Sustainable finance and financial education: a snapshot

editors

Eugenia Macchiavello and Michele Siri

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UniGe

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Introduction: sustainable finance and financial education

Eugenia Macchiavello and Michele Siri

There is an evident urgent need for a transition to a circular and sustainable economic system. States, financial institutions, NGOs, companies, professionals and the civil society are together required to quickly find solutions to cope with the challenges posed by climate change and the current and future detrimental effects of human business activities on the environment. This e-book, conceived as an instrument of financial education about sustainable finance, wants to contribute to such transition.

Sustainable finance in context

The EU and European Commission, since the launch of the first EU Sustainable Development Strategy in 2001, has committed to contributing to the promotion of sustainable development in key cross-sectoral projects, by intervening in all environmental, social and governance (ESG) areas. Sustainable finance has been recognized as a fundamental contributor to sustainable development and to reaching the 2015 UN Sustainable Development Goals. Based on the Final Report of the High-Level Expert Group on Sustainable Finance (HLEG), the EU Commission adopted in March 2018 the Action Plan "Financing Sustainable Growth", which established a plan setting out strategic recommendations for a financial system that supports sustainable investments. Since then, the EU has been developing over time a comprehensive regulatory framework in the area of sustainable finance, with the objective of supporting the growth and correct functioning of such market, also as a part of the broader 2019 EU Green Deal. This represents an ambitious and broad package of measures that should enable European citizens and businesses to benefit from sustainable green transition.

The importance of financial education

Given the complexity of the financial system and of its policy and regulatory framework and of sustainable finance itself, there is a strong need of research work and initiatives in the area of sustainable finance. Financial education has become a priority in international and national public policies for raising citizens awareness and understanding of the financial sector and therefore contributing to their financial inclusion and welfare, as well as at the same time, the correct functioning of the market (see the various workstreams and task-forces set by OECD, IOSCO, World Bank, G-20, Financial Stability Board, etc.).

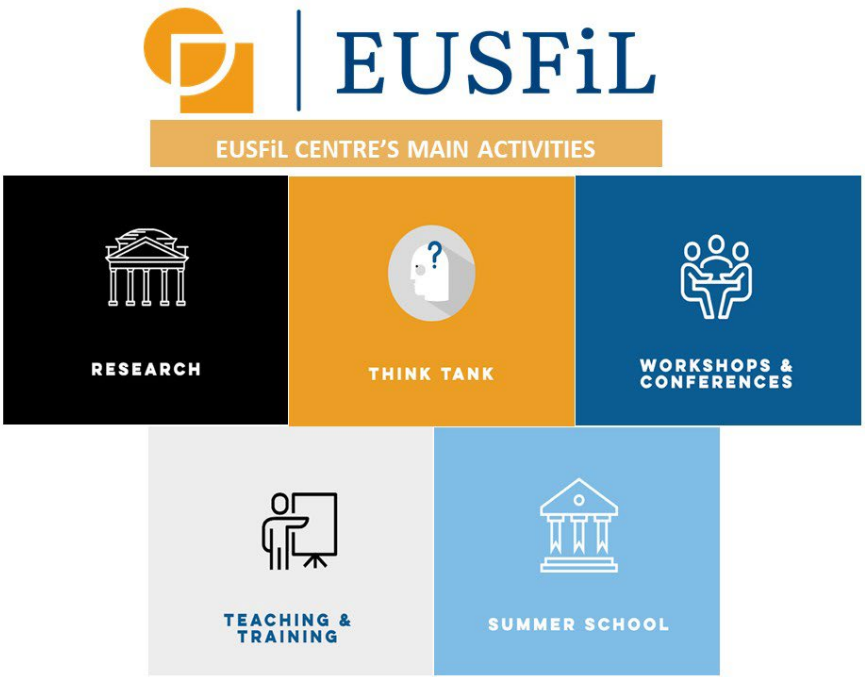
This e-book aims at contributing to spreading the knowledge of sustainable finance and its regulation.

The EUSFiL Centre and its activities

The e-book has been developed by the Jean Monnet Centre on European Union Sustainable Finance and Law (EUSFiL) of the Department of Law (company law and economic law section) of the University of Genoa, created in 2020 by its Director Professor Michele Siri with the support of the EU Erasmus+ programme (Ref. Project: 620519-EPP-1-2020-1-IT-EPPJMO-CoE).

The Centre's activities' focus is on sustainable finance, with particular regard to the recent reform of the EU financial system. The Centre's mandate is to engage in research, education, and publications that broadens inquiry, dialogue, and debate beyond tradwitional academic boundaries, bridging the gap between theory and practice. EUSFiL aims to contribute to the achievement of UN Sustainable Development Goals, with particular reference to SDG 8.10 (strengthening the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all).

Figure 1. EUSFiL Centre's activities



Source: by Eugenia Macchiavello and Michele Siri.

With particular regard to the research activity, EUSFiL focuses on the legal implications of the integration of sustainability in the financial sector. In this respect, the Centre brings together a team of experienced scholars from different countries and backgrounds, with a very high and diversified profile in various fields (corporate social responsibility, corporate governance, capital markets, banking and insurance law, financial regulation, law and economics, economics and finance, etc.). Several activities have been performed in collaboration with other well-known international research centres, allowing a continuous exchange and ideas, recommendations and scientific knowledge. The four main workstreams are presented in figure 2.

Figure 2. EUSFiL Centre's workstreams

Source: by Eugenia Macchiavello and Michele Siri.

EUSFiL's teaching and educational activities are also numerous and diversified: team members have organised several financial education seminars about sustainable finance in the context of the annual IOSCO Investor Weeks and the Italian "financial education month" as well as visited secondary schools to present sustainable finance and its EU regulation to their students. EUSFiL members offer sustainable finance courses or modules at their Universities and are invited to give lectures on the same topic at other Academic institutions. Within these teaching activities, EUSFiL has also developed, together with the University of Genoa e-learning team and EduOpen, three Massive Open Online Course (MOOCs) dedicated to different aspects of sustainable finance and at different levels.

Other activities have been developed with other centres and Departments of the University of Genoa, which presents a rich portfolio of courses in the area of sustainability in different sectors as well as interdisciplinary courses on sustainability (see https://unigesostenibile.Unige.It/Educazione).

A presentation of the objective and structure of the e-book

Within this background, the present e-book aims at increasing the level of financial literacy in the EU in the specific area of sustainable finance in line with the objectives of the EU green deal and action plan on financing sustainable growth. This is the first or one of the first financial education publications to address the recent EU legal framework for sustainable finance.

The e-book presents and explains, in easily understandable terms, fundamental notions in the area of ESG financial markets and financial regulations. The first Chapters will explore the main characteristics of sustainable finance, its role in contributing to sustainable development and the main sustainable investment products. In a second part, after providing an overview of the EU legal reform in the area of sustainable finance, the e-book will focus in explaining the most important legislative acts and initiatives. This will contribute to increasing investors' trust in sustainable investment products and make them aware of the effects of their investment choices on sustainability issues. As most investors are not even aware of the existence of sustainable financial products, this initiative will likely facilitate the channelling of private capital to sustainable activities and therefore to the objectives of sustainable transition.

To reach more effectively its objectives of financial education and dissemination, the e-book will adopt a clear and simple language despite its technical topic, recur to infographics to help the reader more easily understand complex concepts, reduce at a minimum footnotes, while using hyperlinks to refer to additional sources in a convenient way for readers and boxes to better explain concepts. Nonetheless, the e-book is addressed also to academics and professionals, aiming at promoting dialogue and discussions: hyperlinks and references to academic literature and official EU documents in footnotes at the end of each Chapter provide readers with the opportunity to deepen their knowledge about the most relevant topics and engage in current academic and legislative discussions.

Part One

FIRST OVERVIEW

Chapter 1

WHAT IS SUSTAINABLE FINANCE AND HOW CAN IT CONTRIBUTE TO SUSTAINABLE DEVELOPMENT?

Eugenia Macchiavello

1. “Sustainable finance”, “responsible investing”, “ESG investing”, etc.: all the same?

The expression “sustainable finance” has become widespread nowadays but it is quite recent. Other names have been used over the years to refer to similar concepts, such as “ethical finance” and “socially responsible investing” (SRI). In fact, historically, the first experiences relate to the exclusion of certain sectors (e.g. weapons, tobacco, alcohol, etc.) considered “sin” investments by certain religious groups (e.g. in the US: Quakers and Methodists, Muslims in Islamic finance) [1] or, later on, “irresponsible” by civil activists (boycotting, during Vietnam war, weapons and napalm-producing companies). This led to the creation of segment of the investment markets called “(socially) responsible investment”, where investments are chosen not only based on financial considerations.

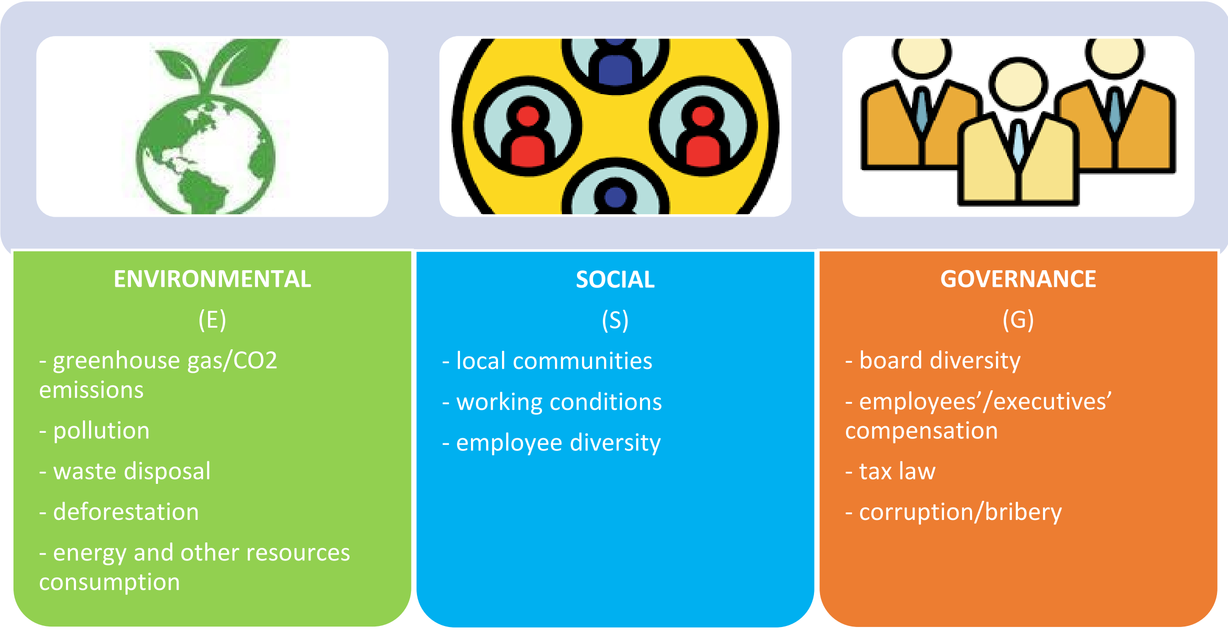
Figure 1. Sustainable finance: different names and evolution

Source: by Eugenia Macchiavello.

Another widespread term is “ESG investments”: this refers to the consideration of factors, in addition to financial return, in investment decisions and linked to the environment (greenhouse gas/CO2 emissions, pollution, waste disposal, deforestation, energy and other resources consumption, etc.), the society (local communities, working conditions, employee diversity, etc.) and governance. This last category is the most diverse one, referring to board diversity and pay gaps but also to compliance with tax law and anti-corruption practices.

[1] Martini 2021; Roncalli 2023.

Figure 2. ESG investing (acronym meaning) – factors



Source: by Eugenia Macchiavello.

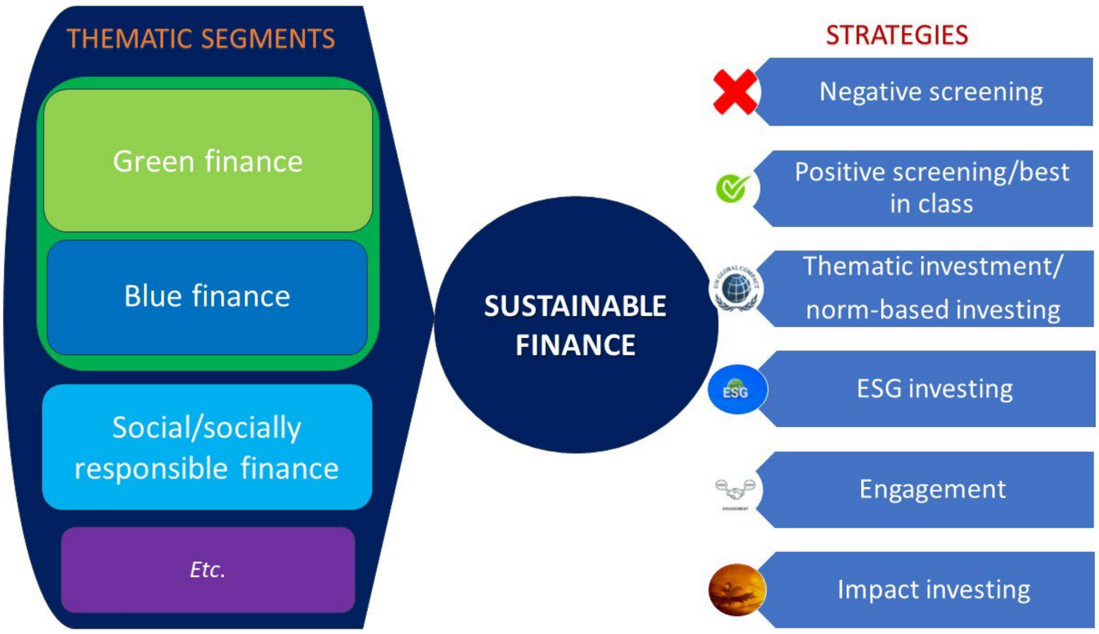
Other terms refer to particular areas of the same universe: "green finance" refers to the environmental area, while "blue finance" to the area of oceans and use of water-related resources. [2] Social or socially responsible finance focuses on social factors and advancement.

Moreover, in the investment market, many different strategies have been developed, each corresponding to different ways of investing "sustainably": from negative screening (simply excluding entire sectors or segments of the economy), to positive screening and best-in-class (choosing, among the investment universe, the "best" companies/investments from a sustainability point of view), thematic investment (focusing on certain goals such as renewable energies, fight against climate change), ESG-risk analysis/integration (including, in the financial analysis of companies, consideration of risks coming, for instance, from the environment or labour conditions), to impact investing (investing with the objective of generating a positive impact for the environment or the society) and engagement (investing in not-yet responsible companies with the objective of transitioning them to more sustainable business models from the inside). [3]

[2] About the blue finance, see the IFC guidelines for blue finance (2022).

[3] About different investment strategies, see Chapter 2 by Piserà and Nieri.

Figure 3. The sustainable finance universe



Source: by Eugenia Macchiavello.

In any case, the term "sustainable" is linked to the concept of "sustainable development" defined in the 1987 UN Report "Our Common Future" (also called "Brundtland Report") as the "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". The UN Resolution "2030 Agenda for Sustainable Development", adopted in 2015 by the United Nations (UN) General Assembly, has clarified that the world development should not only achieve the end of poverty but also the preserving the planet and fostering social inclusion. This fundamental agreement has set 17 "UN sustainable development goals" (SDGs)[4], which, together with more specific 169 targets, shows the way for a more balanced and therefore sustainable development. Certain goals pertain to economic aspects (e.g. no poverty, decent work, adequate infrastructures and economic growth), while others to the social sphere (equality, education, health, peace, etc.) and others to the environmental area (climate action, protection of land, oceans and life on both). The last SDG, partnership, refers, among others, to the cooperation among countries and people to reach all the goals (e.g. transfer of resources and knowledge among countries).

The financial sector, together with public power and other civil and economic sectors, can contribute to reach the SDGs (see below paragraph 4).

[4] The progressive implementation of the SDGs can be tracked in periodic UN reports. The advancement of SDGs in Europe can be monitored through a dedicated dashboard.

Figure 4. UN Sustainable Development Goals (SDGs)

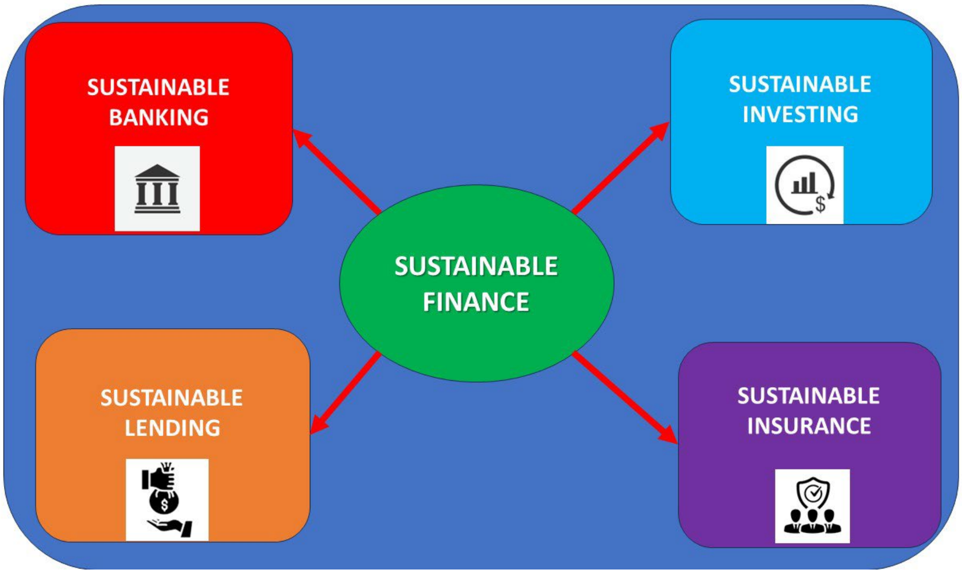
Source: UN SDGs official website.

2. Finance, not just investments!

The investment area has been the first one within the financial sector to be influenced by the consideration of sustainability factors (see above about sustainable finance origins). Also as a consequence, it is also the most mature and developed segment of sustainable finance, and diversified strategies and products (see Chapter 2 by Piserà and Nieri). Chapter 2

However, at both EU and international levels, sustainable finance and its regulation covers all segments of the financial sector: today, financial intermediaries' clients can be offered "sustainable loans" (assigned based on a ESG analysis and for sustainable activities/projects), "sustainable deposits" (the bank commits to lend/invest savings in sustainable activities or where part of the remuneration can channeled to sustainable projects), as well as "sustainable insurance" (e.g. protecting economic activities or people from the losses caused by severe weather events or incentivizing climate risk adaptation and mitigation, etc.: see IPCC 2022, at 15.6.4).

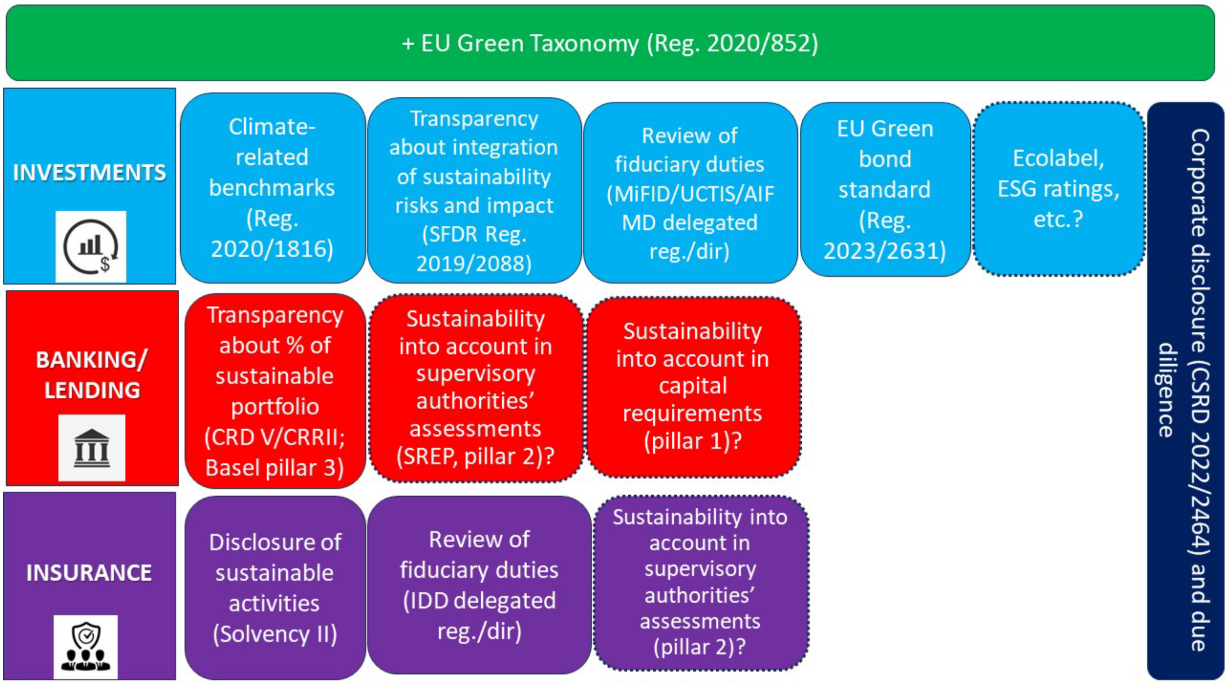
Figure 5. Sustainable Finance – all sectors involved



Source: by Eugenia Macchiavello.

EU regulation also reflects such focus and prioritization of investments, with several legislative initiatives falling withing the sustainable investment area (see also below and Chapter 6 by Nenci).

