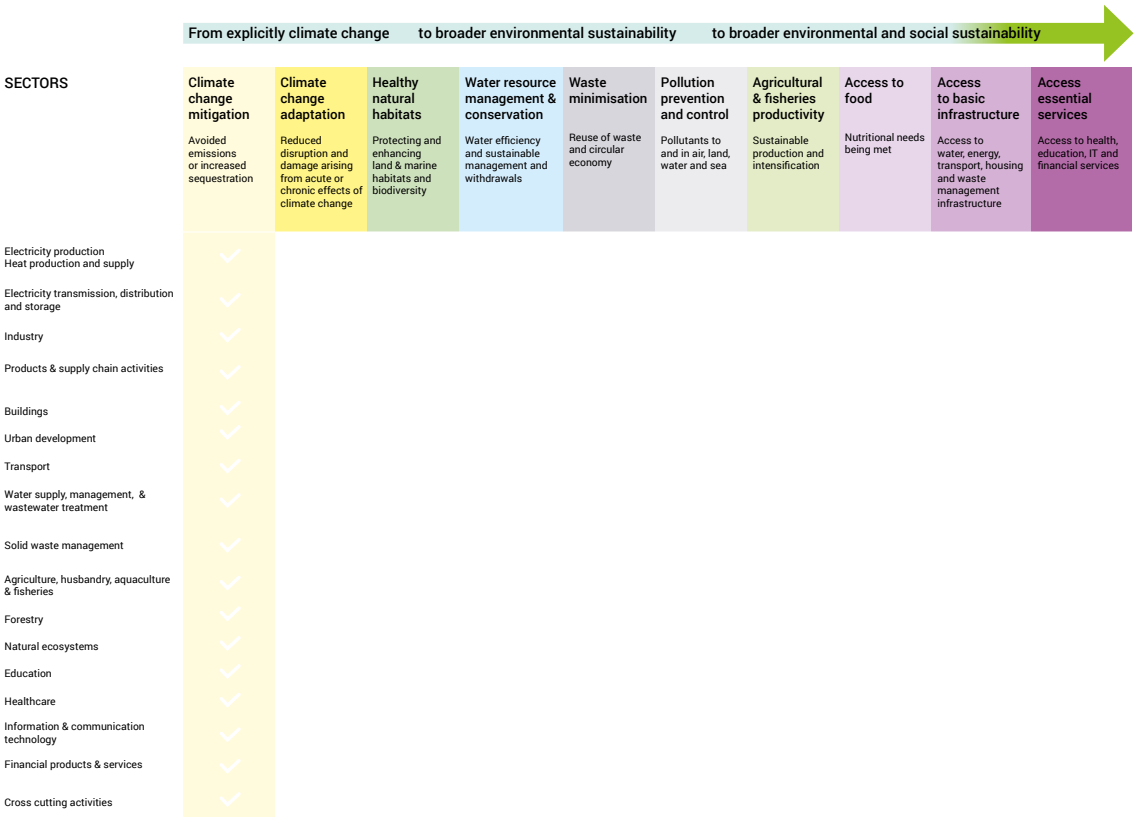
Developing a sustainability taxonomy

Establishing a comprehensive sustainability taxonomy is an immense task. As a starting point, the HLEG has:

1. Developed a framework for a full sustainability taxonomy (see Figure 2), which entails:
   a. The identification and classification of sectors, sub-sectors and associated assets that can contribute to all or any of the identified sustainability goals. These are based on already existing classifications by various stakeholders and therefore coherent with the lending and funding activities of the multilateral development banks (MDBs), the bond markets and the equity markets.
   b. The identification and classification of key sustainability goals aligned with the EU's declared public policy goals, including but not limited to the Paris Agreement and the SDGs.

2. Proposed screening criteria for assets and projects to enter the taxonomy for climate change mitigation goals, supported by:
   a. A list of potential primary screening metrics as a measure of each asset or activity's contribution to climate mitigation. Where relevant, this highlights how the indicators are or can be aligned with EU legislation.
   b. Where appropriate, an associated list of secondary screening metrics that can be used for guidance in the absence of the detailed information that may be needed to test compliance with the primary screening metrics.

Figure 1: The EU Sustainability Taxonomy Framework



As a result of the pilot, the HLEG has identified that, for some sectors or sub-sectors, a greater degree of granularity in terms of potentially eligible assets and activities is required. This is the case, for example, for the manufacturing of different types of renewable energy equipment or categories of energy efficiency products. In some sectors and subsectors, such as energy distribution and storage, further work is also required to identify appropriate primary and secondary metrics.

The roadmap for further development is designed to develop, within the overall sustainability taxonomy framework, proposed screening criteria for activities and projects and assets that would meet goals beyond climate change, for example, those related to natural capital or education.

Against this background, the HLEG recommends that the Commission:

- **Adopt the following roadmap to develop a fully fledged sustainability taxonomy by 2020.** The roadmap would start with activities linked with the EU's environmental ('green') policy goals, such as combating climate change, biodiversity loss and natural resource depletion, as well as pollution prevention and control. The climate mitigation element of the taxonomy could be delivered in early 2018, with climate adaptation and other environmental elements to follow. Work on the social dimensions of sustainable development, such as access to basic infrastructure and services for education and healthcare, could commence in 2019.

Under this roadmap, the Commission would:

- **Establish a sustainability taxonomy technical Working Committee in 2018 to develop the taxonomy by 2018/19 and develop a long-term governance structure.** The Working Committee could initially be comprised of a selection of experts from relevant DGs, such as DG CLIMA, DG FISMA, DG ENV, DG ENER, DG MOVE and DG JUST, and from civil society and the private sector, as well as HLEG members and observers with relevant expertise.
- **Mandate the Working Committee to conduct a consultation process** with relevant technical experts and market participants to develop agreed definitions for key sectors and sustainability goals in the taxonomy. This could include:
    - Developing detailed taxonomies with definitions, together with screening criteria, thresholds and metrics covering the complete scope of the sustainability taxonomy framework. For example, putting more specificity into terms like 'accessible, affordable, equitable' when it comes to the SDGs, as well as clarifying 'substantial improvements in emissions or energy efficiency' or 'low-carbon' in terms of pollution control and mitigation.
    - Designing complementary procedures to make case-by-case assessments where the impact of a particular investment is case-specific.
    - Exploring the need to assess potential trade-offs between different sustainability themes of particular investments and whether there is a need to set minimum performance targets for some investments or sectors such as agriculture, for example.
    - Recommending formally to the Commission to endorse the successively developed components of the sustainability taxonomy, starting with the proposals for climate change mitigation activities on confirmation of its technical and market value by the technical Working Committee.
    - Exploring long-term governance options for the future development and use of the sustainability taxonomy.
    - Identifying and conducting further research as required.

- **Endorse the sustainability taxonomy for use in relevant regulatory and standard-setting processes, on recommendation by the technical Working Committee.**
- **Deploy the proposed EU Observatory on Sustainable Finance to monitor use of the taxonomy and to provide feedback and suggestions for improvement to the technical Working Committee.**

2. CLARIFY INVESTOR DUTIES TO BETTER EMBRACE LONG-TERM HORIZON AND SUSTAINABILITY PREFERENCES

Explicitly linking the duties of investors to the investment horizons and sustainability preferences of the individuals and institutions they serve is key to achieving a more sustainable financial system. An EU omnibus proposal would ensure that this change takes place simultaneously across the entire investment chain.

Investor duties are essential to the investment process. Once cited as a key barrier to the consideration of sustainability issues, a growing body of evidence and regulatory change demonstrates that investor duties put an onus on investors to take account of sustainability when making investment decisions or engaging with investees in their portfolios.[7] But misconceptions remain and market practices do not yet reflect this growing understanding and imperative. Today, for example, just 5% of EU pension funds have considered the investment challenges posed by climate risks to their portfolios.[8]

Investor duties are codified into key EU financial services directives, such as IORP II, MiFID II and Solvency II, as well as such regulations as UCITS and AIFMD. Yet these do not factor in sustainability to the level required. For example, while IORP II and the proposal on 'Pan-European Personal Pensions Products' (PEPP) require pension providers to disclose publicly whether and how they include ESG factors in their risk management systems, these provisions do not oblige them to take account of ESG factors in their investment policies. Similarly, while the standard of prudence of UCITS is high, there is no explicit mention of ESG issues or the need to disclose information about how such issues were considered in the investment process.

By clarifying the duties of investors such as pension funds (understood here as all retirement scheme providers), insurance companies and asset managers, the EU can encourage a greater focus on sustainability issues over the long term. Two key components for a meaningful investor duty requirement are regulatory supervision and adequate forward-looking disclosure from issuers. This can be achieved by aligning investment horizons with those of investors' clients and beneficiaries. The aim should be to make clear that in fulfilling their duties, investors should incorporate sustainability factors consistent with the broad interests, investment horizons and sustainability preferences of their clients and beneficiaries. It should also be clarified that stewardship of investments is a fundamental element of fulfilling these duties.

There is considerable evidence that individual investors would prefer long-term sustainability issues to be considered by their investment providers.[9] There is also strong and growing industry demand for clarification of investor duties. The conclusion of the 2016 consultation by DG JUST on long-term sustainable investment, for example, notes that 'the large majority of contributors, in particular institutional investors and NGOs, argued that fiduciary duty, that is, the duty of investors and asset managers to act in the best interest of the beneficiary (future pensioners) or the client (retail or institutional investors) was not clear enough and could therefore be used as an excuse for not considering ESG matters in investment decisions'.

7 See the Principles for Responsible Investment (PRI) 'Global guide to responsible investment regulation', 2016.

8 See the Mercer 'European Asset Allocation Report', 2017.

9 See, for example, the Morgan Stanley Institute for Sustainable Investing 'Sustainable Signals' report, 2017.

Similarly, the 2017 consultation on the CMU mid-term review identified one of the key areas to address as 'clarification that fiduciary duties of asset owners and asset managers includes integrating environmental, social and governance (ESG) considerations into decision-making'. The Commission was 'urged to reflect on steps that could be launched now to begin the recalibration of the EU financial policy framework'. This combination of social pressure and market demand provides the Commission with the necessary mandate to act.

The HLEG recommends clarifying the duties of institutional investors as well as their asset managers. Asset managers operating collective investment vehicles as portfolio managers (governed by UCITS, AIFMD and/or sector-specific regulations), as well as those managing segregated mandates (MiFID II), which represent a significant proportion of the institutional investment market, would be included.

Clarified duties would encompass key investment activities, including investment strategy, risk management, asset allocation, governance and stewardship. Making it clear that sustainability factors must be incorporated in these activities can ensure that the clarified duty is effective. The clarified duty would also require that all participants in the investment chain pro-actively seek to understand the sustainability interests and preferences of their clients, members or beneficiaries (as applicable) and to provide clear disclosure of the effects, including the potential risks and benefits, of incorporating them into investment mandates and strategies.

The application of the duty will depend on the formulation of the governing directives, and the relationship between the investor and the end client or beneficiary. For example, while asset owners would be obliged to consider ESG factors over the investment horizon of the beneficiary or members, and incorporate such factors into their investment strategies and the mandates that they give to asset managers, the asset manager, in serving its clients, would be obliged to ask about the sustainability priorities and timeframe that the investment mandate or fund is being designed to serve. The asset manager should also ensure that the asset owner understands the potential risks and benefits of incorporating sustainability issues into the investment strategy, ensuring two-way consideration and integration of ESG factors. The investment mandate or fund itself would in turn require sustainability risk and opportunity assessments consistent with the investment horizon of the client, or the institutional client's obligation to their beneficiaries.

This new approach would supplement but not over-rule the fundamental duties of investors. Rather, it is intended to clarify and complement the existing obligations of investors in a way that aligns them with sustainability objectives. It is also aligned with the definitions used in the Shareholder Rights Directive, which seeks to address short-termism and principal-agent problems in equity markets.

By simultaneously clarifying investor duties at the highest level, benefits will cascade across the investment chain. This will require amendment of multiple EU directives to link investor duties to the investment horizon of the individual or institution they serve and to the ethical preferences on sustainability of members, clients and beneficiaries. It will also require involving all participants in the investment chain, including pension funds and asset managers. To maximise impact, these obligations should be clarified and captured in the revised directives below, so that expected adjustments across the investment chain and at all stages of the investment process are clear for everyone involved. If this proposal is implemented in a partial or voluntary way, the regulatory situation will not make sufficient progress on driving sustainability across the investment chain.

To be consistent with the duties for institutional clients, collective investment management companies will need to require informed consent from clients on sustainability issues. Under UCITS and AIFMD, this obligation would include consideration of the interests of all investors who are clients of the scheme. For retail clients, this should include the wider interests and ethical preferences on sustainability that the individual would wish to have taken into account. This should form part of 'know your client' assessments and the consideration of suitability required by MiFID II. This is taken up in the retail investment recommendation.

Key directives in scope

Directive	Scope	Relevance
Pension providers		
• Institutions for Occupational Retirement Provision (IORP II) • Pan-European Personal Pension product (PEPP)	• Occupational pension providers • Personal pension providers	• Investor duties, governance, risk management, disclosure.
Insurance companies		
• Solvency II	• Insurance undertakings	• Investor duties, governance, risk management, disclosure.
Insurance companies		
• Markets in Financial Instruments Directive (MiFID II) • Undertakings for Collective Investment in Transferable Securities (UCITS) • Alternative Investment Fund Managers Directive (AIFMD)	• Investment firms • UCITS (collective investments in transferable securities) managers • Alternative Investment Fund Managers	• Investor duties, governance, risk management, disclosure. • Investor duties and disclosure rules. • Investor duties and disclosure rules.

In addition, harmonisation of disclosure requirements may require further amendments to the Shareholder Rights Directive and the Non-Financial Reporting Directive. It may also be desirable to harmonise sector-specific regulations such as the European Venture Capital regulation (EuVECA) and the regulation authorising European long-term investment funds (ELTIF).

Against this background, the HLEG recommends that:

- **The clarification of investor duties should reflect the following principles:**
  - **Asset owners and investment intermediaries shall examine the materiality of risks and value drivers, including ESG factors, consistent with the timeframe of the obligation to the client or beneficiary/member.** Where financially material risks and value drivers stemming from ESG factors are identified, these shall be acted on in the investment strategy, consistent with:
    - The best interests of the clients and/or members and beneficiaries.
    - The investment timeframe of the clients and/or members and beneficiaries.

- **Pension funds should ensure that they have a sound understanding of the broad range of interests and preferences of their members and beneficiaries, including ESG factors.** They should also ensure that their investments are consistent with time horizon of their members and beneficiaries.

- **Asset managers shall ensure that they have a sound understanding of the broad range of interests and preferences of their clients, including ESG factors, and that they provide clear information to their clients about the potential benefits and risks, including the effect on the prospective return of the investment strategy.**[10] For institutional clients, this should be consistent with the institutional client's long-term obligations to their members and beneficiaries (including under IORP II), policyholders (for insurance undertakings under Solvency II) or customers (for insurance intermediaries and insurance undertakings under IDD).
- **Asset owners and investment intermediaries shall disclose their investment approach to clients and/or beneficiaries in a clear and understandable manner, including how preferences are incorporated into the scheme's investment strategy and the potential risks and benefits of doing so.**
- **Whether financially material or not, the preferences of clients, members and beneficiaries shall be pro-actively sought and incorporated into investors' investment decision-making and the demands that they, in turn, make on the asset managers and other participants with which they interact to deliver their obligations to clients.**

- **These principles are reflected in key building blocks of the provisions:**

  - Text of recitals of Directives and regulations, which are essential to frame guidance around and interpretation of the duties.
  - Articles of the provisions that relate to core investor duties.
  - Clarifications of the operational implication the respective legal texts.

These would be developed on a case-by-case basis for the key provisions identified.

3. UPGRADE DISCLOSURE RULES TO MAKE SUSTAINABILITY RISKS FULLY TRANSPARENT, STARTING WITH CLIMATE CHANGE

Reforms on disclosure rules are needed, regionally and globally. Doing so will help to clarify the time horizon associated with material risk factors and foster climate scenario analysis for large companies in key sectors exposed to the energy transition risks, including the financial sector where relevant.

Long-term investment decisions require adequate disclosure about long-term sustainability risks and opportunities. Today's financial disclosures remain too short-term, making it hard to evaluate this information across companies or financial products. Models used by financial analysts rarely capture developments beyond the one- to three-year horizon, for example. Most disclosures also currently rely on qualitative rather than quantitative elements. While this approach is justified for many sustainability issues, relying solely on qualitative elements prevents measurement over time and across sectors.

10 This could include the divergence from any relevant benchmark over the relevant investment horizon that results from incorporating the clients' interests and preferences, for example.

Disclosures matter for both companies and financial institutions. At the company level, the need to disclose long-term sustainability activities and metrics is a very powerful tool for fostering internal debates, ensuring proper governance and helping to promote dialogue between management, the board and stakeholders. Similarly, disclosure by financial institutions is necessary to ensure that the sustainability preferences of their beneficiaries have been taken into account and that their engagement policy covers both financial and non-financial issues.[11]

Promoting disclosure and transparency is about more than just investment; it is about consistency. The next few years are critical for enshrining sustainable finance action at the heart of the EU financial system and ensuring that the EU has the financial tools and incentives in place to deliver its commitments under the Paris Agreement and the SDGs.

As with other areas of sustainable finance (for example, taxonomy), climate change has the potential to become the first major step towards a more advanced sustainability disclosure regime, while disclosures related to natural capital develop in parallel. Climate-related information should be released by companies at a global level, in both developed and emerging economies, with a particular focus on those sectors most directly exposed to climate change. Two disclosure initiatives are particularly noteworthy following the Paris Agreement.

At the global level, the FSB's Task Force on Climate-related Financial Disclosures (TCFD) is the first industry-led framework with the potential to become a 'new normal' of climate disclosure. Momentum behind the guidelines is growing fast, with more than 230 companies representing a combined market capitalisation of over €5.1 trillion having voiced their support for the TCFD recommendations.

Efforts have also been pursued at the national level. Article 173 of France's Energy Transition Law, notably, requires all major institutions (listed companies but also banks and institutional investors) to evaluate, report and address their exposure to long-term climate-related financial risk. Built on a 'comply or explain' approach, Article 173 has proved to be a powerful tool for bringing disclosure onto the agenda of financial institutions. The provisions of Article 173 are also close to those of the TCFD, with climate disclosure by the non-financial sector (Article 173 IV) aimed at enabling climate disclosure by the financial sector (Article 173 VI).

The EU should endorse the TCFD guidelines and implement these recommendations at the EU level, drawing on the experience of the implementation of France's Article 173. Given the momentum behind the TCFD and its promising role as an international standard on climate-related disclosure, the review of the Non-Financial Reporting Directive (NFRD) is a unique opportunity to explore how the NFRD requirements could be better aligned with that of the TCFD. Another important area would be to ensure that the NFRD provides a clear distinction between financial and non-financial institutions as the motivations for and implications of sustainability disclosure are different for each.

Putting forward-looking disclosure of sustainability-related financial risks into the mainstream is a process that can only succeed if the information generated is of quality and if it used to inform decision-making. This will require trial and error by companies, as well as capacity-building and promotion of best practice by all the key institutions involved, governments included.

11 In this context, it is important to recall that Article 3g of the Shareholder Rights Directive determines that 'Institutional investors and asset managers shall develop and publicly disclose an engagement policy that describes how they integrate shareholder engagement in their investment strategy. The policy shall describe how they monitor investee companies on relevant matters, including strategy, financial and non-financial performance and risk, capital structure, social and environmental impact and corporate governance.'

The recent and voluntary nature of the TCFD suggests that it might take time for that information to be generated. While over 230 firms have already committed to implementing the TCFD recommendations, some have also expressed concerns about the ability of the market to develop and process pertinent forward-looking information in a short timeframe. Specifically, companies have raised concerns about: whether long-term projections in an area of massive technological and policy change can be reliable and will actually be used by financial analysts; whether they have to reveal more strategic business information than competitors in other constituencies; and whether they expose themselves to liability risks if, for whatever reason, the targets that the companies aimed for were not to be met. There are also concerns on the part of regulators, investors and civil society, with some noting that implementation of voluntary reporting can be slow and uneven – something that can be ill-afforded in the case of sustainability in general and climate change in particular.

A first priority should thus be for the EU to make the voluntary experimentation with TCFD disclosure as short and as effective as possible. The Commission should engage in active dialogue around TCFD implementation as soon as possible. This will help to ensure that EU companies, investors and regulators are able to learn from best practice – and adopt it rapidly. With that objective in mind, the Commission could convene meetings of leaders on TCFD implementation to discuss the state of play and how to accelerate implementation, for example. The creation of multi-stakeholder 'learning and leadership platforms' at the sectoral level during this experimentation phase will also ensure that the EU has all the granularity it needs to inform its next regulatory steps.

In parallel, the EU should explore how to align the NFRD with the TCFD guidelines more closely. The NFRD review should assess, based on the progress achieved by the TCFD and information gathered by the different sectoral dialogues established by the EU, what elements of the TCFD might be needed on a 'comply or explain' approach to help accelerate early disclosure efforts. Lessons learned from the experimentation with Article 173 in France will be critical, as this will help to evaluate the effectiveness of the 'comply or explain' approach in accelerating adoption of the TCFD recommendation.

At the international level, the EU should use its international leadership to engage with regulatory counterparts in key partner countries and raise reporting standards globally. US regulators, notably, have yet to make any significant move on sustainability disclosure compared to the actions such a large market would call for. Similarly, the International Organization of Securities Commissions (IOSCO) has for far too long remained silent on an issue at the core of its business. European investors deserve better information on how large international companies are aligned with global goals of sustainable development.

Against this background, the HLEG recommends that the Commission:

- **Endorse and implement the TCFD disclosure recommendations at the EU level, allowing for experimentation time and building on the experience of France's Article 173**
    - Establish a financial sector-specific technical working group to explore how to align the NFRD with the TCFD recommendations, making sure to distinguish between financial institutions and non-financial institutions since the motivations for – and implications of – sustainability disclosure are different for each. This working group, under the supervision of DG FISMA, should build on the feedback and experience of early TCFD implementation and the two first reporting cycles (2017 and 2018) of the Article 173 reporting scheme.
    - Consider the climate-related disclosure frameworks in both the NFRD review and the NFRD amendments over the course of 2018 and 2019, while drawing due lessons from the experiences learned.

- **Make the voluntary, private sector experimentation with TCFD and other ESG disclosure as short and as effective as possible, while assessing where are the needs for complementary disclosure and methodology harmonisation.**

  - **Establish 'Disclosure Learning and Leadership Platforms' to promote TCFD disclosure in a way that is safe for companies to engage and experiment with.** DG FISMA should engage with key industries, such as energy, utilities, transport and others, to understand the remaining concerns mentioned above and provide solutions that address them while delivering on its climate disclosure objectives.
  - **Consider 'comply or explain' disclosure principles on a set of metrics for companies, such as exposure of sales to the activities/products listed in the EU green taxonomy or, where relevant, indications of the geography of main fixed assets.** This will enable investors to reallocate capital to green industries and gauge possible exposure to physical climate risks.
  - **Build on the feedback of existing European ESG reporting and France's Article 173 to identify what type of climate and ESG disclosure provides strategic information useful for investors' decision-making.** DG FISMA should convene a working group of experts (financial analysts, asset managers, asset owners, insurance companies, banks) to understand precisely how they will use the quantitative and qualitative strategic information generated by ESG disclosures.

