



UNEP
FINANCE
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LUXEMBOURG SUSTAINABLE FINANCE ROADMAP

A JOURNEY TOWARDS A
SUSTAINABLE FINANCIAL SYSTEM

October 2018

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United Nations Environment Programme – Finance Initiative is a partnership between United Nations Environment and the global financial sector created in the wake of the 1992 Earth Summit with a mission to promote sustainable finance. More than 200 financial institutions, including banks, insurers, and investors, work with UN Environment to understand today's environmental, social and governance challenges, why they matter to finance, and how to actively participate in addressing them.

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Innpact leverages more than 10 years of experience in enabling impact investing play an active role in the achievement of the Sustainable Development Goals.

It has an unrivalled expertise in designing and structuring impact investment funds and blended finance vehicles. Innpact supports promoters and fund managers for impact investment projects totaling more than USD 5 billion. With its team of 30 experienced impact professionals, it serves a wide range of clients from development finance institutions to foundations, banks, NGOs, institutional investors and fund managers from all over the world.

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1. FOREWORD

Minister of
Finance
**Pierre
Gramegna**

Climate change is the challenge of our time. Its consequences are global in scale and will affect all of us and our children. Therefore only a shared and collective response as agreed in the Paris Agreement can succeed in combating its effects. It acknowledges that finance has to play a key role in the transition to a low carbon and climate smart future. Substantial investments from the private and public sector will not only finance the fight against climate change, but also help countries to achieve their Sustainable Development Goals.

As one of Europe's leading financial centres, Luxembourg already plays an important role in mobilizing private and public capital, in order to assist governments and investors around the world to mitigate climate change.

In 2016, the Luxembourg Stock Exchange launched the Luxembourg Green Exchange (LGX), the world's first platform exclusively dedicated to green securities. Today, Luxembourg is the primary centre in the world for listing green bonds and the European leader in responsible investment fund assets, accounting for 30% of all funds and 40% of all assets under management. Through LuxFLAG, Luxembourg has been a pioneer in the area of sustainable finance labels for more than a decade. In the latest global Green Finance Index, Luxembourg ranks 2nd when it comes to Green Finance penetration.

Based on this expertise, the Ministry of Finance and Ministry of Sustainable Development and Infrastructure have been working hand in hand to further develop the financial centre's sustainable finance ecosystem, in particular by leveraging private investments for climate-related activities. For instance, the International Climate Finance Accelerator, a public-private partnership, is currently supporting its first-ever cohort of innovative fund managers looking to invest in climate projects all over the world.

Deepening its partnership with multilateral actors, the government is running a joint Climate Finance Platform with the European Investment Bank, which uses first loss funding to leverage private sector investments. Furthermore, Luxembourg is a strategic partner of the International Finance Corporation's technical assistance fund to the Amundi Planet Emerging Green One Bond Fund.

Looking to next year, we are delighted to be hosting here in Luxembourg the UN Environment Programme Finance Initiative's Regional Roundtable for Sustainable Finance in Europe, as well as the Global Landscape Forum, with the aim to help create new synergies between different European stakeholders active in the field of sustainable and climate finance.

Building on these achievements, the Luxembourg government has commissioned UN Environment Programme Finance Initiative to work out this Roadmap to look at how Luxembourg can continue to consolidate its existing expertise in sustainable finance and develop new innovative capabilities. It constitutes a common vision on how to achieve the objectives of the Paris Agreement and facilitate the financing of the Sustainable Development Goals. I am pleased to see that all of the financial centre's key stakeholders have actively participated in establishing this document.

I am thus confident that this Roadmap will guide Luxembourg on its path to a fully sustainable financial centre and I hope that it will inspire other governments and financial centres alike to better leverage their financial capacities in our common fight for a more sustainable future. There is no time to lose!

Minister
for the
Environment:
**Carole
Dieschbourg**

The world is changing! And by that, I mean not necessarily in a sustainable way. Climate change, land degradation, biodiversity loss, increasing air and water pollution, poverty and migration are only some of the challenges we all need to face today. To counter the immense burden that lies upon us and to take responsibility, in September 2015 the international community adopted the Agenda 2030 for Sustainable Development, closely followed by the adoption of the Paris Agreement on Climate Change in December 2015. The Paris Agreement is the first-ever universal, legally-binding global climate deal. It entails three major objectives.

The first one is to limit the global temperature increase to well below 2°C, with the aim of limiting this increase even further to 1.5°C, which would significantly reduce the impacts of climate change. Second, the Agreement seeks to strengthen the ability of countries to deal with the unavoidable impact of climate change. Appropriate financial flows must be put in place to reach these ambitious goals. This brings me to the third goal of the Paris Agreement: climate finance and the decarbonization of our economies.

The Paris Agreement notably contains the commitment by developed countries to establish a roadmap to reach USD 100 billion annually by 2020 in the field of international climate finance in order to reassure developing countries. Furthermore, the Paris Agreement outlines the main principles of the post-2020 finance regime, notably a more ambitious collective finance target for 2025. It has been frequently pointed out that public finance alone will not be sufficient – private investments will play a major role in achieving the annual USD 100 billion goal in 2020.

But investing in new climate finance is far from being enough. Trillions of USD/EUR need to be shifted from high-carbon investments to low-carbon alternatives. This is why “making finance flows consistent with a pathway towards low greenhouse gas emissions and climate resilient development” is recognized as a key objective in the Paris Agreement. This is undoubtedly a strong signal from policymakers to businesses and investors.

Still, climate change and its adverse effects are only one of many issues that need to be tackled in the context of the Agenda 2030. There is an urgent need to review existing financing models and vehicles and to start acting more sustainably. This is why Luxembourg has already embraced green finance and is today a European leader in this field.

Luxembourg has all the prerequisites to establish itself as a frontrunner in the field of sustainable finance, namely: by offering a familiar, trusted and responsive regulatory and legal framework, through its well-established international finance centre, combining expertise and knowledge; by its willingness to face today's challenges; and its capability to adapt and identify innovative and successful solutions.

I am confident that this Roadmap will set the cornerstone for Luxembourg to develop a strong and robust sustainable finance framework.

Executive
Director
of UN
Environment
Erik Solheim

In 2018, the reality of climate change hit home. As many countries broke heatwave records, others struggled with floods and drought, and even the thickest parts of the Arctic began to melt. We are living in unprecedented and unpredictable times.

Climate change is having a profound impact on human health, the environment and the economy. As we struggle to grasp the magnitude of the change, it is clear that financial systems need to be better equipped to deal with climate risk. Profits made at the expense of the environment are doing more harm than good and are at best, short-term.

Countries around the world are acknowledging the critical role of sustainable finance in driving a sustainable future for the planet. With its emphasis on transitioning to a low-carbon economy, the European Union Action Plan on Sustainable Finance is an important step in the right direction.

I congratulate the government of Luxembourg for taking the lead on setting out a national vision to make its financial sector more sustainable. With its importance as a centre for international finance, Luxembourg is well positioned to drive sustainable finance in the region, and in the global financial system.

In March this year, more than USD 1 billion was raised on the Luxembourg Stock Exchange for Planet Emerging Green One, a fund that will buy labelled green bonds issued by emerging market banks. This platform, a joint venture between the International Finance Corporation and the French asset management giant Amundi, will increase the capacity of local banks to fund climate-smart investments. In June, the world's first forestry-covered bond was issued on the exchange to invest in sustainable forestry in Sweden. These remarkable achievements send strong signals to the world that investments of this kind in nature can be both profitable and good for the planet. I trust the findings of this comprehensive study will provide important guidance to other countries embarking on efforts to build a sustainable future.

Sustainable finance is absolutely critical to achieving the sustainable development goals because it contributes to value creation which improves economic efficiency, increases prosperity and inclusion, and ensures that the planet continues to thrive.

2. ABOUT THIS ROADMAP

This Roadmap was commissioned by the Luxembourg Ministry of Finance and the Ministry of Sustainable Development and Infrastructure (Department of the Environment). It was drafted in partnership with the United Nations Environment Programme (UN Environment) and with the support of Innpact, a Luxembourg-based specialist in impact finance. It contributes to the framework of the “Luxembourg 2030 – National Plan on Sustainable Development” of the Luxembourg government, the various commitments taken by Luxembourg at international level and is in line with the trend of leading financial centres’ efforts to boost sustainable finance.

The Roadmap was drafted under the guidance of a Steering Committee composed of members from both Ministries, UN Environment and Luxembourg for Finance (LFF). Input from Luxembourg-based and international representatives from government, public institutions, business and financial communities, academia and civil society was obtained through an open, creative and inclusive process involving various working groups and interview sessions.

The aim of the Roadmap is to set a vision and lay the groundwork to establish a comprehensive and far-reaching sustainable finance strategy contributing to the Agenda 2030 and towards the objectives of the Paris Agreement. This Roadmap is ambitious in terms of Luxembourg’s contributions to sustainable development and climate action, it is forward looking in terms of future opportunities and challenges, and it is shared in terms of achieving buy-in from key public, private and civil society stakeholders.

This Roadmap outlines recommendations on how to reach this vision over time. It is not to be understood as an Action Plan. The various recommendations need to be complemented by further analyses in order to develop an actionable plan of concrete measures to be realised over time, considering the specificities and the competitiveness of Luxembourg as a financial centre.

3. EXECUTIVE SUMMARY

Sustainable finance as a new paradigm considers environmental, social and governance issues that traditionally have not been included in financial and economic parameters. The new international consensus is that making profits is compatible with sustainable growth of our economies, an inclusive society and the protection of our ecosystem. In the context of challenges such as climate change, there is also an appreciation that change is urgently needed.

By leveraging its strengths as an international financial centre, Luxembourg can make an outsize impact on the development of sustainable finance worldwide. Thanks to its specific culture and areas of expertise, Luxembourg can be a frontrunner in pushing for the most advanced solutions, experimenting and implementing new approaches to ensure that sustainable finance products are easy to access, expertly managed, serving a purpose and credible. This Roadmap sets out the steps needed to achieve this goal.

Macrotrends at the global level

In 2015, several epochal events marked a turning point in the debate on sustainable development: the UN 2030 Agenda for Sustainable Development, including its 17 Sustainable Development Goals, the Paris Agreement on Climate Change and the UN conference in Addis Ababa on Financing for Development.

These important achievements stem from a new level of awareness about the need to promote radical changes in our institutional, economic and financial models. While public and private actors are engaged in a vast process of redefining basic paradigms, the wider financial system is reflecting on its core purpose, which is to ensure that resources flow to support the long-term needs of balanced and sustained growth. This is happening alongside growing institutional demand for ESG products and retail clients more actively questioning the environmental and social effects of their investment choices.

In this context, policy interventions at the national and international levels have been particularly prevalent over the past five years. Internationally, the most ambitious programme is the EU Action Plan on Financing Sustainable Growth (European Commission [EC] 2018).¹

The EU Action Plan is built on three pillars to:

- reorient capital flows towards sustainable investment
- mainstream sustainability into risk management
- foster transparency and long-termism.

Luxembourg can build on its position to drive sustainable finance

These drivers present an unprecedented opportunity for Luxembourg as one of the wealthiest countries in the world and a successful financial centre serving the European and global economy.