Figure 6. EU Sustainable Finance regulation by sector



Source: by Eugenia Macchiavello.

3. A first (un-official) definition of sustainable finance and a first overview of the (legal) concept of sustainable investments

Despite the relevance of the sector and sectorial legislation, there is no official definition of sustainable finance. On the European Commission's website, however, it is defined, with a focus only on investments, as

> the process of taking due account of environmental, social and governance (ESG) considerations when making investment decisions in the financial sector, leading to increased longer-term investments into sustainable economic activities and projects.

Later on, it clarifies that:

> [i]n the EU's policy context, sustainable finance is understood as finance to support economic growth while reducing pressures on the environment to help reach the climate and environmental objectives of the European Green Deal, taking into account social and governance aspects. [5]

Figure 7. Sustainable finance

Source: by Eugenia Macchiavello.

In these definitions, it is evident the importance placed on the consideration of sustainability risks (box 1) and factors (box 2) (especially, so far in EU law, on the environmental aspect) and on moving from a short-term perspective (maximization of profits in a short period of time) to a long-term perspective (when ESG risks can materialize and negatively affect the value of the investment) in investments.

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[5] On the idea of sustainable finance as a way to direct capital towards activities which not only generate economic surplus value but, at the same time, are useful to society and not charged to the environmental system, see the definition on the Italian capital markets authority (Consob)'s website.

Box 1: sustainability risks

= "'sustainability risk' means an environmental, social or governance event or condition that, if it occurs, could cause an actual or a potential material negative impact on the value of the investment" (Art. 2(22) SFDR)

Box 2: sustainability factors

= "environmental, social and employee matters, respect for human rights, anti-corruption and anti-bribery matters" (Art. 2(24) SFDR)

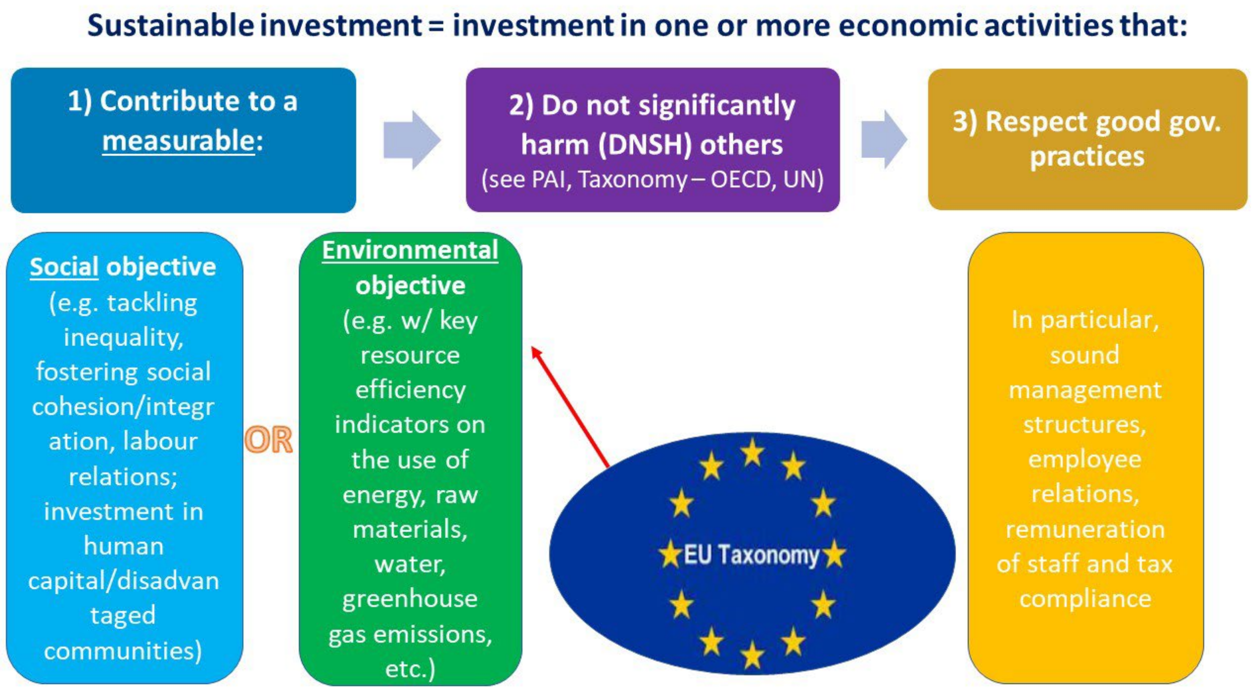
EU financial regulation, however, has provided a definition of "sustainable investment" in the context of a Regulation imposing certain "sustainability-related" disclosure requirements on managers of funds/portfolios and financial advisors (see Chapter 8 by Molinari). [6] In particular, Article 2(17) of the Sustainable Finance Disclosure Regulation (SFDR – Reg. 2019/2088) defines the same as

> an investment in an economic activity that contributes to an environmental objective as measured, for example, by key resource efficiency indicators on the use of energy, renewable energy, raw materials, water and land, on the production of waste, and greenhouse gas emissions, or on its impact on biodiversity and the circular economy, or an investment in an economic activity that contributes to a social objective in particular an investment that contributes to tackling inequality or that fosters social cohesion, social integration and labour relations, or an investment in human capital or economically or socially disadvantaged communities, provided that such investments do not significantly harm any of those objectives and that the investee companies follow good governance practices.

Therefore, in such a context of disclosures by fund/portfolio managers and financial advisors, sustainable investments are the ones contributing either to a (measurable) environmental or social objective, while minimum governance standards must always be respected and cannot represent the sole objective. Moreover, an investment, although contributing only to one environmental/social objective, cannot be considered sustainable if it endangers another environmental/social objective.

[6] For an analysis of the concept of sustainable investments, see also de Arriba-Sellier and Van Caenegem 2024. See also Van Oostrum 2021; Partiti 2023.

Figure 8. Definition of "sustainable investment" (ART. 2(17) SFDR)



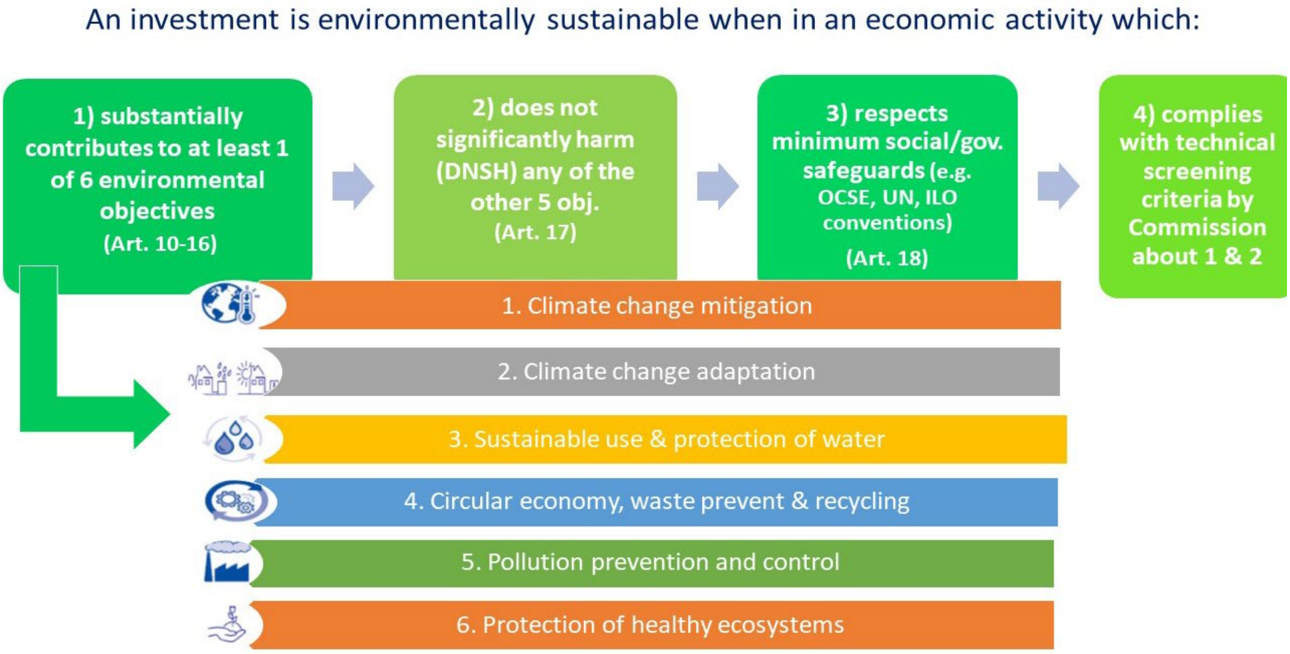
Source: by Eugenia Macchiavello.

In the area of environmental objectives, we need to refer also to the EU Green Taxonomy (Reg. 2020/852): in such Regulation, an environmentally sustainable investment is identified with «an investment in one or several economic activities that qualify as environmentally sustainable under this Regulation» (Article 2(1) EU Green Taxonomy) and, therefore, in an economic activity which «contributes substantially to one or more of the environmental objectives set out in Article 9 […], does not significantly harm any of the environmental objectives […]», is carried out in compliance with minimum social and governance safeguards (laid down in Article 18) and complies with detailed technical screening criteria set by the Commission in relation to the "significant contribution" and "do not significantly harm" (DNSH) principle (Article 3 EU Green Taxonomy). The criteria for identifying "sustainable investments" under the EU Green Taxonomy and the SFDR, therefore, do not completely correspond (e.g. the EU Taxonomy applies only to environmentally-related investments, while the SFDR also to socially-related ones; the former presents detailed parameters/targets for determining the "significant contribution" or "DNSH" at activity level, while the SFDR leaves such criteria to market players except for some PAI indicators and apply a DNSH principle at "sustainable investment" level): [7] as a consequence, a sustainable investment under SFDR with an environmental objective can be considered Taxonomy-aligned when satisfying also EU Green Taxonomy requirements. On the other hand, an investment Taxonomy-aligned is considered *per se* sustainable under the SFDR. [8]

[7] On such differences, see in particular ESMA's Explanatory note on Concepts on sustainable investments.

[8] See also the Commission's notice of 16 June 2023, No. 4 and the proposed changes to the SFDR RTS in the ESAs Joint Committee Final Report on draft Regulatory Technical Standards on the review of PAI and financial product disclosures in the SFDR Delegated Regulation, at 11.

Figure 9. EU taxonomy: criteria for 'green' list of economic activities



Source: by Eugenia Macchiavello.

However, investment products with "sustainability features" are varied: investment funds might include in the portfolio only "sustainable investments" (Art. 9 SFDR), while other investment funds might be presented to clients as with "sustainability characteristics" for selecting a part of the investment portfolio based on environmental or social aspects or both (and as long as also good governance practices are respected: Art. 8 SFDR) and including, if any, only a smaller proportion of "sustainable investment" (as defined in SFDR/EU Green taxonomy). Other products might consider the negative impact of investments (Principal adverse impact – PAIs) on the environment or social factors (Art. 7 SFDR and MiFID II Del. Reg.). In consideration of the definition of "sustainability preferences" in the context of portfolio managers' and financial advisors' fiduciary duties, only Art. 9 products or products considering PAIs might be relevant and suggested/chosen for the client, while Art. 8 only in case of consideration of PAI or minimum proportion of sustainable investment matching the minimum share expressed by the client (see also Chapter 10 by Gargantini). In any case, these expressions and examples correspond to legal categories but might not be easily understandable by retail investors and do not correspond to existing investment strategies (e.g. negative/positive screening, ESG integration, etc.; see above and Chapter 2 by Piserà and Nieri). [9]

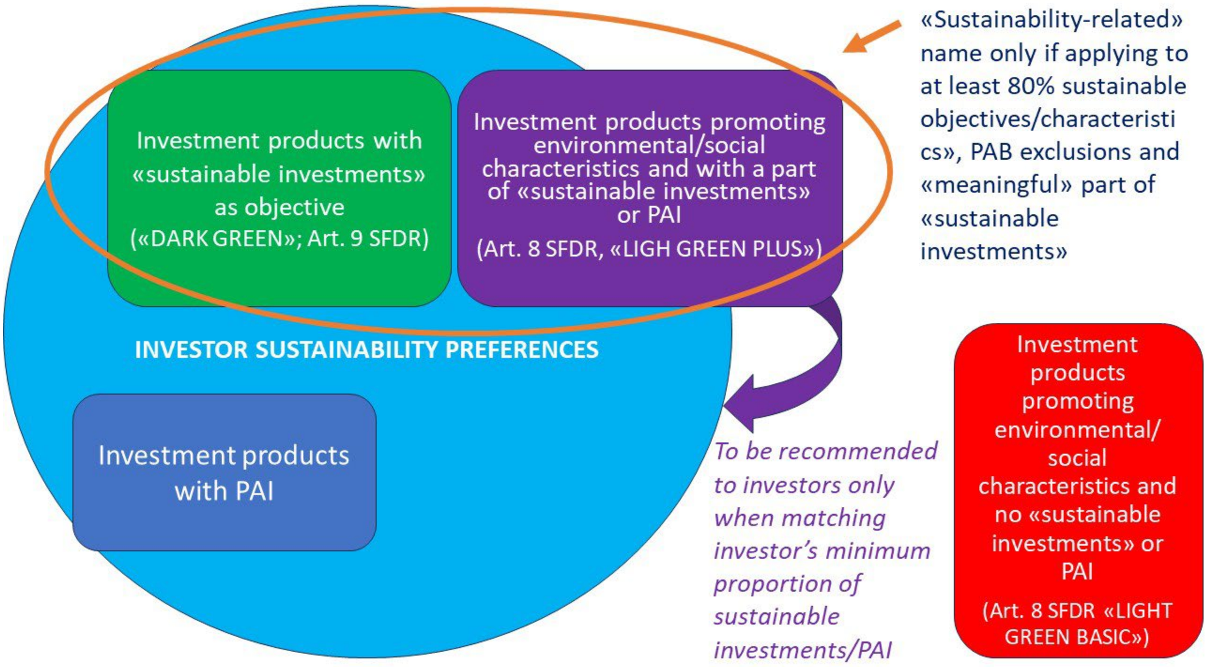
To limit investors' confusion, ESMA has been proposing the adoption of guidelines [10] on "sustainability" and "ESG" related funds names. At the time of writing (December 2023), ESMA seems inclined to require, in case of "ESG-related" funds' names, at least 80% of the investments meeting environmental/social characteristics or sustainable investment objectives (Artt. 8 and 9 SFDR); in case of "sustainable-related" words, again 80% of investments meeting environmental/social char-

[9] On SFDR and investor preferences, see Colaert 2024.

[10] Guidelines are non-mandatory standards but require an explanation from financial intermediaries or national competent authorities for not complying with the same. See Article 16(3) Regulation No 1095/2010 of 24 November 2010 establishing a European Supervisory Authority (European Securities and Markets Authority) (15 December 2010).

acteristics or sustainable investment objectives but, in addition, the application of the Paris-aligned Benchmark exclusions and a "meaningful" investment in SFDR/EU Green Taxonomy sustainable investments; "transition-related" names (with no reference to "sustainability" but, at most, to the "environment"), instead, must apply the (less demanding) Climate Transition Benchmark exclusions (on benchmarks see Chapter 6 by Nenci); finally, "transition" and "impact"-related names will have to ensure that the minimum proportion of investments are, respectively, on a measurable path to transition or are made with the intention to generate positive and measurable environmental/social impact alongside financial return. [11]

Figure 10. Legal categories of investment products with "sustainability features"



Source: by Eugenia Macchiavello.

In conclusion, several investment products might be presented as "sustainable", "green", "responsible" but might also be very different from one another (e.g. in terms of minimum portion of the portfolio invested in "sustainable investments" as defined by the SFDR/EU Green Taxonomy or applying environmental criteria to select investments): to allow investors to understand the true level of "sustainability" or whether it corresponds to investors' idea of sustainable products, disclosure and interaction with the financial professional are crucial (see again Chapters 8 by Molinari and 10 by Gargantini).

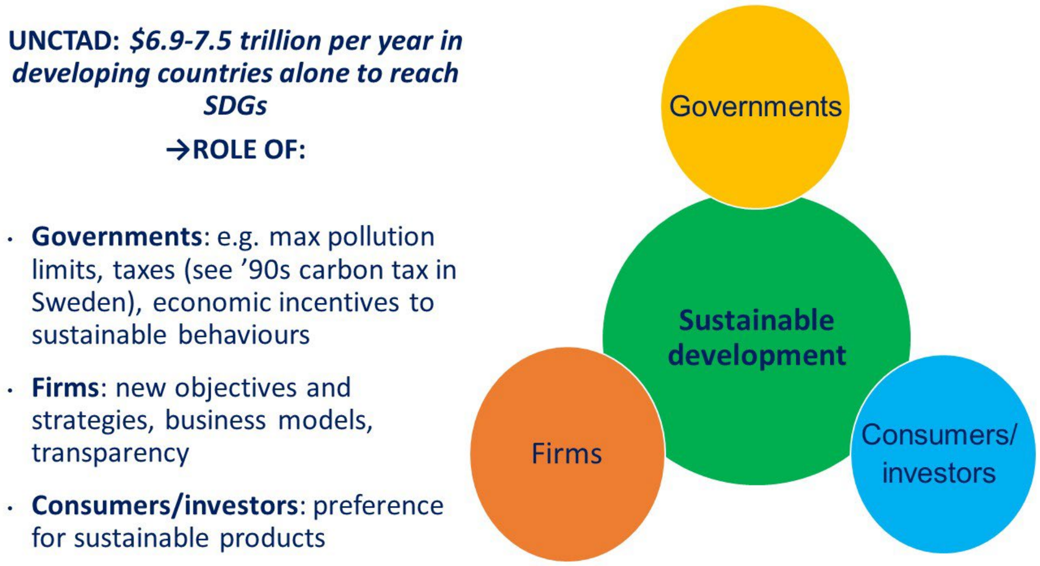
4. The role of sustainable finance

Reaching the SDGs is not an easy task: UCTAD (2022) estimates a financing need of $6.9 trillion-7.5 trillion per year for developing countries alone. Governments should play a fundamental

[11] See the initial ESMA Consultation (November 2022) and its subsequent 'Update on the guidelines on funds' names using ESG or sustainability-related terms' (December 2023).

role by setting innovative and overarching public policies in the area of green energy production, sustainable public transportation, circular economy, etc., sanctioning pollution and creating incentives for sustainable behaviours (see tax on pollution, public co-financing for solar panels installation, etc.). Nonetheless, they cannot achieve such huge objective alone: transitioning to a sustainable society needs the cooperation of the private sector and the civil society too, orienting their choices toward sustainable solutions.

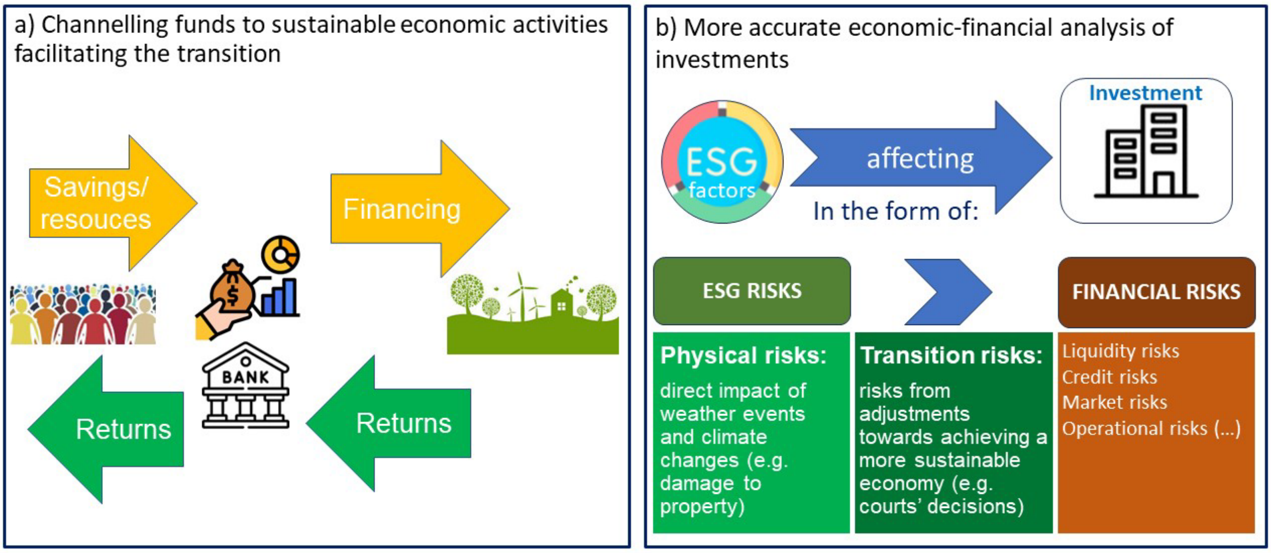
Figure 11. Collective efforts to reach the SDGs



Source: by Eugenia Macchiavello.

Sustainable finance, in particular, has an important role to play, channelling private funds to sustainable enterprises and therefore making the transition to a sustainable economy possible. Taking into account risks coming from sustainability factors (environment, social aspects, governance) also allows a more complete and accurate assessment of the risks of investments (e.g. direct damages to the company's property from severe weather events due to climate change; sanctions and Court decisions against the company), especially in a long-term horizon (as the one of pension funds, for instance) (on ESG risks and double-materiality, see Chapters 8 by Molinari and 9 by Palazzini). In fact, also for this reason, sustainable investments generally ensure financial returns above traditional investments or at least the same level of returns (see also Chapters 2 by Piserà & Nieri, 3 by Santulli & Nieri and 4 by Alemanni).