- **Ensure the need for experimentation does not affect the EU's ability to deliver, by 2020, a comprehensive and useful EU climate-disclosure regime, compliant with the TCFD recommendations.**

  - **Once the first years of TCFD application have passed, and taking into account the lessons learned in this phase, consider integrating TCFD-compliant climate-related disclosure requirements into the NFRD.** This would ensure that in the eventuality that more information is needed by end of the review, the technical work associated with the TCFD can proceed after the NFRD review is published.
  - **DG FISMA should start convening financial analysts and asset managers to understand how they will take up quantitative long-term information and ESG-related information in their financial models.** A strong engagement on long-term issues, for example, towards longer equity holding periods and lower portfolio turnover, could reinforce their enabling role in financing sustainability. More generally, corporate disclosure on non-financial issues and long-term risks suffers from the lack of responses from potential users. There is a need for capacity-building to avoid 'disclosure in a vacuum'.

- **Use the EU's leadership on non-financial reporting to engage global partners and raise the level of global reporting regimes.**

  - Make sustainable finance in general, and disclosure in particular, a key priority for diplomatic engagement in 2018. The EU's action plan on sustainable finance, the Global Climate Action Summit and the UN Sustainable Finance Summit, are all taking place in 2018. Promoting a sustainable finance approach will also help to ensure that the action plan on sustainable finance can be defined and pursued in a supportive international environment.
  - Foster non-financial reporting frameworks as well as TCFD adoption through all key fora. This includes the G20, IOSCO, the UN and the OECD as a priority. The TCFD has started as a voluntary, industry-led effort. So far, however, it has not been endorsed formally by the G20 or the FSB: this should change. The EU should work with partners to ensure disclosure requirements are reflected in the outcomes of the finance track. Within IOSCO, it should create a coalition akin to the 'Friends of Sustainable Finance' in the UN, so as to reach sufficient leverage and convince IOSCO to make sustainability disclosure mainstream across financial securities and stock exchange listing requirements, starting with the TCFD.

4. KEY ELEMENTS OF A RETAIL STRATEGY ON SUSTAINABLE FINANCE: INVESTMENT ADVICE, ECOLABEL AND SRI MINIMUM STANDARDS

Citizens with savings to invest should be empowered to invest in portfolios that reflect their sustainability and ethical preferences. The direct result would be to bring a substantial part of the EU's financial assets into pools of capital contributing to sustainable finance.

European household savings represent over 40% of total financial assets in the EU. As mentioned earlier, there is considerable evidence that most retail investors would like to invest in a sustainable manner, with over two thirds of retail investors considering environmental and social objectives as important for their investment decisions.[12]

Yet very few retail investors currently have the opportunity to invest according to these preferences.[13] Despite their rapid growth, ESG funds represent less than 2% of the overall European retail funds market.[14] Furthermore, national legislation on the role of financial advisers – strongly shaped by MiFID I and II – contains no specific requirements to ask questions clients about such preferences.[15] As a result, many retail investors do not express these preferences. This, in turn, leads to lower observable demand and reduced supply: investment advisers have fewer incentives to respond to these considerations, and asset managers have little incentive to design suitable products. Many financial advisers also perceive sustainability-oriented products as presenting a negative trade-off with returns — despite multiple studies pointing to the opposite.[16]

In addition, retail investors are not given the means to understand the real sustainable impact of financial products offered to them. While the consultation on environmental and social objectives within PRIIPs has started to tackle the issue of standardised communication, more needs to be done for all retail investment products in a way that is kept simple and understandable for all retail investors.[17] This is particularly important given that financial literacy in Europe remains low, though it is higher than in other G20 countries.[18]

In addition to being fragmented, the state of the sustainable products may also be misleading for some retail investors. Today, products that carry denominations such as 'SRI' (socially responsible investment), 'sustainable' or 'ESG' are mostly self-assessed.[19] Yet these encompass heterogeneous levels of ambition, transparency and methodologies across international markets. This heterogeneity can weaken retail investor protection and distort

12 A survey of 7,000 respondents in 22 countries by Natixis Global Asset Management in 2017 found that social and environmental objectives are an important factor for around 70% of retail investors.

13 A 2017 study carried out in France by VIGEO-EIRIS showed that 72% of French retail investors want integration of sustainability issues in their savings funds to be mandatory, but 66% had never heard of SRI. Similar results were found on behalf of BNP Paribas Investment Partners for the German retail market in March 2017.

14 See the Alfi 'European responsible Investing fund market', 2016.

15 A recent review of MiFID I and II transposition and suitability assessment questionnaires used by financial advisers in various member states shows that non-financial investment objectives are systematically overlooked. See 2 degrees investing initiative report 'Non-financial message in a bottle', 2017.

16 See, for example, 'The Value of Responsible Investment – Investment Leaders Group', University of Cambridge Institute for Sustainability Leadership, 2014'. More evidence can be found in G. Friede, T. Busch and A. Bassen et al, 'ESG and Financial Performance: Aggregated Evidence from More than 2000 Empirical Studies', Journal of Sustainable Finance and Investment, 2015.

17 In early 2017, the ESAs consulted on what level of information was required to determine whether Packaged Retail and Insurance-based Investment Products (PRIIPs) with stated environmental or social objectives were fit for purpose.

18 See the OECD survey on 'Adult Financial Literacy Competencies', 2016.

19 See a recent Vigeo Eiris study 'Green, Social and Ethical Funds in Europe', 2016, which shows that there are today around 1,135 funds that bear an SRI denomination. The Eurosif Transparency code, which today represents the only framework based on a European survey for SRI funds, counts 693 official funds. This state of affairs denotes a clear confusion, which hampers the industry's growth and prevents it from achieving its potential to attract the retail market.

competition among product manufacturers. A prerequisite for sustainable investment to grow is therefore to guarantee the quality of such self-assessed investment products through standardised denominations.

In addition to integrating good ESG practices, EU citizens expect sustainable funds to enable them to have a positive impact on the economy; but they lack the concrete tools to identify corresponding investment products.[20] Themed investments are built on this assumption but amounts invested through these are still small.[21] More visibility and credibility are therefore needed. The success of EU organic and ecolabels demonstrates that consumer labels can be efficient tools to mobilise citizens, change consumption patterns, and increase transparency and consumer protection.

Against this background, the HLEG recommends that the Commission and the European Securities and Markets Authority (ESMA):

- **Require investment advisers to ask about, and then respond to, retail investors' preferences about the sustainable impact of their investments, as a routine component of financial advice.**

MiFID already requires advisers to offer products that are suitable to meet their customers' needs. But it is difficult to see how that requirement can be met if advisers are not required to ask about their clients' investment preferences concerning impacts on sustainability.

Although the existing rules could be interpreted to advance this issue, consultation with supervisors shows that it would be helpful if a revision of MiFID II's delegated act explicitly incorporated investor preferences concerning impact on sustainability into the suitability requirements associated with financial advice.

As a first step, ESMA should update the guidelines on suitability requirements to include explicit provisions on the obligation to ask clients about their sustainability, as already recommended by the HLEG in its response to the ESMA consultation on the topic.[22] Taking into account the heterogeneity of the financial landscape across the EU, it could also suggest surveys by national authorities or the EU Observatory on Sustainable Finance on the nature of sustainability preferences and level of interest of European retail investors by country, and produce technical guidance on the types of questions that could be integrated in suitability assessment questionnaires.

- **Facilitate retail investor choice by increasing transparency on the sustainability impact and processes of retail funds.**

The Commission should request all funds, destined for the retail market to disclose clear and understandable information on their sustainability impact, as well as information on the exercise of voting rights. The objective is to help retail investors to understand the impact of their savings through a small range of metrics that should remain simple and understandable.[23]

20 See the Joint Consultation paper on 'PRIIPS with environmental or social objectives', 2017.

21 In 2015, just two countries (France and the Netherlands) saw sustainability themed investments surpass the €35 billion mark, according to the Eurosif study 'European SRI Study', 2016. But overall growth of sustainability themed investments in EU did grow +by 145 % between 2013 and 2015, however, according to the same study.

22 See ESMA consultation on 'Guidelines on certain aspects of the MiFID II suitability requirements' and the HLEG response, 2017.

23 As mentioned in the HLEG response on the ESMA consultation, the information can be disclosed in the Key Information Document, a repository accessible to online-product scanners and could be used for labelling.

Disclosure should be requested first for funds managed by asset managers (including non-European asset managers operating in the EU) representing more than €500 million of total assets under management per fund, including all share classes of that fund.

Given the emergency of the climate issue and the higher maturity of climate impact indicators, these funds should disclose, as a first step, their strategy and portfolio exposure in relation to climate-related risks and opportunities. Proxy indicators could also be provided on other ESG issues. Disclosure should include the sustainability strategies implemented, so as to enable an assessment of coherence with retail investors' sustainable investment preferences. Where no such strategy exists, this should be made explicit. But this, and other more in-depth disclosures, should not obscure the small number of simple metrics required to provide guidance to retail investors.

To help the industry in overcoming methodological obstacles, the Commission should support and encourage the development of a common set of sustainability impact metrics and proxies, including the development of indicators assessing funds' contribution to SDG implementation.

- **Protect retail investors by establishing minimum standards for sustainably denominated funds.**

The Commission should identify and analyse the numerous sustainable denominations being used in the market and clarify them for the benefit of retail investors, while allowing for the specificities of each of the member states' markets to be respected.

The Commission should protect retail investors by preparing an analysis of minimum SRI standards, in line with the EU sustainability taxonomy, to be respected by manufacturers and targeting all funds — including managed mutual funds or equivalent investment vehicles bearing a sustainable denomination — provided they comply with UCITS. Such analysis could later on feed into the PRIIPs and potentially the UCITS V regulations.

- **Establish a voluntary European green label to spur market growth and enable retail investors to identify products that finance the climate and ecological transition.**

The Commission should develop a voluntary EU green label for green themed funds. These should include specifications based on the use of the EU sustainable taxonomy and include a high proportion of green activities in the portfolio of invested companies, exclusion of incompatible business (such as the fossil fuel sector), an ESG risks screening (human rights, governance, etc.), as well as strong and understandable impact indicators on environmental issues. This label could fit into the framework of the existing EU ecolabel. It could be applied first to funds but also later on to other retail products (under the scope of the PRIIPs Regulation, as well as non-life insurance and mortgage products). This label should build on the most advanced European labels such as the French TEEC, LuxFlag Climate Finance, Climetrics, SEImetrics and the German FNG.[24]

Given the urgency of dealing with climate change and other environmental issues — such as biodiversity loss and environmental and/or risks from some prevalent food production practices — and the maturity of some green themed funds to finance the green objectives, the HLEG recommends that this green label be developed within the framework of the existing ecolabel by the end of 2018 or early 2019. At a later stage, the Commission should also examine the development of a European social label to finance social objectives in a framework to be defined.

24 The environmental section of the FNG label, which is a broader SRI label.

5. DEVELOP AND IMPLEMENT OFFICIAL EUROPEAN SUSTAINABILITY STANDARDS AND LABELS, STARTING WITH GREEN BONDS

The EU green bond market has yet to reach its full potential, currently representing a relatively modest percentage of overall outstanding bonds from EU issuers. But it has attracted significant public interest, and it has had a disproportionate demonstration effect in support of green finance. It has simplified and standardised the selection process and criteria for green projects through high-level categories as well as more detailed taxonomies, opening up the dialogue between issuers and investors on criteria and impact. This has also promoted a transition mindset for issuers enabling them to signal publicly how they propose to initiate or accelerate the transformation of their operations and business towards a sustainable model. For certain corporate issuers, this has resulted in better pricing and lower market execution risk compared with mainstream bonds.[25]

As a first step towards establishing official EU sustainability standards, the EU should introduce an official EU Green Bond Standard (EU GBS). As a second step, it should consider an EU Green Bond label to help the market develop fully and maximise its capacity to finance green projects and activities and to contribute to wider sustainability objectives.

The policy objectives for the proposed EU GBS would be:

- To encourage a substantial increase in investment in green projects and activities:
  - That contribute to environmental policy objectives pursued by the EU, such as the Paris Agreement, the EU Biodiversity Strategy and other environmental goals;
  - Across the different issuer types, including corporate, sovereign, sub-sovereign and agency sovereign issuers.
- To make visible those assets that need to be understood as high priority assets in a low-carbon and climate-resilient economy.
- To increase demand from green investors by ensuring that the underlying projects of European green bond issuances are aligned with the future EU Sustainability Taxonomy.
- To promote appropriate reporting of the environmental relevance and/or impact of green assets and projects, including on how the issuance of green bonds actually contributes to scaling up investments in green projects.
- To create a standard that can serve as reference for other sustainable financial products such as social and sustainable bonds, as well as green, social and sustainable loans.

25 See T. Ehlers and F. Packer 'Green Bond Finance and Certification', Bank for International Settlements, 2017.

The HLEG defines an EU Green Bond as any type of listed bond instrument meeting the following requirements:

1) The proceeds will be exclusively used to finance or refinance in part or in full new and/or existing eligible green projects, in line with the future EU Sustainability Taxonomy; AND,
2) The issuance documentation of the bond shall confirm the intended alignment of the EU Green Bond with the EU Green Bond Standard; AND,
3) The alignment of the bond with the EU Green Bond Standard has been verified by an independent and accredited external reviewer.

An issuer may only use the term 'EU Green Bond' if the above criteria are met.

As listed fixed-income instruments, listed green bonds are already extensively covered in terms of transparency and disclosure requirements, on the aspects of the bond, by existing EU regulation such as the Prospectus Regulation, the Market Abuse Regulation and MiFID II/ MiFIR.

Current market best practice on green bonds focuses on the use of proceeds for green projects, as well as how these projects are selected, reported and assessed. The development of market-led best practice has been a key enabler for the growth of the green bond market. Market initiatives such as the financial industry-led Green Bond Principles (GBP) provide issuers with a set of voluntary issuance guidelines focused on disclosure and transparency, as well as overarching green project categories.

The proposed EU GBS would incorporate existing best market practice while at the same time addressing uncertainties and areas of concern that may require greater prescription or more explicit criteria. The prime objective of the standard is to help raise overall investments in green projects and activities, and its success should be monitored and assessed against this benchmark. In this context, a number of issues that have been raised about green bonds should also be addressed:

- Uncertainty on the application of some aspects of best practice;
- Confusion on green project definitions;
- Doubts on the additionality of certain green projects and their impact, as well as concerns that green bonds have in some cases merely been used to re-label existing investments;
- Insufficient disclosure and data on how green bonds lead to the scaling up of investments in green projects and activities; and
- Inconsistencies in the quality of certain external reviews and verifications, and the qualification of their providers.

The manner in which the EU GBS and the related recommendations would address these potential issues is summarised in the table below.

Table 2: Overview of EU GBS compared with the Green Bond Principles
This table outlines how the EU GBS will differ from the existing Green Bond Principles.

Specific topic	Green Bond Principles provision	EU Green Bond Standard provision
Reference of alignment with GBPs/EU GBS in legal documentation	Recommended	Required
Eligibility criteria for green projects	Guidance on high-level categories	Compliance with a detailed EU Sustainability Taxonomy
Disclosure of proportion of proceeds used for refinancing	Recommended	Required
Impact monitoring and reporting	Recommended wherever possible	Required to report whether issuer is monitoring impact or not and if so, disclose estimated/actual impact.
External review requirements	Recommended. External review may be partial, covering only certain aspects of an issuer's green bond or associated Green Bond framework or full, assessing alignment with all four core components of the GBP*	Required. External review must confirm, at a minimum, the alignment, at issuance, of the EU green bond with all four core components of the EU GBS*, or alternatively, confirm the alignment of the EU Green Bond programme as a whole.
Publication of external review	Recommended	Required
Accreditation of external reviewers	Not addressed in GBPs	Sets out accreditation requirements for external reviewers.

* The four components of the Green Bond Standard are: (1) Use of proceeds; (2) Process for project evaluation and selection; (3) Management of proceeds; and (4) Reporting.

While the EU GBS does not contain proposals for green requirements for the broader bond market, the tools and methodologies of the green bond market will nevertheless be very relevant to companies and other institutions as they implement their transition to sustainability. The mainstream bond market provides financing overwhelmingly for general corporate purposes and is not designed to give visibility on projects. Sustainability objectives in these cases pertain to the issuers' overall business and are therefore captured by the HLEG recommendations at that level, such as for disclosures.

Nonetheless, issuers in the mainstream bond market are recommended to look to the tools and methodology of the green bond market as a resource while planning the transition of their business or operations to a sustainable model. This may be especially pertinent when considering developing and/or investing in green projects, as well as evaluating and reporting on their impact. It is also noteworthy that, as part of its Consultation Paper of 6 July 2017 on 'Draft technical advice on format and content of the prospectus', ESMA is considering in the future for prospectuses (including base prospectus/securities note) for all securities to have a standalone and prominent use of proceeds section, providing greater emphasis on the description of use of proceeds.[26]

The governance, promotion and dissemination of the EU GBS, as well as its updating, will require dedicated follow-up with market participants and their representatives, with the European market and regulatory authorities, and with other relevant stakeholders, including civil society. As a first step, the Commission should establish a Green Bonds Technical Committee to define the long-term governance and operational structure for the EU GBS. Such dedicated follow-up and other functions could be undertaken by the Commission or, for example, by a new European sustainability body such as the proposed EU Observatory on Sustainable Finance. This body would perform key functions such as being a vehicle for the EU to recognise the EU GBS as a flexible market standard, overseeing future updates in consultation with market participants and stakeholders, managing the accreditation of external reviewers, and compiling statistics and publishing reports on green bonds.
The Green Bonds Technical Committee along with the Observatory could also be mandated to develop a potential EU green bond label (which could be addressed as a second step by the Commission).

Against this background, the HLEG recommends that the Commission:

- **Establish a Green Bonds Technical Committee in 2018, which will work in parallel with the Sustainability Taxonomy Technical Committee, to develop a long-term governance structure for the EU Green Bond Standard.** The EU Green Bond Standard Technical Committee could initially be comprised of a selection of experts from DG CLIMA, DG FISMA, DG ENV (and other DGs) and from civil society and the private sector, as well as HLEG members and observers with relevant expertise.

  The Green Bonds Technical Committee should also actively contribute to global discussions and facilitate, as far as possible, the adoption of harmonised global standards, in particular the Green bond standard currently under development by the International Organization for Standardization.

- **Introduce in 2018 an official European standard for green bonds.** This EU Green Bond Standard, building on the model proposed in the supplementary document that is based on the association of the EU Sustainability Taxonomy, should include an explicit definition of an EU green bond and the existing and widely accepted market-developed principles for market processes.

- **Mandate the Green Bonds Technical Committee to develop in 2018, and in parallel, accreditation criteria for providers of independent reviews and verification (external review providers) for green bonds.** Such accreditation should be based on best practice and existing regulatory requirements. It should include explicit requirements related to (i) professional codes of conduct related to business ethics, conflicts of interest and independence; (ii) professional minimum qualifications and quality assurance and control; and (iii) standardised procedures for external reviews. Oversight and supervision of accredited external review providers could be managed by the national accreditation bodies in member states on a harmonised basis or supervised by a competent ESA.

26 See the ESMA Consultation Paper (ESMA31-62-532), 2017.

- **In a second phase, explore the creation of an EU Green Bond label confirming alignment with the European standards for green bonds and the future EU Sustainability Taxonomy.** Such an EU Green Bond label could help scale up investment volumes by providing assurance to investor groups and could be linked to potential future incentives. Such a label could be provided by EU-recognised market initiatives, or via a dedicated competent EU agency.

- **Publish additional European sustainable product standards for other asset classes.** This could start with an EU Social Bond Standard and EU Sustainability Guidelines based on the models provided in the supplementary document. These have been developed on the basis of the approaches developed for the EU GBS, linking it to the future EU Sustainability Taxonomy, and building on other market best practice, such as the Social Bond Principles and the Sustainability Bond Guidelines.

- **Conduct an impact study of the EU Green Bond market and design a R&D programme aiming to develop open-source methodologies, tools and technologies** (i) to develop metrics to monitor, evaluate and verify the environmental impact of green bonds in accordance with the EU Green Bond Standard, and reporting annually on how they contribute to scale up investments in green projects and activities; (ii) to aggregate information provided by issuers to enable EU institutions and member states to monitor alignment of financial flows with EU policy priorities, including the Paris Agreement; and (iii) introduce a measurement framework to track the contributions of green bonds to this objective.

6. ESTABLISH 'SUSTAINABLE INFRASTRUCTURE EUROPE'

Much progress has been made in mobilising capital for investment in Europe, in particular through the sizeable and far-sighted Juncker investment plan. While the plan has been very successful and effective, the implementation of dedicated infrastructure investment remains a concern in several member states. Key bottlenecks include a lack of infrastructure development capacity combined with difficulties both of structuring projects appropriately for financing by private investors, and of designing a sufficiently stable local regulatory environment that define pricing and usage policy over time.

To overcome these bottlenecks, which are particularly relevant in the new technological areas of sustainability investments (such as renewable energy and low-emissions transport), the next stage should be to build on current achievements by establishing 'Sustainable Infrastructure Europe'. This would be an overarching organisation designed to support the development of sustainable infrastructure projects across all member states.

The Commission's Investment Plan for Europe, known as the Juncker Plan, has succeeded in mobilising considerable capital for high-quality investment projects that are essential for long-term economic growth. As of November 2017, nearly 80% of the target of €315 billion of investment had been mobilised for investment projects across a wide range of member states and sectors, yet the infrastructure part constituted less than one fifth of the commitments to date.[27]

27 As of November 2017.

The Commission's provision of public funds for business projects, together with the more active role of the EIB and National Public Banks and Institutions (NPBIs) in supporting economic development, have been key to improving the investment environment — both at the European level and within individual member states. This can be seen in several initiatives established to provide technical assistance and financing to cities, regions and municipalities in a wide range of sectors (tourism, infrastructure, R&D, healthcare) such as JASPERS, JESSICA and ELENA. Collectively, these programmes have approved more than 580 projects for a total cost of €90 billion over the period 2007-2017.

To meet the EU's broader environmental and sustainability goals, the bottlenecks constraining investment in sustainable infrastructure must now be addressed. This is especially important to finance the transition towards a low-carbon, more environmentally friendly economic model, notably in the energy and transport sectors. Access to capital is not the most pressing issue, and many large-scale private funds stand ready to invest in viable infrastructure projects.

The key bottleneck is project development capacity. Sustainability infrastructure is a new development area and support is needed to transfer lessons from one member state to another, as well as to advise member states and local authorities on how best to develop projects in this space. To be effective, this support should be based on a clear and comprehensive strategy on how to mobilise financial resources at national level, including from private sources. There is currently a lack of project development capacity at regional and local level, and of a common approach to project contracting across member states. Moreover, in some member states, the regulatory environment in the area of renewable energy and related infrastructures is precarious, leading to negative effects on project cash flows and ultimately on investors.

As with any other infrastructure projects, sustainable infrastructure assets are complex to design, finance and build; they also require a high level of technical expertise and knowledge of modern technologies. These competencies are hard to develop, are unequally distributed across member states, and do not currently benefit from an effective European mechanism for transferring knowledge and best practice. This uneven distribution of capacity is creating infrastructure investment gaps, slowing down progress towards a low-carbon economy, and thereby leading to the risk that Europe falls short of its 2030 and 2050 climate and energy targets.[28] There is an urgent need for interventions at both the macro and project level to help to develop investment frameworks and to more rapidly build complex green infrastructure.

Against this background, the HLEG recommends that the Commission:

- **Establish 'Sustainable Infrastructure Europe'.** This would be an entity built on existing institutions and designed to accelerate the development of high-quality infrastructure projects that meet investor demands and deliver the EU's sustainable objectives, including its obligations under the Paris Agreement.

- **Sustainable Infrastructure Europe would focus on providing project development expertise on the ground across different parts of Europe.** It would be able to transfer lessons from new areas of infrastructure investment contributing to a more sustainable economic model, such as the transition towards sustainable energy and transport systems. In doing so, Sustainable Infrastructure Europe would support capacity-building at European, national and local level on how to develop and implement projects, how to contract most effectively with private sources of capital, and how to reduce uncertainty in the regulatory environment.

28 Agora Energiewende, 'Energy Transition in the Power Sector in Europe: State of Affairs in 2016'. See also European Environment Agency, 'Total Greenhouse Emission Trends and Projections', 2017.