Luxembourg enjoys a close and mutually beneficial working relationship between public and private actors, offers a legal and regulatory framework tailored to serving international financial actors and investors, along with excellent recognition and distribution channels for its investment funds across the globe.

These factors have attracted international banks, asset managers, fund promoters, insurance companies, pension funds, sovereign wealth funds and other financial service providers from around the world, turning Luxembourg into a leading hub and gateway for international finance.

Through its involvement in a number of initiatives at international and EU level, Luxembourg has the potential to forcefully drive the agenda for sustainable development.

1 eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018DC0097&from=EN

Three recent initiatives illustrate Luxembourg's pioneering role in using finance to meet sustainability ambitions. It has developed a climate finance strategy to help leverage international public and private sector investments. The Luxembourg Green Exchange is the first platform exclusively dedicated to sustainable securities, listing almost half of the world's green bond volume and an estimated third of sustainability and social bonds. The Forestry and Climate Change Fund has a €7.5 million first-loss tranche guaranteed by the Climate and Energy Fund as well as a €5 million investment by the Ministry of Finance. And in July 2018, Luxembourg established a legal framework for green covered bonds – the first of its kind globally.

Building on its strengths and expertise, Luxembourg can be a test market, a standard setter and a multiplier on an international scale. Its multi-stakeholder approach allows market forces to innovate and develop their potential and it has proven strong expertise in investment funds, blended finance vehicles, bonds and sustainable labels.

Priorities for making a successful transition to a sustainable economy and society

In the near future, our economy and society will experience a profound transformation. It is not just how we produce goods and services, but also how value is created and distributed. Finance has a key role to play, channelling the trillions of dollars of annual investments needed to achieve the SDGs and the Paris Agreement commitments. There are two key priorities for a successful transition to this future: the need for collective action and the need for a phased approach.

Coherent, consistent actions must be taken at the same time, by both the public and private sectors. The public sector has to set a clear vision and create consensus around it, while providing a stable regulatory framework that supports experimentation. It is for private actors to identify market needs, develop innovative ideas and grow tested models.

Alongside collective action, the need for a phased approach is key. The concept of a roadmap encapsulates the need for gradual change with that of definite objectives: the shift must be planned to allow the system time to adapt without shocks. A phased approach must be adopted to address potential reduced competitiveness over the short term, but also create beneficial ripple effects over the long term.

Conclusion

The EU Action Plan has three high-level aims: reorienting capital flows, managing financial risks linked to climate and other ESG topics, and fostering transparency and long termism.

Luxembourg can be a frontrunner in pushing for the most advanced solutions, experimenting with and implementing new approaches to ensure that sustainable finance products are:

- **easy to access:** investors should be able to find a complete and transparent offer of sustainable investment opportunities
- **expertly managed:** asset managers should be supported in setting up, managing and distributing their sustainable products
- **servicing a purpose:** sustainable enterprises should be supported in accessing long-term funding
- **credible:** the impact of sustainable financial products should be evaluated in order to create clarity and confidence, and avoid greenwashing.

The key recommendations on the following pages have been identified throughout the different working groups and interview sessions, grounded in the spirit of a collective effort. They range from the need to formalize a strategy and set up a coordinating entity to promoting innovation, developing expertise, ensuring proof of concept and measuring progress.

Following this Roadmap will allow Luxembourg to take advantage of its specific culture and areas of expertise and make a meaningful contribution to the financing of sustainable development.

Summary of main recommendations

AMBITION	RECOMMENDATIONS
Formalize and communicate an ambitious, tailor-made and clear sustainable finance strategy	<ul style="list-style-type: none"> ■ Formalize an ambitious, coherent, consistent and transparent Sustainable Finance Strategy, reflecting the distinctive features and added value of Luxembourg ■ Ensure endorsement by all stakeholders involved as well as transparent communication
Set up a coordinating entity	<ul style="list-style-type: none"> ■ Set up a Sustainable Finance Initiative as a coordinating entity, in the form of a public-private partnership, as well as sector and/or theme-specific task forces with defined roles and responsibilities
Leverage financial sector expertise	<ul style="list-style-type: none"> ■ Develop a toolkit for sustainable investment funds and other financial products by combining existing tools and tailoring them to sustainable finance ■ Increase the offer of liquid products, such as sustainable UCITS, listed green and sustainable bonds, savings accounts and insurance products ■ Analyse how Luxembourg can leverage its framework and expertise in blended finance to better connect investors and investees to mobilize finance for sustainable development
Raise awareness and integrate sustainability into education and professional training	<ul style="list-style-type: none"> ■ Organize regular events, conferences and meeting points on sustainable finance to raise awareness and showcase sustainable finance initiatives and products ■ Integrate sustainability into national branding, in order to promote it across the whole ecosystem: sustainable development is a creator of social cohesion, an economic opportunity and a differentiating factor ■ Integrate financial literacy and sustainable finance into school curricula and tertiary education ■ Integrate sustainable finance into all financial sector training ■ Consider criteria for ESG fitness assessment of Board members
Promote innovation	<ul style="list-style-type: none"> ■ Forge close links between incubators, schools and research centres to attract talent and build human capital ■ Promote innovation at the service of the SDGs and explore better leveraging of financial technology to achieve sustainable objectives

Develop expertise and best practice	<ul style="list-style-type: none"> ■ Promote research programmes on blended finance to finance sustainable development ■ Set up Master and PhD programmes in sustainable finance, such as asset management and impact management and measurement ■ Build, strengthen and extend existing expertise in assessing and measuring social and environmental impact investments ■ Develop effective reporting systems and guidelines for ESG reporting
Analyse and redesign the system of incentives and taxation	<ul style="list-style-type: none"> ■ Redesign investment incentives to promote long-term investments at the level of product developers, investors and investees ■ Analyse how direct tax incentives could be linked to sustainable finance activities and business models ■ Analyse whether the scope of reduced indirect taxes should be broadened for sustainable companies and business models
Lead by example and ensure proof of concept	<ul style="list-style-type: none"> ■ Screen public investments for their ESG soundness and carbon footprint ■ Develop and communicate clear guidelines for sovereign funds and public pensions ■ Use the influencing power of public funds through active shareholder engagement ■ Leverage public funding to ensure proof of concept (for example, through creating a social and environmental impact fund) and seed-fund these initiatives
Measure progress	<ul style="list-style-type: none"> ■ Participate in the elaboration of best practice and indicators with initiatives such as the International Network of Financial Centres for Sustainability ■ Identify stakeholders to ensure the definition and implementation of a controlling framework ■ Organize data collection, measure and communicate on progress over time ■ Take corrective actions if necessary

4. SUSTAINABLE FINANCE IN THE ERA OF THE “GRAND TRANSITION”

The Luxembourg Sustainable Finance Roadmap (LSFR) is part of a broader movement. National roadmaps for sustainable finance and the increasing number of financial institutions worldwide adopting sustainable financing and investment practices are clear signals that change is taking place.

A growing consensus is building around the following ideas:

- There is no sustainable development without sustainable financing for development, be it public or private.
- Implementing the Sustainable Development Goals (SDGs) requires tremendous amounts of money.
- Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate resilient development is recognized as a key objective in the Paris Agreement.
- Public financing alone cannot turn the tide. It must be complemented by the private sector.
- Sustainable development projects and programmes need the right financing at the right moment.

Sustainable finance as a new paradigm considers environmental, social and governance issues that traditionally have not been included in financial and economic parameters. The new international consensus is that making profits is compatible with a sustainable growth of our economies, an inclusive society and the protection of our ecosystem.

4.1. GLOBAL MACROTRENDS

The current debate on sustainable development has its roots in the 1970s and has evolved along with the growing social and environmental crises. In parallel, the financial market has experimented with different approaches (using several labels such as “ethical”, “socially responsible”, “sustainable investment”) to integrate non-financial issues into asset management processes.

A change in political climate

In 2015, several epochal events occurred that marked a turning point: the UN General Assembly decision on the SDGs, the Paris Agreement on Climate Change and the UN conference in Addis Ababa on Financing for Development.

These important achievements were possible thanks to a new political climate. The level of awareness on the need to promote radical changes in the institutional, economic and financial models is now widespread, and both public and private actors are engaged in a vast process of redefining the basic paradigms. That is why we are witnessing initiatives at all levels driving the renovation of how our economic and financial markets work.

66 investors now recognize the importance of sustainability as a strategic competitive factor

Sustainability makes business sense

The integration of environmental, social and governance (ESG) aspects into financial decision-making processes is increasingly widespread. With solid evidence² that shows a positive correlation between companies' ESG and financial performance, both specialised and "traditional" investors are systematically using pieces of the sustainability analysis to manage their assets.

More importantly, investors now recognize the importance of sustainability as a strategic competitive factor.³ They are pushing investees to define and communicate long-term plans that consider new challenges and explain how they will cope with them.

This concern shifted the focus from managing specific ESG criteria to a more comprehensive analysis of the company's contribution to achieving sustainable development as a whole. Today, the boundaries between green, social, climate or other types of finance make little sense, as it is clear that performing well in one ESG area may be insufficient in terms of sustainability if other areas perform poorly. The Positive Impact Initiative, led by UNEP FI, is one of the most advanced examples of the approach that business and finance should adopt to achieve the SDGs (United Nations Environment Programme - Finance Initiative 2017).

An increased focus on impact

This explains the growing interest in impact assessment. Impact finance⁴ differs from ESG investment, choosing to focus on the intentional, measurable outcomes of funded activities. Impact investors are increasingly aware that the real value of sustainable finance is in the extent to which it contributes to generating real change in the economy and in society.

The renewed attention to the actual effects of investments goes hand in hand with the debate on the real economy and the importance of involving small- and medium-sized businesses (SMEs) as well as large corporates. The financial system is reflecting on its core purpose, which is to ensure that resources flow to support the long-term needs of a balanced and sustained growth. This is why commercial banks are also trying to integrate sustainability aspects into their lending policies and credit risk models.⁵

2 The subject has been extensively investigated by both scholars and practitioners. One of the most comprehensive reviews of the literature can be found at austinpublishinggroup.com/business-administration-and-management/fulltext/ajbam-v1-id1016.php

3 A remarkable example of investor engagement is the letter to CEOs sent by Blackrock Chairman Larry Fink in 2017 www.blackrock.com/corporate/literature/press-release/2017-ldf-ceo-letter.pdf and 2018 www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter

4 Impact investment is defined by the Global Impact Investing Network as "Investments made into companies, organizations, and funds with the intention to generate social and environmental impact alongside a financial return". thegiin.org/assets/GIIN_AnnualImpactInvestorSurvey_2017_Web_Final.pdf

5 See as an example the UNEP FI Guide to Banking and Sustainability www.unepfi.org/wordpress/wp-content/uploads/2017/06/CONSOLIDATED-BANKING-GUIDE-MAY-17-WEB.pdf

Respond to a growing demand

In terms of market dynamics, the most relevant change is the continuous strengthening of demand.⁶ In its early stages, sustainable and responsible investment was mostly a supply-pushed market: asset managers would offer ESG products as a marketing tool to differentiate their offer. In the last decade, institutional demand grew stronger and retail clients are more actively questioning the environmental and social effects of their investment choices. This change is part of a broader societal phenomenon that also affects other markets and has to do with the level of information and awareness of consumers.