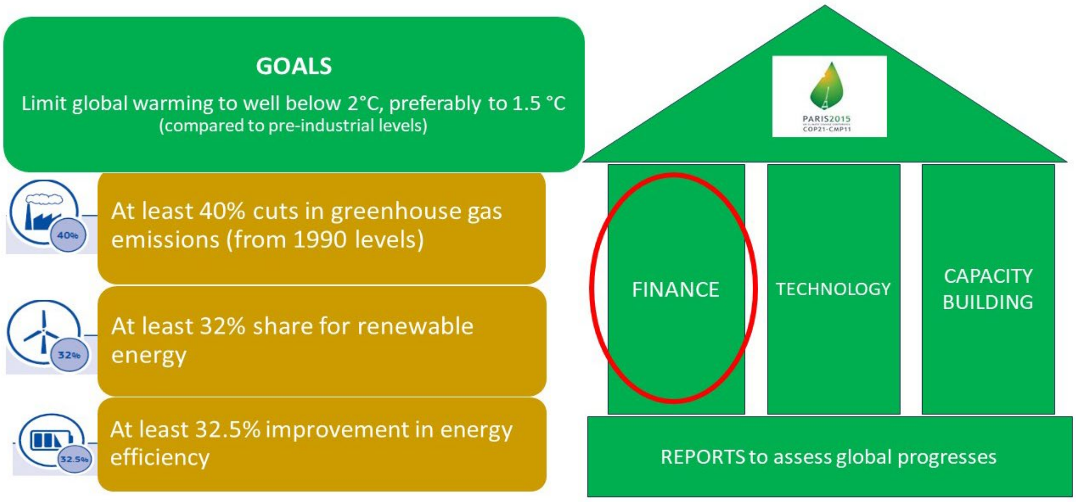
Figure 12. The role of sustainable finance



Source: by Eugenia Macchiavello.

Several international agreements and commitments recognize an important role to sustainable finance. The UN 2015 Paris Agreement, one of the most important Treaties in the area of climate change, is the first international agreement to have sustainable finance as a fundamental pillar. It was adopted by the UN Climate Change Conference (COP21) in Paris (France) on 12 December 2015 and entered into force on 4 November 2016. It has as main goal to hold «the increase in the global average temperature to well below 2°C above pre-industrial levels», pursuing efforts «to limit the temperature increase to 1.5°C above pre-industrial levels» and monitoring global collective progresses over time (stocktake progress reports). Finance is identified as one of the main pillars of the Paris Agreement (see Article 9), able to support initiatives to adapt to climate change and mitigate the same, together with technology (innovations to improve resilience to climate change and reduce CO_2 emissions) and capacity building development and transfer in particular to developing countries. The UN Intergovernmental Panel on Climate Change (IPCC), a body for assessing the science related to climate change from a trans-disciplinary perspective, included for the first time in its 2022 Report a chapter dedicated to climate finance (see the IPCC 2022 Sixth Assessment Report, working group III on mitigation of climate change, chapter 15).

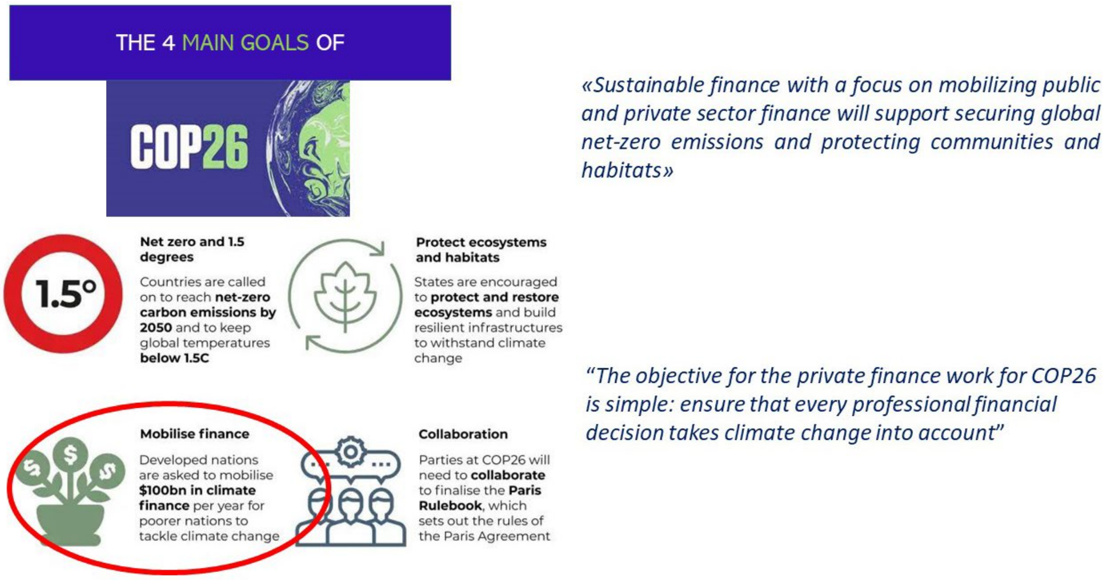
Figure 13. The 2015 Paris Agreement (COP 21, Paris, France)



Source: by Eugenia Macchiavello.

Sustainable finance represents also one of the main goals of COP26 (Glasgow, UK, 2021), together with a net-zero target by 2050 (maintaining global temperatures below 1.5 °C), protect habitats and ecosystems and collaboration to comply with the Paris Agreement (Carney 2020). Similarly, COP27 (Sharm el-Sheikh, Egypt, 2022) has kept stressing out the importance of finance, both public and private, and institutions and businesses' accountability in implementing the Paris pledge and supporting the transition, although the main achievement in this domain has been the creation of a (public) "loss and damage" fund to help developing countries coping with the adverse impacts of climate change. [12]

Figure 14. Sustainable finance at COP26 (Glasgow, UK, 2021)

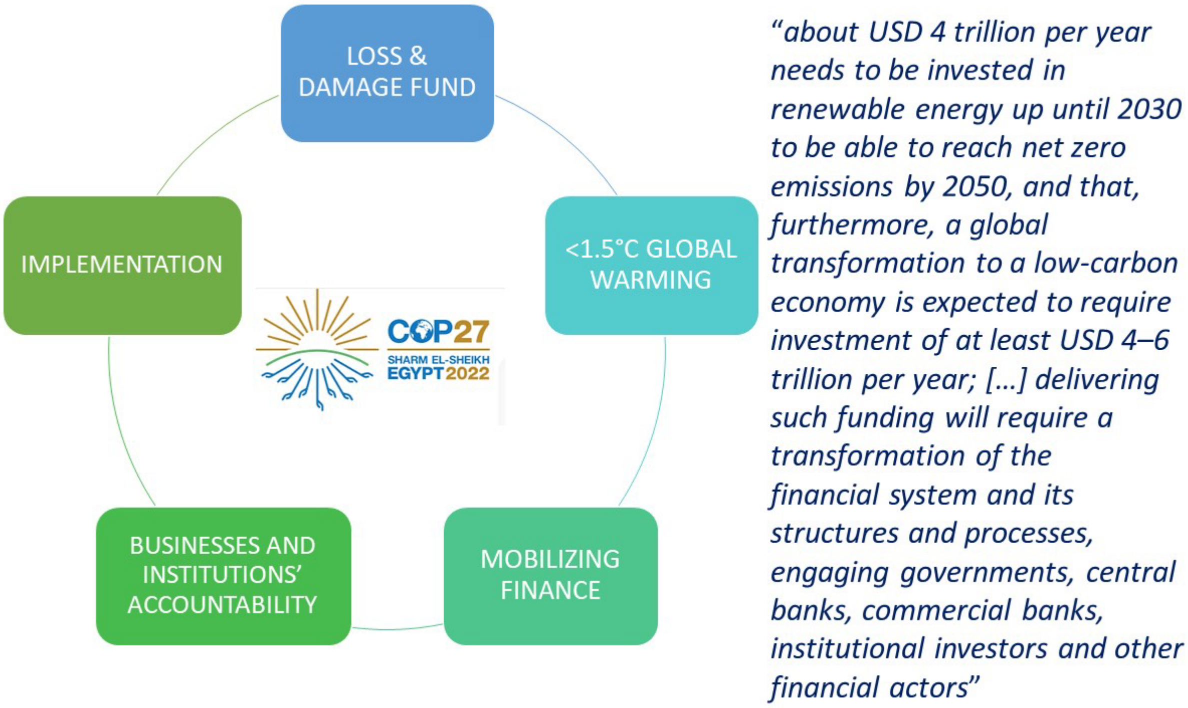


Source: by Eugenia Macchiavello.

Sources of images: UK COP26; quotations: Carney, BUILDING A PRIVATE FINANCE SYSTEM FOR NET ZERO, 2021.

[12] See the Sharm el-Sheikh Implementation Plan.

Figure 15. Main takeaways



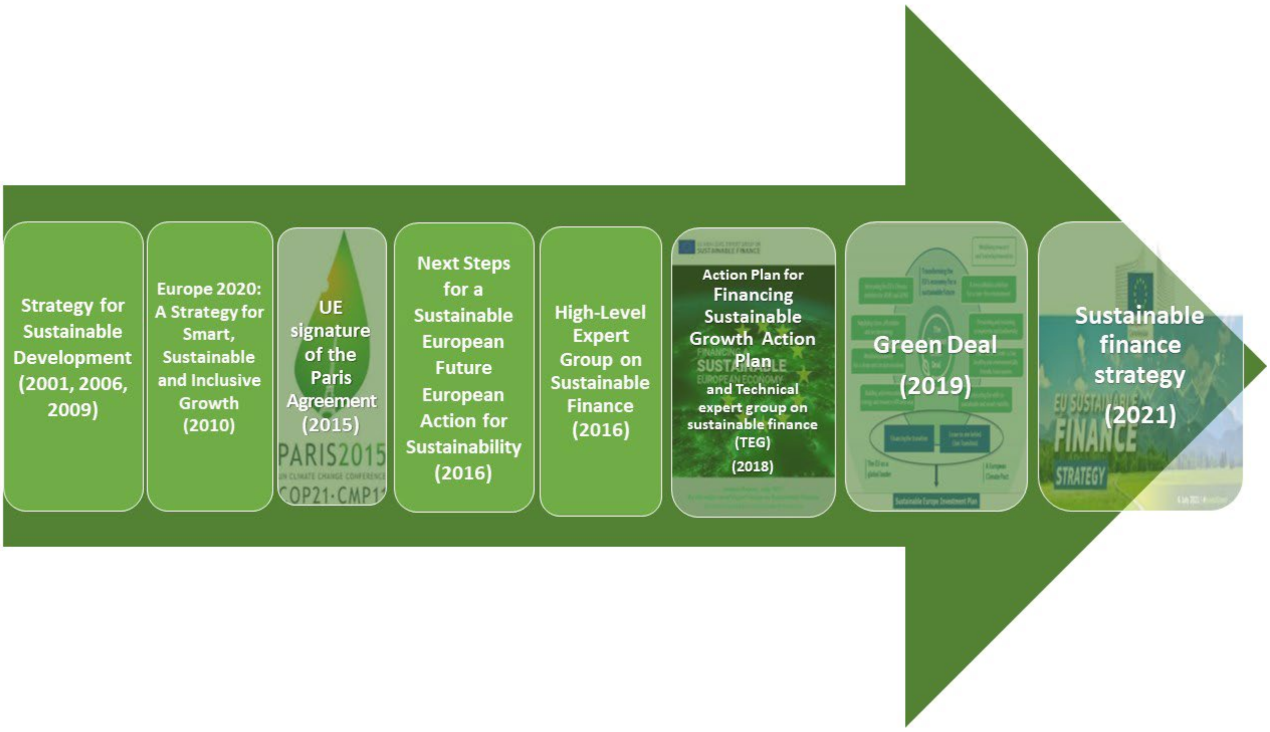
Source: by Eugenia Macchiavello.

Sustainable finance, despite such important role in principle and its recent growth (e.g. representing sustainable investing more than half of the total EU market), has not been able to effectively contribute in a significant way to, for instance, adaptation and mitigation of climate change (IPCC 2022, 15.2.1. and 15.3; Giuliani et al. 2022), for reasons also related to market-related obstacles and lack of adequate and common rules (see Chapter 5 by Macchiavello).

5. Sustainable finance: efforts in setting standards at EU and international level

The European Union has been committed to sustainable development since the 2000s, being one of the first signatories of the 2015 Paris agreement, but later focused specifically on sustainable finance following the recommendations by the High-Level Expert Group on Sustainable Finance (2016), which led to the adoption in 2018 of the Action Plan on Financing Sustainable Growth and in 2019 of the EU Green Deal with its Investment pillar (see Chapter 6 by Nenci).

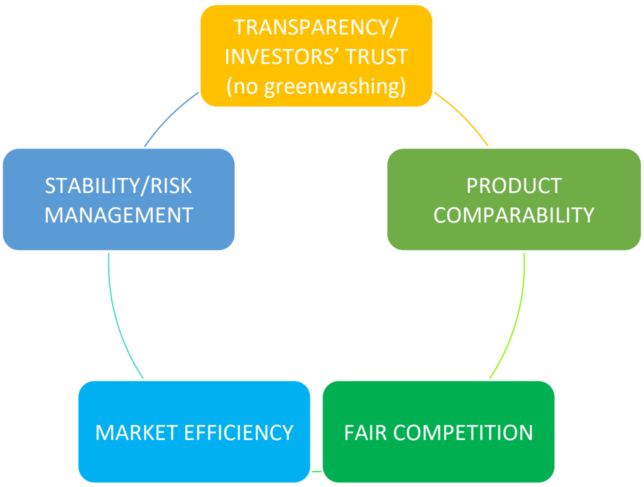
Figure 16. The European Union's commitment to sustainable development and focus on sustainable finance



Source: by Eugenia Macchiavello.

Such comprehensive EU regulatory framework aims at promoting the financing of sustainable economic activities and, at the same time, addressing existing shortcomings and market failure of sustainable finance, ensuring an efficient and fair internal market through, among others, transparency (reducing greenwashing risk), comparability of products, and fair competition (see Chapter 5 by Macchiavello).

Figure 17. Sustainable finance regulation rationales/objectives

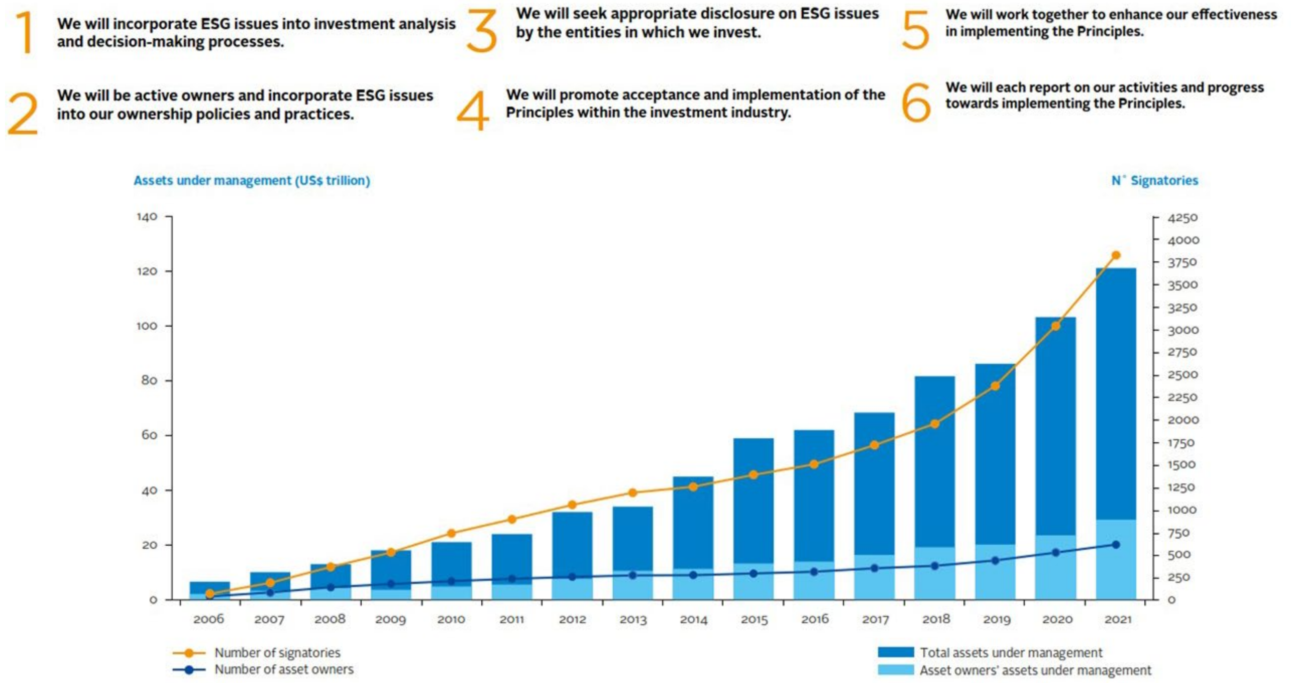


Source: by Eugenia Macchiavello.

Nonetheless, considering the global reach of sustainable finance, it is evident that the need for harmonised standards in the area of sustainable finance has emerged also at international level, both in the private sector and among public organizations and institutions.

In 2005, the United Nations promoted the adoption, by several institutional investors, of the [Principles for Responsible Investment] (PRI), which aim at facilitating the incorporation of ESG issues into investment practice. In 2021, the signatories reached 3,826, corresponding to $121.3 trillion in total assets under management (UN PRI 2023, at 21).

Figure 18. UN Principles for Sustainable Investments



Source: by Eugenia Macchiavello.

Source of principles and graph: PRINCIPLES FOR RESPONSIBLE INVESTMENT Brochure 2021.

Box 3: International standard-setting bodies and the financial sector

These are organizations setting standards which are internationally accepted as important by market participants and regulators for meeting certain fundamental objectives.

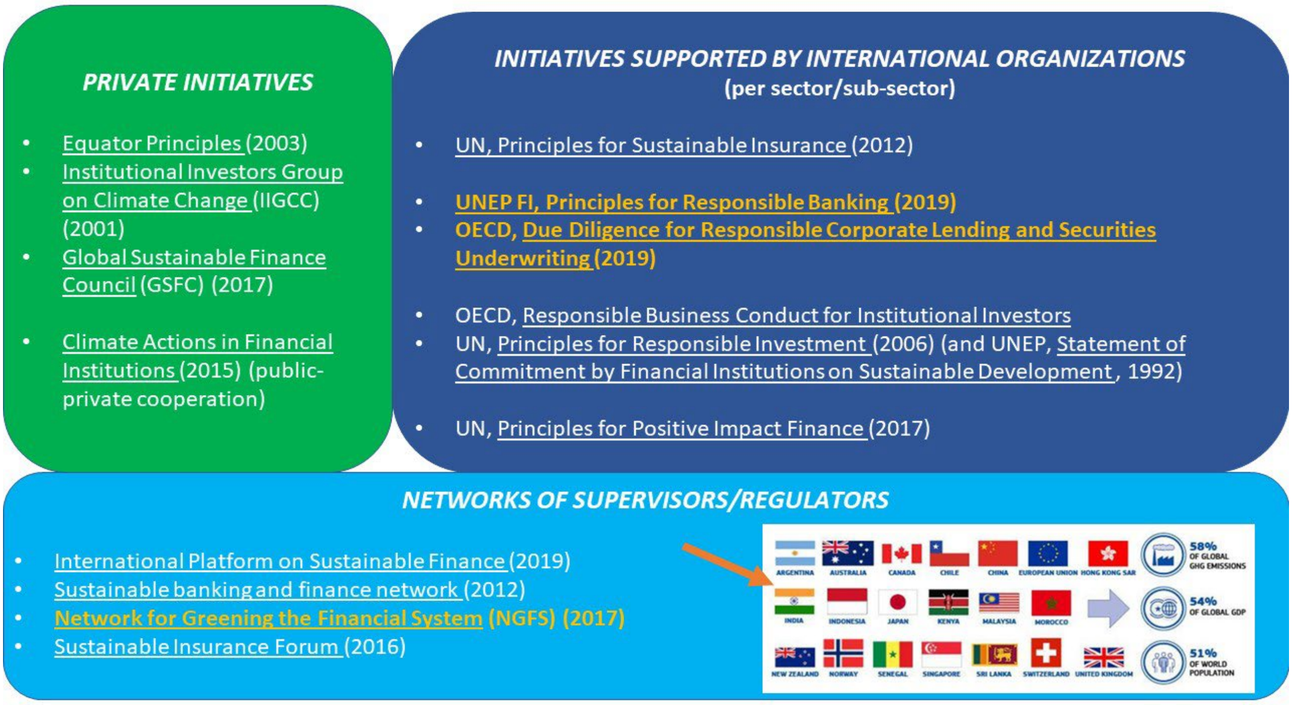
In the financial sector, the most important internal standard-setting bodies/organizations, among others, are:

– International Monetary Fund (IMF)
– Bank for International Settlements (and its Basel Committee on Banking Supervision, Committee on the Global Financial System, Committee on Payments and Market Infrastructures)
– Financial Stability Board (FSB)
– Financial Action Task Force on Money Laundering (FATF)
– International Organization of Securities Commission (IOSCO)
– International Association of Insurance Supervisors (IASS)
– International Association of Deposit Insurers (IADI)
– International Organisation of Pension Supervisors (IOPS)
– International Accounting Standard Board (IASB)

Similar principles have been adopted also in other sectors, like the banking and insurance ones by market participants. For instance, the Equator principles were developed by the financial institutions engaged in project finance and set a common baseline and risk management framework to identify, assess and manage environmental and social risks, ensuring that financed projects are developed in a socially responsible manner and reflect sound environmental management practices.