- **Sustainable Infrastructure Europe could be delivered through a phased approach**, starting with an incubator and developing into a standalone organisation by 2020.

- **Sustainable infrastructure Europe would develop its new integrated institutional capacity around three functions:**

1. **Providing strategic advice on how to mobilise financial resources to deliver sustainable infrastructure projects.** Sustainable infrastructure Europe and National Public Banks and Institutions (NPBIs) would support member states in the design of clear national infrastructure development plans and associated sustainable infrastructure project pipelines. In combination, these would help to translate EU policy objectives into national capital-raising plans as part of National Energy and Climate Plans and deliver the 2030 climate and energy goals under the Energy Union. The pipelines should also include natural capital projects that contribute to solving environmental challenges through the adoption of clean, resource-efficient and circular technologies, while nature-based solutions should be made a priority where relevant. To provide this function, Sustainable Infrastructure Europe would harness and boost the expertise of the Structural Reform Support Service (SRSS), and provide tailor-made, on-demand technical support to member states.

2. **Supporting an upgrade in project development capacity at national and local level.** Sustainable Infrastructure Europe should primarily work on reducing the time between the conception and financing of infrastructure projects by assisting regions and cities to identify high-value, high-quality infrastructure projects, as well as making them financially viable by designing and adopting sound business models. It should also advance the use of standardised public-private partnership (PPP) contracts where possible. Such standardised contracts for PPPs could ensure more predictability in project deals – from the construction phase, through service delivery to termination of the contract – and lower transaction costs.[29]

   The above functions should be pursued in the context of an evolving institutional capacity to meet growing and more complex needs, and they should build on existing European investment and infrastructure initiatives, such as JASPERS, JESSICA and ELENA. To bring more infrastructure projects to market, Sustainable Infrastructure Europe should also leverage the role of the European Investment Advisory Hub (EIAH), the new Urban Investment Support Hub (URBIS) and the NPBs. A link could also be made to 'Global Urbis', in an innovative set of partnership with the Global Covenant of Mayors for Climate and Energy, the EIB and the European Bank for Reconstruction and Development to provide financial advisory services and direct financing to foster low-carbon, resilient investments in cities around the globe. In doing so, it would act as a knowledge-sharing mechanism for member states on best practice in infrastructure planning and development.

3. **Reducing uncertainty in member states' regulatory environment.** Unexpected regulatory changes can result in pricing/tariff changes or repudiation of concessions and agreements. This affects project cash flows and results in deadweight losses for investors. Building on the above two areas of work, Sustainable Infrastructure Europe should offer new dedicated risk-mitigation instruments that reduce political and regulatory risk. One example would be the proposed Renewable Energy Cost Reduction Facility (RES-CRF) – a voluntary, contractual mechanism that would reduce differences in the cost of capital for renewable energy projects across the EU.[30]

29 See, for example, the UK government's PFI 2 (Private Finance Initiative).

30 See, for example, reducing the cost of financing renewables in Europe by IMPULSE.

In cooperation with the Observatory on Sustainable Finance, Sustainable Infrastructure Europe could also play a key role in quantifying the EU's investment needs in strategic policy areas of relevance to sustainability, and helping member states to meet those needs. These include:

- **Climate and Energy:** Meeting the targets of the 'Clean Energy for All Europeans' package by 2030 requires an estimated €11.2 trillion of investment between 2021 and 2030, with an average investment gap of €170 billion per year. The nature of energy investments being small and disaggregated across Europe, Sustainable Infrastructure Europe would leverage multiple retail channels, facilitate aggregation and mitigate risk through new financial products.
- **Information and communications technology:** Around €65 billion per year is currently needed to meet the EU's Digital Agenda goals, including delivering a smart and decarbonised energy system and improving cybersecurity.
- **Water treatment and supply:** Investment needs are thought to be around €90 billion per year, while obsolete and inadequate infrastructure creates additional risks of financial losses.[31]
- **Circular economy:** Investment needs are estimated at €98 billion per year, comprising €23 billion for food, €28 billion for mobility systems and €46 billion for the built environment, according to the Ellen MacArthur Foundation.[32]
- **Waste:** Investment needs are to be further assessed, with current flows at around €12.5 billion per year for all waste management. These are expected to increase as newer member states catch up to achieve the 2025 and 2030 waste-related targets proposed by the Commission in its circular economy package.
- **Transport and logistics:** Investment needs are to be reassessed considering upcoming innovations in electric and connected vehicles. Estimates of annual investment needs (replacement of existing assets and construction of new ones) suggest that they should increase by nearly 50%, meaning additional investment flows of approximately €50 billion per year.[33]

Sustainable Infrastructure Europe could be delivered through a phased approach. In 2018, a Sustainable Infrastructure Europe incubator could be established following the model of the European Systemic Risk Board (ESRB). Co-chaired by the Commission and the EIB, the General Board would be made up of representatives of the key DGs with an infrastructure focus, including DG FISMA, DG ECFIN, DG ENV, DG ENER, DG MOVE, DG REGIO and the proposed EU Observatory on Sustainable Finance. A forum of NPBIs should be associated to this incubation phase. In parallel with this new incubator being established, a feasibility assessment and associated plans should be made to set up the new standalone organisation, 'Sustainable Infrastructure Europe', by 2020.

Overall, Sustainable Infrastructure Europe would have an estimated operational cost of ~€110 million per year. This is an uplift of €44 million per year compared with current spending under the post-2020 MFF. The HLEG believes that this could be secured by:

- Increasing SRSS funding by 50% under the next MFF from €40 million per year to €60 million per year to cover the cost of 180 staff plus consultancy teams working with member state governments and allowing for the establishment of a 30-strong team, including a secretariat, at Sustainable Infrastructure Europe.
- Doubling EIAH funding under the next MFF from €26 million per year to €50 million per year to build a core team of 50 infrastructure experts and 100 support staff.

31 See EIB, 'Restoring EU Competitiveness', 2016. Floods represent the largest source of GDP losses from natural disasters in Europe (€150 billion in 2002-2003) while droughts have caused €86 billion damages over the last 30 years.

32 See the Ellen MacArthur Foundation report 'Money makes the world go round', 2016.

33 See EIB, 'Infrastructure Investment in Europe and International Competitiveness', 2016.

The Sustainable Infrastructure Europe headquarters should be located in Brussels, and the organisation should be responsible for accelerating infrastructure investment in Europe, with a particular focus on the 'Central and Eastern Europe' macro area – since that area accounts for the majority of the infrastructure investment gap. Beyond that, to strengthen cooperation with the EIB, the EIAH and URBIS, additional macro-regional offices could be established within the EIB offices already present in many member states. Some of these offices could include:

- The Southern Europe offices (Italy, Spain, Portugal, Greece, Malta, Cyprus) in Rome/ Madrid;
- The Eastern Europe offices (Poland, Hungary, Estonia, Finland, Slovakia, Slovenia, Romania, Lithuania, Latvia, Bulgaria, Croatia, Czech Republic) in Warsaw and Bucharest.

A regional network for Sustainable Infrastructure Europe would also allow the new institution to work closely with NPBs grouped by macro areas, thus encouraging better communication and greater effectiveness in sharing best practices and expertise between NPBs from countries with similar structural problems and facing analogous challenges.

7. GOVERNANCE AND LEADERSHIP

Corporate culture in the financial sector needs to be better aligned with a long-term outlook. Norms and values need to deliver on the promise of a sustainable financial system that benefits society.

Corporate culture starts at the top, with the board. As the OECD Corporate Governance principles state: 'The board is not only accountable to the company and its shareholders but also has a duty to act in their best interests. Boards are expected to take due regard of, and deal fairly with, other stakeholder interests including those of employees, creditors, customers, suppliers and local communities. Observance of environmental and social standards is relevant in this context.'[34]

As such, the composition of executive and supervisory governing bodies is the key lever for aligning businesses more closely with long-term perspectives. Business success hinges on executive and non-executive supervisory directors understanding sustainability drivers and being able to translate the risks and opportunities into their business models.

Financial sector supervisory authorities should thus assess whether members of governing bodies are able to anticipate longer-term risks and sustainability challenges and whether they take account of clients' sustainability preferences as part of the 'fit and proper' regimes and supervisory manual.[35]

The exercise of stewardship responsibilities is a key expression of investor duties to integrate material ESG risks into their investment process. The HLEG recommends adoption of minimum stewardship standards for investment mandates covering all asset classes and applicable to all institutions in the investment chain that act on behalf of others.

34 See the G20/OECD 'Corporate Governance Principles', 2015.

35 For example, the Dutch Central Bank recognises climate risks as a significant long-term risk and aims to develop a stress test on climate. Likewise, questions on sustainable investing are part of the interview process for board members of financial institutions, though this only applies only to a subset of candidates who are invited for an interview. While sustainable investing is part of the interview, guidance is not included in the Policy Rules or Dutch Law.

For investor stewardship to be effective, it is essential that the consideration of sustainability risks and opportunities becomes an integral part of the way in which the investee companies are governed. Hence, the HLEG proposes that a clear commitment to sustainability is embedded in the duties of company directors and into the governance rules related to company management, supervision and incentive structures.

The removal of technical obstacles in exercising voting rights is essential for effective stewardship. The HLEG welcomes the establishment of the recently appointed expert group on technical aspects of corporate governance process.

Against this background, the HLEG recommends that the Commission:

- **Update the 'fit and proper' tests to include an assessment of the individual and collective ability of the members of governing bodies in financial institutions to address sustainability risks, to understand the broader stakeholder context and to take account of clients' sustainability preferences.**

Supervisory manuals should be updated to include sustainability as a risk against which the skills and competences of the members of the governing bodies of companies should be assessed. In addition, internal governance requirements in sector-specific regulations should be updated to reflect the need for competencies related to: identifying and addressing long-term risks including sustainability risks; understanding the broader stakeholder context; and understanding and responding to clients' sustainability preferences.

Market segment	Vehicle/ actor	Suggested action
Credit institutions	EBA guidance	• Clarify that 'risk strategy' under article 88 of the CRD includes long-term risks including sustainability risks.
	ECB guidance on 'fit and 'proper' tests	• Update to specify understanding of long-term risks including sustainability risks and opportunities under assessment criteria (p10, 4.1.).
Investment firms and credit institutions	Joint EBA and ESMA guidelines on the assessment of suitability of the management body	• Update to include, under theoretical and practical experience (p33), a requirement to understand long-term risk and value drivers, stakeholder norms and client preferences. • Under 'skills' in Annex II, add: 'sense of responsibility, to strengthen the concept of understanding and incorporating stakeholder sustainability preferences.
Insurance undertakings	EIOPA guidance	• Update article 44 to state that 'the risk-management system shall cover at least the following areas: (g) long-term value drivers and risks across and within portfolios including those related to sustainability factors.'
	EIOPA guidance on 'fit and proper'	• Chapter 11, p6, Article 1.32 should be updated to include '(f) relevant long-term risks and opportunities linked to sustainability and stakeholders in what the members of the administrative, management or supervisory body collectively possess appropriate qualification, experience and knowledge about'.

- **Extend the Stewardship Principles for institutional investors, for example, by amending the Shareholder Rights Directive or a similar instrument.**

  This extension should reflect the following stewardship principles:

  - **Internal governance for effective stewardship.** Investors should have governance practices consistent with national requirements and the ICGN Global Stewardship Principles, ensuring in particular the alignment of their own incentives with long-term objectives and having sufficient expertise to address long-term sustainability risks. Investors should report on their stewardship activities to clients or beneficiaries.
  - **Developing and implementing stewardship policies.** Investors should develop stewardship policies that outline their responsible investment practices, including with respect to the sustainability aspects of investment decisions. Asset owners should incorporate their expectations about stewardship in the awarding of investment management mandates.
  - **Monitoring and assessing investment portfolios.** Investors should continuously analyse portfolio holdings with respect to sustainability risks, in particular concerning investments where they have significant influence.
  - **Engaging companies and promoting investor collaboration.** Investors should engage with investee companies with the aim of preserving or enhancing long-term value on behalf of clients or beneficiaries. They should also avoid extracting short-term profits at the expense of long-term value creation. Engagement activities should include equity as well as debt holdings.
  - **Exercising voting rights.** Investors with voting rights should seek to vote shares held and make informed and independent voting decisions, applying due care, diligence and judgement across their entire portfolio in the interests of their clients or beneficiaries. As is appropriate and feasible (for example, by refusing to discharge board members), investors should in their voting process address concerns over investee companies' sustainability performance.
  - **Promoting long-term value creation and integration of sustainability factors.** Investors should promote the long-term performance and sustainable success of companies. They should also integrate material ESG factors into stewardship activities. This requires that the governing bodies of investees have competences related to sustainability and that their incentive structures are aligned with the long term, including sustainability objectives. Investors should demand disclosure of sustainability issues at investee companies in relation to their business strategy, operations and risk.

- **Strengthen director duties related to sustainability.**

  Rather than designing a fully fledged European corporate governance code, the Commission could explore ways to enhance director duties and corporate governance by explicitly incorporating sustainability, along the following:

  - **To act in a way the director considers in good faith is most likely to promote the success of the company for the benefit of its owners and other stakeholders.** This includes:

    - The likely consequences of any decision in the longer term (beyond three to five years).
    - The interests of the company's employees.
    - The need to foster the company's business relationships with suppliers, customers and others.
    - The impact of the company's operations on the community and the environment (externalities), safeguarding the world's cultural and natural heritage.
    - The integrity of the most significant business partners in the company's supply chain (for example, no corruption, no child labour, observing human rights including those of indigenous peoples).

- **To exercise reasonable care, skill and diligence.** This requires a director to be diligent, careful and well informed about the company's affairs, including the direct and indirect impact of the company's business model, production and sales processes on stakeholders and the environment. To fulfil this duty, the director should be required to participate in adequate education and training measures.
- **Specific duties of non-executive directors and supervisory boards.**
  - Require the company management to develop a climate strategy, aligned with climate goals, and to describe the company's approach to the SDGs. Ensure that remuneration policies and individual executive employment contracts are consistent with the long term, including sustainability goals.
  - Ensure that in the board nomination process, competence in relevant sustainability matters is systematically considered.
  - Demand regular reporting to the board and relevant stakeholders about the sustainability strategy, its evolution and the development of the business against specific, measurable sustainability targets.

8. INCLUDE SUSTAINABILITY IN THE SUPERVISORY MANDATE OF THE ESAS AND EXTEND THE HORIZON OF RISK MONITORING

In September 2017, the Commission announced that the upcoming action plan on sustainable finance (Q1 2018) will include provisions to strengthen the regulatory and supervisory framework in order to mobilise and orient private capital flows towards sustainable investments while ensuring financial stability. As a first step, the proposals to review the legislation of the ESAs specifically require that they take account of ESG factors, and possible related risk, within their mandate.[36]

This follows the recommendation in the HLEG's interim report, where it was suggested to 'position the European Supervisory Agencies (ESAs) on sustainability', clarifying and extending their role. The recommendation is recast and further developed below. It focuses on three dimensions: clarifying how the ESAs are expected to interpret the inclusion of sustainability in their mandate; updating the single rulebook accordingly; and extending the horizon of risk monitoring to include climate-related risks and other long-term risks.

In addition to this recommendation, the ESAs are also considered in a wide range of the HLEG recommendations in this report related to governance, banking, insurance, asset management, benchmarks and investment banks.

36 See the European Commission 'Creating a stronger and more integrated European financial supervision for the Capital Markets Union', 2017.

Clarifying the mandate of the ESAs

Content-wise, the HLEG recommends distinguishing three objectives related to 'sustainability', each related to different aspects of the ESAs' mandates and requiring different types of actions (see table below). The HLEG recommends that the ESAs refer specifically to these objectives when integrating sustainability into level 2 and 3 regulation and guidance, rather than referring to broader concepts such as 'integration of ESG factors' which, at that level of regulation, can create ambiguity about the objective and whether issues that are not financially material should be considered.

Roles of regulated entities	Link with the mandates of the ESAs	New areas of activities and focus for the ESAs
Duty to extend the time horizon of risk analysis in line with the horizon of beneficiaries to capture long-term, non-linear, non-cyclical risks (including climate-related risks).	Financial stability and orderly functioning of financial markets; foster supervisory convergence.	• Extend the focus beyond the usual two- to five-year timeframe when supervising risk management systems. • Develop tools to gauge long-term risks and avoid systemic mispricing by financial markets.
Duty to design investment strategies consistent with beneficiaries' objectives, including non-financial preferences.	Consumer protection.	• Supervise how regulated entities consult their beneficiaries and reflect non-financial preferences into investment strategies, • Support research on non-financial preferences of beneficiaries.
Mobilise and orient private capital flows towards sustainable investments.	Facilitating the exchange of information between the competent authorities.	• Leverage the ESAs' access to data to provide transparency to non-financial policy-makers on policy impacts and better manage unintended consequences of financial regulation.
	Possible extension: Without prejudice to the objective of financial stability and orderly functioning of financial markets, the ESAs shall implement the regulatory and supervisory framework to support the general economic policies in the Union, contributing to the achievement of the objectives of the Union.	• Examine whether elements of the regulatory and supervisory framework hinder long-term investment and lending, while not being critical for safeguarding financial stability.

Extend the horizon of risk monitoring, starting with a focus on climate-related risks

The time-horizon mismatch can lead to systematic long-term risk mispricing and reduce the diversity of investments. Research suggests that the mismatch of investment horizons between issuers of securities (mostly long-term), intermediaries (mostly short-term) and beneficiaries (mostly long-term) leads to a short-term focus on risk metrics and incentives, which may amplify the mispricing of actual risk and opportunities.[37] It also may lead to a lower degree of diversity in investments than is ideal from an economic point of view, due to the heavy focus on standard products, large funds and established market benchmarks.

The processes in place to supervise and identify system-level risks are focused on short-term timeframes (one to three years), and heavily rely on historical data. As pointed out by Mark Carney, governor of the Bank of England and chairman of the FSB, for climate-related risks, these processes are likely systematically to miss long-term, non-linear or non-cyclical risks.

Given the risks associated, this mispricing represents a hazard for the orderly functioning of financial markets and for consumer protection. If one of those risks materialises faster than expected, the impact could affect both financial institutions and citizens. The ESAs should thus ideally create processes to identify those risks, assess their magnitude and review risk management systems across the investment and lending chain to evaluate the risk of systematic mispricing.

Against this background, the HLEG recommends that the ESAs:

- **Build expertise over time on tools for scenario analysis, starting with climate-related risks.** Building on the recommendations of the ESRB Advisory Scientific Committee, the pilot conducted by some national supervisory authorities and the recommendations of the TCFD, the HLEG recommends that the relevant ESAs gradually build expertise on climate scenario analysis and other non-cyclical, non-linear risks that may get mispriced by financial markets (bubbles, stranded assets, etc.), supported if needed by a reasonable extra budget.[38] The output of this analysis could facilitate the discussion on risk differentials between 'green' and 'brown' finance. Over time, the scenarios applied could integrate other disruptive factors related to new trends, such as automation and artificial intelligence.

- **Document and monitor the mismatch of time horizons.** The HLEG recommends that the ESAs investigate the mismatch of time horizons and narrowing of investment spectrum, as this has implications not only for the financing of the economy but also for the degree of uniformity, pro-cyclicality and, ultimately, stability of the financial system. The ESAs should also develop an understanding of the problem of short-termism and seek ways to attenuate its impact on the financial sector.

- **Ensure consistent implementation of the single rulebook.** The HLEG recommends that the ESAs map the changes resulting from the Commission's action plan on sustainable finance and ensure consistent implementation of the single rulebook. The HLEG also recommends that the ESAs explicitly require sustainability-related skills in stakeholder groups.

37 Examples of research produced on this topic include the work of John Kay (2012), the WEF (2012), FCLT Global (2016-17), and the Tragedy of the Horizon programme (2016-17). The recommendation involves building on external research and developing internal capacity by ESAs to leverage the access to regulated entities, as well as map policy and supervisory implications.

38 Climate scenario analysis can include two approaches: an 'exposure analysis', focusing on exposure of financial institutions to 'high-carbon sectors' and sectors with specific risks (for example, agriculture); and a 'scenario analysis' relying on forward-looking asset level data, possibly including also on geo-located physical assets.

Spain: Car charging station for self-sufficient and first free photovoltaic panels in Europe.

IV. Other Cross-Cutting Recommendations

1. SHORT-TERMISM, SUSTAINABILITY AND THE 'TRAGEDY OF THE HORIZON'

In his famous 'tragedy of the horizon' speech, Bank of England governor Mark Carney brought the financial world's attention to the issue of time-horizon mismatch, most clearly illustrated by climate-related financial risk. Noting that the impact of climate change will be felt far beyond the horizon of any individual or institution in the financial system, he cautioned that there was a risk that the issue would be continually disregarded, with potentially catastrophic consequences.[39]

This tragedy of the horizon goes beyond climate change and applies to all areas of sustainable development. Sustainability is axiomatically linked to the long term, as the associated actions and investments – in economic, social and environmental terms – require action with a long-term orientation. Investment in education, housing, infrastructure, renewable energy and climate change mitigation all require a long-term horizon, often over several years if not decades.

Sustainability and the need to tackle short-termism

Sustainability cannot develop in a context where investment is dominated by short-term considerations. This is because delivering sustainability in economic, social and environmental dimensions requires large-scale investments in physical assets that are amortised not over a few months but over several years. This is true for virtually all corporate investment that underlies job creation, education and innovation, while investments in the energy, utilities, housing and transport sectors that are at the core of the climate transition are typically amortised over decades. Tackling the tragedy of the horizon means putting increased weight on economic, social and environmental outcomes and aligning the horizon of financial investors with those of investors in physical capital.

Short-termism in finance is generally described as a tendency to place too much weight on short-run profitability at the expense of the long run. The Kay Review, commissioned by the UK government, noted that: 'Short-termism in business may be characterised as a tendency to under-investment, whether in physical assets or in intangibles such as product development, employee skills and reputation with customers, and as hyperactive behaviour by executives whose corporate strategy focuses on restructuring, financial re-engineering or mergers and acquisitions at the expense of developing the fundamental operational capabilities of the business.'[40] The key question is how finance contributes to such short-termism and influences the behaviour of executives to focus on short-term financial optimisation.

Sustainability requires an ex ante long-term orientation and integration of ESG issues at the time of investment. Ex ante long-term orientation means that at the time an asset is purchased, the investor in principle has the intention of holding it long enough for it to yield real, economic returns. This does not mean that the investor holds all assets indefinitely.

39 See M. Carney 'Breaking the Tragedy of the Horizon – Climate Change and Financial Stability', speech at Lloyd's of London, 29 September 2015.

40 See 'The Kay Review of UK Equity Markets and Long-Term Decision Making', July 2012.

After all, disinvestment is part of the investment process in case those expectations do not materialise or the company does not deliver on its project or strategy. Exchange of assets is also part of the necessary disciplining force exercised by investors. But for long-term orientation to yield sustainable results, it is necessary for investors to integrate ESG considerations fully into their investment decisions.

Short-termism in finance: what it is and what it is not

A widely noted study by the Bank of England's chief economist Andrew Haldane, entitled 'Patience and Finance', attributes short-termism to the co-existence of three types of investors in financial markets: a patient long-term investor, who invests according to where prices are relative to their long-term fundamentals; an impatient short-term speculator, who follows the momentum of the herd, buying when prices are rising and selling when they fall; and an untested investor, who can mimic either the long-term investor or the speculator, and whose performance is assessed and benchmarked against peers at frequent intervals, leading end-investors to withdraw or maintain funds accordingly.[41]

Haldane argues that information availability in real time, the shortening of performance assessment intervals across financial investors and the rising frequency of corporate reporting have all contributed to shifting finance towards short-termism. This assessment echoes many aspects highlighted in this report's sections on benchmarks, accounting, asset managers, investor duties and governance.