Policy interventions

The other side of this coin is the role of public policy. Citizens' preferences and expectations are translated into purchasing and investment choices, but also result in political orientation. Over the last five years, many institutional initiatives started addressing both market and policy failures, trying to redefine the financial system's "rules of the game". Overall, the justification for these interventions is linked to the need to better price externalities, to promote innovation, to ensure financial stability and to ensure policy coherence (UN Environment 2018). These initiatives can be either national or international.

National initiatives

National initiatives tend to review different types of fiscal and policy interventions, then create a framework. The framework may be used to diagnose market failures and identify responses at the national level, or to incorporate sustainability considerations into national fiscal frameworks, which may include:

- reviewing the effectiveness of fiscal interventions and subsidies supporting green activities,
- reviewing expenditure on unsustainable activities, such as fossil fuel subsidies, or
- designing roadmaps to support long-term strategic plans at national level.

National initiatives, with different characteristics and levels of political commitment, have been undertaken in both industrialised and developing countries. Examples include China's *Guidelines for Establishing a Green Financial System* – a comprehensive set of national commitments, covering priorities across banking, capital markets and insurance (People's Bank of China and UN Environment 2015). Similarly, the UK Green Finance Taskforce suggested a number of structural reforms, ranging from incentives for sterling issuers of green securities, to sustainability-related disclosure, facilitating long-term investments by increasing allocations into illiquid asset classes, removing barriers to sustainable investment, and a prudential regime for banks and insurers (UK Green Finance Taskforce 2018).

International initiatives

International initiatives typically target coordination at a global level. They may involve:

- defining common principles to promote including sustainability considerations into global financial sector oversight, or
- agreeing methodologies and standards to measure results or to include sustainability data in global financial reporting frameworks.

Internationally, the most ambitious programme is the EU Action Plan on Financing Sustainable Growth (European Commission 2018). In 2016, the European Commission set up the High-Level Expert Group on Sustainable Finance (HLEG) to map out options for community-wide action. This laid the foundations for a comprehensive action plan on sustainable finance proposed by the Commission.

6 A complete market survey is published every two years by the European Sustainable and Responsible Investment Forum (Eurosif). The most recent edition was issued in 2017 www.eurosif.org/wp-content/uploads/2016/11/SRI-study-2016-HR.pdf

Released in early 2018, the EU Action Plan is built on three pillars, each articulated into a set of actions:

- Reorient capital flows toward a sustainable investment
 - Classification system for sustainable activities (EU Taxonomy)
 - Standards and labels for sustainable financial products
 - Promote investment in sustainable projects
 - Integrate sustainability in the provision of financial advice
 - Develop sustainability indices and benchmarks
- Mainstream sustainability into risk management
 - Integrate sustainability in market research and credit ratings
 - Clarify institutional investors' and asset managers' fiduciary duties with regards to sustainability
 - Integrate sustainability into prudential requirements for banks and insurers
- Foster transparency and long-termism
 - Strengthen disclosure and reporting on sustainability and the development of accounting standards
 - Promote sustainable corporate governance and mitigate short-term vision in capital markets.

“the role of
policymakers is becoming
increasingly relevant”

At intergovernmental level, the two fora that have done most in this domain are the G20 and the G7. In 2017, the G20 (then under Chinese presidency) identified key options for member countries to consider adopting voluntarily. These are:

- Provide strategic policy signals and frameworks
- Promote voluntary principles for green finance
- Expand learning networks for capacity building
- Support the development of local green bond markets
- Promote international collaboration to facilitate cross-border investment in green bonds
- Encourage and facilitate knowledge sharing on environmental and financial risk
- Improve the measurement of green finance activities and their impacts.

More importantly, the G20 established the Green Finance Study Group. It has issued numerous input papers on a range of themes,⁷ many of which have been put forward by the German and the Argentinian presidencies.

The Italian presidency of the G7 has given priority to sustainable finance, focusing in particular on financing SMEs and launching a global network of financial centres for sustainability (G7 Environment Ministers 2017), which has included Luxembourg since the beginning.

⁷ For example, see their 2017 synthesis report unepinquiry.org/wp-content/uploads/2017/07/2017_GFSG_Synthesis_Report_EN.pdf

In 2017, the Task Force on Climate-related Financial Disclosures (TCFD), created by the Financial Stability Board, issued a set of recommendations for corporate and financial institutions to assess and disclose climate-related risks and opportunities (TCFD 2017). The recommendations focus on governance, strategy, risk management and metrics and targets. The report's main contribution is to classify risks as well as opportunities, and guidance to adopt a forward-looking, scenario-based approach to identify the financial impacts of climate change. In practice, implementing the guidelines is quite complex. Assessing the impact of climate change on business and representing that impact through reporting remains a challenge for the financial community. To help address this, UNEP FI is working with banks, insurers and investors to pilot implementation.

Another important signal came from a group of key actors that had been absent from the debate until recently. In 2016, a collaboration between UNEP FI's Principles for Sustainable Insurance, UN Environment's Inquiry into the Design of a Sustainable Financial System, and insurance regulators and supervisors launched UN Environment's Sustainable Insurance Forum for Supervisors (SIF), an international network of some 20 national insurance regulators and supervisors that aims to promote cooperation on critical sustainability challenges and opportunities. A few months later, the Central Banks and Supervisors Network for Greening the Financial System was launched, with a specific focus on microprudential/supervisory issues, macroprudential matters and activities to scale up green finance (Network for Greening the Financial System [NGFS] 2018).

The European Systemic Risk Board (ESRB) and the three European Supervisory Authorities (ESAs)⁸ also warned against financial stability risks related to the transition to a low-carbon economy and to climate change (ESRB 2016).

The activism of public actors shows once more that systemic changes require collective action. The pioneering role of private sector players has paved the way for a more comprehensive approach, and the role of policymakers is becoming increasingly relevant. This does not undermine the importance of voluntary initiatives, which in fact reinforce regulation.

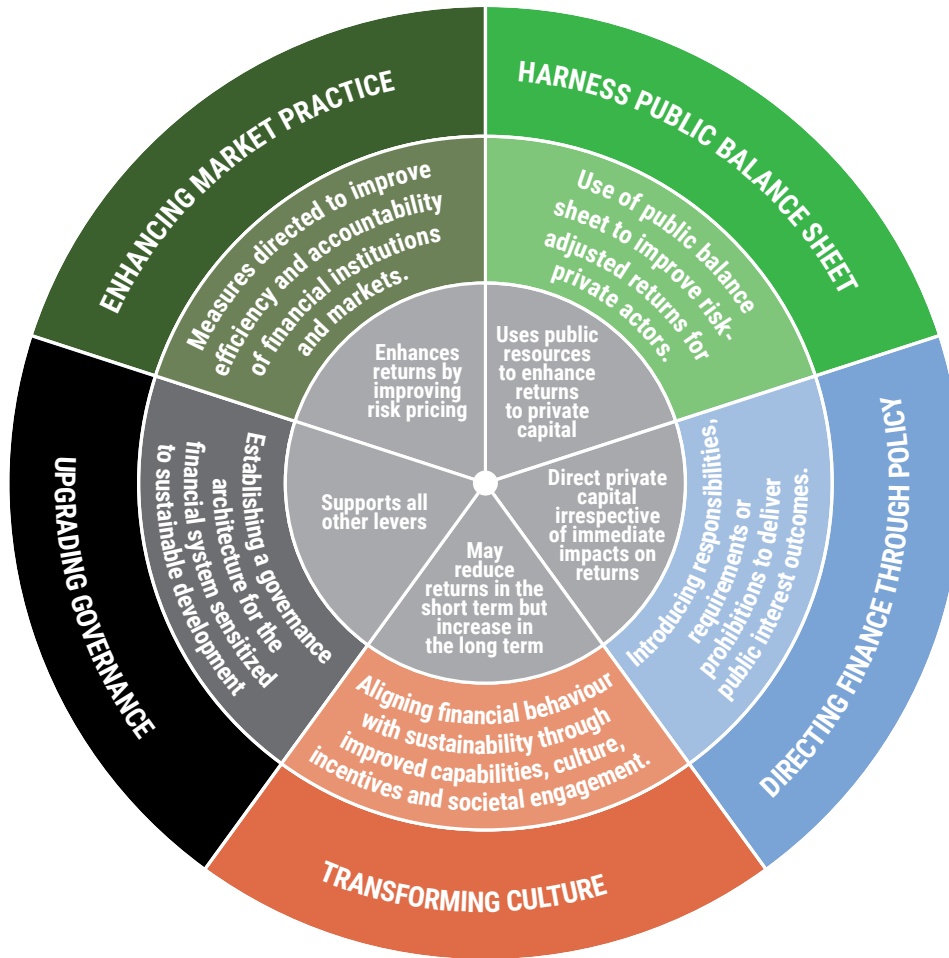
8 The European Banking Authority (EBA), the European Securities and Markets Authority (ESMA) and the European Insurance and Occupational Pensions Authority (EIOPA).

Towards a sustainable financial system

Five approaches should be taken simultaneously to align a financial system to sustainable development (UN Environment Inquiry into the Design of a Sustainable Financial System 2015):

- Transforming culture
- Upgrading governance
- Enhancing market practice
- Harnessing public balance sheet
- Directing finance through policy.

While these approaches are mutually reinforcing, they are insufficient on a stand-alone basis. The recommendations in this Roadmap aim to follow this five-fold approach.



4.2. KEY FEATURES OF LUXEMBOURG'S FINANCIAL CENTRE

Luxembourg is one of the wealthiest countries in the world, continuously enjoying a steady AAA credit rating and experiencing a yearly average GDP growth rate of 3.5% over the past five years. It is one of the world's best performing countries in terms of international benchmarking.

Reasons for success

Luxembourg's success as a financial centre serving the European and global economy is founded on:

- historic social, economic, financial and political stability
- a close and mutually beneficial working relationship between public and private actors
- being a complete ecosystem (or one-stop shop) with experts across all financial sector activities, providing national and international clients with complete solutions and allowing them to do business effectively
- a talent for predicting new trends and adapting quickly to market needs
- the ability to attract and retain highly skilled human capital
- a legal, regulatory and tax framework tailored to serving international financial actors and investors
- decades of experience as a cross-border platform linking international suppliers and customers
- a solid international expertise, with a wide-ranging toolbox of investment vehicles and excellent recognition and distribution channels for its investment funds across the globe
- excellent infrastructure ensuring connectivity, reliability, speed and security to the business community (and financial industry in particular) sound anti-money-laundering policies, and a long-standing culture of investor protection.

Luxembourg holds a significant position in the financial world

These factors have attracted international banks, asset managers, fund promoters, insurance companies, pension funds, sovereign wealth funds and other financial service providers from around the world, turning Luxembourg into a leading hub and gateway for international finance. Its financial system has a key role to play in driving economic development. The capital deposited in Luxembourg-based banks, insurance companies and investment funds boost liquidity across the European continent. The redistribution of capital supports the liquidity needed for businesses as well as households to be able to borrow, invest and ultimately grow.