More recently, platforms to share experiences among regulators or among institutions and market participants have developed: as an example, the International Platform on Sustainable Finance (IPSF) was launched in 2019 by the EU and other States, with the support of the World Bank and the IMF, to bring together world policymakers and allow them to discuss, compare their initiatives and discuss opportunities and issues in sustainable finance. Together, the 20 members represent 58% of greenhouse gas emissions, 51% of the world population and 54% of global GDP. The Network for Greening the Financial System (NGFS) was established at the Paris "One Planet Summit" in December 2017 to allow central banks and financial supervisors to develop best practices to manage risks and mobilize capital for green and low-carbon investments. Nowadays, the network involve supervisors from countries representing 85% of global GDP and 75% of greenhouse gas emissions. Together with several working groups of international standard-setting bodies (see box 3) in the area of global financial regulation (e.g. IOSCO, Financial Stability Board, World Bank, etc.), these initiatives contribute to align international efforts in regulating sustainable finance, therefore reducing gaps and distances, favouring competition in this international market.

Figure 19. International Principles and Standards (examples)



Source: by Eugenia Macchiavello.

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Chapter 2

SUSTAINABLE FINANCIAL PRODUCTS AND STRATEGIES

Stefano Piserà and Laura Nieri

1. Introduction

During the last decades, the increasing pressure on environmental transition have seen the rising of Sustainable Finance, a branch of traditional finance aimed at developing financial products connected to a positive impact on the environment and society. More precisely, Sustainable Finance is defined by the United Nations Industrial Development Organization (UNIDO 2020) as "a management concept whereby companies integrate social and environmental concerns in their business operations and interactions with their stakeholders." Therefore, Sustainable Finance regards all that investments carried on by governments, corporations, or households to foster the financial system towards a low-carbon economy, the reduction of Co2 emissions, and the society finally increasing the resilience of world economy to climate and social change shocks.

This multidimensional concept encompasses a wide range of financial instruments, mechanisms, and institutions that play pivotal roles in facilitating the transition towards a low-carbon and climate-resilient future. From public funding mechanisms to private investments, sustainable finance represents a critical tool in fostering global cooperation and addressing the urgent and complex challenges posed by environmental and social change.

Among the universe of financial tools to foster the climate and societal transition, financial debt instruments such as green bonds, blue bonds (focused on marine and water-related projects), sustainability bonds, sustainable funds and sustainable Exchanged Traded Funds (ETFs) are the most relevant financial instruments allowing issuers to raise capital specifically for climate and environmental projects. A green bond is a type of fixed-income financial instrument that is specifically earmarked to raise capital for projects and activities with environmental benefits. The proceeds from green bonds are used to finance projects that contribute to environmental sustainability and address climate change issues. These projects typically fall within categories such as renewable energy, energy efficiency, pollution prevention, sustainable agriculture, and clean transportation. Similarly, sustainability bonds are fixed income instruments rising capital for more broad sustainable actions, and so not only focused on strictly environmental issues. As for sustainable ETFs, they are a type of investment fund traded on stock exchanges, typically aimed at tracking the performance of a specific index or a basket of assets, combining the features of an exchange-traded fund with a focus on sustainability and environmental, social, and governance (ESG) criteria.

Box 1: What are the ETFs?

Exchange-Traded Funds (ETFs) are investment funds that are traded on stock exchanges, similar to individual stocks. ETFs are designed to track the performance of a specific index, commodity, bond, or a basket of assets. They offer investors a way to gain exposure to a diversified portfolio of assets without having to buy each individual security separately.

Here are some key features and characteristics of ETFs:

1. Diversification:
   - ETFs typically hold a diversified portfolio of assets, which can include stocks, bonds, commodi-ties, or a combination of these. This diversification helps spread risk and can provide investors with exposure to different sectors or asset classes.
2. Passive Investing:
   - Most ETFs are passively managed, meaning they aim to replicate the performance of a specific index rather than actively selecting individual securities. This passive approach often results in lower management fees compared to actively managed funds.
3. Liquidity:
   - ETFs trade on stock exchanges like individual stocks, providing investors with liquidity. This means investors can buy and sell ETF shares throughout the trading day at market prices, just like any other stock.
4. Transparency:
   - ETFs are required to disclose their holdings on a daily basis, providing transparency to investors about the assets held within the fund. This transparency allows investors to know exactly what they are investing in.
5. Low Costs:
   - Due to their passive management style and typically lower operating costs, ETFs often have lower expense ratios compared to actively managed funds. This can be attractive to investors looking to minimize costs.
6. Flexibility:
   - ETFs can be bought and sold throughout the trading day at market prices. Additionally, investors can use various trading strategies, such as limit orders and stop-loss orders, when trading ETFs.
7. Wide Range of Options:
   - There are ETFs available for various asset classes, investment styles, and sectors. Investors can choose ETFs that align with their investment goals, whether they seek exposure to a broad market index or want to focus on a specific industry or theme.

Because of these advantages, ETFs have found high distribution among private and institutional investors worldwide.

Since its inceptions started in 2007 by the European Investment Bank (EIB), green bonds have become the most used debt instruments to finance green projects worldwide. In this market, investors participate to the environmental and social transition process purchasing and trading such bonds with the assurance that the funds will be used for environmentally sustainable purposes. According to recent data from the "Climate Bond Initiative", the sustainable finance debt and funds ETFs market, has reached the total amount of 4.2 trillion of USD and of 2.8 trillion of USD in 2023 respectively, showing a constantly growing demand worldwide.

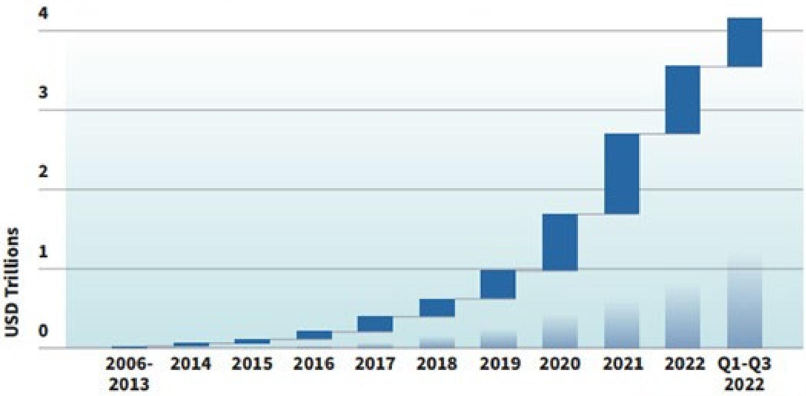
This Chapter focuses on green debt investments and is organized as follow: section 2.1 explores the green bonds state of the art; section 2.2 shows the existing standards and guidelines defining green debt investments; section 2.3 discusses sustainable funds and sustainable Exchange Traded Funds; section 2.4 exposes the recent findings about risk and return profile characteristics of green bonds; section 2.5 has a look at common sustainable investment strategies; section 3 concludes.

2. Sustainable financial products: the state of the art

2.1. Sustainable debt instruments

While initially dominated by supranational entities and development banks, the market of sustainable debt instruments, has witnessed a diversification of issuers with an increasing issuing by corporations from various sectors as well as financial institutions aimed at fostering a broader commitment to sustainability. According to the Climate Bond Initiative (CBI), the issuing of sustainable debt instruments, such as of green, social, sustainability, and sustainability linked (GSS) debt aligned with the CBI definition had recorded the unprecedented cumulative volume of 4.2 trillion of dollars (USD) in 2023, plus a further 12.7 billion of dollars in unscreened bonds bearing the transition label (CBI 2023) (Figure 1).

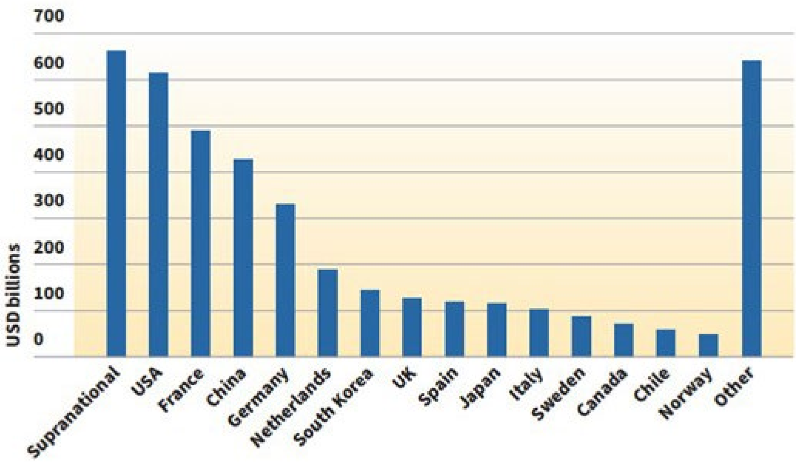
Figure 1. Cumulative aligned sustainable debt instruments (2006-2022)



Source: by Stefano Piserà and Laura Nieri.

Beside the GSS market is increasing its presence among national governments, supranational entities are still the main actors in the market. Looking at country level issuers, USA is the largest market, following by France, China, Germany, Netherlands, South Korea, UK, Spain, Japan, Italy, Sweden, Canada, Chile and Norway (see Figure 2).

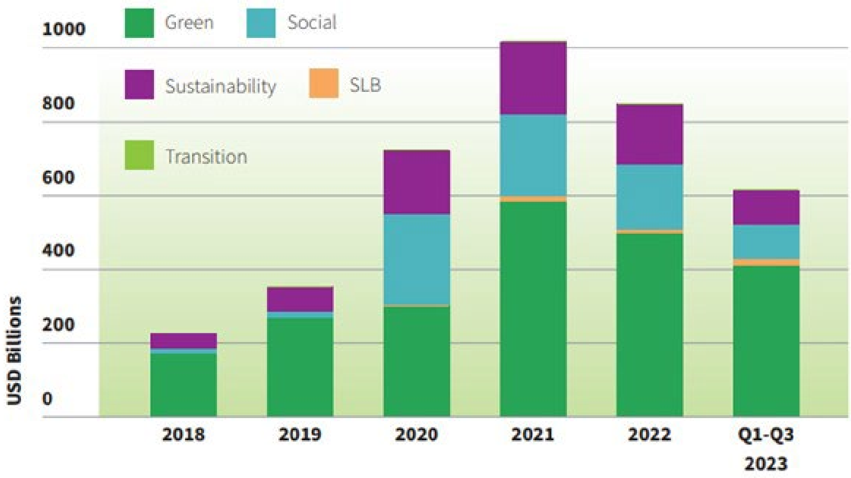
Figure 2. USD Billions of GSS bonds in 2023



Source: by Stefano Piserà and Laura Nieri.

Beside a moderating decline of total amount of GSS volume after 2021, the Green Bonds (GB) category is still the dominant one, accounting for the 64% of total GSS debt instruments volume (see Figure 3).

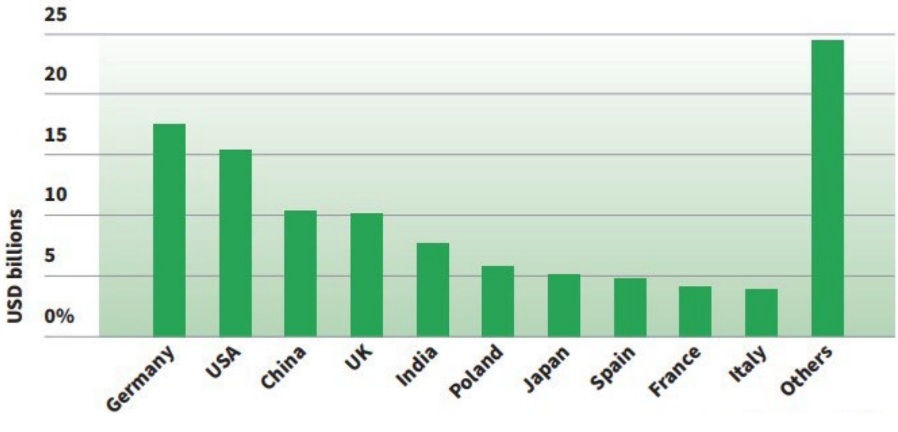
Figure 3. GSS categories volume in 2023



Source: by Stefano Piserà and Laura Nieri.

Nevertheless, looking at the specific GB instruments, Germany is the most relevant issuer, followed by US and other countries, remarking the primacy of Sustainable Finance among European countries (see Figure 4).

Figure 4. GB issuers in 2023



Source: by Stefano Piserà and Laura Nieri.

As for the non-sovereign issuers, the three biggest corporate GB issues come from two energy operating firms and one automotives. Specifically, the first one is Renew Power, a prominent clean energy provider, which secured a 7.8 billion of green loan, facilitated by Power Finance Corporation (PFC) and Rural Electrification Corporation (REC), each contributing half of the capital. The second funding, amounting to USD 5.2 billion, was directed towards Baltic Power's offshore wind project by Northland Power, a Canadian gas and low-carbon energy provider. Anticipated to energize over 1.5 million Polish households, this initiative is poised to significantly advance Poland's energy transition objectives. The third one is Volkswagen, a recurrent participant in the green bond market, which amassed a cumulative aligned volume of USD 12.6 billion, with an additional USD 4.2 billion infused in 2023 Q3. Noteworthy additions include a pair of perpetual bonds in late August, accounting for 1.8 billion USD, and three bullet bonds maturing in three, six, and nine years in mid-September 2023, contributing a combined volume of 2.1 billion USD. Volkswagen's green bond program exclusively channels its Use of Proceeds (UoP) to bolster the development and adoption of electric vehicles (CBI 2023).

2.2. Standardization and Guidelines

Since the bolstering of GB market, financial regulators and actors have started to require the use of a framework assessing the reliability and standardization of green debt instruments. The "Green Bond Principles (GBP)", established by the International Capital Market Association (ICMA), provide voluntary guidelines for issuers to disclose information related to the use of proceeds from green bonds. These principles aim to standardize and enhance transparency in the green bond market. The GBP are designed to assist issuers in financing environmentally sound and sustainable projects, contributing to the establishment of a net-zero emissions economy and environmental protection. Aligned with the GBP, issuances aim to showcase transparent green credentials while offering a compelling investment opportunity. The GBP advocates for issuers to diligently report on the utilization of Green Bond proceeds, instigating a significant shift toward transparency. This, in turn, facilitates the effective tracking of funds directed to environmental projects, enhancing understanding of their potential impact.

The GBP underlines the critical importance of transparency, accuracy, and integrity in the information disclosed and reported by issuers to stakeholders. This commitment is reflected through core components and key recommendations, contributing to the overall credibility and reliability of the Green Bond market.

Similarly, European Commission prepared the NextGenerationEU (NGEU) Green Bond framework, which is a set of recommendations aligned with the GBP, used to prescribe a portion of the eligible investments under the Recovery and Resilience Facility (RRF) – the main instrument to drive Europe's recovery – integrating such technical screening criteria. The proceeds from NGEU green bonds are designated to fund climate-relevant investments, constituting a minimum of 37% of Member States' Recovery and Resilience Plans. These plans are required to align with national energy and climate strategies. Consequently, investments in NGEU green bonds play a direct role in advancing national climate plans and contributing to the attainment of EU climate targets. Beyond their impact on climate initiatives, NGEU green bonds aspire to enhance the European sustainable finance markets. By potentially amplifying essential financial flows towards green economic activities, these bonds aim to further fortify the sustainability landscape in "Europe" (see also Chapter 11 by Chiara Valenti).

2.3. Sustainable funds and Sustainable Exchange Traded Funds (ETFs)

Beyond sustainable debt instruments, investors may use sustainable funds and ETFs which are investment vehicles that specifically focus on integrating environmental, social, and governance (ESG) criteria into their portfolio selection process. These financial instruments aim to align investors' capital with companies and assets that prioritize sustainability, ethical practices, and responsible business conduct. As for sustainable debt instruments, sustainable funds may be focused on the selection of companies that are committed to environmental sustainability such as energy efficiency, renewable energy usage, waste reduction, and adherence to environmental regulations. Alternatively, may have a more social focus, selecting companies that exhibit positive social practices. This could include factors like labor relations, employee diversity, community engagement, and product safety. Other, may be focused on corporate governance, where investments are redirected on companies with transparent and ethical governance structures, effective risk management, and responsible leadership are given preference. Typically, sustainable funds operate by applying negative, or positive criteria to select firms to be invested. The former, is based on a negative screening to exclude companies involved in controversial industries, such as tobacco, weapons, or those with poor human rights records. This approach helps investors avoid supporting businesses that conflict with their ethical values. The latter, involves actively selecting companies that are leaders in sustainability. This could include companies driving innovation in clean technology or promoting social justice.

While the primary focus is on sustainability, these funds aim to deliver competitive financial returns. The assumption is that companies with strong ESG practices are better positioned for long-term success, reducing risks associated with environmental and social issues.

2.4. Financial characteristics of sustainable bonds and sustainable funds

GBs are debt instruments working like normal bonds, excepts for the use of collected economic resource which must be explicitly devoted to environmental projects financing. Therefore, technically there are not any other differences with normal bonds. Nevertheless, the literature has explored if, and to what extent exists any statistically significant financial performance distinctions between green and conventional bonds. Put it simple, if the investment in a green bond allows for a higher/lower return and/or a higher/lower risk compared to other bonds.

In this context, financial practitioners have hypothesized that investors may be willing to accept a lower yield in exchange for assets that align with sustainable or environmentally responsible practices and have coined the term "greenium" which is a portmanteau of "green" and "premium." It refers to a situation where environmentally sustainable or green financial instruments, such as bonds or securities, trade at a higher price or yield lower returns compared to their conventional counterparts. In other words, the greenium represents the additional cost or the lower return associated with investing in assets that meet certain environmental, social, or governance (ESG) criteria.

The financial literature has recently empirically explored the main financial characteristics of sustainable financial products compared to conventional one and has tried to verify if a "greenium" is always associated with green investments. The results of these studies do not provide clear evidence of the lower yield earned by green investments and, on the other hand, some studies suggest that green investments may even perform better than other comparable traditional instruments especially in turbulent/crisis conditions and in the long run.

For example, Climent and Soriano (2011) investigate the financial performance of US green funds compared to their conventional counterparts revealing no significant differences. Subsequently, Hachenberg and Schiereck (2018) indicate that green bonds tend to perform worst in term of financial returns and involve relatively higher issuance costs than conventional bonds. Contrastingly, Kanamura (2020) find positive expected returns for green bonds with a flat risk profile over time, emphasizing their superior performance. In another study, Han et al. (2022) demonstrate that portfolios incorporating green bonds achieved a better risk-return profile and optimal diversification gains compared to those comprised solely of conventional bonds.

Investor preferences for green bonds were explored by Preclaw and Bakshi (2015) and Reboredo et al. (2017), both indicating that investors are willing to pay a premium for green bonds. Zerbib (2019) supported this notion, asserting that despite being issued at a premium, investors favor green bonds over conventional ones. Nanayakkara and Colombage (2019) suggested that the premium on green bonds may be attributed to the diversification potential they offer.

Recent research by Immel et al. (2022) posited that green bonds remain financially attractive compared to non-green bonds, and their returns may be influenced by the growing investors' attention.

Finally, Rehman et al. (2023), encompasses 12 international green bond markets, analysing data spanning from February 12, 2008, to May 21, 2021, indicating potential avenues for portfolio diversification.

All these results are confirmed also looking at the sustainable funds markets, which seems to offer useful diversification properties for investors as well as higher financial return during period of crisis.

In other words, sustainable finance products, both debt instruments and funds, seems to provide benefit from both a financial environmental and social side, satisfying investors portfolio and purposes needs.

2.5. Sustainable financial investments strategies

In the preceding sections, we delved into the state-of-the-art sustainable financial products. Now, our focus shifts to elucidating key investment strategies for those seeking to engage in socially responsible financial practices. The outlined strategies encompass a spectrum of approaches, each designed to align financial strategies with ethical and sustainable principles.

1. ESG Integration: ESG integration involves incorporating environmental, social, and governance (ESG) factors into traditional financial analysis. By considering a company's environmental impact, social responsibility, and governance practices alongside conventional financial metrics, investors gain insights into the long-term sustainability and resilience of their investments. This approach helps mitigate risks associated with environmental and social challenges.
2. Socially Responsible Investing (SRI): SRI is rooted in selecting investments based on ethical and moral considerations. Investors employing this strategy deliberately steer clear of industries or companies engaged in activities perceived as harmful, such as tobacco, weapons, or those with poor human rights records. In embracing SRI, investors harmonize financial objectives with a dedication to social and ethical values, thereby supporting businesses that contribute positively to society.
3. Impact Investing: Impact investing seeks to achieve measurable positive social and environmental impact alongside financial returns. Investors actively pursue opportunities addressing specific issues such as poverty alleviation, education, healthcare, and clean energy. This approach allows investors to contribute to positive societal outcomes while diversifying their portfolios with investments aligned with their values.
4. Thematic Investing: Thematic investing involves concentrating on specific themes or sectors related to sustainability. By focusing on areas such as clean energy, water conservation, or eco-friendly technology, investors capitalize on emerging trends in the sustainable space.
5. Negative/Positive Screening: Negative screening involves excluding certain industries or companies, like those associated with fossil fuels, from an investment portfolio based on predefined ethical criteria. On the flip side, positive screening operates in the opposite manner, with investors selecting firms in alignment with their ethical and responsible principles. Negative screening aligns portfolios with values by avoiding objectionable businesses, while positive screening enables investors to actively support companies committed to sustainable practices.
6. Engagement and Proxy Voting: Engagement and Proxy Voting strategy necessitate active participation with companies as shareholders to influence their ESG policies. This involves attending shareholder meetings, proposing resolutions, and leveraging voting rights to advocate for sustainable practices. This approach empowers investors to directly impact corporate behavior and foster positive changes in ESG practices.