Recent trends suggest that short-termism in the financial sector may have got worse, with the average holding period of market-traded assets becoming shorter, for example. The average holding of equities in the EU has fallen from about eight years two decades ago to just eight months today. It is reported that on average, equity managers turn over their entire portfolio in 20 months.[42]

The fall in the average holding period reflects at least three factors. First, there is the role of high-frequency trading, which accounts for a significant part of trading volumes on European exchanges and a substantial part on US exchanges. The implications of such trading for sustainability and what policy actions might be taken in response are an important matter for future research. Second, there is a growing group of financial institutions with a short-term horizon such as some hedge funds, which focus on short-term value extraction. Third, there is the fact that asset managers more broadly are continuously assessed against peers and market benchmarks. Such assessment implies that many portfolio managers find it hard to take a longer-term view and to tolerate periods of underperformance even by firms in which they fundamentally believe.

Short-termism should not be confused with short-term finance. Short-term finance – that is, financial assets, liabilities and other instruments with a short time horizon – all have their place and justification in a broad-based and effective sustainable financial system. This includes liquidity and treasury management, trade credit, short-term finance (such as treasury bills), etc. In the same way, not all long-term investments are sustainable.

A key issue concerns the role of short-term trading in long-term instruments such as equity or bonds when it is not undertaken by long-term investors but rather by institutions seeking short-term value extraction from these instruments. It is well-known that equities are a long-term instrument for which the risk-return profile materialises over years. This, in fact, is one of the reasons why this instrument is endowed with a vote on the corporate strategy and corporate management. Of course, there can be trading in long-term instruments, as long-term investors adjust their holdings and they do buy and sell at regular intervals. The main concern relates to investors who either seek short-term value extraction of these instruments

41 See Andrew Haldane's speech, Executive Director, Financial Stability, Bank of England, at the Oxford China Business Forum, Beijing, 9 September 2010.

42 See Mercer/Generation/2Dii report 'How Long-only Equity Managers Turn their Portfolio Every 1.7 year' (2017) and European Commission, Shareholder Rights Directive Q&A, 14 March 2017.

or those who, for reasons of market pressure, continuous real-time assessment of relative performance or benchmarking, are not treating this instrument with the time horizon it requires.[43] If this value extraction puts pressure, via equity prices or through other channels, on companies to maximise short-term profits, then it will induce underinvestment and other aspects of short-termism in the real economy.[44]

More fundamentally, a significant aspect of short-termism in financial markets — and indeed the real economy— has its roots in the frequent separation of the behaviour of some financial intermediaries from the preferences of the ultimate beneficiaries. The best interests of the ultimate beneficiary – savings for pension purposes, for example – may be best served by maximising returns over a lengthy period. But the relevant time horizon for the individual influencing or making the investment decisions can be much more short-term focused. Job tenure and financial rewards for analysts, asset/money managers and traders can be heavily dependent on short-term returns. And some shareholders and managers of companies, especially if they are rewarded by shares/share options, might become influenced by short-term strength in the share price rather than its sustainability over many years.

While the problem of short-termism is best illustrated with equity ownership, it should be noted that similar considerations hold for other instruments, including debt-related ones. Myopia is a significant challenge faced by companies reliant for their success on intangible assets such as human capital and R&D capabilities, the benefits of which are only visible in the long run and the effect of which is to depress earnings in the short term.

There is much evidence of the strong short-term pressures that corporate management experiences. A 2005 survey shows that 78% of executives feel pressure to sacrifice long-term value to meet earnings targets.[45] A more recent McKinsey and CPPIB survey of over 1,000 board members and executives finds that 86% believe that if they had a longer time horizon to make business decisions, this would positively affect corporate performance in a number of ways, including strengthening financial returns and increasing innovation.[46]

The HLEG believes that sustainability and long-term orientation require a number of supporting strategies:

- A sufficient number of investors, in their relations with investee companies, which support a focus on long-term value creation and long-term research.
- A sufficient number of investors that identify and apply information on the long-term strategies of investee and potential investee companies in investment decision-making.
- The use of performance benchmarks by asset managers in which there is not an excessive focus on short-term returns. Instead, the portfolio managers' investment philosophy and associated performance should be considered over longer time horizons.
- **Companies lengthening reporting intervals to the extent possible and focusing more strongly on issues and metrics that are relevant to the long-term success of the business.[47]**

The HLEG sees short-termism as a clear challenge and potential obstacle for the establishment of a sustainable financial system and has already highlighted the issue in its interim report. It strongly believes that these issues warrant further examination and policy discussion. As mentioned above, the focus should not be to impose constraints on the portfolio-management of long-term investors but on addressing the practices of financial institutions whose business model is centred on short-term value extraction.

43 A 2017 study of 3,500 institutional active equity funds shows that 90% of portfolios have an average holding period of under three years – see Mercer/Generation/2Dii, 2017.

44 A 2016 study of equity valuation and credit risk models shows that financial analysis only focus on risk factors likely to materialise in the next three to five years, and mostly in the next 12 months. Analysis based on the timeframe explicit forecast periods. See Generation/2Dii report 'All Swans are Black in the Dark', 2017.

45 See A. Edmans, 'Blockholder Trading, Market Efficiency, and Managerial Myopia', The Journal of Finance, December 2009.

46 See McKinsey article 'Focusing Capital on the Long-term', 2013.

47 See PRI, UN Global Compact report 'Coping, Shifting, Changing 2.0. Corporate and investor strategies for managing market short-termism', October 2017.

Many recommendations elsewhere in this report address issues caused by short-termism. For example, the sections on governance, investor duties and retail investors all contain recommendations that would help address issues around the different time horizons of the ultimate beneficiaries and their financial intermediaries. Dealing with these issues and the short-term value extraction from long-term instruments might also require the use of tax instruments, but these have been excluded from the scope of the HLEG.

It is also possible that existing regulations encourage short-term behaviours. An example is the mark-to-market accounting rules for assets held in long-term portfolios. Another pertains to some aspects of prudential regulation which can be pro-cyclical, thereby making the pursuit of long-term objectives more difficult. Overall, it is likely that there is considerable bias in the financial and economic system against the optimal level of long-term planning and investment. This warrants policies that would push in the other direction.

Given these considerations, the HLEG recommends that the Commission and the ESAs pursue action in the following areas:

- **Assessment of short-term pressures**
  Explore the issue of short-termism more closely, with particular attention to:[48]
  - How the pressure for short-term returns in various parts of financial institutions manifests itself in corporate management and decision-making.
  - The extent to which executive remuneration structures in financial institutions closely engaged in or exposed to active trading can contribute to short-termism.
  - How the use and design of performance benchmarks influences investment time horizons (see the section on benchmarks in this report).
  - The impact on the availability of long-term sell-side analysis as a result of MiFID II (see the section on investment banking in this report).
  - Establishing globally consistent data on portfolio turnover by asset managers with relevant granularity
  - Conducting a survey comparing investment behaviour, focusing on time horizons and classifying investors accordingly.

- **Assessment of regulation and incentives, focusing not on imposing constraints on the portfolio management of long-term investors but on the practices of financial institutions whose business model is centred on short-term value extraction.**
  - Identify where a short-term focus might have been embedded by constructing an overview of existing regulations that stimulate short-termism, paying particular attention to how the embedded short-termism materialises (for example, company reporting standards, real-time risk management), the economic costs this generates and where these could be attenuated.
  - Assess whether new legislative proposals and reviews of laws might encourage short-termism, including when reviewing the AIFMD.

48 This could be supported by a research programme financed from EU programmes such as Horizon 2020 or Life.

2. EMPOWER CITIZENS TO ENGAGE AND CONNECT WITH SUSTAINABLE FINANCE ISSUES

A sustainable financial system should be transparent and accountable to EU citizens. Promoting financial literacy and improving access to information on the sustainability performance of companies are essential elements of that effort.

The HLEG's vision of a sustainable future is one in which citizens are able to engage fully with the financial system as a whole and ensure that their money is being invested responsibly and sustainably. EU citizens will be aware of what corporate activity they are funding and how these companies perform on sustainability issues. They will have the means and channels to ensure their influence over the companies they own is used positively. They will also understand how to hold their fund manager to account and ensure they are kept informed of how sustainably and responsibly their money is being invested and managed.

Today's barriers in financial education and transparency limit the ability to deliver this vision. The Commission has been paying particular attention to financial literacy. Yet further efforts are needed to empower citizens to choose the financial products and services that best suit their needs. This, in fact, is necessary for sustainable finance literacy efforts to translate into increased demand for sustainable financial products.

Restoring trust will also require a firm commitment by the private sector to work with governments and civil society to deliver the solutions and investments needed at scale for sustainable development. Many of the world's leading companies are already aligning their business models with the SDGs and the transition to a low-carbon economy. For today's EU citizens, however, information and analysis of corporate sustainability performance remains hard to access or compare, making it difficult to reward leaders or hold laggards to account. European institutions must do more to deliver their mandates in this area. The recommendations below are complemented by the more specific ones on the retail strategy and benchmarks, the latter being an important instrument for a general audience.

Against this background, the HLEG recommends that the Commission:

- **Promote greater financial literacy on sustainable finance.**
    - **Support member states in developing national strategies for financial education with a strong sustainable finance component, and the incorporation of financial literacy components into school curricula.** This could be done via capacity-building programmes for national education officials on financial literacy and how to structure curricula around sustainable finance. In terms of supporting already established practices in member states, the Commission could also work with the European Sustainable Investment Fora (SIFs) members of Eurosif, which since 2005 have been organising 'SRI Weeks' under the patronage of national ministries and the support of public and private stakeholders, as well as other organisations. The goal of such collaboration should be to promote and develop sustainable investment, while educating both the general public and financial experts on sustainable finance and ESG integration.

- **Increase social awareness** by organising a European Day of Financial Education and supporting educational efforts on sustainable finance. These should be integrated into the next EU Multiannual Financial Framework (MFF) in 2018, including in the successor to Horizon 2020 and LIFE budgets. The EU should also engage the OECD to ensure the next (2021) Programme for International Students Assessment (PISA) financial literacy exercise – and its next international publication, scheduled for early 2023 – includes assessments of literacy on sustainable finance issues.

- **Promote free and easily accessible information on sustainable finance.**

  - **Support the creation of a set of publicly available, free corporate sustainability benchmarks, ranking companies on their sustainability performance and contribution to achieving the SDGs, and support the well-established Eurosif market research on the development of the responsible investment industry in Europe.** The Commission should endorse and develop the biennial Sustainable and Responsible Investment practices (SRI) market study produced by Eurosif and which today represents a key source of knowledge on sustainable and responsible investment within the EU. Here, another important initiative is the World Benchmarking Alliance – an institution envisioned to develop, fund, house and safeguard SDG-related benchmarks and league tables. These league tables will provide financial institutions, companies, governments, individual investors and civil society with critical information that they can use to allocate capital, increase transparency, track and compare corporate sustainability performance and ultimately catalyse action and accelerate delivery of the SDGs and the Paris Agreement. The Commission should join UN organisations and national governments in endorsing, giving expertise and helping fund the World Benchmarking Alliance (WBA) as an independent organisation building free public rankings.

- **Facilitate citizen engagement on sustainable finance issues.**

  - **Explore the role of peer-to-peer lending and investments for the promotion of social investments.** The interest of retail clients in sustainable and responsible investment products is registering significant growth and it is of paramount importance to find ways of further supporting this growth. The EU internal Task Force on Financial Technology could produce recommendations on how emerging financial technologies might be used to facilitate citizen engagement with and investment in sustainable finance.

3. ESTABLISH AN EU OBSERVATORY ON SUSTAINABLE FINANCE TO SUPPORT EVIDENCE-BASED POLICY-MAKING

At a strategic level, it will be important to demonstrate that the sustainable finance reforms being proposed by the HLEG are helping to accelerate the shift toward a more sustainable financial system and economy, as well as to understand where more attention is needed. To achieve this, improved tracking and reporting of the EU's sustainable investment needs and the associated capital formation to meet those needs is urgently needed. The HLEG recommends the establishment of an EU Observatory on Sustainable Finance to provide this information.

Official information on the ability and effectiveness of the EU's financial system to deliver sustainability objectives is currently incomplete and highly fragmented. This makes efforts to close investment gaps less precise and effective than they could be. It also hinders basic assessments of whether the financial system and the broader economy are aligned with the EU's agreed sustainability objectives and climate agenda, notably its obligations under the Paris Agreement of 'making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development'.

Improved tracking of the EU's sustainable investment needs and capital formation to meet those needs is thus urgently required. As noted in the HLEG's interim report, creating an EU Observatory on Sustainable Finance would help to track sustainable investment from public and private sources and inform evidence-based policy-making on sustainable finance. Given the urgency of addressing climate change, the initial focus of the Observatory should be on tracking investment and capital formation towards the EU's 2030 climate and energy targets and its commitments under the Paris Agreement. The focus could later be extended to include other sustainable development priorities and the tracking of sustainable and responsible investing trends in Europe, thus supporting other existing institutions working to assess how private flows actually contribute to sustainability.[49]

The EU Observatory on Sustainable Finance would not need to collect data from scratch. It could initially support and draw on a range of existing yet fragmented information sources and processes on a collaborative basis, including: relevant reporting and data streams under EU and international obligations such as the UNFCCC; climate finance tracking processes already undertaken by some member states (and recognised by the European Environment Agency as key to better tracking of financial flows); databases in development funded by Horizon 2020 and LIFE; and procured data.[50]

The significant public value created by the EU Observatory will offset the costs of collecting and making the data publicly available in two important ways. First, the Observatory will 'connect the dots' between multiple aggregated and disaggregated public and private data sources, and publish it in one public repository. This, in turn, will generate system-wide cost savings for the public and private sector users of such data. It will also create a level-playing field in terms of access to data across all member states. Second, the governance of the Observatory will confer on the data an official status that enables member state governments and EU institutions to use it to inform public policy-making in relation to delivering climate change and, in due course, wider sustainability goals.

49 This function is currently undertaken by Eurosif, which publishes trends in SRI in Europe.

50 The EU reporting obligations under the UN Framework Convention on Climate Change (UNFCCC) and the monitoring mechanism — Technical report No 46. See I4CE report, 'Landscape of Climate Finance in France', 2016 and see the Climate Policy Initiative 'Aggregate Global Climate Investment Tracking', 2017. See the SEI Metrics projects 'Developing Sustainable Energy Investment (SEI) Metrics, Benchmarks, and Assessment Tools for the Financial Sector'.

The EU Observatory should be established in phases and the following is suggested as an example of how this could be achieved. In 2018, an initial Secretariat should be set up by the European Environment Agency in close cooperation with the ESAs, led by ESMA. Co-chaired by the European Environment Agency and ESMA in the first instance, the Secretariat would undertake an initial mapping, outreach and convening to establish a multi-year work programme for a fully functioning Observatory with the aim of being operational from 2019-20 onwards. The work programme would be closely coordinated with the Commission and its work programmes. To create efficiency and rigour in this process, the governance of the EU Observatory should include a formal advisory role for existing experts such as Eurosif, CPI, I4CE and others.

The post-2020 MMF should include resources for securing the establishment and running of the EU Observatory. To fulfil its functions, with an initial focus just on climate change-related investment, the EU Observatory would need a start-up team of 12 FTE staff at a cost of €2 million/year with appropriate consultancy support, resulting in an annual budget requirement €4 million/year. The Secretariat would be staffed as follows:

- Head of Observatory (1FTE) to direct the work programme and manage EU institutional relationships.
- Secretary and resource officer (1FTE) to provide secretarial and procurement support.
- IT/database expert (2FTE) to provide oversight of databases and reporting.
- Policy officers finance tracking (8FTE) to support member states to develop and deploy methods and tools to track sustainable investment needs and capital formation to meet those needs and report results at a member state and aggregated EU-wide level.
- Additional staff (4FTE Policy officers suggested) could be hired at further cost to assist with the development of green and sustainable taxonomies and labels and monitoring of private investment.

Against this background, the HLEG recommends that the Commission:

- **Establish an EU Observatory on Sustainable Finance to support member state and EU level public policy development and evaluation, as well as public finance interventions in sustainable finance.** By centralising and coordinating data where information exists, and filling data gaps where it does not, the Observatory would fulfil a number of core functions for member states, including:

    - **Supporting decision-making by both national governments and European institutions.** This could be done by providing both disaggregated national data and an aggregated EU-wide view on the levels of sustainable/green — and, where appropriate, non-sustainable/brown— investments, as well as how they compare with the investments needed to meet sustainability policy goals.
    - **Supporting member states in their efforts to develop and employ specific methods and tools that can track investment needs and match policy plans with supply of capital.** This will be key to turning National Energy and Climate Plans into national capital-raising plans that would fund, for example, national long-term buildings renovation strategies to meet 2030 energy efficiency commitments. It would also complement the technical support provided to governments by the SRSS team located in Sustainable Infrastructure Europe.

- **Reporting regularly on progress towards meeting sustainable infrastructure and other capital formation needs across the EU.** This includes trends in sustainable investments, focusing on risks of under-investment in particular sectors, and the impact of public policy and finance interventions to enhance delivery of sustainable infrastructure.
- **The Observatory could also support the development and monitoring of green and sustainable taxonomies and labels, as well as track the expansion of sustainable and responsible private investment in Europe.**

4. BENCHMARKS

Indices and benchmarks in bond and equity markets are used to gauge the performance of markets and portfolios, and as a reference structure for passive investing. The most high-profile indices, sometimes referred to as market benchmarks, are usually focused on a small number of the largest companies (by market valuation in a particular market). Indices and benchmarks have an indirect but important impact on the orientation of capital, but are not necessarily aligned with sustainability objectives. Greater transparency and guidance on benchmarks is thus needed to ensure investors use and select benchmarks in a manner that is consistent with long-term investment strategies, that does not impede on sustainability and that helps to drive allocation of capital towards green and sustainable investments.

Indices and benchmarks are cornerstones of global capital markets. Benchmarks are usually constructed using weighted averages of the stock (or bond) market value and price performance of a defined number or group of securities. A few benchmarks have become widely used, general reference points to assess market movements within the financial system.

Many investors rely on indices and benchmarks for the creation of investment products, for measuring the performance of markets or investment funds, and for guiding asset allocation. For example, passive funds directly replicate or 'track' an index or set of indices. Those tracking the key market benchmarks are typically very large. As for active funds, while they are normally not limited by benchmarks, their performance is generally measured against them both internally by asset managers and externally by clients and supervisors — often to evaluate whether additional fees for active management are justified.

While high-profile, large-cap domestic equity indices (such as the DAX30, the CAC40 or the FTSE 100) are not representative of an entire country's economic situation, many are nevertheless perceived as such. These indices only include a small number of companies, many of which are multinationals and are not representative of their respective national economies. Yet the FTSE100 in the UK, the CAC 40 in France and the DAX30 in Germany are often the 'barometers' to assess stock market developments. These indices, which are regarded by some as 'market benchmarks', attract a lot of media attention and are the subject of daily news, which gives them an overwhelming importance among retail investors and sometimes within financial institutions. This is potentially misleading for retail investors and could reduce the diversity of investments they make. Institutional investors, by contrast, tend to use much broader indices, such as the MSCI World or FTSE All World.

The current use of benchmarks is a key driver of short-termism in the market. Because portfolio managers' performance is often assessed against a benchmark on an overly frequent basis, they can be punished for deviations if these lead to lower short-term relative returns or a higher risk. This introduces not only a herding mentality but also a very short-term view on investments. If benchmarks were not the yardstick, portfolio managers could take a longer-term view on their investments and tolerate periods of underperformance if their conviction of future success is strong. However, due to the continuous assessment against benchmarks, they quickly have to get out of firms that temporarily underperform, even if they believe in them. Moreover, adjustments of companies' weights in benchmark indices can trigger concomitant capital flows (or outflows) without there necessarily being any change in the underlying fundamentals of the companies.

Traditional benchmarks reflect ESG risks only to the extent that the exchange-traded equity or bond market does so more generally. The HLEG believes that long-term risks and opportunities linked to sustainability and climate change are not properly reflected in market valuations and hence will not be reflected in market benchmarks. As a result, investment strategies based on traditional benchmarks will tend to follow the status quo and allocate capital to assets that are not necessarily aligned with long-term sustainable development objectives. There are also potential risks of 'herding', with many investors following similar strategies. For this reason, it is essential that investors both make careful and considered use of traditional benchmarks, and make more use of benchmarks incorporating ESG considerations.

Index providers have been developing a wide range of ESG-based indices and indices aimed at capturing sustainability and climate considerations, but their significance in overall portfolio allocation remains minimal. Demand for these products is now growing, however, especially for bespoke – as opposed to standard – sustainability benchmarks. There is a growing range of options available on both a standard and custom basis, which enables different climate and sustainability parameters to be built into passive investment strategies. Some large asset owners are also starting to integrate climate considerations into their core benchmarks – the Norwegian Pension Fund and HSBC's UK Pension Fund being two recent examples. Smaller and retail investors typically have less choice and tend to choose either passive or active funds for which a well-known benchmark is the key orientation.

IOSCO's Benchmark Principles (developed in 2013) and the EU Benchmarks Regulation (published in 2016) are particularly relevant in this context. Regulators like the UK's Financial Conduct Authority (FCA) recommend that supervised firms comply with the IOSCO Benchmark Principles. Both the EU regulation and the IOSCO guidance refer to transparency and methodological considerations to ensure benchmarks are an accurate, reliable representation of economic realities, and that they can be easily understood by all stakeholders. One of the reasons that the EU chose a regulatory approach was to ensure a 'high level of consumer and investor protection'.[51] The focus is on benchmark and index governance and transparency, but neither IOSCO's principles nor EU's regulation on benchmarks make explicit references to sustainability or ESG considerations.

Given the critical role of sustainability issues for current and future economic realities, it will be essential to update benchmark guidance and regulations to ensure that they take account of sustainability issues. This is particularly true of climate change, which the EU accepts can pose substantial physical, transitional, and liability risks for key sectors of the economy. Similarly, given the focus on consumer protection, it will be important for these updates to reflect the need to track alignment with the Paris Agreement and the SDGs. ESMA could also consider how to include climate, sustainability and governance considerations in its guidance on benchmarks. Policy-makers should finally use their influence and convening power to draw the attention of benchmark providers and users to the need to integrate sustainability systematically into their tools and decisions, and contribute to a public debate on this topic.

51 Regulation (EU) 2016/1011 states that 'to ensure a high level of consumer and investor protection, it is appropriate to lay down a regulatory framework for benchmarks at Union level'.

Against this background, the HLEG recommends that the Commission pursues the following actions:

- **Regulators**
  Influence IOSCO to update its Benchmark Principles in order to refer explicitly to sustainability and governance aspects, and specifically to climate considerations. At the regional level, ESMA should include references to ESG and sustainability considerations in its guidance on the 'Benchmark statement', notably in Article 1.2, where a fourth point could be added: '(4) to what extent are sustainability (environmental, social and governance) considerations, including the transition to a low-carbon economy, reflected within the methodology of the benchmark?'

- **Index providers**
  Index providers should be asked to provide details of the exposure of widely used and referenced benchmarks to climate and sustainability parameters based on the securities included within the index and their weights. This type of consistent disclosure should help to assess how an index/fund is aligned with the climate targets from the Paris Agreement, and later on with sustainable development targets. It would also act as a demand-pull for corporate disclosure. On the supply side, the emergence of new indices that incorporate ESG and green metrics considerations should be welcomed and further encouraged. The Commission could explore whether delegated acts of the Benchmark Regulation or ESA guidance are adequate avenues for that purpose.

- **Passive and active asset managers**
  Enable investors to understand the sustainability characteristics and exposures of different fund options, both active and passive. There must be consistency of reporting/disclosure of exposures to sustainability and climate parameters across funds (both active and passive) and their associated benchmarks. As passive index funds follow the investment structure of the underlying index in these cases, the exposures will normally be consistent. At European level, the new Pan-European Pensions Product default asset allocations could follow best practice in the market and be sustainability-adjusted, including where passive funds are used.[52] In the same way, IORP II and the PRIIPs' 'key information documents' should ensure that careful consideration of performance benchmarks is encouraged.