“Luxembourg has a significant multiplier effect and an important role to play in providing transparency establishing best practices and ensuring compliance”

As an open international financial centre specializing in certain key parts of the global financial services value chain and acting as a platform allowing banks, insurers, issuers and asset managers to connect with investors across the globe, investment decisions are for the most part taken either at corporate level (in the case of issuers) or in the traditional asset management hubs such as London, New York or Hong Kong.

However, being home to the regulatory and compliance nerve centre of these global financial institutions and the actual investment products themselves, as well as being one of the world's most important securities listing and fund distribution hubs, Luxembourg has a significant multiplier effect and an important role to play in providing transparency, establishing best practices and ensuring compliance with current and forthcoming rules in the area of sustainable finance.

Key features of Luxembourg's financial centre:

- Luxembourg is the second largest fund centre in the world and the most popular domicile for Undertakings for Collective Investment in Transferable Securities (UCITS).
- Luxembourg is the leading hub for global fund distribution and international investors. It handles 65% of distribution of cross-border funds worldwide and funds are registered in more than 70 countries.
- Around 27% of all investment funds in the EU are domiciled in Luxembourg – roughly 4,000 umbrella funds with 14,700 sub-funds, and net assets of €4.2 trillion as of April 2018.
- Luxembourg has a performing securitization framework, allowing transformation of predictable cash flows into a vast range of investable securities.
- The Luxembourg Stock Exchange (LuxSE) lists more than 35,000 securities in 59 currencies from approximately 2,300 issuers. 26% of all bonds listed in the EU are listed at LuxSE including sovereign bonds from 17 EU Member States.
- Luxembourg has €360 billion in assets under management (AUM) in private banking, with 60% of clients from the EU, and 40% from the rest of the world.
- Luxembourg is a hub for European life insurance assets, with large national and international insurance and reinsurance companies managing €21 billion of written premiums.
- 75% of the Luxembourg financial centre's income comes from international customers.
- Of the 46,000 people working in Luxembourg's financial sector, 81% are of non-Luxembourg origin.
- Luxembourg is home to the European Investment Bank and the European Investment Fund, investing roughly €80 billion per year in the European and global economy.
- Luxembourg increasingly plays the role of a gateway from and to China. Chinese banks present in Luxembourg not only serve China-based clients (enabling them to invest in Europe), but also provide European clients with the expertise and opportunity to invest in China. The Luxembourg Stock Exchange's Chinese domestic Green Bond Channel bridges the information gap between Chinese issuers and international investors.

(Luxembourg for Finance 2017)

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These conditions mean that Luxembourg currently benefits from a first-mover advantage in sustainable finance initiatives

4.3. STOCKTAKE OF LUXEMBOURG'S SUSTAINABLE FINANCE INITIATIVES

The Luxembourg financial centre has created an ecosystem well suited to raising international capital for responsible investments. It is at the forefront of developing initiatives and financial instruments that are specifically designed to support sustainable finance. It offers a limited but highly expert, responsive and committed number of actors, with flexible and short decision-making processes.

These conditions mean that Luxembourg currently benefits from a first-mover advantage in sustainable finance initiatives. Acting promptly will be necessary to maintain this position. As a platform for international finance, the Luxembourg financial sector can also have an important multiplier effect by committing to sustainable finance.

Driving the sustainable development agenda

Through its involvement in a number of initiatives at international and EU level, Luxembourg has the potential to drive the political agenda for sustainable development:

- Luxembourg is a member of the International Network of Financial Centres for Sustainability.
- The Banque Centrale du Luxembourg (BCL) is a member of the Central Banks and Supervisors Network for Greening the Financial System.
- The Luxembourg government is actively engaged in discussions at EU level as a member of the EU Member States Expert Group on Sustainable Finance.
- The Luxembourg Stock Exchange actively contributes to various working groups at EU level, such as the EU Technical Expert Group on Sustainable Finance, and also chairs the UN Sustainable Stock Exchanges Initiative's Green Finance Advisory Committee.
- LuxFLAG has been engaged in the technical group for convergence of green labels.
- The Luxembourg Banks and Bankers Association (ABBL) chairs the EU Banking Federation Group on incentives and disincentives for sustainable finance working group.

A climate finance strategy

Luxembourg strives for complementarity and cooperation between the financial centre actors, its climate policy and Luxembourg Development Aid (Direction de la coopération au développement et de l'action humanitaire and Lux-Development). As well as the principle of policy coherence, Luxembourg distinguishes itself on the international scene through strictly applying the additionality principle between its International Climate Finance (ICF) and its Official Development Assistance (ODA).

Luxembourg's commitment to international climate finance targets mitigation, adaptation and REDD+ actions in developing countries, with a particular focus on least-developed countries and small island developing states among the ODA partner countries. These funds are new and additional to Luxembourg's ODA (reaching 1% of its GNI since 2009). Disbursements related to ICF are being carried out by the Climate and Energy Fund of the Luxembourg government.

Luxembourg has developed its climate finance strategy to help leverage international public and private sector investments. The strategy (including criteria guiding the allocation of Luxembourg's ICF pledge) was published in 2017 (Luxembourg, Ministère du Développement Durable et des Infrastructures Département de l'Environnement [MDDI] 2017). The ICF is being provided in the form of donations, equities, special capital (at risk, initial, patient) and guarantees (e.g. first loss), and complements the technical support provided by Luxembourg's official development aid.

The Luxembourg government, the financial services industry and a number of actors in the sustainable finance ecosystem collaborate in a Climate Finance Task Force (CFTF), with the dual objective of contributing in a meaningful way to the international fight against climate change and cementing Luxembourg's role as an international centre for climate finance.

The strategy is built on four key vectors (Luxembourg, Ministère des Finances 2018):

- 1. Consolidate and leverage Luxembourg's existing expertise** in sustainable finance to drive and develop climate finance capabilities with the Green Exchange:

In 2016, the Luxembourg Stock Exchange launched the Luxembourg Green Exchange (LGX), the world's first platform to list exclusively 100% green bonds. With its strong experience in layered funds, Luxembourg can provide an ideal platform for blended financing and thus channel both public and private investment to sustainable projects.

- 2. Enter into strategic partnerships with climate finance leaders** such as the European Investment Bank (Luxembourg – EIB Climate Finance Platform) and the International Finance Corporation (Amundi Planet Emerging Green One Fund).

The Luxembourg government contributes a first-loss guarantee to mitigate private sector investors' risk. It is to be co-invested with the EIB in investment funds dedicated to finance climate change mitigation and adaptation, in particular to developing countries.

As a strategic partner of the International Finance Corporation (IFC), the Luxembourg government contributes to the IFC's Green Cornerstone Bond Fund Support Programme. The IFC manages this technical assistance programme to complement the Amundi Planet Emerging Green One Fund – the world's largest green bond fund focused on emerging markets. The fund will be labelled by LuxFlag and displayed on the Luxembourg Green Exchange.

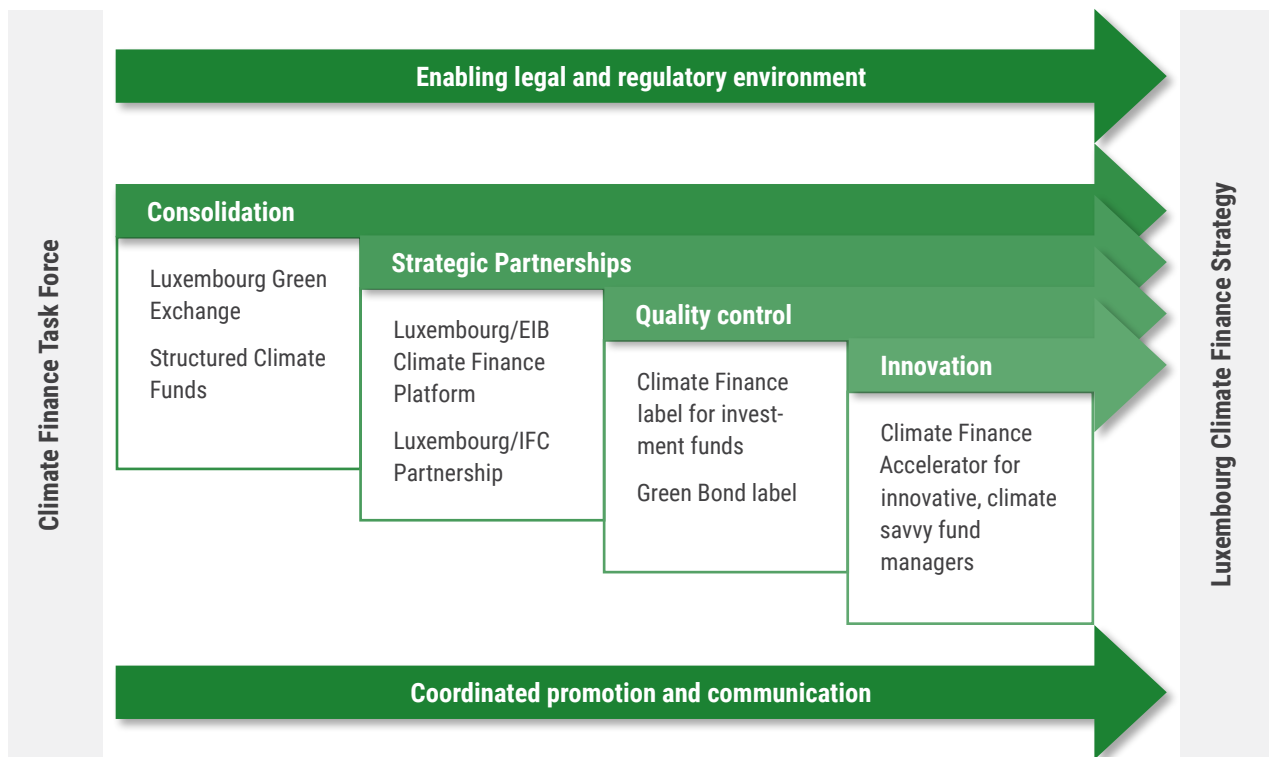
- 3. Ensure quality control** in the area of climate finance through standards and dedicated labels.

In 2016, the labelling agency LuxFLAG launched a Climate Finance quality label (in addition to their existing labels) to acknowledge the effective climate focus of investment funds in the implementation of their investment policy.

- 4. Encourage innovation** in climate finance.

The Climate Finance Accelerator set up as a public-private partnership in 2017 supports innovative fund managers specializing in climate action by offering various forms of support, including financial and operational support during the launch phase of a new fund structure.

“Luxembourg embraces a multi-stakeholder approach that allows market forces to innovate



Source: www.climatefinancetaskforce.lu/435829813

Layered funds

Layered fund structures have proven a most successful way to gather sufficient assets from all types of investors and thus achieve their mission. Layered funds can differentiate between different shareholder classes, with different risk/return profiles, making them well designed for public and private investors. A first-loss liability by public investors attracts private investment by creating a low-risk environment. There are more than USD 6 billion of assets invested in layered funds domiciled in Luxembourg.

The Forestry and Climate Change Fund is the latest initiative launched by the Luxembourg government with a first-loss tranche guaranteed by the Climate and Energy Fund as well as an investment by the Ministry of Finance. This pioneering impact fund aims to demonstrate that sustainable forestry within secondary and degraded tropical forests generates economic, ecological and social value and contributes to healthy landscapes, climate change mitigation and adaptation and local economic development.