To sum up, all diverse array of sustainable investment strategies provides investors with the tools to integrate their financial goals with a commitment to ethical, social, and environmental responsibility. As the financial landscape continues to evolve, these strategies serve as a compass for navigating the intersection of profit and positive societal impact.

3. Conclusions

In this Chapter, we delve into the contemporary landscape and ongoing development of sustainable financial products on a global scale. As an expanding market that demands specific regulatory attention, the total value of sustainable financial debt products has surged to an unprecedented $4.2 trillion USD in 2023. This substantial growth has propelled it beyond the confines of a "niche" market, transforming it into a pervasive global financial phenomenon.

Following a comprehensive examination of sustainable financial products, we have scrutinized the latest empirical findings in financial literature. This analysis emphasizes the risk and return profile characteristics of sustainable financial products when compared to their conventional counterparts, especially during financial turmoil. Despite their remarkable evolution and financial attributes, critical questions and challenges persist for regulators. These include concerns related to greenwashing risks, the imperative to standardize the concept of "sustainable financial products," and the strategic use of such instruments to fulfil the commitment to transitioning away from fossil fuels, as outlined in the COP28 agreement of 2023. Therefore, until the passage of a final and resolutive regulation about definition and classification of sustainable financial products, investors must be able to distinguish real sustainable products from others. Addressing these issues is crucial for investors and all stakeholders to facilitate a just environmental and social transition.

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Chapter 3
A FOCUS ON IMPACT BONDS

Rosalia Santulli and Laura Nieri

1. Introduction

The *Social Finance* or *Social Impact Finance*, defined as «the set of processes, actors and instruments that finance initiatives in the social field with participation of the private sector» (Andrikopoulos, 2020), has been strongly developing in the last decades, as a branch of Sustainable Finance (see Chapter 1 by Macchiavello). The Global Impact Investing Network (GIIN) estimates the global market size at $1.164 trillion and highlights its strong expansion (GIIN, "Sizing the Impact Investing Market" Report, 2022).

In the past years, the initiatives in the field of social services were carried out by the Public Administration (PA), both central and local, and by Non-profit Organizations, the so-called Third Sector. The PA took care of the costs and financing of the most significant share of social interventions, the Third Sector operated mainly under agreements with the local PA and/or took advantage by philanthropic non-repayable contributions. However, in the most recent years, two macro-phenomena are significantly involving the social field: a) the slow growth of Gross Domestic Product (GDP), [13] which has reduced the resources available in all countries, even those where the "welfare state" is more developed; b) the increased average aging and expectation of life of the population, which have significantly increased the need for assistance and social services. Both the macro-phenomena determine a greater request for fundings and the necessity to involve financial markets in the social field. From here, the emergence of Social Finance (Kuchler & Stroebel, 2021).

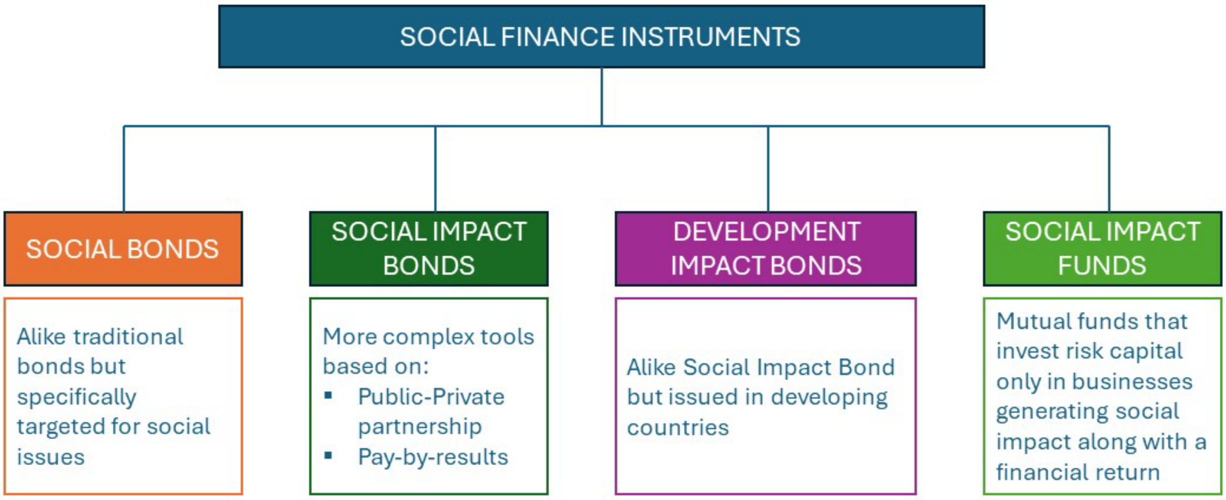
Social Finance operates through a multitude of tools and instruments aimed at achieving social objectives for which public policies are poorly or not effective at all, thus providing a bridge between the financial markets and socially responsible initiatives. In this context, the most widely used instruments are:

- Social Bond (SB), alike traditional bonds but specifically targeted for social issues. They are having a good application and represent a real opportunity to bust the social sector.
- Social Impact Bonds (SIBs), together with the following Development Impact Bonds represent the most interesting instruments, characterized by a more complex application due to their involvement of several actors, yet destined to find their own space in finance, especially in countries where investors are available, and authorities are ready to collaborate.
- Development Impact Bonds (DIBs).
- Social Impact Funds (SIFs), a form of social ownership that is achieved through mutual funds (see also Chapter 2 by Piserà & Nieri) that invest risk capital only in businesses or organizations

[13] The Gross Domestic Product is the total (monetary or market) value of all the goods and services produced in a country in a specific time period.

generating social impact along with a financial return (an example is aimpact[e], promoted by Etica Sgr and Avanzi). So far, they are scarcely widespread, especially in Italy, due to the lack of a specific regulation.

Figure 1. Social Finance Instruments



Source: by Rosalia Santulli and Laura Nieri.

This Chapter focuses on Social Bond, Social Impact Bonds and Development Impact Bonds and is organized as follow: section 2 defines Social Bonds, recalls the Social Bond Principles (SBP), and illustrates Social Bonds' market characteristics; section 3 presents the Social Impact Bonds and depicts their structure, models and market diffusion; section 4 shows the functioning of Development Impact Bonds also by providing an example; section 5 concludes.

2. Social Bonds: Definition, Principles, and Market Characteristics

Social Bonds emerged and widespread after the success of Green Bonds and the increasing interests by policy makers and financial actors towards social issues. According to the International Capital Market Association (ICMA), they are bonds designed to finance initiatives with a positive social impact and can concern essential services, such as healthcare, or specific services, such as professional training. Furthermore, they aim to support the resolution of significant social challenges and improve the situation of the most vulnerable sections of the population (NN IP, 2022).

There are not specific regulations about Social Bonds but the ICMA provides the voluntary guidelines "Social Bond Principles" (SBP) since 2017. They have a consultative and participatory nature and describe the four fundamental characteristics of Social Bonds, in relation to the use of the proceeds, the evaluation of the project and impacts, and reporting. As for Green Bonds, only securities that comply with the principles can be defined as "social". Let's take a closer look at SBP:

1. Use of proceeds: Social Bonds have the peculiarity of using the proceeds deriving from the issue to finance projects with evident social benefits. The issuer must specify the use of the proceeds in the documents relating to the security, and then analyze and measure its effectiveness. Fur-

thermore, when the proceeds can refinance a pre-existing project, it must estimate the sum expected for both the financing and the refinancing, specifying the expected repayment period. Social projects can be aimed at promoting socio-economic development, employment, food security, the presence of essential facilities, such as the supply of drinking water, sewerage, health systems and transport, or, access to basic services, which include healthcare, education and social housing. Instead, the target populations are disadvantaged, marginalized or vulnerable subjects, such as disabled people, migrants, illiterates and the unemployed.

2. Project evaluation and selection process: the issuer must inform investors of the social objectives it wishes to achieve, of the project selection process and eligibility requirements, including the selection and exclusion parameters, as well as any other procedure adopted to control the potential socio-environmental risks associated with the investment. Furthermore, it must declare the social practices or certifications considered during the selection phase of the initiatives.
3. Management of proceeds: all net proceeds attributable to Social Bonds must be deposited in a dedicated sub-account and then transferred to a specific wallet or tracked by the issuer through appropriate methods. Furthermore, the issuer must communicate to investors how it will place the proceeds temporarily not allocated to the project. As long as the tool is in use, the net revenue balance must be regularly updated to match the amount still to be allocated. The SBP invites you to consult an auditor or a third party to verify the adequacy of the monitoring methods and placement of funds linked to the use of the proceeds.
4. Reporting: issuers must disclose and periodically review the data relating to the use of proceeds, until the end of their placement. Furthermore, they must include a list of the projects in which the resources are invested, a brief description, details of the sums allocated and the expected impacts. The information should also be reviewed during the period following the allocation of proceeds, in case of any relevant developments. If confidentiality agreements, market agreements or the large number of funded projects compromise the possibility of obtaining detailed data, the SBPs suggest making generic information available in any case. Instead, ensuring transparency is relevant during the impact assessment, which occurs through qualitative and quantitative performance indicators, as well as in order to communicate the methods and considerations used to quantitatively define Social Bonds.

Figure 2. The four fundamental characteristics of Social Bonds along with Social Bond Principles

Source: by Rosalia Santulli and Laura Nieri.

Finally, issuers appoint one or more external auditors to ascertain the alignment of the characteristics of the assets or activities with the SBPs. More in details, they have four different alternatives:

a) Second Party Opinion: some organizations competent in the social field and autonomous from the broadcaster can provide an opinion on the quality of the project.
b) Verification: the issuer can make use of an independent verification regarding the consistency of the projects with respect to its requests or reference standards.
c) Certification: the issuer has the possibility to certify the Social Bonds, the related program or the use of the proceeds.
d) Scoring or Rating of Green Bonds: the issuer can have the instruments, their peculiarities or the financed project analyzed by specialized third parties, based on a solid method of analysis of the result, which can refer to the impact, the related processes or other thresholds.

The introduction of the Social Bond Principles has favored the development of the Social Bond market, which aims to use bonds as a means to overcome social challenges without having to sacrifice returns. The majority of Social Bonds are issued by public bodies, public sector-controlled entities and banks. Some examples include the €500 million "Social Inclusion Bond" launched by the Council of Europe Development Bank to finance social projects relating to housing, education, training and employment, and the €2 billion Social Bond issued by NBW Bank (now National Exchange Bank & Trust) to invest in social housing in the Netherlands (Responsible Investor, 2017).

Companies (see also the Danone issuance, box 1) are slowly starting to explore this form of financing and to understand its advantages:

1. they help firms to be recognized for their effort in supporting the Sustainable Development Goals (SDGs);
2. they, by representing a way to give visibility to the social efforts of a firm, contribute to improve their image and reputation;
3. they generate positive effects in the working environment, for example on the well-being of employees, translating in turn in a greater productivity.

Box 1: DANONE: The first firm to issue a Social Bond

Danone, a French multinational agri-food company, launched a €300 million Social Bond. The issue aroused strong interest from investors, achieving demand of over €700 million. The proceeds finance projects aimed at: developing responsible agricultural practices, increasing growth opportunities for communities and social entrepreneurs, support research in medical nutrition, invest in small nutrition businesses and improve employee welfare services.

By referring to the SPB:

1. Use of proceeds: the proceeds of the issues are used to finance suitable projects, they include disbursements made in the three years before the issue or disbursements made subsequently. Eligible project categories are: research and innovation for advanced medical nutrition (Utrecht R&I Center for Advanced Medical Nutrition); social inclusiveness (job creation in community-based projects and socio-economic development of local communities); responsible breeding and agriculture (the CMP Milk Support plan); entrepreneurship financing (Danone Manifesto Ventures); quality healthcare and parental support (Dan' cares).
2. Project evaluation and selection process: the Sustainability Integration Committee is responsible for the implementation of sustainable development in the adopted strategy and deals with the monitoring, selection and evaluation of projects. Furthermore, every decision is communicated to the Social Responsibility Committee.
3. Proceeds Management: Until full allocation, net proceeds not yet allocated to projects are temporarily held as cash funds.
4. Reporting: An annual report is provided to update investors on the allocation of proceeds and the impact of projects. The indicators used include a list and description of the admitted projects, the refinancing of pre-existing projects, the amount of proceeds allocated to each initiative and those not yet allocated.
5. External Review: Vigeo Eiris provides Second Party Opinion on the model and independent external reviewers ensure consistent allocation of net proceeds.

The pandemic gave a real boost to SB emissions between 2020 and 2021, drawing more attention to global social issues. With the aim of supporting people unemployed due to the health emergency, the European Commission has launched a financial assistance program called SU-RE: through the issuance of Social Bonds, it aims to allocate approximately €100 billion to Member States in the form of loans at advantageous conditions. According to the Climate Bonds Initiative, bond volume reached a record $220 billion in 2021, an 18% increase from the previous year. The growth is attributable to the renewed commitment of companies and institutions towards the SDGs and their willingness to support projects with a positive social impact. The SDGs to which the titles make a contribution include: poverty, unemployment, food security, gender equality, health, education and work.

Currently, out of the $400 billion in sustainable debt issuance (see Chapter 2 by Piserà & Nieri) in 2019, according to the Climate Bonds Initiative (CBI), social bonds made up approximately $20 billion, or 5% (S&P Global Rating, 2020). Experts believe that the introduction of European Taxonomy in the Social field will give further impetus. From the point of view of issuers' exposure to risk and financial peculiarities, such as yield, rating and duration, the social bond market and traditional bonds have similarities. According to NN IP, the majority of Social Bonds are denominated in euros or US dollars, 30% are issued by companies and the remainder by governments, while the affinity with high quality credit bonds is 95% and the volatility is similar. Furthermore, the report "Shifting the emphasis to the Social factor in ESG" by NN IP highlights that the average return of Social Bonds (1.03%) is higher than that of traditional bonds (0.66%), comparing the respective indices, namely the iBoxx Euro Social Bonds [14] and Bloomberg Euro Aggregate Index. [15]

3. Social Impact Bonds: Definition, Structure, Phases and Models

The origins of SIBs date back to 2000, when the notion of Social Policy Bonds was formulated. Social Policy Bonds were described as freely tradable, non-interest-bearing bonds redeemable for a fixed sum only when a targeted social objective had been achieved. SPBs aimed at creating groups of active like-minded bondholders. They were interested in maximizing private returns and achieving efficiently the targeted social objectives (Horesh, 2000). The concept of Social Policy Bonds, as it evolved into that of SIB, lost its initial connotation of freely tradable, non-interest-bearing bond to become a form of outcome-based contract signed between private and public actors.

SIBs are outcome-based contracts signed between governments, non-profit service providers and private investors in high-income countries. They are defined as:

> an innovative financing mechanism in which governments or commissioners enter into agreements with social service providers, such as social enterprises or non-profit organisations, and investors to pay for the delivery of pre-defined social outcomes (Social Finance, 2013; OECD, 2016).

SIBs are considered a subset of payments-by-results, pay-for-performance or results-based financing mechanisms. The basic idea behind these schemes is that they link funding to results, while providing supporting process innovation in the public sector and, finally, better performance from services providers. Although SIBs can fall under this broad category, they differ from other forms of Pay for Success (PfS) [16] contracts in two important ways (Butler et al., 2013). First, in SIBs government can transfer risk from taxpayers to private investors. Second, in SIBs service providers are not paid based on their costs, but rather on their output or on their social outcomes.

Their goal is to fund socially relevant initiatives. Private investors will provide the upfront capital commitment. SIBs do not have a fixed rate of return: the expected return for investor will be determined based on the savings that governments expect to obtain once service providers achieve the contractually stated social outcomes (Warner, 2013). Investors get their principal plus an additional financial return if the intervention succeeds. Such amount will be paid by government or by an organization on whose behalf the service is being delivered (Edmiston & Nicholls, 2018).

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[14] The iBoxx® Social Bonds Index, as part of iBoxx ESG (Environmental, Social, Governance) and sustainability bond indices, is designed to reflect the performance of global Social investment grade and high yield sovereign, sub-sovereign and corporate bonds denominated in EUR, USD, GBP and CAD, whilst upholding minimum standards of investability and liquidity.

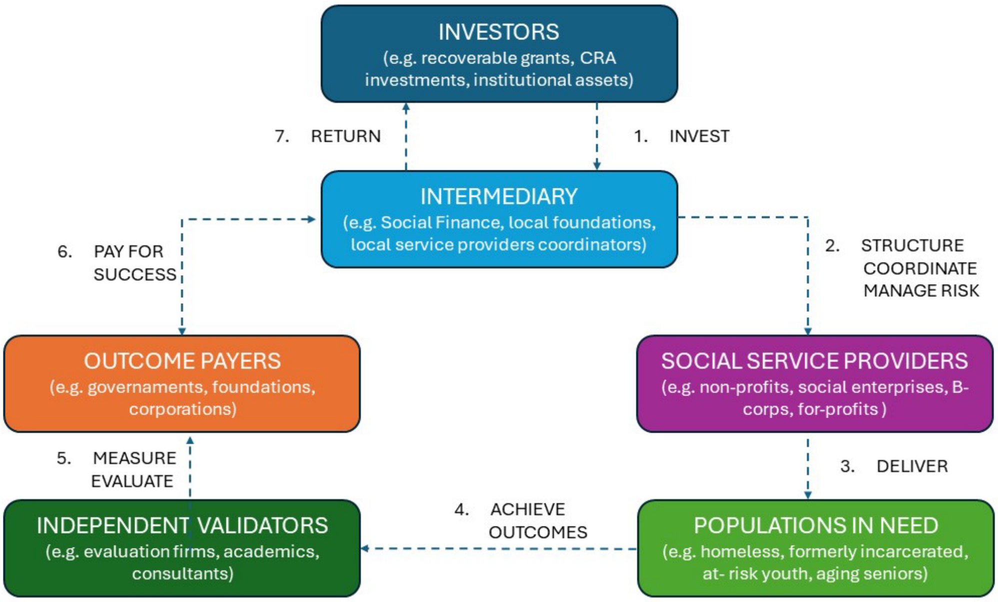
[15] The Bloomberg EuroAgg Index is a benchmark that measures the investment grade, euro-denominated, fixed-rate bond market, including treasuries, government-related, corporate and securitized issues.

[16] Pay for Success is a set of innovative outcomes-based financing and funding tools that directly and measurably improve lives by driving resources toward results.

Pay for Success is applied across the public, private, and nonprofit sectors. From helping governments efficiently allocate taxpayer dollars to programs that better serve constituents to leveraging funds from impact investors to scale effective interventions that build community resilience, Pay for Success encapsulates a range of approaches, all designed to accelerate social change (Social Finance).

A prototypical SIB structure includes investors, intermediaries, service providers, independent validators, outcome payers (see Fig. 1). An investor provides funding for an intervention, which is used as working capital for a service provider that is responsible for the social services delivery, the attainment of agreed outcomes and potentially for the provision of data related to them. Outcomes measurement is a crucial step for the SIB process. Based on this, the payment to the investor coupled with agreed interest shall be released by the government or the commissioner. Therefore, the government or commissioner is the ultimate outcomes payer and may as well determine the outcomes metrics and payments terms. An intermediary is involved in some SIBs and it has a twofold role. First, it can act as convener of all stakeholders involved in the mechanism in order to strike an agreement regarding the transaction process. Second, it can be responsible for raising capital and structuring the deal. An evaluator may be used in some SIBs assessing the agreed outcomes and their impact. On a different note, the beneficiaries from a SIBs intervention shall be mentioned too, as they are the population in need and recipients of the intervention. SIBs may address smaller or larger groups of beneficiaries. For example, the Sweet Dreams SIB in Canada focuses on 22 beneficiaries-mothers and children, whereas the ONE Service Peterborough SIB in the UK on 3 000 male prisoners and the NYC ABLE Project for Incarcerated Youth on approximately 10 000 sentenced *adolescents.*

Figure 3. Social Impact Bond Structure (adapted by OECD adapted from Burand (2013))



Source: by Rosalia Santulli and Laura Nieri.

Apart from the principal stakeholders mentioned above, depending on the structure of the SIB (see below), additional actors may participate in the mechanism, such as subordinate investors, guarantors, grant makers, technical assistance providers, legal advisors, and researchers. It has to be noted that the roles of the stakeholders and of additional actors may vary according to the SIB structure as well as the specific terms appropriate to each deal. For instance, researchers can act as independent evaluators assessing whether the agreed outcomes are achieved. Another example is that a government could act both as outcomes payer and as evaluator by validating administrative data. Similarly, as noted by Gustafsson-Wright et al. (2015), services providers can also be investors. In the same spirit, intermediaries can also be investors, intermediaries can also be evaluators, and intermediaries can also be technical assistance providers.

The time required to develop the SIB deal has varied so far from six months to three years.

Based on common practice, five stages have been identified in a SIB launch: feasibility study, structuring the deal, implementation, evaluation of outcomes and repayment.