- **Supervision of the use of performance benchmarks**
  To the extent that they regulate or monitor the use of performance benchmarks by institutional asset owners, the ESAs and national supervisory authorities should monitor the extent to which institutional investors use benchmarks that are aligned to ESG objectives.

- **Broad-based sustainable investment orientation**
  The Commission should use its influence and convening power to draw the attention of the general public, media and policy-makers to the importance of moving financial and market assessments towards sustainability, climate and ESG-aligned indices, and of the need to be mindful of possible sustainability limitations of the established benchmarks. Active investors should not feel pressure from supervisors to maintain investment positions close to their performance benchmarks and too frequent references to performance against a benchmark can lead to such an outcome. Investors should instead use secondary sustainable benchmarks or alternative reference points.

52 See the Proposal for A Regulation of the European Parliament and of the Council on a Pan-European Personal Pension product (PEPP).

5. ACCOUNTING

The accounting standards and rules that are used to assess the financial position and performance of companies are a crucial part of the information needed to make investment decisions by external providers of capital. They also have a significant impact on companies investing their own funds in the capital market. In the context of long-term investments, there is a debate about whether the new IFRS9 accounting standard on financial instruments is potentially challenging for such investments, particularly equity instruments. This is relevant for the transition towards a more sustainable economy since large-scale long-term investments are required, and because equity investment has a particularly relevant long-term risk-return profile and is needed alongside debt investment in the economy.

Consideration of sustainability issues

Better consideration of sustainability issues in accounting standards is critical. Information about sustainability is increasingly relevant for the decisions of investors, lenders and managers. Integrating such information is essential to help them make appropriate investment decisions. With some exceptions of leading companies that include sustainability information in their reporting subject to some level of assurance, information on sustainability is not yet subject to the same standardisation and assurance provided by third parties as financial information.

While there are numerous initiatives on sustainability reporting, the ultimate ambition has to be convergence or integration of financial and non-financial or sustainability information, which should be subject to the same assurance rigour as audit requirements for financial information. Integrated reporting supports this convergence qualitatively through reporting that links sustainability factors with company strategy. The EU has itself made great strides towards non-financial reporting, notably via the Non-Financial Reporting Directive, which amended the Directive on annual statements, consolidated financial statements and related reports of certain types of undertakings.

The EU accounting directive on annual financial statements, consolidated financial statements and related reports of certain types of undertakings also includes a general reference on non-financial aspects. It states that 'The information should not be restricted to the financial aspects of the undertaking's business, and there should be an analysis of environmental and social aspects of the business necessary for an understanding of the undertaking's development, performance or position.'

Accounting standards, volatility and long-term investments

There is considerable disagreement among interested parties on the appropriate accounting treatment for long-term investments, in particular on whether long-term assets on investors' balance sheets should be valued based on the currently prevailing (daily) market prices – also known as 'mark-to-market' valuation or 'fair value' accounting. This issue does not concern debt instruments which have a fixed ex ante maturity and which are held to collect contractual cash flows, but rather equity instruments (investments in listed equity) and credit instruments that are listed on an exchange. It does not concern financial instruments that financial institutions actively trade for which there is general agreement that (daily) market pricing is appropriate. The debate is mainly around equity, equity-type and listed credit instruments on the balance sheets of long-term investors, such as non-financial corporations, insurance companies and banks.

Those in favour of marking investments in such instruments to market prices for companies with long-term horizons are essentially those who consider that the primary users of information reported according to accounting rules are providers of capital. They argue that the current market price is the best valuation assessment at the reporting point in time, that it is transparent, comparable across companies, free from management judgement and generally available to the extent that there are functioning capital markets. Because market value is an instrument to generate comparable information, providers of capital will then have to interpret the resulting numbers when making their own capital allocation decisions. Supporters of mark-to-market practices also refer to the global financial crisis and the need to assess the value of companies and assets in real-time to avoid negative shocks.

Those who raise concerns about mark-to-market valuation of assets for long-term investments, mainly in corporate management, point out that the short-term fluctuations are not very relevant for long-term investors. They add that such fluctuations create undue volatility in their balance sheets, reported earnings and capital requirements, and that the only way to avoid such undue volatility is to avoid such types of investments or reduce them to a minimum. This, in turn, is undesirable, not only from the point of view of a business model but also from a general economic point of view — especially in the context of sustainable finance, which requires large-scale investment in long-term instruments, both in debt and equity. Equity investment is particularly relevant as it reduces the debt bias in the economy and displays a favourable risk-return profile over longer time horizons. But marking-to-market is an issue also for credit investments, including infrastructure, when they are listed on an exchange or quoted by a bank. Here, too, financial market movements can trigger volatility even though there is no impairment in the underlying fundamentals.

In this context, the accounting standard IFRS 9 is seen by many companies as having a negative impact on long-term finance, including both investment and lending. The HLEG has received feedback from a number of stakeholders that mark-to-market accounting rules are a concern, especially for equity financing. The reason is that current IFRS rules imply more income statement volatility, even if no transactions occur, simply as a result of market movements. Moreover, they add to procyclicality as long-term investors need to integrate short-term market movements and cannot act as stabilisers. The concern about a potentially negative impact of the IFRS standards, in particular IFRS 9, on long-term investments is well-known and was explicitly highlighted when the European Parliament approved these rules.[53]

For the energy sector, the difficulty can arise, for example, when companies have to make large provisions related to the winding down of nuclear operations as part of the energy transition, which is something the regulator can call for. 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. The problem is that mark-to-market requirements create short-term fluctuations and a reporting maturity mismatch. The European electricity industry, for example, which comprises about 3,500 companies and is a critical sector towards achieving carbon neutrality by 2050, has confirmed in the stakeholder consultation that the obligation of mark-to-market valuations has a detrimental impact on their long-term equity investments.

Similar views come from 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 larger downward movement. These features, combined with regulatory requirements under Solvency II, have contributed to the decline in the share invested in equities by European insurance companies, which is particularly striking compared with their US counterparts, which have been 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.

53 At the time, the Parliament's resolution expressed 'concerns of potential negative impacts of IFRS 9 on long-term investment' and requested the Commission to prepare a 'post-impact assessment' in 2019. See the European Parliament, Resolution on Financial Reporting Standards IFRS 9, 2017/2898.

The Commission's mid-term review of the CMU recognises the challenges for long-term equity investments. 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.' It would be essential to open this review to other long-term investors, for example, from the energy sector.

The HLEG has not sought to conduct a complete review of the accounting framework and its impact on sustainability. In particular, the group is not in a position to endorse any particular alternative accounting treatment for long-term investments instead of mark-to-market valuation. But it does believe that such alternatives can be developed and would actually result in a more faithful presentation of assets that are clearly not for instantaneous sale but held in a long-term investment perspective.[54] The two key components would be a definition of qualifying assets and an appropriate valuation/pricing rule. The IAS 39 and IFRS 9 definitions of assets that do not need to be marked to market are presumably too restrictive and are not very useful for most long-term investors. A usable accounting treatment devised for clearly identified 'Long-term Investment' portfolios that also applies to equity instruments should be possible.

The European governance of accounting standards is unique in the world. The EU is the only major constituency that has ex ante legally committed itself to make IRFS standards compulsory for listed companies, without even having reserved the right to make amendments to specific rules if they cause an issue for the European economy. Maybe this ex ante commitment explains the sometimes limited impact that EU considerations seem to have, especially for the issue of long-term holdings that has not changed despite strong concerns by the Commission and the European Parliament. At the same time, the EU disposes of only four out of 14 board members (three post-Brexit) that come from non-EU countries and it is therefore conceivable that specific EU policy goals may not always be reflected. A governance change that would at least give the EU the possibility to amend specific rules that otherwise cause a problem for broader policy objectives would seem warranted.

Against this background, the HLEG recommends that the Commission:

- **Update the EU Directive relating to financial statement and related reports** to place greater emphasis on the need to integrate non-financial information and discuss the governance of addressing long-term and sustainability risks and opportunities.
- **Investigate alternative accounting approaches to fair value/mark-to-market valuation for long-term investment portfolios of equity and equity-type instruments.** EFRAG as well as experts from a range of long-term investors should be involved. Such alternative approaches should mitigate the undue impact of short-term market price movements on portfolios that are managed according to long-term investment criteria. A successful alternative to mark-to-market valuation would be one that, on average and over time, is better correlated with long-term value. Ideally, such research should feed into the IASB/IFRS and the outcomes should be implemented globally.
- **Change Regulation 1606/2002 on accounting rules in the EU:**
  - to specify that international accounting standards should only be adopted if they are 'conducive to the European public good, including its sustainability and long-term investment objectives' (Article 3.2; underlined text proposed addition); and
  - to provide the power to the EU to adjust specific aspects of IFRS standards adopted by the IASB before transposing them into EU law. This would remove the anomaly of the EU being the only constituency currently forgoing such a possibility and can be confined to cases where key overarching EU policy goals would otherwise be compromised.

54 A range of possibilities are discussed among specialists, ranging from applying mark-to-market only to a fraction of long-term portfolios to allow for possible sales; using amortized cost until some point before a possible sale (for example, when liabilities come due); confidence intervals; or moving averages to smooth out the arbitrariness of daily fluctuations in financial markets.

6. ACCELERATE ACTION TO FINANCE ENERGY EFFICIENCY INVESTMENTS

Delivering transformational improvements in energy efficiency is essential if Europe is to achieve its climate change, competitiveness and social inclusion goals. Energy efficiency, in fact, is where Europe faces the largest investment gap. There is however a growing momentum in favour of energy efficiency financing among banks and investors. The Commission should build on this opportunity by facilitating data collection and analysis, as well as by supporting efforts to verify and exploit potential links between energy efficiency savings and mortgage loan performance.

Nearly three-quarters of the EU's 2030 clean energy investment gap is accounted for by energy efficiency in buildings. This gap, which stands around €130 billion per year, is also geographically concentrated in central and east European member states. Historically, financing energy efficiency was regarded largely as a public finance exercise. Many of these programmes have created a market and forged a series of useful instruments and approaches.

Now is the time for private financial institutions to enter the market at scale. Private sector financing models that focus on the whole value proposition of energy efficiency investments – and not just on the present value of the energy savings – can play a significant role. Greater visibility of the investment opportunity, and its ability to enhance underlying asset value in multiple ways, will be key to unlocking the European energy efficiency market. The Energy Efficiency Financial Institutions Group (EEFIG) has worked to enhance visibility of the data on energy efficiency investments. It has launched Europe's largest and growing database, containing over 10,000 project records, and provided an underwriting toolkit to support a better understanding – and hence 'de-risking' – of energy efficiency investments for European financial institutions.

Financial regulators are also examining the risk to real estate loans stemming from poor building standards. Minimum energy performance standards are proving highly effective at promoting the cost-effective upgrades of properties in the Netherlands and the UK, and encouraging banks to review the energy performance of their asset portfolios. In the Netherlands, for example, DNB finds that 46% of bank loans related to commercial real estate currently involve collateral with energy performance certificates (EPCs) between D to G.[55] Starting January 2023, however, all Dutch office buildings must have at least a level C energy label, or else be taken out of use. This has prompted banks to identify how to improve the energy efficiency of their loan book.

A number of barriers have impeded the flow of private capital to the energy efficiency sector. Until 2017, one of these had been the Eurostat interpretation of IFRS rules as they applied to Energy Performance Contracts (EPCs) in government accounts. A previously narrow interpretation had resulted in some local authorities being unable to invest in much needed energy saving measures through EPCs, because of uncertainty as to whether these would be on or off government balance sheets.

55 DNB, 'Waterproof? An exploration of climate-related risks for the Dutch financial sector', 2017.

Another constraint is the lack of systematic 'tagging' by financial institutions of loans to the building sector with energy performance and wider environmental data. Without this information, banks are unable to price loans effectively or generate a pipeline of energy efficient mortgage assets that comply with the criteria for access to the growing green bond market. The European Mortgage Federation is developing a standardised 'energy efficient mortgage', which would enable a correlation between efficiency improvements and lower probability of default of borrowers.[56] A growing number of European banks are also starting to tag their commercial and real estate loans, but even among leading European banks, only around 20% of loans are currently tagged with energy performance information.

The EU is starting to address these barriers. In its interim report, the HLEG recommended that the Commission support Eurostat in its reinterpretation, together with member states, of the guidance on the accounting consequences of EPCs. Following this, Eurostat published in September 2017 an updated guidance note that improved and clarified these accounting rules and allowed public-led investment programmes to be recorded as off-balance sheet under specific conditions. The new guidance allows local authorities and governments to invest in energy savings while complying with the debt and deficit thresholds established in the Maastricht Treaty. This change opens the way for billions of new investments to make European buildings more energy efficient.[57]

Against this background, the HLEG recommends that the Commission:

- **Examine further how energy efficiency investments improve underlying asset value.** Energy efficiency investments affect the value of a building, industrial facility or other infrastructure by more than just the present value of the expected energy savings. A process to provide guidance to financial institutions on the identification and measurement of these multiple value streams would help de-risk energy efficiency investments.

- **Consider the wider impact of energy savings for financial risk management.** In the context of the review of the ESAs, green tagging could be considered as an important tool for banks to understand the environmental exposures in their balance sheets.

56 The EeMaP project was launched in Italy, Sweden and Germany in June 2017 by a consortium comprised the Ca'Foscari University of Venice, RICS, European Regional Network of Green Building Councils, E.ON and SAFE Goethe University Frankfurt.

57 European Commission, 'Fact Sheet – Eurostat clarifies how to record energy performance contracts in national accounts', 2017.

7. 'THINK SUSTAINABILITY FIRST' PRINCIPLE

Europe's strategy for sustainable and inclusive growth requires a smart sustainable financial sector and capital markets system for renewed economic resilience and competitiveness and improved sustainability performance. But at the same time, there needs to be a reinforced system for integrating sustainability priorities and incentives within the broader system of economic and financial policy-making to deliver sustainable growth and investment. The Commission's political priorities and work programmes should therefore reflect the principle of 'Think Sustainability First'.

Economic, social and environmental sustainability needs to be embedded in policy-making processes to ensure a continuous and long-term drive for sustainable capital markets to support the development of a sustainable economy. Moving the EU towards a low-carbon, resource-efficient, and inclusive economy requires sustainability to be hard-wired into the legislative and policy-making processes for financial regulation. The Commission's political priorities and work programmes should therefore reflect the principle of 'Think Sustainability First'. This principle should be applied throughout the policy-making chain, starting with the inception of the impact assessment and political validation process.

There is a need to incorporate the 'Think Sustainability First' principle as a core approach for the application of the Commission's Better Regulation Guidelines. The Better Regulation Guidelines provide the tools to equally assess economic, social and environmental impacts. But to ensure that a chosen financial services policy or legislation proposal is contributing to the SDGs, an ESG assessment needs to be taken into account more effectively throughout the various steps of the policy-making process.

The existing impact assessment (IA) process could be strengthened to include sustainability screening at the beginning of the EU policy-making, legislative and regulatory chain. A well-researched impact analysis, for instance, could clarify how legislation and regulation is stimulating EU finance to be supportive of long-term investment considerations, and environmental and social sustainability – especially where this is prevented by current market dynamics and market failures.

A 'Think Sustainability First' principle could also enable sustainable development to be incorporated as an important EU policy objective for financial services policy-making. This would be fully compatible with the main objectives of financial stability, market integrity and consumer protection.

Short-term and long-term sustainability assessments should be carried out to identify whether the impacts are 'sustainable' or 'non-sustainable' and supported by a methodology that demonstrates whether the specific policy is contributing to the long-term sustainability goals of the EU, notably the climate and SDG commitments. This methodology and approach should also identify opportunities to promote sustainability.

Against this background, the HLEG recommends that the Commission:

- **Strengthens and improves the implementation and application of existing rules and policies.**

  - Consider the development of a clear and robust set of internal guidance to take due consideration of ESG and broader sustainability impacts throughout the financial policy-making process, including impact assessments and evaluations.
  - Include the 'Think Sustainability First' principle in the mandatory evaluation criteria.
  - Investigate how to apply and implement the 'Think Sustainability First' principle throughout the policy-making and implementation chain with all key institutions, including:

    - The European Parliament and Council;
    - The ESAs in their policy mandate, the standards-setting process guidance notes and their oversight role in implementation and enforcement of supervisory activities;

  - Member states in the transposition and implementation of legislation and enforcement.
  - Consider a public consultation or call for evidence on how to best embed the 'Think Sustainability First' principle into EU policy-making;
  - Introduce a continuous cycle of improvements to impact assessments, in particular for ESG methodology and its application to financial policy and implementation.

  The application of the 'Think Sustainability First' approach should help to clarify what kind of legislation is most suitable to stimulate sustainable finance, and provide guidance on what specific requirements within the legislation are needed, for example:

  - Requiring disclosure of whether ESG factors have been taken into account, or requiring particular ESG measurements for what is being financed;
  - In the drafting of any new legislative proposal on fiduciary duty, it must be clear that ESG risks have been considered, in both the inception impact assessment and all steps of the legislative process.

  The 'Think Sustainability First' principle should be applied to all key investor and financial legislation in both ex ante impact assessments, ex post evaluations (for example, Solvency II, IORP II, UCITS, AIFMD, MiFID II/MiFIR, PEPP) and the necessary adjustments and reviews.

- **Embed the 'Think Sustainability First' principle throughout the decision-making, implementation and enforcement process.**

  Incorporate and enhance sustainability expertise and action into the role of the regulatory scrutiny board:

  - In carrying out its mandate and its quality control and support function on impact assessment and evaluation, the Regulatory Scrutiny Board must ensure it has the key policy expertise on sustainability factors and demonstrate that it has taken due consideration of ESG risks and opportunities.
  - Before proceeding to inter-service consultation, the board must be satisfied that the 'Think Sustainability First' principle has been applied and that the sustainability standards required by it have been met.

- **Monitoring and follow-up**

  On 22 November 2016, the Commission adopted the Communication 'Next steps for a sustainable European future' (COM(2016)739). This Communication presents the Commission's approach to the 2030 Agenda and includes two work streams. It also announces the regular monitoring of the SDGs in the EU context from 2017 onwards, and the development of a reference indicator framework for this purpose. In this context, the Commission has committed to using all the instruments at its disposal to ensure that existing and new policies take account of the three pillars of sustainable development (economic, social and environmental). It has also committed to providing regular reporting of the EU's progress towards implementation of the 2030 Agenda through biannual monitoring reports by Eurostat, and will launch reflection work on developing a vision with a post-2020 perspective.

  In this framework, the Commission could further:

  - Include, as part of the Eurostat Sustainable Development Monitoring Report, an evaluation of the role of financial policy and capital markets in achieving the EU's sustainable development objectives;
  - Promote EU sustainable capital markets that appropriately address the issue of short-termism as a key integral component of the EU Post-2020/EU Sustainable Future vision;
  - Encourage the EU Presidency to incorporate, once a year, a high-level discussion with ECOFIN ministers on progress in developing sustainable finance and capital markets, possibly linked to an annual Sustainable Finance Day to showcase new approaches to mobilising public and private capital for sustainable growth.

8. LEVERAGE EU ACTION TO ENSHRINE SUSTAINABLE FINANCE AT GLOBAL LEVEL

Sustainable finance reforms are increasingly implemented across the globe. Europe has been in the vanguard of sustainable finance, but it is by no means alone. This global movement provides the EU with a unique opportunity to consolidate its leadership by bringing together other countries and working with them to cooperate and promote sustainable finance policy reform at an international level.

This should be done both within existing fora — such as the G20, the G7, the UN, IOSCO, the International Association of Insurance Supervisors and the International Organisation of Pensions Supervisors — as well as bilaterally and multilaterally. Perhaps the greatest opportunities lie in working closely with key countries making strong commitments to transition towards a more sustainable economy and financial system, notably China.

Against this background, the HLEG recommends that the EU and its member states:

- **Develop and agree bilateral 'Sustainable Finance Compacts' with key countries. These could start with China because of its current national focus on rapidly shifting their economy onto a more sustainable footing. These compacts would include areas of cooperation such as:**

  - Assist countries with the development of national capital-raising plans to meet their domestic climate mitigation and adaptation targets, as well as the SDGs.
  - Examine the role of regulators and potential regulatory frameworks in aligning international financial flows with the objectives of the Paris Agreement and the SDGs.
  - Support the development of domestic and international sustainable finance to attract increased cross-border investment in low-carbon sectors.
  - Develop sustainable financial centres and include facilitation of inter-country sustainable capital flows as part of their mandate.
  - Share expertise around climate risk management for institutional investors and support the implementation of the TCFD at the international level.

- **Make sustainable finance a key priority of future G20 and G7 meetings.**

  - Tackle investor duties, sustainable financial literacy, sustainable finance standards, ESG disclosures on an international basis, and reconsider the mandates of global regulators and standard-setters (as per the review of the ESAs at EU level).
  - Ensure that sustainability factors are incorporated into the surveillance regime for the global financial system such as Article IV consultations (IMF) as well as Financial Sector Assessment Programs (IMF/World Bank).
  - Building on the success of the G20 Green Finance Study group, ensure that progress on sustainable finance remains a priority for the finance tracks of the G20 and G7, including via the establishment of a permanent working group on sustainable finance under the leadership of the finance ministers and central bank governors.

- **Support the FSB in its work on climate change.**

  - Encourage the FSB to conduct a review of the TCFD recommendations in 2020, with consideration given to whether uptake of the recommendations on a voluntary basis has been sufficient.
  - Review prudential rules for the banking and insurance sector so as to ensure that these two key sectors for lending and long-term investment are appropriately mobilised for sustainable finance, while protecting financial stability.

- **Ensure that European industry is not unduly affected by unfair competition from constituencies that are less engaged in fighting climate change.**

  - The Commission should be attentive to potentially adverse effects of different ambitions for fighting climate change on a global level playing field. Despite the long-term benefits that are undisputed, ambitious steps to fight climate change can entail short-term costs. The Commission should ensure that employment in the EU is not negatively affected by lower ambition in some other constituencies and consider action in case of possible distortions ('CO2 border tax').

- **Champion sustainable finance within the UN system.**

  - Provide expertise and political support for the work of the UN Inter-Agency Taskforce (IATF) to implement the Addis Ababa Action Agenda to scale up global private finance for the SDGs and the Financing for Development Forum.
  - Support the formalisation of sustainable finance norms at the UN level, providing monitoring mechanisms and a home for sustainable finance within the framework of the SDGs. This could be done through a UN Resolution on Sustainable Finance, for example.
  - Promoting the idea of a UN Framework Convention on Sustainable Finance (UNFCSF), to be established by 2019, and setting out the UN's role in this area with an annual Conference of Parties meeting to push for and monitor progress.
  - Promote the development of national capital-raising plans within the 'nationally determined contributions' (NDCs) to meet domestic climate mitigation and adaptation goals under the Paris Agreement, and as part of the 2018 COP24 Global Stock Take.

- **Press international standard-setting bodies to promote sustainable finance.**

  - Work with member states to encourage IOSCO to make sustainability disclosure mainstream across financial securities, including stock exchange listing authorities, starting with climate-related financial risks described by the TCFD and upgrading IOSCO's code of conduct, moving then to the fundamentals for CRAs and the associated guidance around listing rules.[58]
  - Support the development of international green bond markets to attract increased cross-border investment in low-carbon sectors, giving consideration to the International Organization for Standardization as a suitable forum.
  - Call on the OECD to produce a convention on long-term sustainability risks clarifying that investor duties should incorporate sustainability issues.[59]
  - Call on the OECD to support and measure adult financial literacy on sustainable finance issues as part of their International Network on Financial Education reviews. The OECD should assist countries in embedding sustainable finance in their financial literacy programmes, and reflect sustainable finance considerations within the OECD recommendations on National Strategies for Financial Education.