And in July 2018, Luxembourg established a legal framework for green covered bonds – the first of its kind globally (Luxembourg for Finance 2018).

Luxembourg's strengths

Building on these initiatives, Luxembourg can build upon these strengths:

- It can have an important effect as a test market, a standard setter and a multiplier on an international scale. While products are often located in Luxembourg, they are managed by asset managers mostly located outside of Luxembourg, and often outside of the EU.
- It has access to the expertise of large international groups and players through their branch networks in Luxembourg.
- It has an extensive, performing framework of regulation and tools that can be easily used to scale green finance.
- It embraces a multi-stakeholder approach that allows market forces to innovate and develop their potential.
- It has a proven strong expertise in terms of investment funds, blended finance vehicles, bonds and sustainable labels.

Luxembourg's key contributions to sustainable finance:

■ **Green and sustainable market infrastructure: the Luxembourg Green Exchange (LGX)**

The world's first green bond was listed in Luxembourg. Launched in 2016, LGX was initially a platform focusing only on green bonds. Encouraged by its success, it later expanded to encompass social and sustainable bonds, as well as socially responsible investing (SRI) funds. The LGX is the world's first platform dedicated exclusively to sustainable securities, a platform to connect issuers and investors listing almost half of the world's green bond volume and an estimated third of sustainability and social bonds. Today, the platform displays more than 200 green, social and sustainability bonds from issuers across the globe, amounting to more than USD 110 billion as well as 16 SRI funds. All securities displayed on LGX are contributing to achieving the UN SDGs.

LGX has also launched a Chinese domestic Green Bond Channel in partnership with the Shanghai Stock Exchange (SSE). China boasts one of the world's largest bond markets, valued at USD 9 trillion, with a production of green and sustainable bonds in excess of RMB 250 billion (about €33 billion). However, the market may appear off-limits to the international investor community due to the difficulties of accessing the right level of information on the traded bonds. The partnership aims at bridging this information gap. The cooperation between the two exchanges focuses on providing relevant information in English about Chinese domestic green bonds to offshore investors.

■ **Leading European sustainable investment funds domicile**

Over the years, Luxembourg has strengthened its position as the leading domicile for responsible investing funds in Europe in general and in each of the underlying strategies, accounting overall for 30% of funds and 40% of total assets under management (KPMG 2017). ESG cross-sectoral funds applying positive and negative screening strategies remain the biggest category with 1,687 funds and €423.3 billion assets under management. Luxembourg market shares for ESG cross-sectoral funds, ESG environmental strategies, ESG social strategies and ESG ethics strategies range from 42% to 57%. Two out of three impact investment funds in Europe are Luxembourg funds.

■ **Early expertise in micro and inclusive finance**

Luxembourg's early development in the 2000s of exceptional expertise in microfinance has provided the foundation for its development of impact finance and sustainable finance as a whole.

As of today, 31 microfinance funds accounting for 50% of all global Microfinance Investment Vehicles (MIV) assets are based in Luxembourg. Luxembourg has been at the origin of internationally-recognized networks such as InFine (Inclusive Finance Network) and the European Microfinance Platform.

■ **Sustainable finance labelling**

Luxembourg is home to LuxFLAG. Created in 2006 as the first independent labelling agency, LuxFLAG provides quality labels and thus clarity and confidence to investors in sustainable investment funds and financial instruments. Labels are available for microfinance, environment, climate finance and broad ESG funds as well as for green bonds. LuxFLAG currently labels 74 funds and 21 green bonds with a clear growing tendency.

■ **Philanthropy**

The Fondation de Luxembourg, a public-private partnership, provides a platform to set up private philanthropic foundations, including advice and guidance to donors.

■ **Financial knowledge transfer**

The House of Training – ATTF (Agence de Transfert de Technologie Financière) co-finances training programmes around the world. Working mostly in developing countries, it helps strengthen financial structures, build capacity and support sustainable development in 40 markets.

■ **Additionality, avoidance of double counting and transparent criteria**

Luxembourg lives up to the principle of additionality between ODA and ICF as set out in the Kyoto Protocol. Indeed, its ICF funds come on top of its ODA funds, rather than displacing them. As a consequence, Luxembourg subscribes to the principles of avoiding double counting when tracking and reporting climate finance. Since 2017, the allocation of ICF funds is done based on a transparent strategy and criteria.

5. A ROADMAP FOR A SUSTAINABLE FINANCIAL SECTOR

5.1. NEED FOR COLLECTIVE ACTION

All the signals and trends described above converge to a point: in the near future, our economy and society will experience a profound transformation. It is not just about the way we produce goods and services, but also about the way value is created and distributed. Finance has a key role to play, channelling the trillions of dollars of annual investments needed to achieve the SDGs and the Paris Agreement commitments.

“A successful transformation requires a number of coherent, consistent actions to be taken at the same time

Luxembourg ranks among the largest green financial centres. Yet, as for all its competitors, sustainable finance still represents a fraction of Luxembourg’s business and some of its initiatives are not fully financially sustainable on a stand-alone basis at this stage.

Becoming a sustainable financial system means more than growing the niche. It also means harnessing flows of capital currently allocated to so-called “brown” activities towards those that demonstrate good sustainable/ESG practices. This can be done by implementing a number of coherent actions, such as increasing the quality of information on ESG aspects and showing that sustainable business models can be less risky—and more profitable—financially.

From a financial centre standpoint, sustainable finance can be an additional market in the short term that progressively becomes mainstream as market opportunities related to sustainable finance develop.

Neither the carrot, nor the stick, nor sermons alone can change the status quo. We must use all these means, in a balanced way. We cannot rely only on the enthusiasm of a prophetic minority nor leverage only on the power of regulation. A successful transformation requires a number of coherent, consistent actions to be taken at the same time, from both the public and the private sector.

This is why the process for creating the Luxembourg Sustainable Finance Roadmap has been designed as a collective one. The idea was to gather as many stakeholders together as possible, to share a common vision – knowing that a public agenda can be successful only if all societal actors are on board.

A role for both the public and private sectors

The dialogue has identified a number of expectations and conditions that must be fulfilled to create the right environment for the growth of a sustainable financial system.

Public and private actors are called to:

- **Participate at the forefront of international initiatives** (such as the working groups related to EU Sustainable Finance, the International Network of Financial Centres for Sustainability, the Central Banks and Supervisors Network for Greening the Financial System) in order to lead multilateral and public-private dialogue, push the international agenda (for example, integrating sustainability risks into the mandate of national regulators, and discussions around green supporting factor) and to ensure that regulatory frameworks are adapted and expertise is built up in light of international developments.
- **Raise awareness and support education at all levels** – a cultural change is necessary. While information is largely available, the ability to elaborate on it is not. In order to create the consensus, we need a new mindset. New generations are already sensitive to sustainability. Sustainability must be integrated into school and university curricula and lifelong training programmes must be supplied to professionals across all economic sectors. Campaigns for the general public can pave the way for a new social acceptance.

In particular, the role of the public sector is to:

- **Set a clear vision and create consensus around it.** This is the fundamental pre-requisite for all other activities. Only the government can steer the transition in an ordinate way. All other actors can play their role only if the ultimate goal is clearly identified and set within a coherent strategy. Inconsistent signals disorientate market operators and incentivize speculation and free riding.
- **Acknowledge international commitments and identify national priorities** for implementing them.
- **Assure continuity and participation at national level.** The coordination of various actors in the market and society in general does not come naturally; it has to be managed. The policymaker can use its convening power to maintain momentum, increase the participation of new stakeholders and guarantee the constant adjustment of objectives and alignment of long-term interests, as well as visibility and reactivity with regard to international initiatives and trends.
- **Provide a credible, reliable, predictable and stable regulatory framework.** Structural change requires long-term investments, whose inherent risk can be taken only if the framework is reasonably predictable. If uncertainty is too high, risk aversion will prevail and resources will not be mobilised.
- **Ensure proof of concept and de-risking** of innovative and more risky ideas and projects. Failures cannot be fixed by the market itself. When new models have to be validated, the public sector can take the risk of innovation. Public support of research and experimentation can accelerate the diffusion of new business models and the growth of new markets.
- **Create incentive-based models.** The State can create a coherent framework of disincentives to define the context conditions where economic actors operate. In this regard, fiscal policies (covering both direct and indirect taxes) play a crucial role by rewarding activities whose outputs are aligned with the objectives of public policies (or penalising those that work against them). This redefines the objective function of consumers, producers and capital providers.
- **Lead by example and support new markets.** The government is not only a regulator, it is a market actor itself: it is an employer, an entrepreneur, an investor, a supplier and a purchaser of products and services – very often, the biggest. By using its power in a sustainable way (for example, introducing strict green criteria in public procurement), it can make a significant difference. This will reinforce the conviction that the change is real, and also, more concretely, increase the demand for sustainability in the market and create opportunities for niche players.

- **Reduce costs of transactions.** Innovation implies new risks that need to be identified and managed. In practice, they become additional upfront costs that can jeopardize transactions. Supporting the intermediaries, who often bear the burden of these risks, can increase market liquidity. The incubation and acceleration structures that have been created over the last years are an important part of this equation. They will need long-term public support to reach their full potential and ensure predictability in planning.

On the other hand, private actors are needed to:

- **Identify market needs and gaps and develop innovative ideas.** While the public sector can support innovation, it does not necessarily have the needed market, sector and technical expertise, and may not be flexible enough. Financial actors can be protagonists in identifying market needs or gaps that can be satisfied or filled by new products and services. The innovation process can be fully internal or, as it happens more and more frequently, open to the contribution of external partners.
- **Grow tested models.** Once an innovation has proven to be effective, market forces need to scale it up and make it mainstream practice. The financial market is mostly demand driven, but a greater supply of “sustainable money” can transform latent needs into market demand and encourage the growth of new sustainable businesses.
- **Develop and manage actors who serve as aggregators.** Today’s market is small and fragmented. In particular, the demand side is populated by businesses that are often too small to be picked up by large investors’ radar. And even when they do meet, transaction costs are too high in relation to the size of the operation. The value chain needs to be integrated with new players that can aggregate the demand, standardize financial instruments, reduce asymmetries and increase market liquidity.
- **Serve as a relay between retail investors and the real economy.** The move towards more sustainable finance cannot happen without the key intermediary role of banks, insurance companies and their ecosystem. Financial institutions intermediate between economic agents and interact with the environment and society in multiple ways:
 - as lenders, supplying or guaranteeing the funding needed to develop sustainable businesses
 - as innovators, developing financial products to enable sustainable investments
 - as investment advisors and managers
 - as valuers, estimating and pricing risks and returns for companies and projects
 - as stakeholders (shareholders and lenders), wielding extensive influence over the management of companies
 - as service or market infrastructure providers
 - as fiduciaries.

Banks and life insurance companies offer a diversity of savings and investment solutions that substantially contribute to the shift to sustainably invested assets. When they operate in the retail market, they also play a social and educational role. By raising the right questions, they can help retail clients to better understand the new market dynamics and orientate them towards sustainable investments.

- **Manage climate-related risks.** Insurance companies are at the forefront of integrating climate-related risks in their business models, products and pricing structures.