1. The feasibility study aims at identifying the social challenge, which the SIB will address, and based on specific criteria at assessing whether this would be possible or not. Although the criteria used to assess the feasibility of the SIB can vary across the deals, there are few common considerations. The first one is the capacity of the stakeholders involved in the SIB to identify measurable outcomes for the selected social challenge and evidence of success of achieving them. Then, it has to be determined what would be a reasonable time horizon based on previous experience for achieving similar outcomes as well as on the willingness of the outcomes funders to commit funds and receive the payments in such a timeframe.
   Political and legal conditions should be taken into consideration in this endeavour. Political commitment and support for the services provided are crucial for fulfilling SIBs mission. This can be demonstrated through government strategy documents or policy frameworks for instance (Gustaffson-Wright et al., 2015). Legal conditions are also very important as they may equally enable or hinder the development and implementation of a SIB as abovementioned.
2. "Structuring the deal" is the second step for a SIB. During this stage, raising capital from investors (individual or funds), grant makers, and senior or subordinated lenders is key. At the same time, determining the intervention, the outcomes metrics and evaluation methodology based on the feasibility study should be decided. Procuring a service provider should also be defined at this stage. There are several ways that this can happen. What has to be highlighted here is the assessment or evidence of the capacity of the service provider to deliver the outcomes (Tomkinson, 2016). Last step is the negotiation and the finalising of the contracts including decisions about the responsibility of the performance management.
3. The implementation phase of the SIBs entails the provision of social services by the selected providers and the management of their performance in most cases.
4. Measurement and evaluation of the outcomes using the agreed metrics is a challenging element.
5. Finally, once the evaluation is completed and the SIBs outcomes assessed, the repayment process can be initiated accordingly or not depending on the results.

Social Impact Bonds (SIBs) can have different models and structures depending on the composition and the dynamics among the actors involved, their functions, the process for structuring the deal and the accountability regarding the delivery of the expected outcomes.

Two models have emerged so far through which governments and others have sought to provide funding; the SIBs funds and the individual SIBs. The main difference between them is that SIBs funds have the capacity to issue multiple contracts dealing with the same or similar social issues, whereas individual SIBs proceed to one payment contract at a time and they select among the structures presented below.

Three main structures stand out from the individual SIBs implemented thus far:

1. Direct SIBs – In a direct SIB, a delivery contract is signed between the outcomes-payer and service provider or a services provider-controlled special purpose vehicle. In this case, the service provider is responsible for the implementation of the deal and the performance management. The intermediary is responsible to raising capital, structuring the deal and determining the feasibility of the deal (Goodall, 2014). Overall, under this structure the service provider holds the greatest amount of responsibility.
2. Intermediated SIBs – An intermediated SIB foresees that the delivery contract is signed between the outcomes payer and the investor, or an investor-controlled special purpose vehicle (SPV) or an intermediary, which identifies and contracts the service provider, supports the performance

management process and refines the financial model (Goodall, 2014). In some instances, the intermediary can also invest in the SIB.

3. Managed SIBs – A managed SIB is signed between the outcomes-payer and the prime contractor (usually an intermediary) or an intermediary-controlled special purpose vehicle, who usually manages the entire process. The process is similar to the intermediated SIB, in terms of the activities of the intermediary (Goodall, 2014). The main difference with the intermediated structure seems to be that the intermediaries have not invested in SIBs directly yet. Given the adaptability and the flexibility of the SIB structures, it is hard to make clear and neat distinctions between them.

The first SIB was implemented in the United Kingdom (UK) in 2010 aimed at decreasing recidivism. Since 2012, a sharp increase of interest in this mechanism has been observed. From that pilot SIBs, other were e introduced and developed mainly in the US (Olson, & Phillips, 2013) and in the UK (Disley, & Rubin, 2014). In continental Europe SIBs have been launched in Belgium, Germany, the Netherlands, Portugal, and Switzerland. Implementations have been evaluated or made over the years in the criminal justice sector (Fox, & Albertson, 2011), in the homelessness prevention sector (Cox, 2011) and in the preventive health sector (Fitzgerald, 2013). To date a few SIBs have been completed, their returns sometimes have been equal to that of free risk securities. A lot of them are still in progress, thus it is difficult highlighting the financial advantages for investors, if we consider also the high transaction costs. However, the social purpose and the advantages for governments (costs savings in supporting social projects) and community are undoubted.

4. Development Impact Bond: An Adaptation of SIBs in Developing Countries

DIBs are an adaptation of SIBs, since they share some of their first-tier characteristics (Arena et al., 2016). However, DIBs differ from SIBs in several respects. First, DIBs address social problems affecting low and middle-income countries (Gustafsson-Wright et al., 2015). SIBs, instead, focus on high-income countries. Second, their actors and the issues they tackle, are significantly different (Fraser et al., 2018). As for DIBs, academic and practitioner literature considers five constituting phases. In the first phase, outcome funders and investors sign an Outcomes Contract. The outcome funder is the actor, specific of a DIB contract, which pays for outcomes or supplements government payments for outcomes (Gustafsson-Wright et al., 2015). There are two important differences between DIBs and SIBs. First, DIB commissioners and DIB outcome funders do not necessarily overlap. Commissioners and outcome funders, in several of the examined DIBs, are separated and commissioners are partially or fully in charge of repayments. Second, designed contracts do not always include SPVs. In DIBs, in fact, investors provide capital for social interventions by directly funding service providers. In most of the cases, external funders such as development agencies or charitable foundations provide for DIBs outcome payments (Social Finance Ltd., 2013). In the case of SIBs, the outcome payer is the government. Let us now consider the remaining four phases of DIBs. In the second phase, investors fund directly service providers. In the third phase, service provision starts, and service providers deliver a set of services to a group of targeted beneficiaries. In the fourth phase, independent evaluators, usually named “outcome evaluators”, check the results of service provision. They verify the achievement of contractually stated social outcomes. In the fifth phase, should the intervention succeed, investors get their principal plus an additional financial return. Contrarily, investors lose all their principal, unless the upfront capital commitment is not partially secured by third-parties, and they get no financial return at all.

Little is instead known about DIBs implementations, apart from a small number of studies focused on agriculture (Belt et al., 2017) and innovative health interventions (Trotta et al., 2015; Atun et al., 2016; Welburn et al., 2016; Anyiam et al., 2017; Welburn et al., 2017). To date, there are few studies that have investigated with varying degrees of accuracy DIBs contractual and financial characteristics (among others, see: Gallucci et al., 2022; Clarke et al., 2018; Oroxom et al., 2018). Gallucci and colleagues (2022) identified 31 DIBs contracted worldwide from 2014 to the end of 2020. They found a prevalence of DIBs contracted in the health sector. By looking at the stages of implementation (early stage, late stage, implementation and completed), they found that DIBs in late-stage design accounted for more than half of the total sample, while only two DIBs were completed. Finally, the distribution by countries reveals that Africa and South America are the geographic areas in which most of the DIBs were designed. In relation to the data on the contractual characteristics of DIBs, approximately 60% of the 31 DIBs were based on a reward structure that comprises partial payments, distributed throughout the service provision. Such payments are usually contingent upon the attainment of contractually-defined payment thresholds or outcome metrics. Almost half of the DIBs provided repayments of principal and additional returns to investors in bullet form. Furthermore, DIBs are depicted as high-risk-return impact investing tools, requiring a consistent upfront capital commitment. The average IRR is 9%. This is a significant, average financial return, but it is still not sufficient to justify the considerable risk underlying DIB contracts. Indeed, the average potential loss of DIBs for investors is 82%. DIBs usually revolve around a 100% loss in cases of unsuccessful service delivery. Investors will not consider DIBs as investment tools if their riskiness is not be mitigated.

Box 2: An example of Development Impact Bond: The educate girls case study

The social issue

That of education is one of India's most pressing societal issues.

Hidden costs associated with the girls' school leaving are high.

Indian schools did not deliver quality education to marginalized populations.

The solution

To overcome such challenges, the Indian government needed experienced social enterprises and enough funds to sustain their projects.

The project involved three main actors: Educate Girls (service provider), the Children's Investment Fund Foundation (outcome funder), and the UBS Optimus Foundation (investor). Apart from that, the DIB included the state government of Rajasthan, IDInsight (outcome evaluator) and Instiglio (project manager).

Educate Girls acted as the service provider and implemented the service provision for target beneficiaries. The Children's Investment Fund Foundation, the outcome funder, paid back the investor. The UBS Optimus Foundation, the investor, provided the early capital for the project launch.

Educate Girls and the state government of Rajasthan signed a Memorandum of Understanding (MoU).

Instiglio, the intermediary, mediated partner's requests to close the contract. After some negotiations, it was decided that the outcome metrics would trigger payments from the outcome funder to the investor took an entire year.

Then, the "Educate Girls DIB" was ready to start. It costed $1 million, including legal fees, evaluation and marketing (Assomull et al., 2015). It lasted from 2015 to 2018, and the early capital commitment amounted to $270,000. The UBS Optimus Foundation disbursed 50% of the principal in 2015 and the remaining 50% in 2016 (Kitzmüller et al., 2018). The Children's Investment Fund Foundation released a single outcome payment to the UBS Optimus Foundation in 2018 (Gustafsson-Wright et al., 2017). Contractual parties selected two outcome metrics to test the service provision. Learning gains accounted for 80% of the final DIB payments. Enrollment of out-of-school girls accounted for 20% of the final DIB payments. The DIB links outcome payments to each added unit of outcome achieved (Gustafsson-Wright et al., 2017). Reimbursement of the principal plus the Internal Rate of Return (IRR) of 15% in 2018 in bullet form occurred in 2018. The investment was 100% unsecured. At the end of the project, the UBS Optimus Foundation got back its principal ($ 270,000) plus an added 15% IRR (For more, Gallucci et al., 2019).

The outcome

Educate Girls DIB surpassed both its target outcomes: 160% for learning gains target and 116% for enrollment. Since 2015, the nonprofit organization Educate Girls confronts gender inequality in India. The NPO helps girls living in rural and marginalized areas of India to resume their studies.

5. Conclusions

The Social (Impact) Finance has a prominent role to overcome welfare issues in both developed and developing countries. In the last decades, a lot has been done and instruments like Social Bonds, issued by both PA and private firms, have widespread and have supported several social initiatives. However, more is yet to be done. SIBs and DIBs are innovative and full of potential instruments, nevertheless they are still rarely implemented. They suffer from some limitations: SIBs, for example, are depicted as a neo-liberal remedy to constraints in welfare spending (Dowling, 2017) capable of putting at stake critical public values (Warner, 2013). Other fear that SIBs may let the cost- benefit logic spread in the third sector (Joy, & Shields, 2017) and in unprecedented social settings (among others, see: Dowling, & Harvie, 2014; Cooper et al., 2016; Tse, & Warner, 2018). If on the one side this is true, on the other side SIBs may represent a concrete way to support social issues in a time of financial constrains for PAs. Regulations, such as the European Social Taxonomy, may help stem the negative aspects and encourage diffusion by enhancing the positive ones. Regarding the DIBs, they are unbalanced in terms of the risk and returns for investors. Therefore, to become more attractive, several changes are required in terms of their structural, contractual and financial features.

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Chapter 4
SUSTAINABILITY AND INVESTOR BEHAVIOUR
Barbara Alemanni

1. Why people show interest in sustainable investments?

The rationale behind the introduction of sustainable financial products for retail investors finds roots in the observation that consumers are showing an increasing interest in sustainable products. However, the classic economic literature is silent on utility that investors might get from non-monetary aspects, largely missing that investors are to some extent treating investments as consumer goods. [17]

Are investors attracted to Environment, Social and Governance (ESG) factors because they are superior in terms of their risk-return tradeoffs or their usefulness as a hedging device, in other words for financial considerations? Or is there a distinct taste for ESG that has developed recently, giving investors non-pecuniary utility such as the moral satisfaction of having made an environmental and social impact? Finally, are ESG allocation a form of financial activism? Do these different types of demand for ESG investing, precisely the first and the second, have distinct implications for its future? This is one of the biggest financial questions among practitioners, and academics have begun to provide answers.

The general consensus is that climate is indeed a significant source of financial risk, reflected in the return premia on assets with high climate risk exposure. It is for this reason that investors are interested in strategies to hedge against this risk. [18] The concern of ESG investors regarding downside risk goes beyond climate risk. In fact, the literature on Corporate Social Responsibility (CSR) argues and demonstrates that corporate investment in CSR is a useful hedge against downside risk in general. For example, when a company suffers a reputational or economic shock, prior corporate investments in socially responsible goals may ensure customer and employee loyalty or signal differentiation against competitors, protecting the firm against such shocks. With this in mind, ESG is one among the several factors that over time will move the risk-return optimization targets.

Most research finds that retail investors focus not only on investments' risk-return ratio but also on the moral or value expressive benefits that increase their utility when making sustainable investment decisions. [19] A pro-social approach to ESG demand finds now place in asset pricing models. In these models, it appears that investors with a taste for sustainable assets earn negative alphas in equilibrium [20] or that the presence of non-pecuniary preferences justify why green bonds are priced at a premium over regular bonds. Other evidence, such as lower volatility in funds flow and lower

[17] Keloharju et al. (2012).

[18] Krueger et al. (2020).

[19] Beal et al. (2005); Hofmann et al. (2008); Hong & Kacperczyk (2009); Martin & Moser (2016); Statman (2008).

[20] Fama & French (2007).

sensitivity to negative returns, seem to justify that utility comes from altruism and investors show a willingness to pay for greenness.

A different interpretation is that such an altruism is at best imperfect [21] and investors' motivation towards Sustainable Responsible Investment (SRI) comes from a mere warm glow effect of people caring who they are. [22] In such a case, experimental evidence shows that if warm glow moves investors, their Willingness To Pay (WTP) is unaffected by the magnitude of the impact. In other words, investors' WTP does not significantly differ between an investment that saves 0.5 tons of CO2 emissions and one that saves 5 tons. If it is, this could undermine the effectiveness of sustainable finance as a whole, as the financial industry may not have an incentive to supply products with substantial impact. Additionally, imperfect altruism can also be one of the causes of the intention-action gap registered in consumers goods and analyzed in the next paragraphs.

Actions fall short stated intentions. Sustainable products, both consumer and financial, are considered luxury goods and bought accordingly. As a consequence, demand might be more cyclical with negative implications on long-term impact. Indeed, recent empirical investigation of fund flows during the Corona-virus shock appears to confirm that institutional investors' behaviour is consistent with the optimization of financial preferences, while the large swings in flow of retail investors might be a prove of this warm glow effect. [23]

In conclusion, we can put forward at least three different motivations for retail investors demanding sustainable financial products.

- First, to act consistently with their beliefs or values. In these circumstances, utility comes for altruism or from a mere warm glow effect of people caring who they are. In such a case, sustainable investments can be perceived as luxury goods and demand might fluctuate depending on disposable income.
- A second motivation deals with the conviction that sustainable investments can maximize the risk-return trade off. In such a case, sustainable investments represent a hedge against sustainability risks and are a relatively stable and consistent allocation in investors' portfolio.
- In the end, sustainable investments can be a way to implement social activism purposes.

2. Are people really interested in sustainable investments?

Nowadays, retail investors who want to allocate their money to sustainable products can find a large array of financial instruments with sustainable characteristics as shown in Chapter 2. [24] Morgan Stanley [25] surveyed over 2,800 investors with over $100,000 in investable assets across the U.S., UK, France, Germany, Switzerland and Japan. The survey found (see for more detailed data figures 1 and 2) that over 77% of investors reported being interested in sustainable investing, including 40% who are very interested, while 57% said that their interest has increased over the past two years, and 54% expect to increase the percentage of their portfolios allocated to sustainable investments within the next 12 months.

[21] Andreoni (2009); Andreoni (1990).

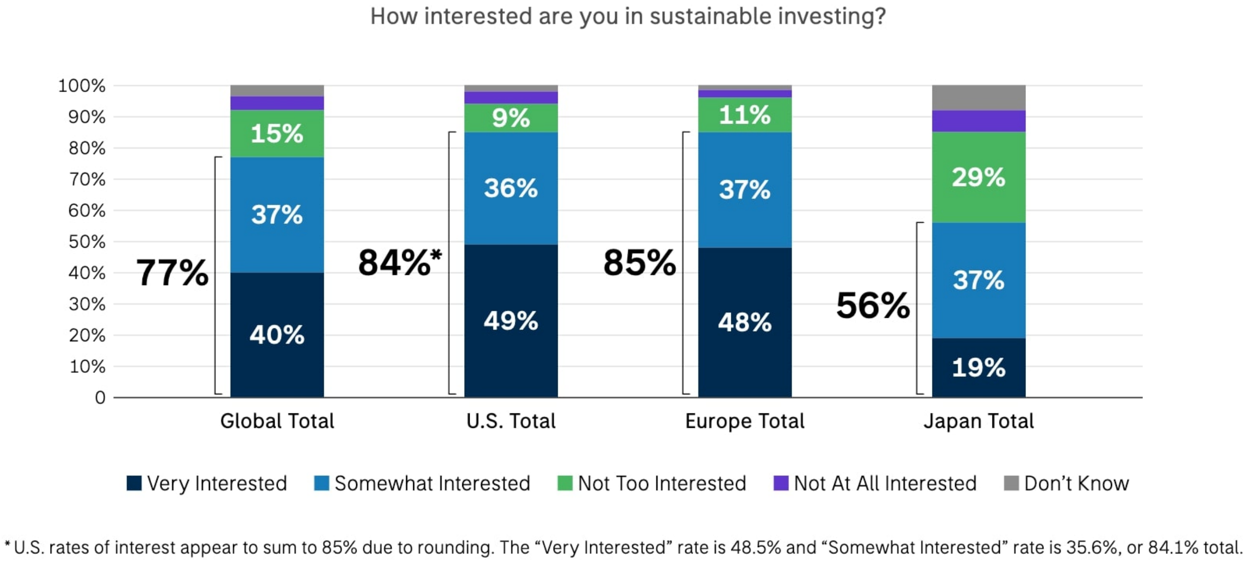
[22] Bénabou & Tirole (2006); Bénabou & Tirole (2011).

[23] Döttling and Sehoon (2022).

[24] See Chapter 2 by Piserà & Nieri, paragraph 2.5 on sustainable financial products and strategies.

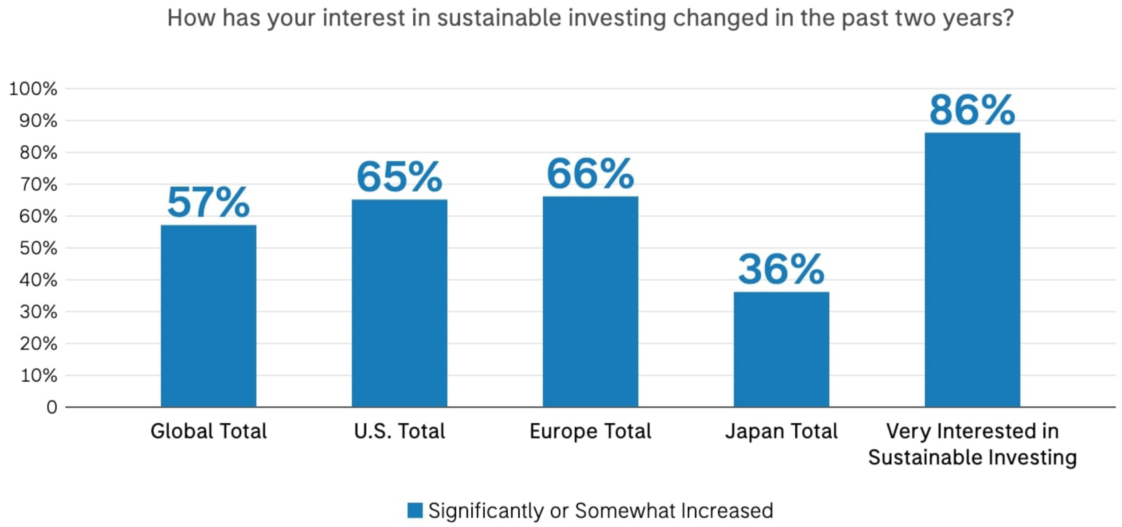
[25] Morgan Stanley (2024).

Figure 1. Interest for sustainable investments



Source: Morgan Stanley Institute for Sustainable Investing, January 2024.

Figure 2. Trend in interest for sustainable investments



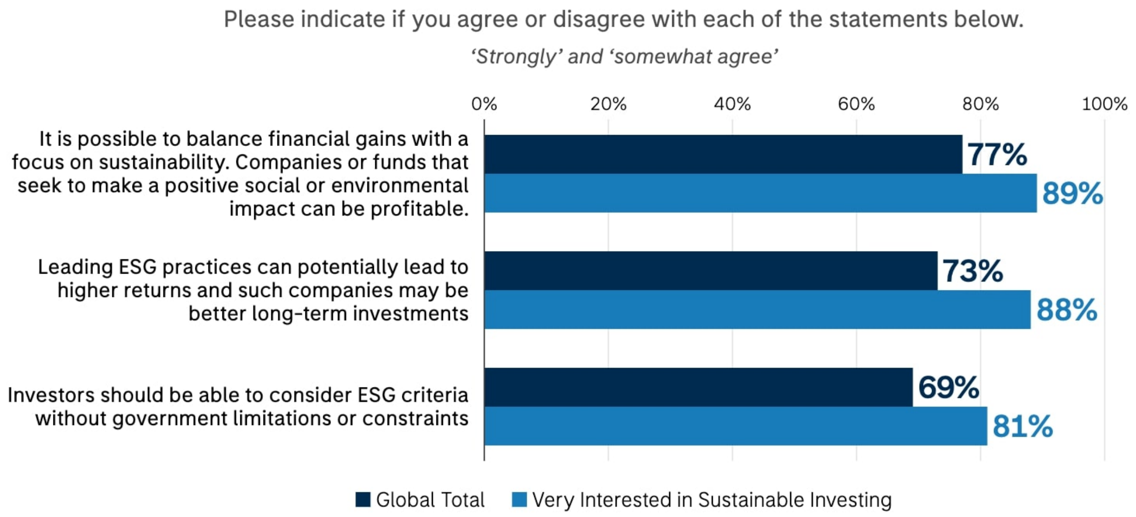
Source: Morgan Stanley Institute for Sustainable Investing, January 2024.