- **Embed the Commission's action plan on sustainable finance into the European Consensus on Development review process.**

  - Make capacity-building for sustainable finance a core theme of the EU's development cooperation activities.
  - Include a review of the impact of the action plan on sustainable finance in the joint synthesis report.
  - Systematically measure progress in relation to the action plan on sustainable finance.

58 See the European Parliament study of the EU's role in IOSCO, 2015. According to this study, the supervisory authorities of the 28 member states of the EU were ordinary members of IOSCO and in 2015 together represented 22 % of IOSCO membership. In addition, ESMA is an associate member.

59 EU member states fund over 40% of the base OECD budget.

England: The Crystal, home of one of the world's largest exhibition focused on urban sustainability.

V. Financial Institutions and Sectoral Recommendations

1. BANKING

As the largest source of external financing in the EU, banks are an essential component of the financial system. Lending and financing by this sector need to be fully aligned with the EU's sustainability objectives if those goals are to be achieved.

Banks remain the backbone of the European financial system. Their primacy among lenders in assessing the credit risk of individual loans makes them particularly important for financing the origination of sustainable assets and for lending in support of the transition to a more sustainable economy.[60] Some banks also originate and distribute sustainable assets into capital markets for long-term financial investors. It is important to recall that banks play a far more important role in project financing in the EU than in other parts of the world, such as the United States.

The HLEG has not sought to conduct a complete review of the bank regulatory framework and its impact on sustainability lending. It is the view of the HLEG that further development of best practice on ESG and longer-term sustainability risk assessments is still needed to ensure that sustainability is better integrated into the banking sector, while at the same time ensuring financial stability. These assessments should include a more systematic approach for banks on the impact of climate change and the transition to a lower-carbon economy. Supervisors should also ensure that banks appropriately include ESG risks in their risk management systems. This could be pursued under Pillar II of the supervisory process, where national supervisors, the European Banking Authority (EBA) and the Single Supervisory Mechanism (SSM) have a role. In some cases, it might also lead to changes in an individual bank's capital requirements, provided risk management is deemed insufficient.[61]

In outreach and stakeholder engagement with the banking community, two issues are notable as potential constraints on long-term and sustainable bank financing, each of which warrant further exploration:

- **First, there is consistent feedback from banks that the current capital framework charges some 'traditional', non-complex lending operations and long-term exposures more than is warranted by risk considerations.**[62] This is particularly a concern with calibrations for project financing, specialised lending and mortgage lending. New agreements, such as the conclusion of the Basel III reform by the Basel Committee and the Group of Central Bank governors and Heads of Supervision on 7 December 2017 — (which introduced a floor for risk weights under internal models) — will need to be carefully reviewed to prevent curtailment of European bank lending in the areas that are critical for sustainable finance.

60 T. Ehlers, 'Understanding the Challenges for Infrastructure Finance', Bank for International Settlements Working Paper, 2014.

61 Some supervisors have recognised these issues and are already making significant progress (for example, Bank of England, 2017).

62 See D.P. Monteiro and R. Priftis, 'Bank Lending Constraints in the Euro Area', 2017.

- **Second, the complexity of EU banking regulation – the thrust of which has been designed for large banks and which, in the United States is applied solely to the largest banks (about 20) – creates a burden for smaller banks.**[63] Regulatory complexity might also raise barriers to entry and run counter to efforts to enhance sustainable lending and banking services. This has given rise to calls for more 'proportionality' in the application of the framework. Given how much lending and investment needs to be mobilised for the EU to achieve its Paris Agreement and broader sustainability targets, it is important to review whether this framework is appropriately designed for smaller banks and banks with straightforward business models that are not engaged in complex securities trading. This issue is critical since sustainability needs to involve all banks and cannot rely on a few larger institutions. Key activities in the transition – such as mortgages for energy efficiency, installation of solar panels, biomass power, etc. – can all be undertaken with the support of small banks. Equally, saving products linked to sustainability issues are a way to engage European citizens, whose household savings represent over 40% of total financial assets in the EU. Here too, small banks need to be mobilised.

The HLEG has also debated the merits of lowering capital requirements for lending to the green sector to make it more financially attractive to lenders and borrowers. The arguments in favour of such a 'green supporting factor' refer to the positive systemic value of green projects and activities that reduce long-term environmental risks, and to the need to integrate positive externalities.

A green supporting factor could give a strong policy signal to re-engage the banking sector in its lending function for the economy after years of tightening capital regulation. It would also reinstate an explicit purpose for banking in the current context, namely the pro-active pursuit of the EU's sustainability and climate objectives, which go hand in hand with sustainable economic, social and environmental developments and for which large-scale investment and lending is necessary.

Financial stability is a prerequisite for sustainability; to safeguard both, capital requirements must remain risk-based. This means that several steps are needed to establish whether the basis for a risk-based change to capital requirements is in place.

While the HLEG debated the idea of a green supporting factor, and a brown penalising factor, the Commission made an announcement at the One Planet Summit in Paris in December 2017. Vice-President Dombrovskis stated that the Commission is 'looking positively' at the possible introduction of a 'green supporting factor' in prudential rules to boost lending and investments in low-carbon assets. Therefore, the question is what aspects need to be considered when exploring the appropriateness of a green supporting factor.

The HLEG considers that the key conditions for a green supporting factor to be effective are the following:

- A well-identified 'green' and, potentially also 'brown,' asset class is needed to which differential capital requirements could be applied.[64] The HLEG's work on taxonomies is helping to fill this gap, and the idea fits the first recommendation of this report on taxonomy. In any case, the definition of green assets eligible for lower potential capital charges will have to be set by official public bodies and not by banks themselves.
- Evidence of significantly lower risk at the micro-level should also be present. At this stage, that is still missing, and existing public proposals for a green supporting factor do not seem to be quantitatively grounded in a risk assessment.
- Prudent banks would hold capital in line with their economic risk. If capital requirements were reduced below that, lending could become concentrated in less prudent lenders. To

63 For these smaller banks, a different regime applies.

64 A third option would be to differentiate into three categories, 'green', 'neutral' and 'brown'.

avoid any 'green bubble' and undercapitalisation coming from market distortions, there should be a cap on lower capital requirements on green assets. That cap could evolve overtime.

- Mortgages, which are generally low-risk assets, already have a low capital weight, leading to potentially high degrees of leverage. This will have to be actively monitored and managed.[65]
- It might well be that there is a valid risk differential between green and other (brown) assets that is not currently reflected in the capital framework. After all, it could be argued that the Paris Agreement has made carbon-intensive assets riskier than non-carbon-intensive assets, and to the extent that there are green/brown risk differentials, differentiated capital requirements could be justified. One tool for establishing green/brown risk differentials is forward-looking scenario analysis, as advocated by the TCFD.

More generally, banks need to ensure that their assessment of material risks covers financial and non-financial risks, notably through data-driven models and forward-looking perspectives. From a sustainability point of view, the inclusion of ESG issues and risks, and the strengthening of the forward-looking perspective will be particularly relevant. In many banks, ESG issues are already a core part of the process of risk management; in banks where this is not yet the case, urgent improvement is needed.

The strengthening of forward-looking analysis and broadening to scenario projections and ESG issues are not without challenges. Supervisors have been understandably cautious of 'expert models' and scenarios, preferring assessments based on (historic) data. The stranded asset risk, however, lies in future exposure of current assets, not the past performance of those assets.

Against this background, the HLEG recommends that:

- **The Commission support the development, coordination and sharing of best practice on ESG and longer-term sustainability risk assessments for banks.** It should also monitor whether all European supervisors (EBA, SSM) ensure, within their mandates, that national supervisors encourage banks to have such instruments of risks assessment. Banks will need to deal with ESG and longer-term sustainability risks: supervisors – the SSM and national supervisory authorities – should develop, coordinate and share best practice on these issues.

- **As a first step on a green supporting factor, the Commission should investigate whether there is a risk-differential justifying such a factor and, if so, how it could be implemented, considering the possible drawbacks.** Meanwhile, other public policy measures to stimulate and support borrowers for green projects could also be considered, going beyond the various recommendations in this report, such as subsidies, taxes and public guarantees.

- **With overall EU regulation, the HLEG recommends that the Commission explicitly consider the impact on (sustainability) lending in its impact assessment before transposing the Basel recommendations of December 2017.**[66] If the EU wants to meet its sustainability objectives, the European banking sector needs to be fully mobilised, including in the areas of sustainable project finance, specialised lending and sustainable mortgage lending. The HLEG encourages the Commission to implement what is best for the European economy and wider society from a long-term sustainable perspective, whereby undue 'level playing field' considerations and international competition can be avoided, for example, in the financial services chapters of trade and investment treaties concluded by the EU.

65 See the latest Risk Warnings by the ESRB on this issue.

66 In this context, also the existing studies as conducted by the EBA, BIS and others should be also considered, in parallel with practitioners' feedback from the banking sector and its clients.

- **The HLEG also urges the Commission to consider greater proportionality in applying the Basel III framework to different banks.** To avoid harming European banks involved in long-term sustainable lending and project finance, the Commission could review the latest and pending changes to the Basel framework, with a particular focus on those banks that are in alignment with the EU's climate change and SDG commitments. In this context, the Commission could review the implementation of relevant measures listed in the 'Report on the follow-up to the call for evidence on the EU regulatory framework for financial services'. The Commission could also research the benefits of innovative business models in banking and of long-term saving products that support the environmental and social needs of the economy and wider society, so as to engage citizens in the transition.

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 short-term misfortunes, including those from climate-related risks. Given the protection it provides against such risks, the insurance sector has an inherent interest in, and through prevention can contribute to, (climate) risk mitigation, as well as in the promotion of sustainability through long-term investments.

Insurance requires an operating environment that allows underwriting under sustainable conditions. It can itself contribute to this environment by developing capacity in modelling, prevention and adaptation. Sustainability also requires the insurance sector to ensure that long-term risks are appropriately managed on both the asset and liability sides; that the sector contributes to climate change mitigation and adaptation; and that its investment capacity is available to support the transition to a more sustainable world. This also requires stability and predictability for the regulatory framework.

Contributing to risks remaining insurable

Even achieving the objectives of the Paris Agreement will mean changes in climate and natural hazards. In carrying out their business, insurance companies have a central role in the mitigation of and adaptation to such risks. In this area, insurance companies are taking account of all areas of ESG. There needs to be room for sound analysis of risks while avoiding inappropriate exclusion. In addition, loss prevention should be promoted and, when claims are paid for reconstruction, insurance companies should promote more sustainable constructions and also support risk-mitigation behaviour.

Taking account of sustainability risks in supervisory reviews and disclosures

Solvency II requires that insurance companies take a comprehensive approach to the identification and measurement of their risks, via qualitative and/or quantitative assessments. Under Solvency II, insurance companies for which climate risk is material should already be taking this into account and cover climate risks and risk mitigation explicitly in the supervisory review. While this is certainly the case with most companies, it is important to ensure that it is happening across the sector.

General insurance is affected most directly by potentially rising natural hazard risks; yet these are in most cases underwritten on an annual basis and subject to the annual renewal cycle. In principle, this allows insurance companies to adapt underwriting, premia and their reinsurance strategy to the evolving situation with climate risks. But such risk could still be mispriced by some insurance companies if they do not properly take account of the trend in

increasing frequency and severity of natural hazards as a result of climate change. Therefore, a proper understanding of the dynamic of these risks over time is essential for the sector as a whole.

Moreover, annual repricing does not in itself mitigate the impact on the insurance business model of temperatures rising significantly over time. As a senior leader in the insurance industry commented recently, 'more than four degrees Celsius of warming this century would make the world uninsurable'.[67] Therefore, proportionate action by insurance companies now, alongside other key institutions in the financial sector, can help the long-term sustainability of the insurance industry.

Insurance companies, especially in Europe, have been very supportive of the TCFD. The TCFD provides a framework for the reporting of climate-related risks and opportunities for the insurance sector, and it can therefore provide greater clarity on this issue for investors and the general public. This issue is covered in the disclosure recommendation earlier in the report.

Fostering long-term and equity investments supporting sustainability

The insurance sector is the largest institutional investor in Europe. Its assets under management currently account for nearly €10 trillion, or about 60% of the EU's GDP. At the portfolio level, most sector liabilities are predictable and long-term. It is essential that regulatory and accounting frameworks do not unduly penalise the capability for insurance companies to hold considerable assets in the real economy and act as stabilisers over the economic and financial cycle. If the EU wants to finance its transition towards sustainability, the investment portfolio of the insurance sector needs to be mobilised, including by much more strongly engaging insurance companies in equity financing, infrastructure financing and other long-term investment.

Solvency II currently bases a number of important elements – such as the setting of discount rates, the determination of risk margins and the calibration of charges for investment risk – on the assumption that insurance companies trade all their assets and liabilities at any point in time. This assumption is not consistent with the long-term business model of insurance and with economic reality. It is also not consistent with the wider desire and benefits for significant market participants to maintain and even grow their long-term approach to investment in general, and sustainable investments in particular.

The obligation entailed in the IFRS accounting rules to use current market values for equity investment further discourages the use of equity for long-term investment – an issue that the Commission has committed to investigating in 2018.[68] This investigation has the potential to unlock significant equity investments, while at the same time paving the way for improvements in the risk/capital regime. A more long-term, stable accounting framework would bring the reported balance sheet much more in line with the actual business model, and solutions found there could feed into the Solvency II 2020 review. By way of scale, even if only one percentage point of assets were to move from debt to equity, this would entail additional equity investments of €100 billion and reduce the debt bias in the EU economy. More specifically, it will be important that the upcoming IFRS 17 accounting standard ensures a combined working of accounting standards of assets and liabilities, as these are managed jointly in the insurance sector.

More broadly, it is important to examine how long-term investment risk can differ from short-term trading risks – and how this difference can be reflected in solvency capital charges, including for sustainable, long-term investments. This could lead to alternative ways of calibrating long-term investment risk to avoid the 'tragedy of the horizon' described by the Bank of England governor Mark Carney. It might also make the capital framework as a whole

67 AXA CEO Thomas Buberl at the One Planet Summit in Paris, 12 December 2017.

68 European Commission, 'Capital Markets Union (CMU) Mid-Term Review', 2017.

somewhat less restrictive of long-term investments, while of course providing sufficient coverage of long-term risks. It is important to note that the so-called Long-Term Guarantee (LTG) measures already try to address this challenge. From this perspective, these tools, which are scheduled for the 2020 fundamental review of Solvency II, should continue to be part of the solution and be accordingly preserved and improved.

Against this background, the HLEG recommends the following:

- **Disclosures: encourage greater adoption of the TCFD recommendations.**
  The coming years will allow for an assessment of how the TCFD framework has been adopted and its impact on companies, investors and analysts. The Commission can clearly support the proportionate implementation of the TCFD framework by the insurance sector, as the strengthening of disclosure on climate-related risks and opportunities will also strengthen companies' internal command on this topic. Depending on how the process is assessed, the Commission could eventually consider how to integrate proportionately the recommendations of the TCFD into the reporting regimes for financial services companies.

- **Supervisory review: assess the need to incorporate climate risk more explicitly into assessments conducted by insurance companies.**
  Assess if and how the supervisory reviews need to be more explicit in including climate-related risks, as well as mitigation and adaptation policies. This could concern both the asset and liability sides of the balance sheet.[69] In this context, consideration could be given as to whether it would be appropriate to develop common climate risk scenarios to help ensure that company assessments of climate risks are consistent and comparable.

- **Solvency II reviews: investigate how Solvency II could be adapted to facilitate further long-term investment while maintaining a strong risk-based nature.**
  - **Assessment of alternative ways to deal with prudential concerns about forced selling of assets:** Forced selling can be a real risk for some insurance companies, but the current approach implies that the entire asset base is exposed to forced selling. More appropriate ways of capturing the actual magnitude of this risk for insurance companies should be investigated.
  - **Assessment of alternative ways to set discount rates to avoid exaggerating liabilities and balance sheet volatility.** Measures of the LTG package (Matching Adjustment, Volatility Adjuster) seek to address this challenge and can constitute efficient tools. They should continue to be part of the 2020 review of the prudential framework, including with refinements to capture cases of artificial volatility more effectively.
  - **Examination of how long-term investment risk can differ from short-term trading risks and how this difference can be reflected in solvency capital charges, while ensuring that overall capital requirements do not increase.** This could lead to alternative ways of calibrating long-term investment risk and, in cases where this is justified by robust analysis, to the introduction of lower capital requirements for green investments.
  - **Ensuring that the European Insurance and Occupational Pensions Authority's (EIOPA) response** to the Commission's request for technical advice on 'unjustified constraints to financing' considers the ways in which the current system gives disincentives to green finance in unrated bonds and loans, as well as in unlisted equity.[70]

69 The 2020 Solvency II review needs to be completed on 31/12/2020.

70 Request for advice from the European Commission to EIOPA of 21 February 2017.

- **Accounting**
  Ensuring that the IFRS 17 accounting standard on the liabilities side safeguards a combined working with the accounting standard on the asset side. Such combined working is essential as insurance companies manage assets and liabilities jointly.

3. ASSET MANAGEMENT

Asset managers should ensure that their governance, expertise and stewardship practices take account of sustainability in order to deliver the best possible investment outcome for clients. They should also be required to establish a clear understanding of their clients' preferences on sustainability, governance and any broader ethical issues.

As the institutions responsible for investing their clients' capital, asset managers play a crucial role in the investment chain. In line with the investor duties and stewardship principles mentioned in this report, the leadership of an asset management firm has a responsibility to develop their own competence on matters related to sustainability in accordance with their duty to act in the best interest of their clients. Asset managers should also set investment and reward structure in a way that discourages short-term behaviour and that favours long-term holding and alignment with sustainable development objectives.

In their role as providers of equity and debt financing, asset managers should use their leverage towards their investees to promote sustainable corporate governance and business practices. In particular, asset managers should demand transparent reporting of relevant and material sustainability issues at investees in relation to their business strategy, operations and risk, including the most significant parts of their supply chain. Asset managers should also build awareness with investees over long-term systemic threats, including ESG risks, as well as those relating to overall economic development, financial market quality and stability. They should foster the mitigation of system-level ESG risks and respect for basic norms (for example, anti-corruption and human rights) over short-term profits. Asset managers should also report back to clients on the engagement that has been undertaken on their behalf.

Against this background, the HLEG recommends that:

- **Promote high standards of competence on ESG issues.**
  - **Asset managers should develop competence on sustainability and governance issues within their organisations and establish organisational principles and reward structures that encourage long-term oriented behaviour.** This includes promoting internal awareness, and embedding ESG in internal training and professional development of relevant personnel, including management leadership and the board. Sustainability should also be reflected in incentive structures. The composition of pay for fund managers and analysts should be based on performance over time periods longer than one year; for example, over one, three and five years.
  - **Asset managers should adopt minimum standards for investment mandates vis-à-vis their institutional clients**, and thereby establish greater consistency and alignment with their institutional clients' sustainability preferences – and, through that, the interests of their clients' beneficiaries. But it is essential that any legal requirements for asset managers also come with measures on direct investments made by institutional investors. Otherwise, institutional investors might use direct investments to avoid sustainable considerations imposed by law.

- **In line with the wider understanding of the obligation to act in the best interest of clients and the data available, asset managers should review their valuation and risk models.** This will help ensure target investments to consider long-term ESG factors in the investment process.
- **To assess the average holding period of securities, particularly equities, asset managers should routinely publish meaningful information on the portfolio turnover in their funds.**
- **When using external analysis, asset managers should consider an adequate mix of longer-term, thematic and ESG research to broaden and inform their investment perspective.** This will enable them to act as better long-term stewards of their clients' money.

- **Ensure client sustainability and ethical preferences are reflected in investments.**
  - **Asset managers should be required to ask their institutional clients and their representatives whether there are any sustainability, governance or broader ethical concerns that the clients wish to have considered** and reflected in the investment mandate. To ensure these preferences are properly reflected, asset managers should also seek informed consent from their clients on the strategy that they adopt for them.
  - **For retail investors, transparency about the ESG features of mutual funds is key to facilitating suitable product advice by financial advisers.** Asset managers should inform their retail clients about ESG risks and integrate sustainability within their management processes and report back to clients on the engagement that has been undertaken on their behalf. While most asset managers do not have direct advisory relationships with retail clients, they should nevertheless use the target market definition under MiFID II to provide the point of sale with the above information.

4. PENSION FUNDS

Pension funds should consult beneficiaries on their sustainability preferences and build those into their investment strategy. Meanwhile, in line with the extension of the ESAs' mandates, EIOPA will need to build expertise on including sustainability and governance factors into risk assessment.

Pension funds' long-term liabilities make them ideal providers of sustainable finance. They constitute the 'purest' approach to long-term finance, as the beneficiaries of collective retirement schemes expect income streams over several decades. Compared with other institutions, pension funds' long-term investment policies also make their assets potentially more exposed to long-term risks.

Thus far, the issues of sustainability reporting and ESG integration by EU pension funds have been taken up in the areas of occupational pension funds (Pillar II) and private voluntary plans for personal pensions (Pillar III). The 2016 update to the Institutions for Occupational Retirement Provision Directive (IORP II) and the 2017 proposal on Pan-European Personal Pensions Products (PEPP) both encourage pension providers to disclose publicly whether and how they account for climate risk and include such factors in their risk management systems. But these provisions do not oblige them to take account of ESG factors in their investment policies.

Pension funds are not precluded from stating that ESG factors are not considered in their 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 their activities. But it can be argued that those who manage money on behalf of others, including pension funds, have an obligation to consult their beneficiaries on their sustainability preferences and subsequently include such considerations in their investment strategies, if such is the preference of their beneficiaries.

If sustainability factors are to be properly considered in investment decisions, a pension fund's own risk assessment must include an assessment of new or emerging risks, including those related to sustainability. For example, occupational pension schemes, which fall under IORP II, are required to review a written statement of their investment principles at least every three years with information on how the investment policy takes account of ESG factors and make this statement publicly available. They must also inform prospective members whether and how ESG factors are considered in the investment approach.

Against this background, the HLEG recommends:

- **In line with the HLEG recommendation on investor duties, pension funds should consult their beneficiaries on their sustainability preferences and reflect those in the fund's investment strategy.**
- **The pension fund industry could explore initiatives to improve ESG integration and reporting above and beyond what is currently required in regulation.** This would be in recognition of the new landscape of sustainability risks and opportunities and also be in the interest of sustained long-term performance.

5. CREDIT RATINGS AND SUSTAINABILITY RATINGS

A financial system that fully supports the EU's sustainability targets will be characterised by lending and investment processes into which ESG considerations are systematically integrated.

This also means that all rating activities within the financial market must also have ESG factors at their core.

Two main categories of ratings providers are considered here: credit rating agencies (CRAs) and sustainability rating agencies (SRAs). While the CRAs have their traditional focus on financial aspects that determine an issuer's creditworthiness and risk of default; SRAs assess ESG factors, measure sustainability performance and impact, and provide information about other, potentially financially relevant aspects. Together, these agencies provide essential tools to guide investment decisions.

The two types of ratings provider can be distinguished by their business models (CRAs are usually paid by issuers, SRAs by investors) and by their independence, methodology and customers. Given their different roles, this section contains two separate sets of recommendations for the two categories.

Credit rating agencies

CRAs are systemically important institutions, and their risk assessment methods influence the sustainability and stability of the financial system. CRAs have been widely criticised for their narrow risk assessment approach, which contributed heavily to the 2008 financial crisis.[71] At the time, they attributed AAA ratings to assets that were largely sub-investment grade, and, along with other institutions, overlooked the systemic risk associated with these assets.

The CRAs' oligopolistic position at the interface between the issuers of and investors in securities puts an onus on them to help align capital flows with sustainability objectives. In the future, it is essential that CRAs take a longer-term, ESG-informed approach to credit risk assessment to avoid systemic risk in the future, this time related to climate change or other sustainability issues. The proper integration of ESG factors cannot be considered discretionary or a moral obligation, but a necessary step in performing credit rating analysis more fully.