All these actions are important; none, alone, is sufficient. The strategic objective can be achieved only if they are all pursued in a coordinated way. This gives the sense of what we call a “collective effort”. Every actor has its part and, if they all act together, the costs of change will be shared. A new social contract has to be signed in the name of a common, shared interest, which is higher than the sum of individual interests.

“The shift must be planned to allow the system time to adapt without shocks

5.2. NEED FOR A PHASED APPROACH

Rome was not built in a day. The same holds true for the implementation of the Luxembourg Sustainable Finance Roadmap (LSFR).

A substantial change requires a long-term approach, but this does not necessarily mean delaying immediately actionable initiatives. The concept of a roadmap encapsulates the need for gradual change with that of definite objectives. The shift must be planned to allow the system time to adapt without shocks. At the same time, clearly identifying the ultimate goal and the intermediate steps provides clear guidance on the strategic direction and helps measure progress against targets.

A phased approach, with short-, medium- and long-term actions and initiatives must be adopted in order to address potential reduced competitiveness over the short term, but also beneficial ripple effects over the long term. Integrating key characteristics of the financial centre and striking the right balance between competitiveness and sustainability will ensure that the LSFR is both realistic and ambitious.

At the same time, we have to realize that:

- Sustainable finance is an additional market that will become mainstream sooner rather than later, and will enlarge the pie.
- The oft-used argument of the trade-off between sustainability and financial return will become obsolete as soon as climate-related risks and externalities are priced within financial products.
- There is a sense of urgency. We have to start acting now, and thinking for the long term.

Implementing new approaches

The EU Action plan has three high-level aims: reorienting capital flows, managing financial risks linked to climate and other ESG topics, and fostering transparency and long-termism.

Luxembourg can be a frontrunner in pushing for the most advanced solutions, experimenting with and implementing new approaches to ensure that sustainable finance products are:

- **easy to access:** investors should be able to find a complete and transparent offer of sustainable investment opportunities
- **expertly managed:** asset managers should be supported in setting-up, managing and distributing their sustainable products
- **servicing a purpose:** sustainable enterprises should be supported in accessing long-term funding
- **credible:** the impact of sustainable financial products should be evaluated in order to create clarity and confidence, and avoid greenwashing.

“ Sustainable development requires changes in the deployment and relative value of financial assets

5.3. KEY RECOMMENDATIONS

The following recommendations have been identified throughout the different working groups and interview sessions and are grounded in the spirit of the EU Action Plan on financing sustainable growth.

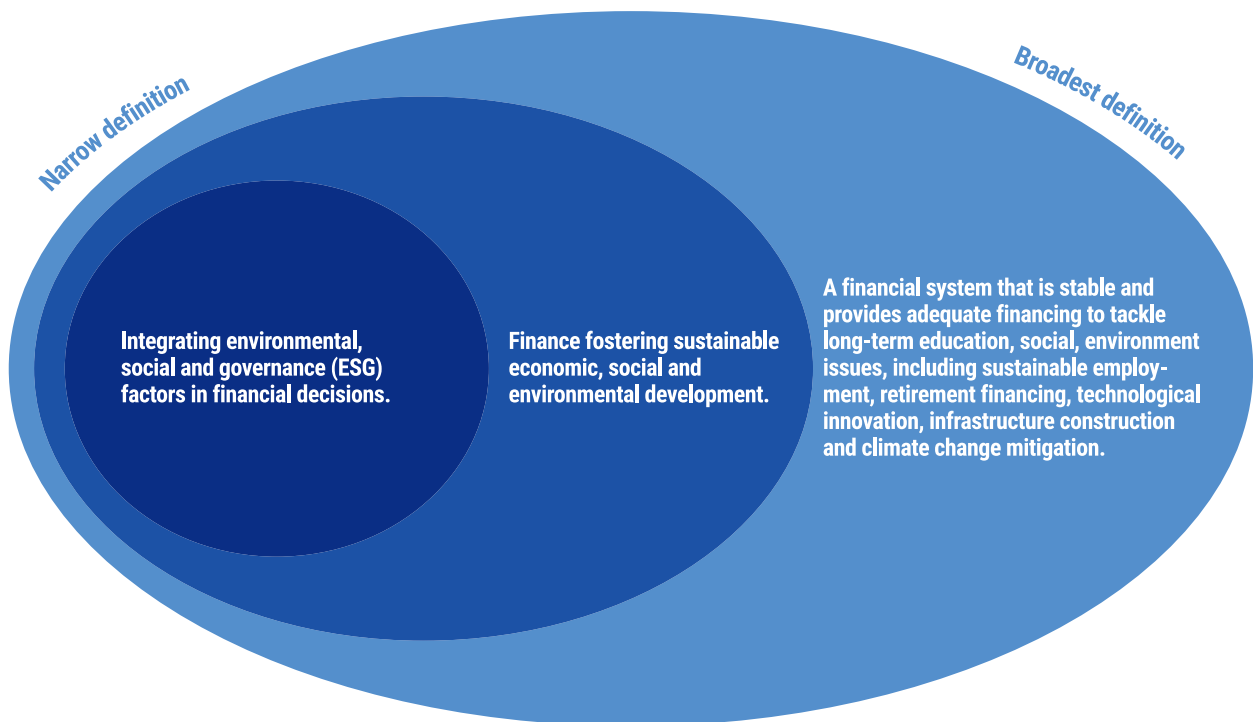
The ambition is not to develop a Luxembourg taxonomy for sustainable investments, but rather to base the recommendations on work currently being done on this topic in various EU-level working groups.

5.3.1. Formalize and communicate an ambitious, tailor-made and clear sustainable finance strategy

Sustainable development requires changes in the deployment and relative value of financial assets and in their relationship to the creation, stewardship and production of real wealth. A sustainable financial system is, therefore, one that creates, values, and transacts financial assets, in ways that shape real wealth to serve the long-term needs of an inclusive, environmentally sustainable economy (UN Environment 2015).

The aim of this Roadmap is to ensure that Luxembourg’s financial centre gradually moves towards a sustainable financial system by 2030, which is at the service of a sustainable economy, for future generations and according to the broadest possible definition of sustainable finance as illustrated below:⁹

Three definitions of sustainable finance



⁹ As adapted from the EU Interim Report July 2017 By the High-Level Expert Group on Sustainable Finance, ec.europa.eu/info/sites/info/files/170713-sustainable-finance-report_en.pdf

In the broadest sense, a financial system needs to be sustainable from several perspectives:

From a systemic perspective, a sustainable financial system must be sound and contribute to long-term financial stability. First and foremost, it should be at the service of the real economy, nationally and internationally. In addition, it should be viable in itself as well as socially and environmentally responsible. Moreover, it should be built and managed for the long run, in a competitive international context and ready to draw lessons from positive past experiences. It should also be open to exploring new business opportunities, including those with non-traditional partners and clients, and embrace technological innovation.

From an operational perspective, a sustainable financial centre must increasingly provide steady, reliable funding and financing. This needs to be accessible at the right moment and over a prolonged period of time (lifecycle dimension); available to a broad spectrum of projects and programmes that are economically viable and produce positive social and/or environmental impacts; and able to meet different needs and stages for funding, with an adequately equipped toolbox (including grants, subsidies, equity, debt, and other financial instruments, including blended finance).

From a functional perspective, the Luxembourg financial centre is a facilitator, primarily at the service of international product developers and investors, and has an important multiplier effect.

An international financial centre must be sustainable in itself before it can contribute to sustainable growth. Financial service providers must acknowledge that economic viability and profitability and positive environmental and social impact are not mutually exclusive, but can combine to generate new opportunities for added value and ultimately sustainable growth.

Financial service providers need to adopt a “generational perspective”, with long-term commitment and the ability to adapt their services and financial products to the varying needs of sustainable projects and to the demand of the sustainability-savvy Millennials and Generation Z.

In 2015, Luxembourg engaged in a deep collaborative initiative on the outlook and positioning of the country in an era of a smart green Third-Industrial Revolution. This strategic reflection process culminated in The 3rd Industrial Revolution (TIR) Strategy Study, covering eight key areas and sectors, including finance (Third Industrial Revolution Consulting Group 2016).

The Finance Working Group in the TIR Strategy Study has sketched out the following vision: “Luxembourg: a sustainable, world-class financial hub at the vanguard of the digital revolution making transformation happen”, and prioritized the following key elements:

- A resilient, diversified international financial sector, serving customers in Luxembourg, Europe and the world.
- A worldwide leading hub for financial innovation, socially responsible investments, trust and transparency where impact and socio-economic sustainability go hand-in-hand.

Building on the work done in the context of the TIR Finance Working Group, the Climate Finance Task Force, the Conseil Supérieur du Développement Durable, Luxembourg’s Agenda 2030 (Luxembourg 2017a; Luxembourg 2017b) and the National Plan for Sustainable Development (Luxembourg, Ministère de L’Environnement 2018), a coherent, consistent and transparent Sustainable Finance Strategy should be formalized. This strategy should also take into account international and EU developments and be adjusted accordingly.

The formalized vision and strategy need to be shared widely and supported at all levels of the financial centre.

RECOMMENDATION:

- Formalize an ambitious, coherent, consistent and transparent Sustainable Finance Strategy, reflecting the distinctive features and added value of Luxembourg
- Ensure endorsement by all stakeholders involved as well as transparent communication

5.3.2. Set up a coordinating entity

Coordination between all actors involved in sustainable finance is key to formalize, ensure buy-in, and communicate the Sustainable Finance Strategy, ensure visibility internationally and coherent implementation, execution and follow-up nationally.

A small ecosystem of very committed and experienced actors has developed a number of innovative and promising initiatives. There is a need to better coordinate these initiatives and to get all actors on board.

The Climate Finance Task Force (CFTF) has played the role of an informal coordinating entity for climate finance. It should evolve into a broader Sustainable Finance Initiative (SFI), building on the work of the CFTF, integrating and enlarging its scope of activities to all areas of sustainable finance.

The SFI should be approved at the highest political level, be incorporated as a public-private partnership (PPP)—which has proven to be the most efficient solution—and be co-chaired at high level by the Minister of Finance and the Minister for the Environment.

The SFI should have the following roles and responsibilities:

- Formalize an ambitious, coherent, consistent and transparent Sustainable Finance Strategy, ensuring buy-in from all stakeholders and transparent communication
- Follow-up on the implementation of the LSFR by the various public and private stakeholders
- Broaden, deepen and consolidate existing initiatives
- Coordinate and liaise between various actors and organizations and promote shared knowledge and expertise
- Integrate existing initiatives, international trends and developments and analyse their implications on the Sustainable Finance Strategy and the LSFR
- Recommend ongoing strategic amendments and developments to the LSFR to ensure the 2030 vision is achieved
- Ensure visibility of the LSFR internationally, attract sustainable finance actors to Luxembourg and serve as a focal point for requests for information or cooperation from international organizations
- Coordinate capacity development, research activities and data collection, ensure measurement of, and report on, progress.

The Sustainable Finance Initiative should seek to join international initiatives, such as Eurosif, in order to be connected to international trends and developments and ensure visibility.