By region, U.S. and European investors indicated the strongest levels of sustainable investing interest and investment plans, with 84% of U.S. respondents, and 85% or Europeans, reporting that they are interested, and nearly two thirds of respondents in each group indicating an increased interest in sustainable investing over the past two years. Interest levels were particularly high in these regions amongst millennial investors, including 96% of respondents in this demographic in the U.S., and 97% in Europe.

In Japan, only 56% of respondents reported being interested in sustainable investing, and only 36% indicated increased interest, potentially due to a less developed sustainable investing market, according to the report.

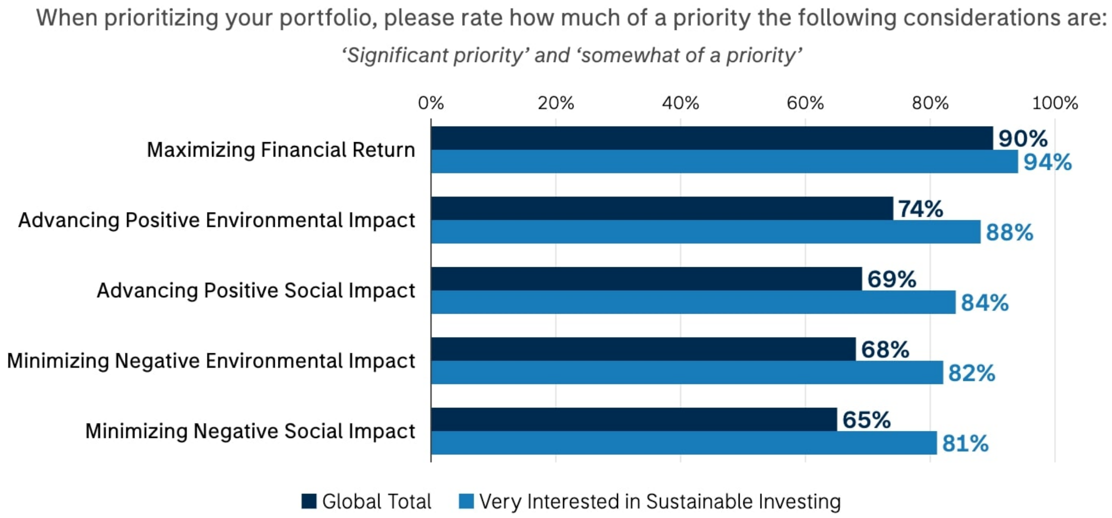
The survey found that most investors do not see a conflict between ESG and financial performance, with high levels of interest in sustainable investing persisting even as maximizing financial returns remains by far the most commonly indicated investment priority, cited by 90% of investors. More in detail, as shown in figures 3 and 4, financial returns are the number one priority for respondents, but individual investors don't necessarily see ESG and financial returns as a trade-off. In fact, nearly 80% of global respondents say that it is possible to balance financial gains with a focus on sustainability, and strong ESG practices can potentially lead to higher returns and make better longer-term investments (figure 3). Alongside competitive returns, most investors want their investments to minimize harm and advance positive impact as well (Figure 4).

Figure 3. Investors expectation on ESG financial performances



Source: Morgan Stanley Institute for Sustainable Investing, January 2024.

Figure 4. Motivation for ESG investments

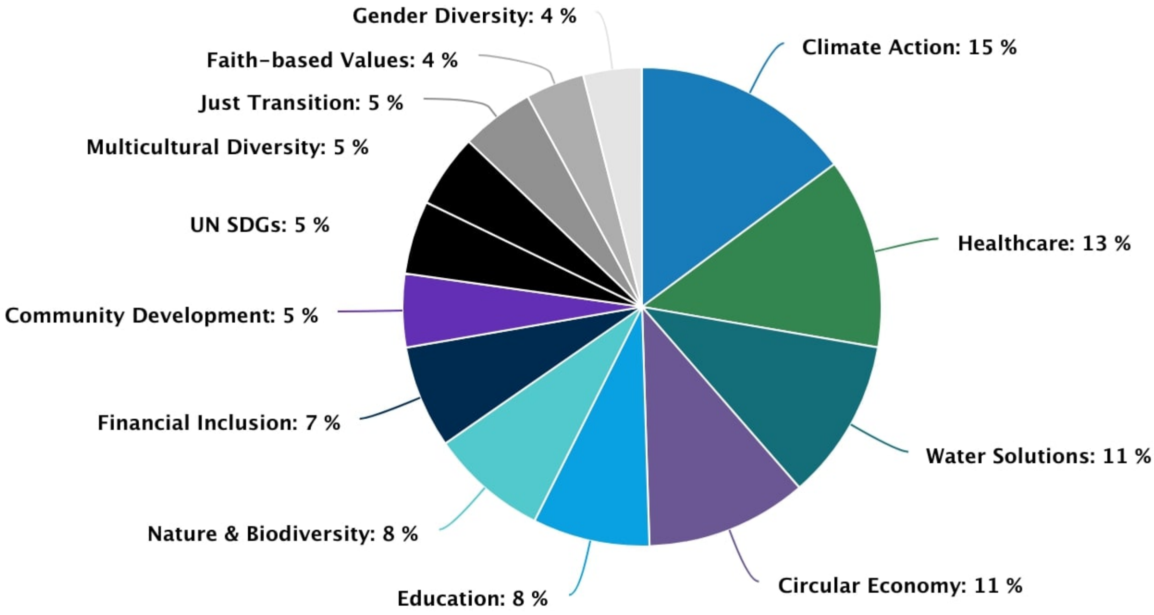


Source: Morgan Stanley Institute for Sustainable Investing, January 2024.

Moreover, even investors who are aware that their sustainable investments underperformed in the prior year reported an increased interest in sustainable investing, suggesting a long-term investment horizon for sustainability-focused investors, according to Morgan Stanley. Additionally, around three quarters of investors agreed that «leading ESG practices can potentially lead to higher returns, and such companies may be better long-term investments».

When asked to pick their top sustainable investing theme, investors prioritized climate action with 15% ranking it first, followed by healthcare (13%), water solutions (11%) and circular economy (11%) (see figure 4.5).

Figure 5. Preferences for ESG investment strategies



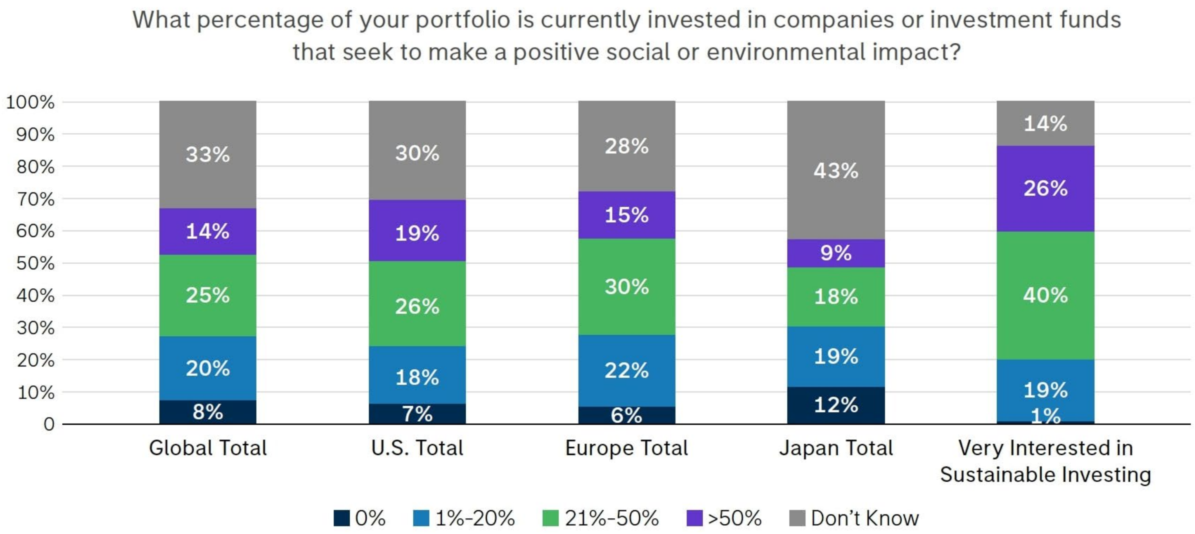
Source: Morgan Stanley Institute for Sustainable Investing, January 2024.

The survey found that a large majority of investors want companies to address sustainability issues, including 82% of respondents that believe that companies should address environmental issues, and 77% that said companies should address social issues. Investors appear to be integrating these beliefs into their investment choices, according to the report, with nearly 80% reporting that they consider a company's reporting on sustainability practices, carbon footprint, and emissions reduction commitments when making a new investment, and 58% said that they would be likely to select a financial advisor or investment platform based on their sustainable investment offerings. Additionally, more than half of respondents reported that they would only invest in traditional energy companies if they had robust plans to reduce emissions, and 60% said that they would be likely to purchase carbon offsets for their investment portfolios, if available.

3. Do investors invest in sustainable assets?

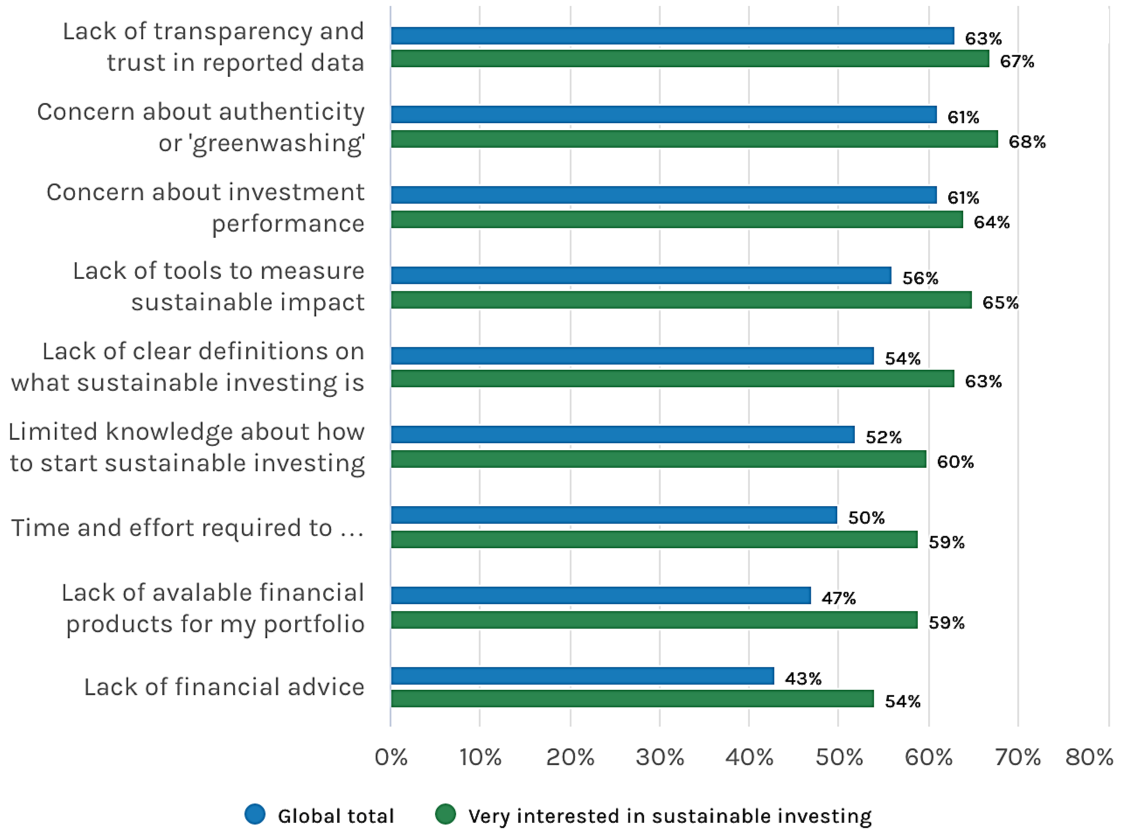
Despite increasing interest in sustainable investments, action falls below intention. In 2023, the majority of investors were still investing a minority of their wealth into sustainable assets. As Figure 4.6 points out around 40% of investors either don't have sustainable investments or don't have idea if their investments are sustainable. This is a trend similar to what it is registered for sustainable goods and products where consumers declare an interest in sustainability but fall short in their actual purchasing behavior. Looking at investments data presented in figure 4.7 show that lack of transparency and trust in reported data (63%), and concerns about greenwashing (61%), as well as concerns about investment performance (61%) are the top factors preventing investors from including sustainable investments in their portfolios.

Figure 6. Asset allocation to ESG investments



Source: Morgan Stanley Institute for Sustainable Investing, January 2024.

Figure 7. Barriers to ESG investments



Source: Morgan Stanley Institute for Sustainable Investing, January 2024.

4. The intention-action gap in sustainable investments

Consumers say sustainability considerations are important in their purchase decisions, but they do not act on that belief by making sustainable choices and engaging in pro-environmental behaviors after making a purchase. As shown in the previous paragraph, this intention-action gap is present also in sustainable investments. Figure 7 reports the rational reasons pointed out to justify inaction, but can behavioral aspects influence the sustainability decisions of investors? And, also, what is the relationship between these behavioral elements and the decision-making process as it relates to sustainability?

In behavioral science, the intention-action gap refers to the discrepancy between an individual's stated intention to engage in a particular behaviour or achieve a certain goal and their actual behaviour or performance. This gap occurs when individuals fail to translate their intentions into actions, often due to cognitive biases, self-control problems, lack of motivation, or other psychological and contextual factors that hinder the successful implementation of intentions.

The concept of the intention-action gap has its roots in research on motivation, goal pursuit, and self-regulation in psychology, which has explored the factors influencing the translation of intentions into actions. It has been adopted by behavioural scientists to help understand the dynamics of decision-making and to develop interventions that effectively address the psychological factors that impede goal attainment or behavioral change.

The intention-action gap has significant implications for various domains, including personal finance, health, and consumer behaviour. By understanding the factors contributing to the intention-action gap, decision-makers can design interventions and public policies that effectively support individuals in translating their intentions into concrete actions. For example, creating implementation intentions (specific plans outlining when, where, and how an intended action will be executed), using reminders, or providing social support can help individuals bridge the gap and achieve their desired outcomes. Similarly, businesses and policymakers can leverage insights from research on the intention-action gap to design programs and interventions that promote behavioral change, such as adopting sustainable consumption practices or engaging in regular exercise.

In the case of sustainable investments (see fig. 8), a first element worthwhile mentioning is psychological inertia which is a tendency to maintain the status-quo (or default option). Inertia affects decision-making by causing individuals to automatically choose or prefer the default option, even if there is a more beneficial option available to them. The EU taskforce on sustainable finance recommends that pension funds consult beneficiaries on their sustainability preferences and reflect those in their investments; however, there is an intent-action gap between what new members say they want and how they actually invest. Indeed, this can be explained by inertia, because sustainable funds are usually not the default option, and it is necessary to opt-in. A solution for European pension funds would be to exploit inertia and to default on a sustainability option as some UK pension schemes already do.

A second behavioural motivation to recall is the pervasive belief of no free lunch. In an era of information overload, to make decisions we often take mental shortcuts leading to errors and biases. As shown in figure 7, it is a common assumption that sustainability compromises return. The big green elephant in the room is that investing in a way that considers climate requires financial sacrifice. While this can partially be explained by limited knowledge about climate impacts on asset valuations and how environmental issues can be integrated into portfolio construction, behavioral finance provides insights into additional factors at play.

The no free lunch heuristic is at the root of our automatic response that green or sustainable finance requires a returns sacrifice. To lose weight, you must diet, to pass our exam, we must sacrifice our social life; there is no reward without risk and good things (like green products) require sacrifice.

Even when there is abundant evidence to the contrary, we are less likely to take it into account because of confirmation bias, which is the tendency to prioritize or interpret new information in a way that confirms our existing beliefs. Confirmation bias is stronger for more emotive and deeply entrenched beliefs, and this could explain the slower adoption of sustainable finance in markets, such as the US, where issues like climate change are politically polarized. Listening to our reflective systems may lead us to a more logical judgement.

Moving forward, we must recall that there is a behavioural tendency amongst human beings to focus on the present and discount the future. Over 250 years ago Benjamin Franklin said, «When the well is dry, we know the worth of water». Franklin's words remain as true today as they were then, because we humans are irrational in how we quantify value and risk at different points in time. Behavioral finance teaches that losing something makes us approximately twice as miserable as gaining the same thing makes us happy. However, preserving what we have is also subject to biases, as we tend to undervalue future risks, particularly if there is a short-term cost. Communication must emphasize that the future is now.

An additional behavioural aspect to mention is the affect heuristics, the evidence that humans are also more likely to care about events and scenarios that are more personal to them. The image of a polar bear on a melting ice cap is thought to be powerful and emotive. However, it could be argued that this is not actually a wholly accustomed image/experience to many people, especially when compared to for example the effects of the Corona-virus pandemic. Knowing people who have fallen ill or seeing a chart showing the death toll for their country or local area has a much higher affective content. Indeed, these latter are more personal and more likely to hit home because they are closer to home. Nobody would doubt the importance of issues such as access to clean water, excellent sanitation or food hygiene as key factors contributing to a strong public health system. Communicating that such factors are relevant to the Covid-19 crisis, as they can all be placed within the S of the ESG umbrella, can certainly increase the awareness toward the topic.

Finally, behavioural scientists show the relevance of salience in decision making. In a world where investors face information overload, salience can make a difference. People tend to react to events which are recent, emotive, easier to recall. Once again sad to say, the pandemic crisis can be used as an ally to increase awareness towards sustainable investments.

Figure 8. Behavioural bias and bias mitigation relevant to financial services

Bias	Description	Mitigation to bias	Description
Psychological inertia	Maintaining the status quo	Default option	Pre-set option to induce consumer to choose that option
Information overload	Disregards important information	Salience effect	Limiting information to most important features
Confirmation bias	Intuitive mental shortcuts lead to errors and biases by generating and approximate answers	Logical judgement	Listening to our reflective, rational systems
Loss aversion	Losing something makes us approximately twice as miserable as gaining the same thing makes us happy	Total cost and long-term benefits evaluation	Value future risks and not assess outcomes relatively to a reference point
Present bias and future discounting	Overvalue the present over the future	Review own preferences over time and be flexible to changes	Quantify value and risk at different points in time
Affect heuristics	Humans are more likely to values events and scenarios that are more personal and known to them	Communication	Increase the awareness toward the topic

Source: by Luisa Nenci.

5. Concluding remarks

If the common man derives positive utility from more socially responsible investments, asset managers should incorporate these preferences of their clients into their investment schemes. However, for different investors the approach to including a sustainability objective takes different forms. For some, it is a dedicated effort to avoid exposure. For others, it is a dedicated effort to advance a certain objective. Each of these motivations is legitimate and should have an approach broad enough to capture them. This is not an easy task, Barber[26] points out: «Once considerations other than wealth maximization are relevant for investors, aligning the interests of portfolio managers and investors becomes extremely difficult». Think about regulatory difficulties concerning heterogeneous preferences[27] or the interpretation of fiduciary duties.[28] However, these difficulties cannot be an argument to refrain from taking environmental and social preferences into account at all and represent them effectively to the public. This represents a true call to action for both industry and regulators.

In this Chapter, we put the attention on the motivations and on the barriers to sustainable investments and we believe that both industry and policy-makers have aligned interests in the reductions in the gap between intention and action. More transparency, precise and complete framework useful to define compliant behaviours and to reduce the risk of un-intentional greenwashing, clever use of choice architecture to convince investors to change their behaviour are some examples of the required way forward.

Quoting Victor Hugo: «*Nothing is as powerful as an idea whose time has come*».

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[26] Barber (2007).

[27] Richardson (2011).

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Chapter 5
REMAINING MAIN CHALLENGES IN THE AREA OF SUSTAINABLE FINANCE

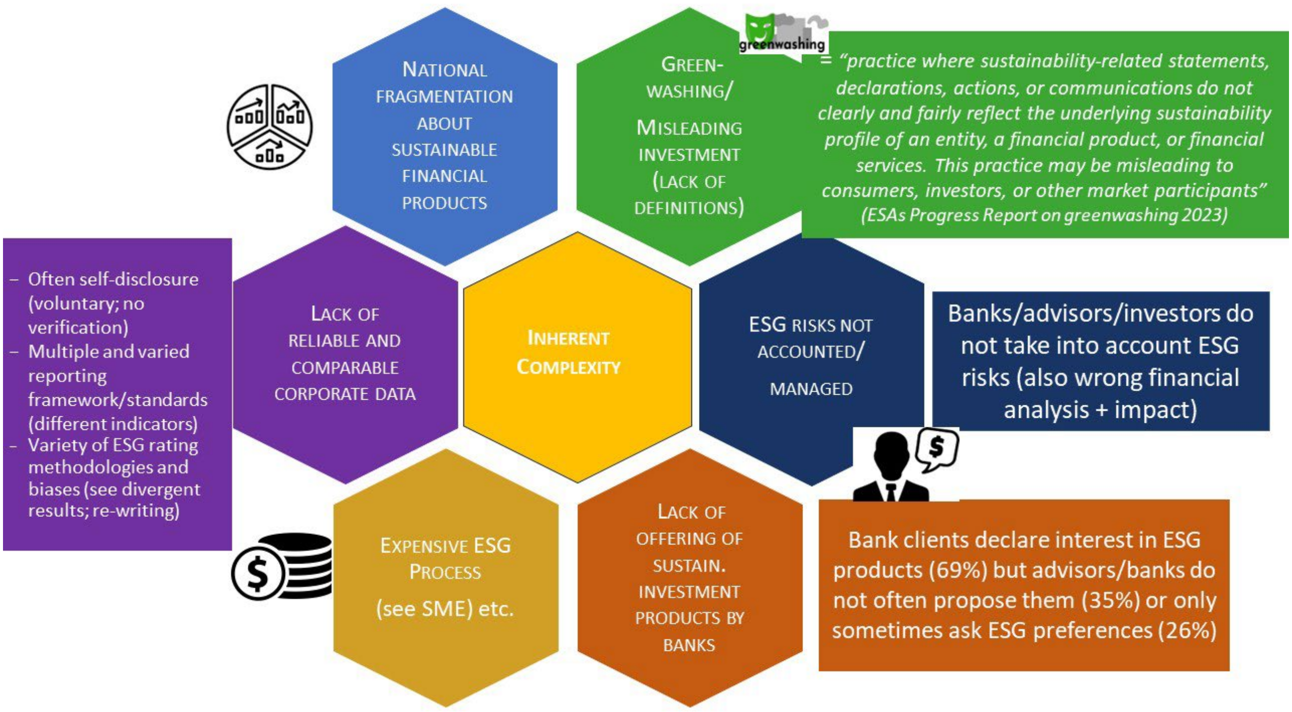
Eugenia Macchiavello

1. Introduction: the potential obstacles to the functioning of the market of sustainable finance

As explained in previous Chapters (see for instance Chapter 1), sustainable finance has the potential to channel important resources to sustainable companies and therefore contribute to the transition to a more sustainable economy. However, during the growth of such financial segment several obstacles and market failures have emerged, with the potential of jeopardizing the fulfilment of such role.