The three leading CRAs hold a privileged market position in assessing creditworthiness and credit risk. As the primary interface between issuers and investors on financial risk assessment, CRAs contribute, establish and maintain market practices on financial management and governance by issuers in debt capital markets. Both in the EU and globally, the credit rating market is dominated by three firms – Standard & Poor's, Moody's and Fitch – which enjoy levels of margins reflecting the oligopolistic market structure. More importantly, the concentration of ratings opinions for thousands of issuers and entire economies in the hands of only three companies can be a major issue especially in view of systemic developments, as previous experience has shown.

The HLEG considers that credit ratings currently fail to incorporate adequate consideration of long horizon risks or to assess the influence of transformative ESG trends on issuers' prospects or future creditworthiness. The HLEG observes that research efforts are now increasing on environmental issues, while methodologies are less developed with respect to social aspects.[72] The Principles for Responsible Investment (PRI) report shows that CRAs' horizons typically look over three to five years for investment grade credit, two years or under for high yield and around ten years for sovereigns.[73] This position is in striking contrast with long-term (bond) investors whose time horizon is tied to an individual bond's maturity.

The HLEG has concerns that the current legal regime for credit ratings in the EU does not include an explicit mandate that relevant long-term risks including ESG risks must be fully integrated. The CRA Regulation requires that credit rating methodologies must 'incorporate all driving factors deemed relevant in determining creditworthiness of a rated entity or a financial instrument which shall be supported by statistical, historical experience or evidence.'[74] Yet the current EU regulatory regime was last amended in 2013 and does not reflect recent international agreements relating to long-term sustainability – most notably the Paris Agreement (2015), the SDGs (2015) and the Addis Ababa Action Agenda (2015) – nor any recent private sector-led initiatives, such as the 2017 TCFD report and the 2017 PRI statement on ESG in credit ratings.

The EU should carefully monitor progress made with regard to embedding ESG within Credit Ratings and seek to lead the debate also at international levels. The CRA specific recommendations in this section are targeted at ensuring this. If there are obstacles to doing this, such as a lack of cooperation by issuers, slow progress on disclosure or unwillingness

71 See 'Implied Materiality and Material Disclosures of Credit Ratings' by Robert G. Eccles and Tim Youmans, HBS Working Paper 15-079, 2015.

72 Examples include Standard & Poor's 'How Environmental and Climate Risks and Opportunities Factor Into Global Corporate Ratings – An Update', November 2017.

73 See the UN PRI report 'Shifting Perceptions: ESG, Credit risk and ratings', 2017.

74 Article 4, Commission Delegated Regulation (EU) No 447/2012 of 21 March 2012 supplementing Regulation (EC) No 1060/2009 of the European Parliament and of the Council on credit rating agencies by laying down regulatory technical standards for the assessment of compliance of credit rating methodologies.

on behalf of the incumbent CRAs, then further measures are warranted. Even though the HLEG does not call for the establishment of a European rating agency today, if more progress is required the EU could support the establishment of a new credit agency that fully includes long-term risks and sustainability in line with European policy objectives.

Sustainability rating agencies

Sustainability ratings have existed since the mid-1990s. Since then, the number of products offered has increased substantially — despite a shift towards consolidation among the institutions involved. The core of the ratings consists mainly of evaluating and comparing the sustainability performance of issuers on the sustainability challenges that they face: companies, countries and other types of securities issuers.[75]

Investors are the core users of sustainability ratings, which can be used in investment decisions and in managing their portfolios. The analytical work is primarily based on publicly available information produced by issuers and third parties, as well as information gathered via direct exchange with the issuers. Companies and financial institutions involved in credit-sensitive transactions also use sustainability ratings, along with credit ratings, in order to assess counterparty risk. Investors are normally users of 'declarative' ratings, while companies and other institutions in the financial system use 'solicited' or 'requested' rating (ESG audits performed at the request of the company or government and paid for by the issuer).

With a wide variety of products comes a different set of methodologies, many of which are agency-specific.[76] The SRA industry is still young compared with CRAs and there has thus been competition for innovative metrics. Some SRAs will focus more on one aspect of ESG for their sustainability rating, for example. This preference can also vary at the request of clients. The process of standardisation has mostly been led by single initiatives and associations, while national or EU regulation has not touch on it thus far.

Establishing business models that are independent and avoid conflicts of interest is essential for any ratings, financial advisory and analyst services. The SRAs have addressed this in a number of ways. Some agencies have taken steps to mitigate these risks by separating the work tasks (client-facing and analytical) and establishing governance structures made up of independent committees and a board of directors.[77]

Having established completely new assessment tools to help investors integrate ESG issues into their investment decisions, SRAs have built the basis for a new market segment and generated the products that can help reallocate capital towards sustainable development. Today, ESG ratings from different agencies exist on several thousand issuers worldwide, providing critical information for investors to minimise ESG risks and capture sustainable investment opportunities.

A financial market architecture that aims to support the EU's sustainability targets must ensure faster market growth in this segment. This is best achieved when investors systematically ask for information on sustainability and when companies systematically report on sustainability issues. It is also why disclosures are a key recommendation of this report. Furthermore, measures of assuring sustainability performance quality of portfolios and rating quality would be helpful to support the achievement of the EU's sustainability targets.

75 See the Novethic report 'Overview of ESG rating agencies' 2013, pages 4-6, 2013.

76 See the Novethic report 'Overview of ESG rating agencies', page 6, 2013.

77 See the Standard Ethics website 'Solicited Sustainability Ratings'.

Against this background, the HLEG recommends that:

Recommendations on credit ratings agencies

- CRAs should systematically integrate relevant ESG factors and factors related to longer-term sustainability into their credit risk analysis and credit ratings by:
    - Ensuring that their ratings methodologies are fit for purpose, publicly available and fully integrate relevant ESG factors, for example, considerations of stranded assets, the secular shift to a low-carbon economy — as well as robust disclosures, including alignment with the TCFD recommendations.
    - Ensuring that credit ratings staff are sufficiently trained to conduct analysis of ESG factors relevant for assessing creditworthiness, and that the current governance principles of CRAs are effectively applied with respect to ESG matters.
- ESMA should use the existing regulatory framework to enforce integration of ESG risk factors, to the extent they are relevant for credit risk analysis, into the methodology, transparency and governance of credit ratings outlined above, providing additional ESG-specific guidance where necessary.[78] In particular:
    - ESMA should issue guidelines for CRAs based on existing regulation, clarifying that they should integrate relevant ESG criteria in their analysis. In back-testing, CRAs could analyse how ESG criteria played a role in corporate defaults.
    - ESMA should enforce the regulations covering governance of credit ratings and competency of staff on ESG aspects.[79]
    - ESMA should ensure that regulations covering public disclosure of methodologies are adhered to with particular reference to ESG aspects.[80] The HLEG believes that it is critically important that CRAs disclose their methodology with respect to ESG and that a CRA should also disclose whether or not it is integrating relevant ESG aspects and associated information disclosed by issuers into its methodology.
- The Commission should monitor ESG integration and the credit ratings market structure closely. The importance of the climate transition should galvanise sufficient political will to ensure that this is the case and, if need be, that it allows the market structure to evolve. Possible measures could include encouraging market entry and/or the production and use of longer-range credit risk assessments, which, due to their longer timeframe, would incorporate ESG risks more substantively.

Recommendations on sustainability ratings agencies

- The EU should support and strengthen the work of the SRAs as they are already playing a crucial role of sustainability information brokers in the capital markets. This could be done by promoting the quality of sustainability ratings and of the rating processes, as well as by monitoring and assessing the extent to which sustainability ratings are considered in long-term investment decisions. Specifically, it is recommended that the Commission boost clarity and transparency on sustainability ratings through the development of guidance or, more stringently, a set of minimum requirements for organisations that deliver ESG data analytics and ratings, paying particular attention to the issue of independence.

78 As part of the existing CRA regulation CRAs 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' (Article 8.5 of CRA1 2009). EU/1060/2009 requires that CRAs should 'use rating methodologies that are rigorous, systematic, continuous and subject to validation based on historical experience, including back-testing'. Annex 1 (Part III, Section E) of CRA1 outlines that the transparency report is currently required to disclose information about the legal structure of the CRA, the internal control mechanisms that ensure the quality of its ratings, record-keeping, allocation of staff, management, a review of independent compliance, financial information and governance accounts.

79 Specifically ensuring that Annex I Section A (2) paragraph 2 of the Credit Rating Agency Regulation is applied in the context of ESG risks, where relevant.

80 Specifically ensuring that Annex I Section E I 1(5) of the Credit Rating Agency Regulation is applied in the context of ESG.

6. STOCK EXCHANGES AND FINANCIAL CENTRES

Financial centres and stock exchanges can play a positive role in promoting the growth of sustainable finance, particularly in relation to the provision of market infrastructure supporting sustainable asset classes.

A small but growing number of European financial centres are taking strategic action to mobilise their expertise and contribute to both climate action and wider sustainable development goals across banking, capital markets, fintech, insurance and investment. Examples of EU financial centres with sustainable finance initiatives include Dublin, Frankfurt, London, Luxembourg, Milan, Paris and Stockholm.

Efforts in this space are still relatively new and most of the EU's financial centres have yet to engage. As a result, the interim report acknowledged that 'at the very least, the EU could encourage and support financial centres in launching and strengthening green and sustainable finance initiatives.' To do so, it will be important to consider how the overall system of fiscal incentives for financial products and associated savings can be aligned with sustainable development. Fiscal incentives such as tax-free pension provisions and individual savings accounts can significantly affect capital flows.

The growth of green finance depends on promoting green finance products as well as greening mainstream financial markets; stock exchanges play a key role in both. Recently, the Sustainable Stock Exchanges (SSE) Initiative issued a voluntary action plan on 'How Stock Exchanges can Grow Green Finance'.[81] The SSE green finance action plan identifies two main action areas that stock exchanges could work on in parallel. First, the promotion of green-labelled products and services; second, more systematic changes to support a green transition. The guidance also identifies two cross-cutting action areas that will facilitate green finance efforts: strengthening climate-related and other environmental disclosures among issuers and investors; and contributing to the growth of dialogue and consensus-building on green finance with other capital markets participants. Throughout all four of these action areas, partnerships are key.

Exchanges have also been collaborating through the SSE to develop model guidance on ESG reporting for exchanges to use in their own markets. Many exchanges have now launched ESG reporting guidance for issuers to encourage and support high-quality ESG reporting.[82] While this is welcome, a more consistent global framework of disclosure is needed for both exchanges and regulators, notably to lower the reporting burden for companies operating globally. This indicates a role for IOSCO, which could start on climate issues given the TCFD momentum.

With the current regulatory framework, the HLEG acknowledges that while disclosure rules are essential for the functioning of exchanges, in implementing the Non-Financial Reporting Directive, the Prospectus Regulation and the PRIIPs Regulation, the Commission should pay attention to avoiding undue regulatory burden on small and medium-sized enterprises as it might otherwise affect the attractiveness of using EU stock exchanges and capital markets.

81 See the Sustainable Stock Exchange Initiative report 'How stock exchanges can grow green finance', 2017.

82 See the Sustainable Stock Exchange Initiative report 'Model guidance on reporting ESG information to investors', 2015.

Against this background, the HLEG recommends that:

- **Financial centres**
  - Provide clarity about the role and responsibility of listing authorities in promoting disclosure of ESG information across the EU, building on the new Prospectus Regulation and ensuring that ESMA incorporates ESG considerations into the development of Level II and Level III regulation.
  - Conduct a review of the system of incentives for financial instruments, to rethink existing fiscal incentive budgets so they are used to support uptake and investment in products that help drive sustainability, alleviating or removing any fiscal barrier in particular to the issuance of debt securities on regulated or exchange-regulated markets at the member state level; this could include fostering longer-term holding periods in particular.
  - Encourage IOSCO to develop a consistent approach to corporate disclosure of sustainability performance and in fostering the development of sustainable asset classes.

- **Stock exchanges**
  - Encourage stock exchanges to publish guidance on ESG reporting to investors, establish lists or segments dedicated to sustainable financial instruments, building on work carried out by the SSE Initiative, including the voluntary action plan on 'How Stock Exchanges can Grow Green Finance'.
  - Give consideration to streamlining and standardising ESG and sustainability information that listed issuers are required to report, and encourage harmonisation of this information across stock exchanges, rather than simply adding to existing disclosure requirements.
  - Encourage stock exchanges to establish alternatives to bank finance for small and medium-sized enterprises, including privately held companies, by removing any regulatory barrier to the issuance of debt securities on regulated or exchange-regulated markets at the member state level.

7. INVESTMENT CONSULTANTS

Investment consultants have a role and duty in helping to deploy capital towards sustainability goals.[83] Investment consultants are the primary point of contact for many asset owners in the investment market. They provide a range of advisory services to asset owners, from funding decisions to asset allocation, manager selection and reporting processes. They frequently train sponsors and trustees on approaches to investment and emerging investment trends. Guidance as to how ESG should be integrated into their client interactions could help to ensure that investment consultants pro-actively consider ESG issues.

Effectively managing ESG issues is a core part of the duties that asset owners owe to their beneficiaries and to wider society. If investment consultants are to retain their position as trusted advisers, and develop their future businesses (for example, fiduciary management), they need to ensure that their asset owner clients navigate these challenges effectively.

83 This term refers to those consultants providing advice (investment advice under MiFID or generic advice) to the larger institutional investors.

Many EU markets make significant use of investment consultants. This is particularly the case in the UK, and also includes France, Germany, Italy, Norway and Spain. Pension fund trustees, and other institutional investors, often rely on their advice in deciding how to invest the money of their clients and beneficiaries.

The generic advice, asset allocation and manager selection elements of the investment consultant market remain largely unregulated.[84] Consultants do not systematically include ESG considerations within the information and generic investment recommendations that they provide to their institutional clients, regardless of the materiality of such risks or their clients' interest in considering them. Investment consultants rarely raise such issues on the basis that they are not raised by their clients, yet clients often do not raise them because they are overly reliant on following the advice and agenda of the consultants.

When investment consultants provide investment advice under MiFID, consistent with the HLEG recommendation on investor duties, there are two recommendations. First, that whenever a personal recommendation is given, consideration must be expressly taken of financially material ESG issues, and of non-financially material ESG issues, including any stated interests and preferences of their pension scheme client (including those based on the interests and preferences of scheme members and beneficiaries as understood by the scheme) that the client wishes to be included in the advice. Second, that when an investment consultant also offers 'investment management' or 'fiduciary management' services to their clients, the investment management elements of the fiduciary management (governed by MiFID) must be carried out in accordance with the clarified duties set out in the investor duties recommendation.

To spur sustainable market growth, the EU should require investment consultants pro-actively to raise ESG and ethical issues with clients and establish whether there are any ESG and/or ethical preferences that should be considered within the advisory process. This is essential to complement the HLEG-recommended changes to investor duties both to incorporate material ESG risks into their investment strategies and to engage with clients and beneficiaries to establish and act on their investment preferences. Investment consultants should therefore ensure that they are sufficiently informed about ESG and ethical issues to provide the advice that their clients require, including the likely effect on the risk and reward profile of their investments of integrating their ESG and ethical preferences into their investment strategies.

Pension trustees have a duty to ensure they have a sound understanding of preferences and interests of their members and beneficiaries, particularly on ESG, and to ensure that these are reflected in the terms on which they engage investment consultants. In turn, investment consultants have a duty to understand the interests and preferences of their pension scheme clients — and through the scheme and their trustees, those of their members and beneficiaries. Consultants should also incorporate advice on ESG issues and the expressed interests and preferences of the scheme, its members and beneficiaries into the advice given to the scheme, including generic asset allocation or manager selection advice, as well as their effect on the risk/return profile of the recommended investment/asset allocation/manager selection strategy.

84 Generic advice about a type of financial instrument is not considered investment advice for the purposes of MiFID.

Against this background, the HLEG recommends that the Commission:

- **Clarify and provide guidance on the following points:**
  - Investment consultants have a duty to inform themselves about ESG and ethical issues so that they may pro-actively raise and offer advice on such issues to their clients.
  - Where investment consultants offer regulated advice, or regulated investment management, such management must be carried out consistently with the clarified duties set out in the investor duties recommendation.
  - Pension trustees and other clients of investment consultants should ensure that they request that ESG issues and their likely effect on investment risk/return are included in the advice that they receive, and reflect this requirement in terms of appointment of consultants where relevant.
  - If this suggested guidance fails to have the desired effect, the HLEG recommends that the Commission consider more direct intervention through MiFID II or a new regulation explicitly aimed at investment consultants.

8. INVESTMENT BANKS

Investment banks support issuers in coming to the market for the first time (via initial public offerings) and in raising capital subsequently through the issuance of debt or equity.

Their ability to assess the financial and sustainability risk profile of the issuer depends on the quality of disclosures. Likewise, investors buying into the issuance rely on the prospectus that the investment bank has prepared on behalf of the issuer. Research by sell-side analysts, most frequently based at investment banks, has a significant influence on the buy, hold and sell decisions of investors.

The majority of sell-side research analysts continue to focus on a short-term outlook and ignore sustainability issues. For example, a recent survey found that a mere 12% of mainstream sell-side analysts' time is spent researching companies' prospects beyond a 12-month horizon.[85]

There is also insufficient demand for research into long-term and ESG issues from the buy-side (investors). According to the same survey, for example, over 50% of mainstream sell-side analysts surveyed are asked less than once a month about broader and longer-term factors, with 12% having never been asked about such factors.

Analysts face commercial conflicts that may too often lead them to produce research that looks to enhance the profitability of investment banks at the expense of an efficient and properly functioning capital market. Findings indicate that as many as 90% of mainstream analysts would at least undertake some additional caution when writing on topics sensitive to the bank. Over a third of mainstream respondents readily acknowledge that they should avoid damaging investment banking relationships if they are to have a successful career.[86] Again, this means that ESG issues can too often be ignored.

85 See Aviva Investors Investment Research report 'Time for a brave new world?', 2017.

86 See Aviva Investors Investment Research report 'Time for a brave new world?', 2017.

Against this background, the HLEG recommends that the Commission:

- **Encourage more long-term research from sell-side analysts.**
  - The Commission/ESMA should work with investors and the sell-side to investigate how they can promote better long-term research in a post-MiFID II world. This should include:
    - Amending the MiFID II-mandated research disclosures so that all investment firms must disclose the proportion of their research budget, whether they fund this from their own resources or via a research payment account, has been spent on sustainability-focused research in the past 12 months.
    - Making clear in ESMA guidance that long-term ESG research should be encouraged under research payments and that direct fund managers should raise this issue pro-actively with their clients.
    - A requirement for all sell-side company research to include a section that looks beyond 12 months and to include a specific ESG performance analysis section.

- **Tackle the conflict of interest in investment banks.**
  - The Commission/ESMA should conduct a review of the restrictive practices within sell-side firms that put pressure on analysts as to what they can and cannot write.

Dottenfelderhof, biological farm of 150ha and research centre for biological crops, near Frankfurt/Germany. Partly supported by innovative financing model through Bürger AG, Frankfurt. Winner of the German 2018 prize on sustainable agriculture. Source: Dottenfelderhof

VI. Social and Broader Environmental Sustainability Recommendations

Finance is a vital ingredient of sustainable economic growth and its potential contribution is still frequently underestimated. While the financial sector's support in climate change mitigation is considered a priority, there are many other social and environmental challenges that require integration into investment and lending decisions. The challenges posed by the real economy today are a concrete opportunity for the financial industry to be an engine for socially and environmentally sustainable growth. This could be achieved by employing a comprehensive approach to sustainability and ESG considerations, one that is developed and endorsed by the financial sector as well as integrated into EU policies.

1. SOCIAL DIMENSION

The global financial crisis, which induced large losses in (youth) employment and economic output, has led to a questioning of the positive influence of finance on the distribution of income and the inclusiveness of growth. Credit intermediation and stock market values, which are heavily influenced by short-term speculative trading, have been steadily increasing in recent decades. High levels of remuneration in the financial sector have run in parallel with growing income inequality in many countries: the real incomes of households, especially those who are socially vulnerable and/or dependent on manual labour, have remained stagnant. Marginalised and remote regions and sectors are considered not profitable enough and have subsequently been sidelined.

Reflecting these concerns, building a fairer Europe and strengthening its social dimension have become a priority for the Commission. Particularly notable is the European Pillar of Social Rights, launched in November 2017, which focuses on promoting better working and living conditions in Europe.[87] It is structured around three categories: equal opportunities and access to the labour market; fair working conditions; and social protection and inclusion.

The financial system should be a vehicle for promoting these objectives by embedding social and other sustainability considerations into capital allocation, and by promoting more socially sustainable approaches to finance. By using social risk assessments as part of the wider ESG prism, banks and investors can effectively integrate social indicators into their core operations and use access to finance as a tool to raise corporate standards on social issues. This can create new opportunities to address low productivity and growth relating to long-term unemployment, inequality, unequal access to education and human rights violations, including outside Europe. Bringing investment to remote regions of Europe is also key to prevent them from continuing to fall behind.

87 See the European Commission website on the 'European Pillar of Social Rights'.

The HLEG sees five major areas of opportunities:

- **Supporting the growth of social enterprises:** As longstanding agents of inclusive growth, social enterprises have proved remarkably resilient in the face of economic adversity.[88] They are considered by the Commission to be valuable institutions whose main objective is to have social impact. But like start-ups, social enterprises have traditionally faced obstacles in accessing financing.
- **A 'Just Transition' fund:** As called for by the European Parliament, a 'Just Transition' fund is intended to help workers, employers and communities to profit from the income of the EU Emissions Trading System (ETS) allowances for measures to support the decarbonisation process.
- **Social impact bonds (SIBs) or 'payment-by-results':** SIBs are one of the three main types of social impact investment instruments under the European Fund for Strategic Investment's (EFSI) equity instrument.[89] They represent a valuable tool for organisations in the social economy seeking to access capital from an investment community beyond philanthropic investors. In this context, it would be useful to consider the work by the OECD on its Social Impact Investing Initiative Data Work Stream.
- **Strengthening the social factor in ESG risk assessments and related EU financial legislation:** EU legislation does not yet have a clear and standardised definition of social factors and social risks. Clarification is therefore needed. In addition to existing international social indicators, tackling specific social problems in the EU and member states will require the identification of specific social indicators.[90]
- **Promoting more inclusive and sustainable banking:** A more diverse ecosystem of sustainable banking would support local renewal and financial inclusiveness. Too many EU citizens do not have access to a bank account or other financial services to support their integration into the economy.

Against this background, the HLEG recommends that the Commission:

- **Support the growth of social enterprises.**
  - In line with the European Parliament's proposal for a 'European social label' to act as an identifier for social enterprises in the euro area, the Commission could review the legal and pragmatic implications of the use of the 'shared'/mutual recognition principle, whereby member states commit to official recognition of the social economy/social enterprise forms included in other legal systems.
  - EU support could include a focus on how tax relief approaches can be tapered or banded based on the internal economics of a sector, industry or social impact theme and therefore linked to the SDG agenda. The goal would be to rebalance the field in a way that gives more incentives for supporting those areas that are more difficult to fund or that have more challenging revenue models.

- **Identify key performance indicators for social factors to be used as part of requirements to integrate ESG aspects and risk assessments into different pieces of EU legislation.**
  - When undertaking ESG risk assessments and taking ESG factors into account, key indicators that can be used by investors, asset managers and banks, as well as their supervisors, should refer to the International Bill of Human Rights, International Labour Organization standards, and the UN International Covenant on Economic, Social and Cultural Rights.