Regular meetings, jointly moderated by public and private sector actors to underline the PPP dimension, should integrate relevant forces in the financial and sustainable finance sectors. This collaborative approach would ease implementation with the various sector members, develop shared vision, priorities and expertise and highlight specific opportunities or hurdles for each sector.

The SFI should coordinate the creation of various sector- and/or theme-specific task forces whose role would be to:

- Define specific roadmaps and/or Action Plans for sectors or themes¹⁰
- Work on the practical implementation of these sector roadmaps, designing ideas and solutions, implementing actions and adapting to sector needs and requirements
- Identify how favourable policies and regulatory frameworks may incentivize new initiatives, products and actors to create their sustainable products in Luxembourg
- Manage the risk of greenwashing of future products and tools offered to safeguard Luxembourg's good reputation in this field
- Design and promote the adoption of new standards that support sustainable finance.

Cross-cutting themes such as governance, fintech, impact indicators and standards, as well as knowledge sharing and education, should be covered across all task forces.

RECOMMENDATION:

- Set up a Sustainable Finance Initiative, as a coordinating entity, in the form of a public-private partnership, as well as sector and/or theme specific task forces with the roles and responsibilities as defined above.

5.3.3. Leverage financial sector expertise

In order to steer the flow of public and private capital towards sustainable investments, Luxembourg can leverage the expertise it has built over the last decades.

Develop a toolkit for the design, set-up, management and administration of sustainable investment products:

Luxembourg, as a hub for international finance, has an important role to play in providing guidelines and designing tools that make it easy for asset managers to set up their products, manage sustainable investment strategies and market these products throughout the world.

One of the strengths of the Luxembourg financial sector is the large variety of existing frameworks and tools covering listed and unlisted investments that can be managed under a variety of vehicles, such as investment funds, unit-linked insurance products and securitisation.

In order to meaningfully scale sustainable finance, a toolkit should be developed to make it easier to use existing solutions and to tailor them to the specific needs of sustainable finance:

- a modular toolbox for designing and structuring investment funds or unit-linked insurance products, which can be used for multiple sustainable investment strategies (listed or unlisted) and various sectors (for example, circular economy, intelligent mobility, or agricultural value chain financing)
- a framework for the valuation and accounting of sustainable investments
- additional sustainability labels (as offered by LuxFLAG) covering various areas of sustainable finance
- a display on LGX to promote information and transparency for investors
- state-of-the art reporting of financial and non-financial information
- guidelines for extra-financial risk management as well as climate-related financial risk management
- guidelines to integrate principles such as the Principles for Responsible Investment (PRI), Principles for Sustainable Insurance (PSI), and forthcoming Principles for Responsible Banking (PRB).

¹⁰ One example of a high-level strategy document that can lead to a roadmap for the banking sector can be found at www.abbl.lu/2018/04/27/the-abbl-perspective-on-sustainable-finance/

Over the past couple of years, new frameworks specifically designed for green finance have been developed, such as green bonds, green covered bonds, sustainable labels and positive impact finance. Additional tools are currently being analysed. The development of new legislation responding to existing gaps should be further explored and encouraged.

Increase the offer of listed and liquid sustainable products:

Today, sustainable investments are mainly driven by institutional investors. Retail investors lack a broad spectrum of investment opportunities, as regulatory barriers largely prevent them from accessing products investing in unlisted instruments.

As a major centre for listed green bonds and investment funds that are distributed worldwide, listed and liquid investment products should be developed to provide access to and encourage investments from retail investors, and to address liquidity issues for institutional investors when investing into unlisted assets.

Additional sustainable investments need to be developed to increase the overall market, such as savings accounts, funds investing in listed green equities or bonds, unit-linked insurance products and second- and third-pillar pension products.

Inspiration can be drawn from specialist sustainable banks in Europe, who offer a range of sustainable investment products at a competitive rate of return.

Better connect investors and investees:

Sustainable projects often do not find financing at the right moment and under the right conditions. On the other hand, investors willing to finance sustainable projects lack information on projects or investment opportunities that suit their profiles and expectations.

Blended finance has proven effective at financing sustainable development. Analysis of how it could be extended to mobilize additional financing for sustainable development and Luxembourg's potential role in this should be carried out.

RECOMMENDATION:

- Develop a toolkit for sustainable investment funds and other financial products by combining existing tools and tailoring them to sustainable finance
- Increase the offer of liquid products, such as sustainable UCITS, listed green and sustainable bonds, savings accounts, and insurance products
- Analyse how Luxembourg can leverage its framework and expertise in blended finance to better connect investors and investees to mobilize finance for sustainable development.

5.3.4. Raise awareness and integrate sustainability into education and professional training

Designing a roadmap for a sustainable financial system is an important exercise, especially in a country where the financial sector, in aggregate, contributes 25% to the GDP. Thus, the vision for a more sustainable financial system at the service of a sustainable economy needs to be embraced by decision makers, citizens and workers alike, in their private and professional lives and on a daily basis.

There are a number of ways to share this vision broadly:

Information and awareness raising:

Corporate social responsibility has been effectively driven through networks such as IMS and INDR. Meeting points, conferences and events aimed at national, international, retail and institutional investors are needed to create a similar level of information and awareness about sustainable finance and showcase the products available.

Luxembourg-based banks and insurance companies need to market more sustainable financial products for retail, private banking and institutional clients in order to start a meaningful shift of assets into sustainable investments and provide the necessary track record and credibility.

In addition to organizing events, meeting points and conferences, sustainability should be integrated into national branding: sustainable development is a creator of social cohesion, an economic opportunity and a differentiating factor.

Sustainability in education:

Financial literacy needs to go hand in hand with education on sustainable finance. To foster a meaningful change in mentality, the link between finance and the real economy and the way environmental and social considerations integrate with banking, insurance and investment activities and business models needs to become an integral part of education. This recommendation has already been highlighted by the TIR report.

There needs to be smooth interaction between developing the financial centre and training and educating local resources.

Sustainability in professional and governance training:

All actors in the value chain—from product development and management to asset servicing, administration and auditing—need ongoing training on what sustainable finance is and how it adds value for society. Luxembourg already has sound expertise in this, and existing initiatives should be coordinated, further developed and mainstreamed.

An adequate level of training for financial advisors (for example, in banks and insurance companies), as well as proactive advice on sustainable financial products is indispensable to ensure that sustainable finance becomes the norm.

Integrating environmental, social and good governance considerations in strategic and operational decisions and processes is part of sound management. This means that the level of expertise in sustainability needs to be extremely high, particularly for decision takers, board members and managers.

Embracing sustainability at the top level of companies, institutions and organizations is essential to ensure that all financial system actors own their sustainability strategy and processes and ESG is not just a box-ticking exercise.

Sustainability should be an integral part of professional training – for example, House of Training for the financial sector, ILA (Institut Luxembourgeois des Administrateurs) for Board members, and IRE (Institut des Réviseurs d'Enterprises) for auditors.

The assessment of the ESG “fitness” of Board members will be a natural consequence and should become part of their overall “fitness assessment”.

RECOMMENDATION:

- Organize regular events, conferences and meeting points on sustainable finance to raise awareness and showcase sustainable finance initiatives and products
- Integrate sustainability into national branding, in order to promote it across the whole ecosystem: sustainable development is a creator of social cohesion, an economic opportunity and a differentiating factor
- Integrate financial literacy and sustainable finance into school curricula and tertiary education
- Integrate sustainable finance into all financial sector trainings
- Consider criteria for ESG fitness assessment of Board members.

5.3.5. Promote innovation

Attract talent and build human capital:

Start-up entrepreneurs are attracted to Luxembourg because they find it a supportive environment to develop and scale their activities. The ecosystem, connectivity and inter-connection between private and public actors also appeal.

Incubation and acceleration structures have been created that focus either on a company's maturity or sector (such as social business, mobility, financial technology, ecotechnology, innovation, design, or climate finance). These accentuate the link between actors of the real economy and the financial sector.

Innovation hubs (and the entrepreneurs they support) feed their expertise, knowledge and network into the landscape of existing companies to create a virtuous innovation circle. They can help grow the sustainable finance sector intrinsically, underlining the movement from niche to critical mass.

Further efforts should be made to link these start-ups and entrepreneurs to the financial sector, as well as to schools, universities and research centres. Children should be encouraged and motivated to experience entrepreneurship and look for learning opportunities in innovative areas, such as social or green start-ups and fintechs.

Showcasing new business models in conferences and events across all financial sectors will attract new talents to sustainable businesses and business models. A culture of managed risk and failure needs to be supported to encourage innovation.

Use innovation and the power of financial technology to foster sustainable finance:

Financial technology has the power to disrupt entire fields of services, and thus the potential to create synergies for sustainable finance, for example by linking sustainability and smart data management. Financial technology can have a disruptive effect on "know your customer" (KYC) processes—integrating sustainability preferences in investor profiles, robo-advising on sustainable financial products, or promoting shareholder engagement by blockchain integration—and thus foster better governance.

The numerous incubator and accelerator structures created in recent years provide an important infrastructure to attract fintech companies developing new solutions for sustainable finance.

As an example of the support provided to fintechs, the Luxembourg House of Financial Technology (LHoFT) has integrated financial inclusion as one of its core strategies. The LHoFT provides acceleration services in terms of support and advice to several impact funds and supports financial inclusion through fintechs in Africa.

Further exploration is needed to effectively link financial technology with the sustainable development goals. Leveraging financial technology to achieve sustainable objectives, such as the fight against climate change or the empowerment of women, will make the whole financial system more sustainable.

RECOMMENDATION:

- Forge close links between incubators, schools and research centres to attract talent and build human capital
- Promote innovation at the service of the SDGs and explore better leveraging of financial technology to achieve sustainable objectives

5.3.6. Develop expertise and best practice

Build expertise in structuring, asset management and measurement:

Blended finance—the efficient combination of public and private funding, encompassing investments and grants—is necessary to respond to the huge financing need for sustainable development.

Luxembourg has an efficient regulatory framework in place to allow such innovative, valuable financing mechanisms and consider various types of investor profiles and requirements.

Further research and expertise, by the University of Luxembourg among others, is needed on how to best integrate sustainability into the design and structuring of financial products.

Managing assets sustainably requires integrating environmental, social and governance related criteria with traditional financial criteria. The University of Luxembourg, School of Finance and House of Training should collaborate with international and national research centres, such as Luxembourg Institute of Science and Technology (LIST), to develop additional expertise in sustainable finance, for example in sustainable asset management. This might mean creating new Masters programmes, adding PhD or post-doc opportunities in sustainable finance research, or creating an expert programme in impact management and measurement.

Existing expertise needs to be further developed, together with institutions such as the EIB, as well as with universities and research institutes. The European Commission Technical Expert Group on Sustainable Finance and the development of a taxonomy for sustainable investments, to which Luxembourg actively contributes, is expected to guide this topic.

In recent years, actors such as LuxFLAG have gained valuable expertise in assessing and measuring the environmental and social impacts of investments. Mainstreaming green investments bears the inherent risk of greenwashing, and a more in-depth assessment of extra-financial performance ensures transparency and trust.