88 The SBI 2017 definition is 'A social enterprise is an operator in the social economy whose main objective is to have a social impact rather than make a profit for their owners or shareholders. It operates by providing goods and services for the market in an entrepreneurial and innovative fashion and uses its profits primarily to achieve social objectives. It is managed in an open and responsible manner and, in particular, involves employees, consumers and stakeholders affected by its commercial activities.'

89 See the European Investment Instruments, p. 3.

90 As is used by the Commission 2017 'Public consultation on institutional investors and asset managers' duties regarding sustainability', see the definition of ESG in the glossary p.3.

- Specific EU social indicators to be used should be the SDG indicators developed and reported by Eurostat, the indicators in the EU's guidelines of the Non-Financial Reporting Directive that relate to social and employee matters, respect for human rights, gender issues, supply chains and conflict minerals, and the principles set out in the European Pillar of Social Rights.[91]
- Attention should be paid to how forward-looking social risk analyses could be developed, particularly in relation to the trend of growing inequalities.

- **Undertake action to develop investment with a social impact in the EU.**
  - The Commission could develop a framework of social impact investing profiling in collaboration with the OECD, and building on its Social Impact Investing Initiative Data Work Stream. The framework should be made available on the European Investment Advisory Hub.[92] In a similar way to what the OECD has done around data reporting standards, this EU framework could also include performance data (financial and impact-related). It could be used to integrate social impact requirements into the regulation underpinning EFSI 2.0. Supporting regions in the European periphery would be particularly important to secure employment prospects and avoid large parts of the population feeling forced to abandon their home regions.
  - Continue to investigate SIBs as risk-sharing mechanisms linked to the SDGs based on the Social Impact Incentives model, with hybrid/blended 'payment-by-results', whereby an outcome payer becomes a key customer to the enterprise, paying premia for its social contribution. These mechanisms would serve as additional financing to an enterprise's regular revenues, thus providing incentives to improve the social enterprise's levels of profitability while raising its attractiveness for investors.
  - **Given the existence of SIBs, their relationship with 'social bonds' will need to be assessed.** If the Commission were to explore the further development of social bonds and consider industry-related initiatives, it will have to specify the criteria of project/activity selection, use of proceeds, management and attractiveness to retail investors.

- **Support a just transition.**
  - The Commission should support the Just Transition fund to help workers, employers and communities to profit from measures supporting the decarbonisation process, including the ETS allowances.
  - The Commission should support member states in the establishment of national transition funds supporting activities to address climate action and related employment risks for workers and vulnerable communities.

- **Develop a strategy for inclusive and sustainable banking with approaches that can accelerate innovative banking across the EU.**
  - The Commission should collect the different innovations and best practice that respond to the inclusive and sustainable financing needs of citizens, entrepreneurs and communities and bring them to the European level. The EU could use the work done at the G20 level on inclusive finance and the use of new financial technology, such as the G20 High-Level Principles for Digital Financial Inclusion and the G20 Financial Inclusion Indicators.

91 See the European Commission's SDG indicator set, 2017 as well as the Monitoring report on progress towards the SDGs in an EU context, 2017; see also the impact assessment methodology developed in the EIB 'Environmental and Social Handbook', 2013.

92 It should also be made available through the website www.fi-compass.eu (fi-compass is designed to support ESIF managing authorities, EaSI microfinance providers and other interested parties, by providing practical know-how and learning tools on financial instruments).

2. NATURAL CAPITAL AND ENVIRONMENTAL CHALLENGES

Our economies and societies depend on several types of capital, including natural capital.[93] Natural capital comprises the stock of renewable and non-renewable resources – water, land, air, biodiversity (animals and plants), forests, soils – that yield a flow of benefits, often termed 'ecosystem services'.[94] But the stock of natural capital is currently at risk, as it is deteriorating beyond its rate of renewal, not least due to policies that do not value it sufficiently value.

Natural capital has typically not been included in the past in standard economic production functions, largely because it was widely thought that it could be taken for granted. This is no longer the case. Even though it is critical for virtually all kinds of production, and most of the SDGs are either directly concerned with or strongly dependent on natural capital, natural capital continues to be degraded.

It is essential to halt the destruction of natural capital and instead manage it within boundaries that maintain the resilience and stability of natural ecosystems, and allow for resources to renew.[95] Breaching the limits of these systems presents risks of severe social, economic and geopolitical consequences. At the planetary scale, human pressures on biodiversity, nitrogen and phosphorus already present high risks. Biodiversity loss as well as ecosystem degradation (for example, forestry) and collapse, resource overconsumption and depletion, waste, and air, water, land and ocean pollution are all examples of unsustainable management of the natural capital on which our economies and societies depend.[96] Some of these already translate into stranded assets for financial institutions in various sectors.[97]

The externalities generated by the misuse of natural capital are dangerously high. According to the 'Natural Capital at Risk – Top 100 Externalities of Business' study, primary production sectors (agriculture, forestry, fisheries, mining, oil and gas exploration, utilities) and primary processing sectors (cement, steel, pulp and paper, petrochemicals) generate externality costs of US$7.3 trillion, or 13% of 2009 global economic output.[98] The majority of environmental externality costs are from greenhouse gas emissions (38%), water use (25%), land use (24%), air pollution (7%), land and water pollution (5%) and waste (1%).

While this report further dwells into the areas of agriculture and marine resources more specifically, a key issue is also forestry. Forest support 80% of terrestrial biodiversity and represent one of the largest and most cost-effective solutions to climate change. As such, they are essential to the full integration of natural capital in our financial system.

It is also clear that environmental challenges go beyond climate change. Companies that depend on or affect natural capital need to manage the related risks, including supply chain disruption and other operational risks, reputational risk, production risk, legal and regulatory risks, human rights and health risks. They also need to capture the potential opportunities stemming from a more sustainable business model.

93 The International Integrated Reporting Council lists six capitals in its framework: natural, financial, manufactured, intellectual, human and social. Natural capital is a concept proposed by Pearce et al. in 1989.

94 See K. Bolt et al., 'Biodiversity at the Heart of Accounting for Natural Capital: The Key to Credibility', 2016.

95 See the Stockholm Resilience Centre.

96 Biodiversity loss and ecosystem collapse are listed as one of the top ten global risks in the World Economic Forum's Global Risk Report in 2015.

97 See, for example, the Smith School of Enterprise and the Environment, University of Oxford article 'Stranded Assets in Agriculture: Protecting Value from Environment-related Risks', 2013.

98 See the Trucost for Business Coalition, 2013.

The EU has introduced a number of policies to protect, restore and manage European natural capital sustainably. Given that the global trends of growing population and urbanisation exacerbate environmental problems, more support for environmental protection is urgently needed. The pricing of externalities can directly encourage this transition: environmentally harmful subsidies should be urgently phased out, while environmental taxes and extended producer responsibility schemes should be implemented.

To date, these policies and/or their implementation record have been insufficient to ensure proper integration of natural capital risks and opportunities into financial decision-making. For the most part, other approaches, many of which have been destructive of natural capital, have dominated. On balance, policy signals predominantly reflect unsustainable economic approaches that deplete natural capital. The loss of biodiversity is the most alarming element in this context. The incorporation of natural capital risks and opportunities has not yet become standard practice in the financial sector, and destructive policies are still permitted and widespread. Financial institutions should ensure that, at the very least, they 'do no harm' and do not support companies that deplete natural capital.

Such analysis needs to comprise several features to ensure that there is an adequate risk assessment and management framework. It should:

- Assess both impacts and dependencies on natural capital, considering natural capital as a resource, and not only as an externality.
- Have a broad scope: traditional ESG analysis often pays little attention to biodiversity and soil-related issues; such a narrow perspective prejudges which issues can be considered financially material and hence may overlook risks to which a company is exposed, potentially resulting in stranded assets.
- Treat natural capital as an integrated whole, not as a series of standalone issues. For example, climate change, water, biodiversity and public health are interrelated and these links should be analysed to ensure no risks are missed.[99]
- Adopt a long-term horizon, in particular taking account of how technological developments and existing environmental regulatory provisions might evolve.

Against this background, the HLEG recommends that the Commission:

- **Foster natural capital assessment and disclosure.**
  - The Commission should encourage and support the development and use of standards, metrics and methods for quantifying, reporting and managing natural capital risks and opportunities in decisions by financial institutions. This should also consider accounting standards and draw on initiatives targeted at financial institutions, such as the Finance Sector Supplement to the Natural Capital Protocol and the EU Community of Practice on Finance and Biodiversity to standardise approaches, as well as on recent experiences with corporate environmental profit and loss accounting.[100] Action in this area is urgent, as the loss in diversity of flora and fauna is alarming.
  - The Commission should explore how to use frameworks for defining global science-based targets for natural capital management and restoration, building, for example, on the concept of planetary boundaries.
  - The Commission should improve natural capital disclosures in the next NFRD review and could examine how natural capital could better be accounted for in economic valuations.

99 Scientific evidence shows that tackling these issues separately reduces effectiveness and that an integrated approach is needed.

100 There is a broader issue on accounting, as accounting standards do not reflect the destruction of natural capital and the massive externalities related to it. Initiatives aimed at the national (World Bank's WAVES) and EU level (Eurostat pilots on Natural Capital Accounting) can also be useful.

- **Make ESG issues more specific in investor duties by requiring assessment of both impacts and dependencies** on natural capital and ecosystem services, and how they can become financially material.[101]

- **Facilitate access to capital and provides incentives for natural capital investments**, in particular for projects that prioritise contribution to climate and sustainability and that de-risk investments. These include green/blue infrastructure as well as nature-based solutions and nature restoration, for example.

- **Encourage Sustainable Infrastructure Europe** to include a pipeline of natural capital projects that contribute to resolving environmental challenges through adoption of clean, resource-efficient, circular technologies. Nature-based solutions should be made a priority where relevant, in line with the EU Green Infrastructure Strategy. They should also benefit from the experience of the Natural Capital Financing Facility developed jointly by the Commission and the EIB. Finally, the Commission should investigate what financial tools would be most relevant for promoting these activities (for example, innovative public-private risk-sharing facilities).

3. AGRICULTURE

The HLEG has devoted some attention to agriculture as the sector is rooted in natural capital management (land, water and biodiversity) and deeply intertwined with climate change, health and environmental sustainability.[102] The following recommendations showcase how financial policy reforms can help to achieve economic, social and environmental objectives in the agri-food sector.

Agriculture in Europe today is strongly characterised by 'intensive' production; a method which was originally driven, among others, by society's food production needs after the war. It has provided affordable food for EU citizens assisted by considerable public funds, essentially through the Common Agricultural Policy (CAP). High production levels have safeguarded food security. They have also provided for abundance in agricultural products across seasons and regions, and allowed the EU to be a significant exporter of agricultural and processed food.

But the environmental and health costs of this model, which are well recognised by European policy-makers, have become increasingly evident. Over time, they will threaten the access of future generations to natural resources such as fertile soil, clean water and thriving biodiversity in flora and fauna. Despite several rounds of CAP reform, fundamental concerns still remain to be addressed.

Sustainability risks include:

- Concerns about soil and water quality degradation as well as waste in those parts of the agricultural sector that are often referred to as 'intensive' or 'industrial agriculture'.[103]
- Large-scale use of pesticides, raising major concerns about their impacts on natural resources and health.[104] The loss in biodiversity is so rapid that even experts consider it as dramatic and that all EU targets are missed in this area.

101 The distinction between impacts and dependencies, and the mechanism through which they translate into a financially material risk for the company helps to clarify the concept of ESG. For example, on the lending side, it may impair the credit quality of a portfolio by impeding a client's ability to service its debt; on the investment side, it may affect revenue and thus valuations; on the insurance side, it may affect risk exposure.

102 Agricultural activities in the 28 EU member states generated 470.6 million tons of CO2 (2012), corresponding to about 10 % of total greenhouse gas emissions, a decrease of 24% as compared with 1990.

103 See M. Brian, 'Water Pollution by Agriculture', 2017.

104 See M. Watts, 'Human Health Impacts of Exposure to Pesticides', 2012.

- Large-scale use of antibiotics, particularly in the food industry, has been a major factor in the emergence of bacterial resistance to antibiotics and biocides, with potentially negative effects on population health.[105]

The current food production and supply system is complex, and it is largely opaque to both the end user and the financial investor. For example, production conditions for agricultural products are not fully disclosed — either to consumers or investors. Where disclosures do happen, the prescription is on visible product characteristics (shape, size, colour and appearance), while there is no mandatory disclosure on products or processes that were used in the production – such as pesticides or antibiotics. Information that is directly related to the sustainability of production methods should urgently be disclosed as it will enable the financial sector to encourage the transition towards a more sustainable model for agriculture.

In this context, the HLEG proposes a significant review of the agricultural policy to bring it as a whole onto a path of economic, environmental and health-related sustainability.

Against this background, the HLEG recommends:

- **Revising the Non-Financial Reporting Directive to improve disclosures in the agri-food sector and help to re-orient investments towards sustainable agricultural practices.**
  Enhanced disclosures by agri-food companies on a range of sustainability indicators would enable investors to distinguish between firms operating to higher or lower environmental standards. Disclosures could include: for agri-food producers, the share of organic product sales compared with total sales (in a way similar to the use of renewable power for utilities); within the supply chain, disclosures could include natural capital indicators such at biodiversity levels on farmland; kind of animal feed used; use of antimicrobials and pesticide and so on. The Commission could request its existing stakeholder groups to determine a list of the most significant material sustainability risks in the agri-food sub-sectors.

- **Revising Commission Implementing Regulation No. 543/2011 of 7 June 2011 and other relevant regulations to include disclosure requirements relating to agricultural production's impact on natural resources and empower consumers to express their preference for sustainable food production.**
  Food classification is made essentially according to product size, shape and colour, and higher classification is made on grounds of better visual appearance. This does not allow investors or consumers to identify sustainability or non-sustainability aspects in underlying production. The focus on appearance of agricultural products rather than on the way they have been produced, presents a massive distortion towards the use of chemicals and pharmaceuticals. The classification system should evolve towards a classification system focused on the production type (degree of use of chemicals, pharmaceuticals, etc.). General disclosures beyond the classification system should also be enhanced to include information on the use of metrics relevant for sustainability, such as chemicals/pharmaceuticals; plant treatment; animal feed and conditions; distance travelled; and other natural resource consumption to enable consumers to make informed choices and help incentivise sustainable production chains.

- **Investigating whether disclosure in the Non-Financial Reporting Directive can be improved with indicators relating to agriculture and food lending and investing, in order to increase accountability in the investment and lending chain.**
  Investors and lenders could report on how aligned their ESG risk assessment and screening of potential borrowers and investees are to those set out in the Principles for Responsible Agricultural Investment (PRAI), the UN Principles for Responsible Investment in Farmland and the Committee on World Food Security's Principles for Responsible Investment in Agriculture and Food Systems (PRIAFs).

105 See R. Capita, 'Antibiotic-resistant Bacteria: A Challenge for theFood Industry', 2013.

- **Investigating how environmental and social externalities can be better included in pricing to foster full price transparency in the production of basic agricultural and food commodities.**
  Food pricing currently lacks transparency and seems unduly influenced by commodity derivatives trading and other non-transparent financial or physical trading mechanisms that are often unrelated to the actual demand and supply of agricultural products. Such price swings unrelated to fundamentals are likely to hinder long-term investments in sustainable agricultural production. More research is needed to identify how best to address this issue.

- **Facilitating access to capital for sustainable farmers.**
  Farmers often face difficulties accessing credit needed when making the transition to more sustainable practices, as this transition frequently entails short-term costs. Here, the EU could investigate how financial support could be provided that takes account of the important positive externality of such transition and develop innovative public-private risk-sharing facilities to support sustainable agriculture projects and the pooling of loans to smaller sustainable farmers. This might even include options for debt relief, funded through revisions to the CAP, to encourage farmers to transition to more sustainable business practices, such as high natural value farming or organic and other types of sustainable farming.

4. MARINE RESOURCES

The EU should move to sustainable use of marine resources. Seafood production, in particular, presents a major challenge to our collective ability to manage the earth's resources sustainably. Fishing efforts have often exceeded the ability of fish stocks to maintain themselves and the impact on non-target species can be severe.

Many fish stocks have declined just when global need for food is greatest, and the marine ecosystem has been significantly degraded. Sustainability is central to the business success of companies that produce, process or retail seafood, and which must manage the significant risks inherent in the supply chain. For example, companies engaged in the seafood sector have to manage such risk factors as supply chain disruption, reputational risk, production risk, risks associated with using illegal products and human rights risk.

The EU has introduced a number of policies to encourage the sustainable use of marine resources within the EU. In particular, the Common Fisheries Policy aims 'to ensure that fishing and aquaculture are environmentally, economically and socially sustainable'.[106] This has helped to contribute to the partial recovery of Europe's fish stocks, as identified in the Commission's 'Next steps for a sustainable European future'.[107] The 2011 Biodiversity Strategy sets a series of targets for healthier fish stocks, healthier seas and no significant adverse impacts on species and ecosystems.[108] The EU's Marine Strategy Framework Directive seeks to join together other elements of EU legislation that affect the marine environment. More recently, the EU's commitments, as submitted to the UN Ocean Conference in June 2017, highlight financial commitments that will contribute to the implementation of SDG 14.[109] Looking to the future, the 7th Environment Action Programme reinforces the need to maintain and improve natural resource bases to allow economic sectors to deliver services.[110]

106 See the European Commission's Common Fisheries Policy.

107 See the communication from the European Commission, 'Next steps for a sustainable European future', 2016.

108 See the European Commission's Biodiversity Strategy to 2020.

109 See the General Secretariat of the Council, 'List of voluntary commitments proposed for presentation by the EU on the occasion of the UN Ocean Conference', 2017.

110 As referenced in the European Commission's communication on the next steps for a sustainable European future.

These policies, particularly those in the EU, give responsible investors an indication of good practice, but do not set out core rules that they could follow to support the sustainable use of marine resources. There are currently too few signals from policy-makers to private investors that wish to invest in more responsible marine and maritime practice.

Against this background, the HLEG recommends that:

- **The Commission deliver on its June 2017 commitment to work with NGOs and investors to develop a set of 'blue economy investment principles' that will guide financing decisions.** These principles should encourage investors to engage with the maritime sectors in which they invest as good stewards, as well as steering capital towards those sectors that are more sustainable and away from those that are fishing unsustainably, resulting in a differentiated cost of capital for these approaches.[111]
- **The Commission and supervisory authorities turn the principles into investor guidelines and consider how to use the principles to strengthen existing EU ecolabels.**
- **The EU looks to extend these principles outside the EU, via EU development policy action**, through the Sustainable Fisheries Partnership Agreements established with developing countries and wider partnerships with other regional fisheries management organisations.

111 Report from the European Commission on options for an EU Ecolabel scheme for fishery and aquaculture products, 2016.

France: Experimentation of autonomous and electric shuttles on the esplanade of La Défense.

VII. Conclusion

It took under 12 months for the High-Level Expert Group (HLEG) to produce its report. Making sustainable finance the norm across Europe will take years, if not decades. Since the HLEG began its work, there have been many signs of both the need for sustainable finance and its rapid evolution. Greenhouse gas emissions are rising once more, species loss remains remorseless and social dislocations continue to hold back global development. At the same time, more of Europe's financial institutions have shifted assets from 'grey' to 'green', more of Europe's financial authorities have shown how ESG factors can be incorporated into market rules, and more of Europe's users of financial services have demanded new ways of delivering their sustainability requirements. Closing the gap between this impressive – but still fragmented – response and the scale of the systemic threats requires a long-term strategic framework for sustainable finance.

The Group's goal was to provide a sustainable finance roadmap containing practical policy recommendations for the EU. More specifically, the HLEG's mandate, as set out by the Commission, was to deliver recommendations on: how to integrate sustainability considerations more effectively into the EU's financial policy framework; how to protect the stability of the financial system from risks related to the environment and its stability; and how to mobilise capital, notably from private resources, to finance sustainable investments and growth. In particular, the HLEG was asked to provide advice on how to 'steer the flow of public and private capital towards sustainable investments; identify the steps that financial institutions and supervisors should take to protect the stability of the financial system from risks related to the environment; and deploy these policies on a pan-European scale'.

The Group's recommendations are contained in this final report. Beyond these formal recommendations, the HLEG has been inspired by how an initiative like this can trigger action on a European scale. New conversations are taking place within member states on how to develop sustainable finance at the national level. A more strategic approach has been developed by some institutions within the financial sector. And civil society organisations have raised the bar in terms of the right level of ambition for sustainable finance in Europe. None of this was expected. Indeed, the HLEG has shown how an open process of dialogue and analysis can generate real change, pooling the best of Europe's efforts.

The Commission will now come forward with an action plan on sustainable finance. That will draw on the recommendations in this report. What has been striking over the past year is how the Commission started signalling policy changes as soon as the interim report was issued. Most recently, for example, an important set of measures to be included in the action plan was pre-announced at the One Planet Summit in December 2017. Such activity is a testament to the EU's leadership and it will enable this Commission and the next to build on a growing momentum and body of work around sustainable finance in the EU.

The ultimate test of the HLEG will not just be the degree to which its specific recommendations are adopted, but the extent to which sustainable finance becomes a permanent feature of European markets and policy-making. Roadmaps and action plans are essential to identify priorities for policy reform. But these are only means to the ultimate end of making sustainable finance the norm across the EU. This will require a durable way of ensuring that the sustainable finance agenda affects real decisions, that its progress is transparently monitored and that responses evolve in light of new needs and opportunities. If this takes place, then the HLEG could be seen to have been one ingredient in the necessary shift in Europe's financial system from post-crisis stabilisation to delivering a positive impact for sustainable development.

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Acronyms and Abbreviations

A4S	Accounting for Sustainability
ABP	Stichting Pensioenfonds ABP
AIFMD	Alternative Investment Fund Managers Directive
CAB	Climate Action Bonds
CEB	Council of Europe Development Bank
CMU	Capital Markets Union
CRD	Capital Requirements Directive
DG-FISMA	Directorate General Financial Stability, Financial Services and Capital Markets Union
EaSI	Emplyment and Social Innovation Programme
EC	European Commission
ECBC	European Covered Bond Council
EEA	European Environment Agency
EEFIG	Energy Efficiency Financial Institutions Group
EeMAP	Energy Efficiency Mortgage Action Plan
EFRAG	European Financial Reporting Advisory Group
EFSI	European Fund for Strategic Investments
EIB	European Investment Bank
EIOPA	European Insurance and Occupational Authority
ELTI	European Association of Long-term Investors
ELTIF	European Long-term Investment Funds
EMCS	Environmental Markets Classification System
EMF	European Mortgage Federation
ESAs	European Supervisory Authorities
ESF	European Social Fund
ESG	Environmental, Social & Governance
ESMA	European Securities and Markets Authority
ESRB	European Systemic Risk Board
ETS	Emission Trading System
MFF	Multinannual Financial Framework
EUR	Euros
EUROSTAT	European Statistics
Eusef	European Social Entrepreneurship Funds
EuVECA	European Venture Capital Funds
FSB	Financial Stability Board
GHG	Greenhouse Gas
GISB	Global Infrastructure Sustainability Benchmark
GRESB	Global real Estate Sustainability Benchmark
HLEG	High-Level Expert Group
I4CE	Institute for Climate Economics
IASB	International Accounting Standards Board
ICMA	International Capital Market Association
IFRS	International Financial Reporting Standards
IIRC	International Integrated Reporting Council
IORP-II	Directive on Institutions for Occupational Retirement Provision
IOSCO	International Organization of Securities Commission
KIDs	Key Information Documents
LCE	Low Carbon Economy
MDBs	Multilateral Development Banks
MIFID	Markets in Financial Instruments Directive
MTFs	Multilateral Trading Facilities
NECPs	National Energy and Climate Plans
NFR	Non-Financial Reporting Directive
NGO	Non-Governmental Organization
NIB	Nordic Investment Bank
NPBs	National Promotional Banks
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
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
UNEP	United Nations Environment Programme
UNEPFI	United Nations Environment Programme Finance Initiative