As a platform for international finance, it is important to share expertise with actors that might not be at the same level of understanding and expertise. This can be done through organizations such as:

- **ALFI, ABBL and ACA** providing guidance and best practice to support asset managers and financial product developers in areas such as integrating financial and extra-financial criteria in risk management, and the use of sustainable benchmarks and indices.
- **House of Training – ATTF** (Agence de Transfert de Technologie Financière) providing training and support in adopting best practice in sustainable finance, including gender equality, predominantly in developing countries.

Develop best practice and provide guidance on ESG reporting:

One of the recommendations of the EU Action Plan is to strengthen the transparency of companies' ESG policies in order to make the right information available to investors.

The proposed regulation requires institutional investors and asset managers to disclose how they integrate environmental, social and governance factors in their risk processes. Requirements to integrate ESG factors in investment decision-making processes, as part of their duties towards investors and beneficiaries, are being further developed. The EU Commission also contemplated integrating ESG considerations into the advice that investment firms and insurance distributors offer to individual clients.

As a leading distribution platform for financial products worldwide, Luxembourg has a real opportunity to contribute actively to developing effective reporting systems and guidelines for ESG reporting. Such guidelines could include examples of standardized impact metrics with supporting methodologies and calculation tools.

An endorsement by the Sustainable Finance Initiative of the recommendations of the Task Force on Climate-related Financial Disclosures would have an important signalling effect.

Resources to develop a commonly accepted reporting framework for sustainable financial products are needed. It is also necessary to build up expertise across the ecosystem, to be able to support the wider international financial sector to collect such data, analyse it and produce meaningful reporting for investors. This is of particular relevance for the investment fund sector where Luxembourg has a leading global position.

RECOMMENDATION:

- Promote research programmes on blended finance to finance sustainable development
- Set up Master and PhD programmes in sustainable finance, such as asset management and impact management and measurement
- Build, strengthen and extend existing expertise in assessing and measuring social and environmental impacts
- Develop effective reporting systems and guidelines for ESG reporting

5.3.7. Analyse and redesign the system of incentives and taxation

Incentives can lead to a meaningful increase in the supply of, and demand for, sustainable finance products. Incentives can motivate product issuers and investors to learn about the various types and characteristics of sustainable investments, encourage new actors to come on board and generate a massive shift of money into sustainable investments.

Incentives should be analysed in a transparent and open-minded way, in light of international initiatives and in the spirit of the EU Action Plan on sustainable finance. Clear criteria to access and benefit from such incentives are necessary and an adequate approval and follow-up by a certifying body is essential.

Analyse and redesign incentives:

Incentives could be designed to encourage long-term, sustainable investments and discourage unsustainable investments. This includes assessing the nature of the incentives (the type of investment for which they are granted), and the conditions for accessing them (for example, minimum holding periods for exoneration of capital gains, or minimum duration of unit-linked insurance contracts). Furthermore, the multiplying effects of incentives at the level of the product issuer, investor and investee need to be integrated into this assessment.

Incentives could be linked to specific investment models. For example, the financial performance of an investment could be linked to its environmental or social benefits. Sound expertise in extra-financial performance measurement is needed for such innovative incentive schemes.

Subscription and direct taxes:

Direct taxes have an important multiplier potential, both at the level of the investee and of the investor.

Waiving subscription taxes for microfinance funds has driven significant growth in this sector. Analysis should be conducted to determine under which conditions the same measures could be implemented for sustainable investment funds at large.

The Ministry of Labour, Employment and the Social and Solidarity Economy has started certifying commercial companies that comply with strict criteria around their business model, performance indicators, auditing and reporting. These social impact companies (SIS) enjoy tax advantages and greater access to public procurement.

Similar advantages could be provided to a broader range of companies or business practices under the condition that they comply with strict ESG conditions and make reference to the taxonomy currently being developed at EU level.

Investors could be granted tax relief on personal or corporate income tax against a sustainable investment made, for example in a sustainable-labelled investment fund or SIS company.

Indirect taxes:

Indirect taxes also have the potential to incentivize socially and environmentally oriented business models. Today the list of activities eligible for a reduced VAT rate covers a number of essential sectors and products (from a social point of view), but mostly does not consider environmental aspects.

Reduced VAT rates could include more generally sustainable business models and activities, a measure that would support the growth and development of these—often small—start-ups.

RECOMMENDATION:

- Redesign investment incentives to promote long-term investments at the level of product developers, investors and investees
- Analyse how direct tax incentives could be linked to sustainable finance activities and business models
- Analyse whether the scope of reduced indirect taxes should be broadened for sustainable companies and business models

5.3.8. Lead by example and ensure proof of concept

To credibly lead the path towards sustainable finance, it is crucial to have an ambitious sustainable finance strategy and a consistent approach. Other key factors include coherent integration of sustainability criteria in investment strategies, as well as transparent reporting on financial performance and social or environmental impacts. The same holds true for public procurement.

Public investments should be screened for their ESG soundness and carbon footprint. Clear guidelines for public investments, sovereign funds and public pensions need to be elaborated and communicated.

In addition, public funds should use their tremendous influencing power by exercising their voting rights and practicing active shareholder engagement. This is consistent with commitments made through international treaties and conventions.

One of the roles of government is to use public means to ensure proof of concept for innovative and more risky investments. The Luxembourg EIB climate finance platform is an excellent example. Public funding is invested in sectors, countries or risk tranches with the aim of taking additional risks and pulling in commercial, private funding. Other projects should be considered, such as the creation of a social and environmental impact fund or the provision of seed funding for these types of investments.

Public financing also has a leading role to play in terms of green lending. Public credit institutions should complement government efforts and integrate social and environmental criteria into their financing policies and lending conditions to improve access to funding for thriving sustainable and green businesses and meaningfully boost their growth.

RECOMMENDATION:

- Screen public investments for their ESG soundness and carbon footprint
- Develop and communicate clear guidelines for sovereign funds and public pensions
- Use the influencing power of public funds through active shareholder engagement
- Leverage public funding to ensure proof of concept (for example through creating a social and environmental impact fund) and seed-fund these initiatives
- Elaborate and implement green lending policies in public credit institutions

5.3.9. Measure progress

Implementing the various recommendations of this Roadmap requires designing and setting up a controlling framework:

- What is the current situation (quantifiable)?
- What are planned actions (input provided over the short, medium and long term) to change the current situation?
- What social and environmental indicators are integrated into policy planning measures?
- What are meaningful indicators to measure change over time?
- How to ensure data collection and reporting?
- How to follow-up on indicators and make adjustments if necessary?
- How to follow-up on planned actions and implementation process and make adjustments if necessary?

Detailed data gathering, measurement and reporting tools will allow the progress made by all actors in the sustainable finance spectrum to be evaluated. Communicating on progress made is crucial to reinforce buy-in and cohesion.

The Sustainable Finance Initiative has an important role to play in ensuring the contribution of the financial sector, as well as actors such as the National Statistics Agency, the Central Bank, the financial and insurance sector regulators and associations, universities and research institutes.

Indicators could be defined in line with the taxonomy foreseen in the EU Action Plan on sustainable finance, the technical specifications of which will be worked out in the coming months. It should then be ensured that:

- these indicators are integrated into the data collection process
- there is a consistent reading and interpretation of data and results
- there is a continuity and coherence of these statistics over time.

Below are examples of relevant indicators, inspired by the work of the International Network of Financial Centres for Sustainability, among others. These indicators are a work in progress.

- The volume of sustainably managed AUM issued or deposited in Luxembourg compared to overall AUM:
 - by public, institutional and retail investors
 - by resident and international investors
 - by type of products: such as bonds, investment funds, savings accounts, insurance and pension products.

- The number of green bond issuers, green loan providers, asset owners or managers who have signed the PRI, PSI or other principles promoting sustainable investments
- The number and amount of green loans disbursed by banks compared to traditional loans:
 - For private clients
 - For corporate clients
 - For institutional clients
 - For public entities
- The number of labelled sustainable investment products:
 - Private equity and/or debt funds
 - Listed equity and/or debt funds
 - Green bonds
- The number of training courses focusing on sustainable finance
- The number of certified directors including ESG fitness assessment
- The number of listed companies and investment funds publishing their carbon footprint
- The volume of public procurement following sustainability criteria compared to traditional criteria.

Monitoring progress over time will ensure that corrective actions can be taken. Furthermore, monitoring and reporting on progress has important snowball potential and increases ownership of all stakeholders.

RECOMMENDATION:

- Participate in the elaboration of best practice and indicators with initiatives such as the International Network of Financial Centres for Sustainability
- Identify stakeholders to ensure the definition and implementation of a controlling framework
- Measure and communicate on progress over time
- Take corrective actions if necessary

6. CONCLUSION

The Luxembourg financial centre as a hub for European and international finance is in a good position to meaningfully contribute to the financing of sustainable development. Being a frontrunner in sustainable investment funds, green bonds and sustainable finance labels, important expertise has been built over the last years, but a lot of work still lies ahead.

Luxembourg is committed to contributing to the international debate and the development of frameworks and guidelines that leads towards a more sustainable financial system. Actions need to be coordinated, nationally and with our EU partners, and wisely planned over time. Ensuring progress is assessed and measured is crucial to attaining the vision of a sustainable financial system at a horizon of 2030.

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8. TABLE OF ACRONYMS AND ABBREVIATIONS

ABBL	Association des Banques et Banquiers, Luxembourg	LFF	Luxembourg for Finance
ACA	Association des Compagnies d'Assurances et de Réassurances du Grand-Duché de Luxembourg	LGX	Luxembourg Green Exchange
ALFI	Association of the Luxembourg Fund Industry	LHoFT	Luxembourg House of Financial Technology
ATTF	Agence de Transfert de Technologie Financière	LIST	Luxembourg Institute of Science and Technology
AUM	Assets under management	LSFR	Luxembourg Sustainable Finance Roadmap
BCL	Banque Centrale du Luxembourg	LuxFLAG	Luxembourg Finance Labelling Agency
CFTF	Climate Finance Task Force	LuxSE	Luxembourg Stock Exchange
CSSF	Commission de Surveillance du Secteur Financier	ODA	Official Development Aid
EIB	European Investment Bank	PPP	Public private partnership
EIF	European Investment Fund	PRI	Principles for Responsible Investment
ESA	European Supervisory Authorities	PSI	Principles for Sustainable Insurance
ESBR	European Systemic Risk Board	REDD	Reduced Emissions from Deforestation and Degradation
ESG	Environmental Social Governance	SDG	Sustainable Development Goals
EU	European Union	SFI	Sustainable Finance Initiative
Eurosif	European Sustainable Investments Forum	SIS	Société d'impact sociétal
Fintechs	Financial technology companies	SME	Small and medium enterprises
GDP	Gross Domestic Product	TCFD	Task Force on Climate-related Financial Disclosures
GNI	Gross National Income	TIR	Third Industrial Revolution
HLEG	High-Level Expert Group	UCITS	Undertakings for Collective Investments in Transferable Securities
IFC	International Finance Corporation	UNEP	UN Environment
ILA	Institut Luxembourgeois des Administrateurs	UNEP FI	United Nations Environment Programme Finance Initiative
IMS	Inspiring More Sustainability	VAT	Value added tax
INDR	Institut National pour le Développement Durable et la RSE		
Infine	Inclusive Finance Network Luxembourg		
IRE	Institut des Réviseurs d'Entreprises		
KYC	Know Your Customer		

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