We will present groups of some of these problems here below.

Figure 1. Main shortcomings in sustainable finance



Source: by Eugenia Macchiavello.

2. Complexity of sustainable finance and investor's understanding

Financial products present per se complexity and technicality considering the average customer's knowledge. [29] In fact, in the European Consumer Markets Scoreboard, investment services present very low scores in terms of "comparability", "trust" and "expectations" [30] and retail investors show to have on average little confidence in their own financial decision making. [31]

In the context of sustainable finance, investment products might appear even more complex [32] due to the multidisciplinary and highly technical nature of sustainability: having a clear understanding of the majority of sustainable products would require not only a certain level of knowledge in the area of financial markets but also of sustainability and the variety of associated concepts (e.g. climate change, renewable energies, technical standards diversified per type of sector, etc.). A relevant part of retail investors do not invest in sustainable investment products because they do not know enough about the same and therefore do not feel comfortable in engaging in such new area (see Chapter 4 by Alemanni). [33] On the other hand, the objective of "doing good" runs the risk of underestimating financial risks inherent to any investing activity. [34]

Moreover, methodologies to calculate ESG risks and impact are new, experimental and therefore potentially leading to uncertain results and unable to truly support investment decisions, even of sophisticated investors. Furthermore, although sustainable firms seem to show higher level of resilience and lower level of risks compared to traditional firms, several investments concern start-up firms testing new ideas in unexplored areas, therefore a risky and a-typical segment for retail investors. [35]

Collecting investors' sustainability preferences is a complex task, also considering typical investor behavioural bases (see Chapter 4 by Alemanni) and would require intensive and preliminary investor education (see Chapter 10 by Gargantini). Investors, in fact, need to become aware of ESG issues and understand the characteristics and risks of sustainable products before investing and made therefore able to take action. Currently, NGOs such as 2Dii, Reclaim Finance, Better Finance, ShareAction, etc. provide relevant information on how financial decisions are contributing to or hampering the ecological transition but an important role will be played by financial advisors and portfolio managers performing their "know-your-customer" duties.

3. Lack of clear definitions, minimum parameters of ESG investments and information verification: in particular, the risk of greenwashing

The segment of ESG investments has grown significantly over time in different countries. However, especially at international level, there is no consensus on the criteria to identify ESG investments (see also Chapter 1 by Macchiavello). Therefore, every country – but also every investment fund and firms – can in principle set their own standards and present themselves as fulfilling thesame.

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[29] Bruhn and Miller 2014; Costanzo and Ashton 2006; Byrne et al. 2008; Busse and Georg 2021.

[30] European Commission 2018a, at 42.

[31] European Commission 2018b, at 97.

[32] Finance for Tomorrow 2020; Filippini, Leippold and Wekhof 2022.

[33] Linciano et al 2020; Eurosif 2018, at 76; Paetzold & Busch 2014.

[34] OECD 2023, at 24.

[35] Macchiavello & Siri 2022; IPCC 2022, at 1555-56.

Greenwashing has been recently defined by the European Supervisory Authorities [36] as the:

> practice where sustainability-related statements, declarations, actions, or communications do not clearly and fairly reflect the underlying sustainability profile of an entity, a financial product, or financial services. This practice may be misleading to consumers, investors, or other market participants.

Studies attest that the investment strategies of some investment funds, despite using names or descriptions recalling sustainability, do not prioritize sustainability and present an important portion of the portfolio in firms still relying on carbon fossil fuels. [37]

This phenomenon jeopardizes investors' ability to identify companies which can really be considered sustainable. Consequently, greenwashing reduces investors' intention to invest and translate into a financial risk for the investee. Additionally, the long-term consequences of greenwashing practices, especially among funds and managers, may be those of eroding the intrinsic value of ESG investments, favouring the stakeholders' scepticism, and even endangering the success of climate policies. [38]

This might be exacerbated by the voluntary character (so far) of ESG reporting for several firms, able to choose the international standard and template best fitting their needs and even picking only the items and indicators conveying a good image of the firm, disregarding the others. [39] The variety of available templates and international standards and the heterogeneity of data also reduces the comparability among firms and investments. [40] Supranational and International efforts in harmonizing reporting standards (such as the Global Reporting Initiative, the TCFD recommendations, the Sustainability Accounting Standards Board Standards and, more recently, the International Sustainability Standards Board – ISSB standards: see Chapter 1 by Macchiavello) are particularly important. [41]

Moreover, firms might obtain certifications, but these might focus only on certain aspects of the business (e.g. only a particular line of the overall range of operations) or certain objectives (e.g. CO_2 emissions but not water pollution or human rights). Otherwise, anyway, the information and data reported might not be checked at all.

4. In particular, ESG rating and scoring

The assessment of the ESG profile of firms by specialized agencies (ESG ratings/scoring) is a crucial aspect for ESG investments, being in principle able to address the above-mentioned lack of information verification and complexity. However, recent studies, by analysing ESG ratings from the most important ESG rating agencies have found significant and unsubstantiated divergencies among rating agencies' assessments of the same firms as well as ex-post rewriting, evi-

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[36] ESMA 2023a.

[37] See Morningstar 2022, at 23-24. On PRI investors not investing more sustainable than others: Soohun & Yoon 2021; Gibson et al. 2020. For climate-related claims by US equity funds without a corresponding divestment from fossil fuels, see Giuliani, Monasterolo and Duranovic 2022.

[38] See ESMA 2023b on greenwashing risks; OECD 2023, at 24.

[39] Tsagas & Villiers 2020; Macchiavello & Siri 2022; Siri & Zhu 2020, at 9ff; European Commission, 'Guidelines on non-financial reporting', (2017), and 'Guidelines on Non-Financial Reporting: Supplement on Reporting Climate-Related Information', (2019); IOSCO 2020, at 23ff; World Economic Forum 2020.

[40] Eccles, Kastrapeli & Potter 2017; IOSCO 2020, 10ff; Ferreira et al. 2021.

[41] IPCC 2022, at 1584.

dence of biases and opacity (to protect their proprietary methodology, agency tend not to disclose their methods). [42]

In fact, ESG rating agencies tend to:

– assign weight only on the sustainability of operations disregarding the sustainability of the products (therefore awarding for instance also coal and tobacco industries);
– be work-intensive for analysts (who run the risks of consequently being not as careful as they should while covering many companies at the same time);
– present significant differences in measurement, metrics, weight, and personal judgement on single indicators (also because institutional investors require customized analyses to better match their needs and preferences);
– present several biases (e.g. in favour of large companies, certain industries and countries with more disclosure regulations).

5. The offer side: financial intermediaries' lack of ESG risk integration and offering of ESG products

Surveys and studies attest that a relevant part of retail investors would be interested in investing in sustainable investment products but do not do so also because they are not offered such products by their banks and financial advisors, in addition to the lack of knowledge (see above). This might happen because of financial intermediaries' lack of policies in taking into account ESG risks in management and investment decisions or investor's ESG preferences and/or their employees lack of adequate knowledge about these products (preferring to recommend more traditional products they know better).

Until recently, also the limited availability and variety of sustainable investments might have limited the offering of sustainable investments, therefore not easily matching all investors' preferences and profiles. [43]

6. Regulatory response: revisions to the legal framework and financial education

Regulators have recently decided to address such shortcomings and market failures with the objective of allowing finance to channel important resources for the transition, while protecting investors and financial stability.

In particular, the EU, with its 2018 Action plan and subsequent strategies and reform has been trying to play as a model worldwide in prioritizing sustainability, also through the financial sector, developing a comprehensive framework aimed at addressing the above highlighted issues (see fig. 2 and below Chapter 6 by Nenci) and choosing a "double materiality approach" (taking into account the impact not only of ESG risks on firms and financial intermediaries but also of the latter on ESG factors: see Chapters 8 by Molinari and 9 by Palazzini).

[42] On this topic: Gibson et al. 2020; Busch, Bauer & Orlitzky 2016; Berg, Koelbel and Rigobon 2019; Walter 2020; Standard Ethics 2020; IOSCO 2021; Walter 2020; Berg, Fabisik and Sautner 2020; Huber and Comstock 2017; Kotsantonis and Serafeim 2019; Labella et al. 2019; Drempetic, Klein and Zwergel 2020; Boffo and Patalano 2020; SustAinability 2020; Doyle 2018; Schoenmaker and Schramade 2018. See also Gargantini and Siri 2022; European Commission 2021, at 28.

[43] Linciano et al. 2020; Eurosif 2018, at 76; Paetzold & Busch 2014; Lewis 2011; Glac 2008; Schrader 2006.

Figure 2. EU regulatory response

Source: by Eugenia Macchiavello.

Several countries have showed interest in developing policies in the same area: for instance, Australia, Hong Kong, Japan, Singapore, Norway, Switzerland, the UK and other jurisdictions have developed, depending on the cases, definitions of sustainable investments, taxonomies and/or new sustainability reporting obligations for companies.[44] Financial authorities and agencies, like the FCA in the UK[45], AMF in France[46] and ESMA in Europe, have issued guidelines on the use of "sustainability-related" terms in investment funds names and products (see also Chapter 1, paragraph 3, by Macchiavello). Reaching harmonization in definitions and rules worldwide would be extremely difficult but efforts in setting some common standards have been made and facilitate sustainable finance (see Chapter 1 by Macchiavello).

In order to reduce greenwashing risk and other issues related to the complexity of sustainable finance, it is important to raise investors' awareness and understanding in the area. Financial education has been identified as an important public objective and, more recently, special attention has been assigned to sustainable finance education.[47] At international level, OECD Recommendation on Financial Literacy recognizes the importance of sustainable finance for individual financial well-being, and sustainable finance is identified as a strategic priority by the OECD/International Network on Financial Education and by the G20/OECD Task Force on Financial Consumer Protection. In particular, the latter, in 2022, integrated sustainable finance in its High-Level Principles on Financial Consumer Protection as a cross-cutting theme relevant for the implementation of the same

[44] For a synthesis of recent sustainable finance policies worldwide, see the IPSF 2023 report, at 5ff; OECD 2023, at 15ff, 28ff.

[45] FCA 2022.

[46] See AMF 2020.

[47] OECD 2023 and G20-OECD 2022. The OECD, through its International Network on Financial Education (OECD/INFE), has also established a new working group on financial literacy and sustainable finance.

Principles (together with financial well-being and digitalization; see fig. 2) and recommend, not only financial education programmes for investors (Principle 4), but also proper training of financial services providers and advisors specifically on sustainable financial products to be better equipped to support investors in their investment choices (see Principle 9).

Figure 3. OECD High-Level Principles on Financial Consumer Protection, update 2022

Source: G20-OECD 2022.

Several countries, Italy included, have started inserting financial education in school programmes and supporting several initiatives in the area of sustainable finance education. Also national financial authorities (e.g. Bank of Italy-Consob in Italy and the financial authorities in Germany, Luxembourg, Portugal and Spain) have developed webpages, courses and other initiatives specifically dedicated to sustainable finance education, contributing to raise the citizens' awareness about sustainable finance's opportunities and characteristics. [48]

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[48] IOSCO 2022; OECD 2023, at 38ff

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Chapter 6

THE EU APPROACH TO SUSTAINABLE FINANCE

Luisa Nenci

1. Action Plan on Financing Sustainable Growth

1.1. Introduction: Background and Overview of the Action plan

Table 1. Regulation scope and timeline

Instrument	Timeline	Scope
High-Level Expert Group - Interim and Final report	2016-2018	Identification and formulation of EU Sustainable Finance Strategy
Action Plan on Financing Sustainable Growth - Strategy	2018	Sustainable Finance Strategy Implementation Plan
The Green Deal - Communication	2019	Policy Initiatives package with the overall objective of EU climate neutrality by 2050
Sustainable Europe Investment Plan Green Deal Investment Plan - Communication	2020	Financial Instruments to finance the Green Deal Implementation
European Climate Law- Regulation	2021	Legally binding actions for Green Deal climate neutrality objective implementation
Strategy for Financing the Transition to a Sustainable Economy – Communication	2021	Integration to the Action Plan to include further actions through transitional finance for the Green Deal implementation
A sustainable finance framework that works on the ground- Communication	2023	Sustainable finance package to complete the sustainable finance framework: EU Environmental Taxonomy Delegate Acts, Environmental, Social, and Governance (ESG) rating and credit rating proposal, Transition Finance, European sustainability reporting standards

Source: by Luisa Nenci.

The European Commission established the High-Level Expert Group (HLEG) on sustainable finance in late 2016 tasking it of advising on the formulation of a comprehensive EU strategy regarding sustainable finance. In its final report in January 2018, [49] the HLEG presented eight recommendations, including crosscutting suggestions and actions tailored to specific financial sectors. The recommendations of the High-level expert group on sustainable finance form the basis of the action plan on sustainable finance adopted by the Commission in March 2018.

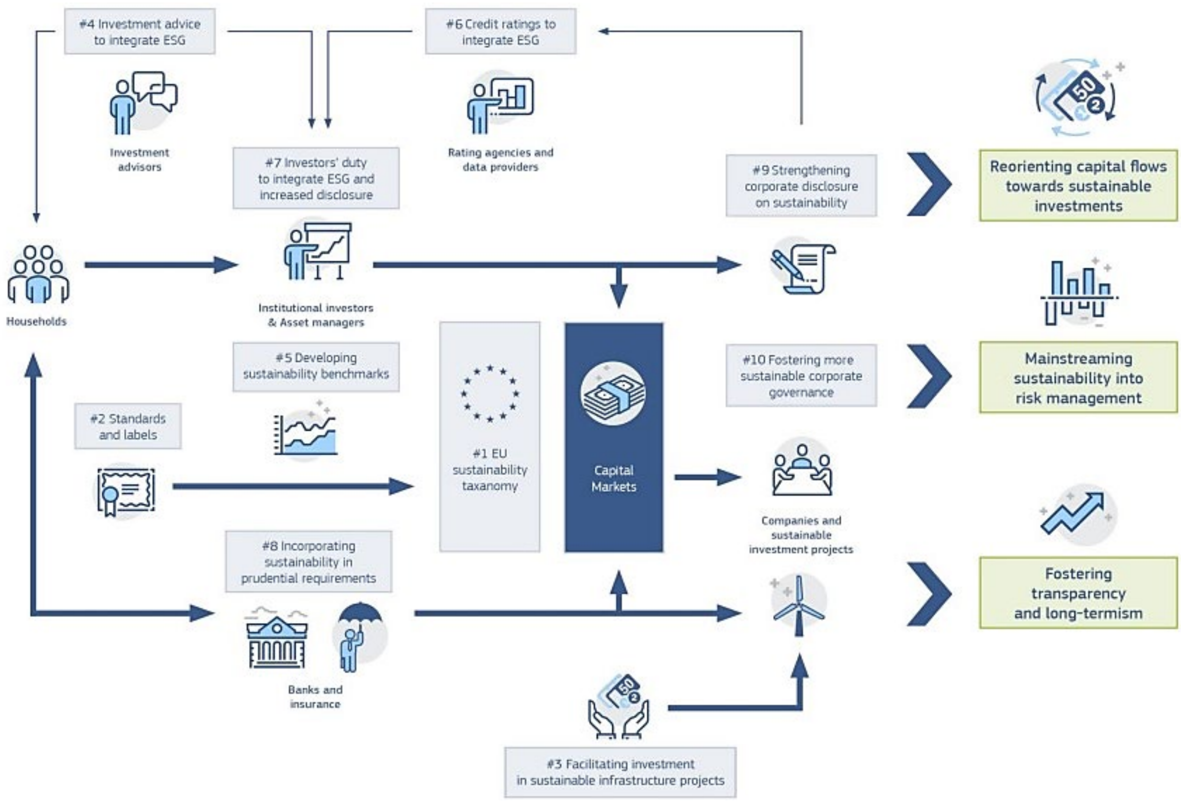
[49] High-Level Expert Group (HLEG) on Sustainable Finance, Final Report 2018: Financing a sustainable European economy.

The Action Plan on Financing Sustainable Growth [50] was a component of the Capital Markets Union's (CMU) [51] actions to align financial activities with the distinct requirements of the European economy for a better planet and society. The Action plan launched an ambitious and comprehensive strategy implementation plan for sustainable finance with the aim of redirecting capital flows to help generate sustainable and inclusive growth. With this plan, the financial system assumes an important role to play in the achievement of the Paris agreement and the UN 2030 Agenda by reorienting private capital to more sustainable investments.

1.2. Objectives and Actions

The action plan specifically pursues three main objectives for implementation (see Figure 1), to reorienting and mainstreaming sustainability in capital flows and fostering transparency, for which a total of 10 actions are identified and classified within the three objectives. To identify which actions have already been translated into which regulatory texts and which are still in the process of being approved a scale of colour has been applied. Green highlights legislative initiatives already in force, while grey identifies measures in place non-legislative in nature and pink shows actions which are ongoing.

Figure 1. The Action Plan: Visualisation of the actions



Source: Commission (2018) Action Plan: Financing Sustainable Growth, 19.

[50] Commission Action Plan Financing Sustainable Growth (Communication) COM/2018/097.

[51] The Capital Markets Union (CMU) initiative was launched in 2015 to developing and deepening the integration of capital markets within the EU. The measures outlined in the 2015 and 2017 CMU action plans have been implemented. In September 2020, new measures have been proposed to update the CMU, addressing key areas such as EU business financing, market infrastructure, retail investment, and the internal market. Commission A Capital Markets Union for people and businesses-new action plan (Communication) COM/2020/590 final.

1.2.1. *Objective (i) reorienting capital flows towards sustainable investment, to achieve sustainable and inclusive growth*

Action 1: Establishing an EU classification system for sustainable activities, which builds a common language for sustainable finance, providing scientific criteria to define which economic activities qualify as environmentally sustainable (EU Green Taxonomy; see Chapter 7 by Ceriana on EU Green Taxonomy).

Action 2: Creating standards and labels for green financial products (EU green bond standards; see Chapter 11 on EU green bonds' standards by Valenti– and Ecolabel for financial products). The EU Ecolabel is a scheme identifying products independently verified as green excellence thanks to strict criteria developed by the European Commission and Member States together with industry experts, consumer organisations and environmental NGOs[52]. The Ecolabel for Retail Financial Product is an ongoing project managed by the EU Joint Research Centre to define the minimum environmental performance of this group of products based on the requirements of the EU Ecolabel Regulation 66/2010 to award the best environmentally performing financial products.

Action 3: Fostering investment in sustainable projects is generically described in the action plan as measures to improve the efficiency and impact of instruments aiming at sustainable investment support. Important ones are the Invest EU (see Box 1), together with the Financing the Transition and the Leave no one behind (Just Transition) as established by the Green Deal (see below paragraph 2 of this Chapter).

Box 1: Financing Sustainable Growth: Invest EU program 2021-2027

An EU Budget was established in June 2018, to bolster employment, stimulate economic growth, and foster innovation across Europe. The Invest EU Programme, an extension of the successful Investment Plan for Europe (Juncker Plan), is integral to the Commission's economic strategy, blending investment, structural reforms, and fiscal responsibility to maintain Europe's appeal for businesses to establish and flourish. The Invest EU Fund is designed to underpin sustainable infrastructure, advance research, innovation, and digitization, support small and medium-sized enterprises, and promote social investment and skills development.

Action 4: Incorporating sustainability when providing financial advice, by mandating insurance and investment portfolio managers and advisors to make investment decisions for and advise clients based on their clients' sustainability preferences (MiFID and IDD suitability assessment; in this regard, please see Chapter 10 by Gargantini on Investor preferences and review of MiFID II).

Action 5: Developing sustainability benchmarks, which by relying on the mutually agreed EU classification system, will assists investors in recognizing investments that adhere to green or low-carbon criteria. Two categories of low-carbon benchmarks[53] have been created so far: a climate-transition benchmark and a specialised disclosure requirements for investment portfolios to be aligned with the Paris Agreement and entered application on April the 30th of 2020. Successively on 17 July 2020, the European Commission also adopted new rules on methodological technical requirements for the EU climate benchmarks implementation through the delegated acts which entered into application on December the 23rd of 2020.

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[52] For more information on product catalogue and criteria applied to minimize their environmental impacts over the entire lifecycle, https://environment.ec.europa.eu/topics/circular-economy/eu-ecolabel-home/product-groups-and-criteria_en.

[53] Commission EU Climate Transition Benchmarks, EU Paris-aligned Benchmarks and sustainability-related disclosures for benchmarks (Regulation) 2019/2089/EU amending Regulation 2016/1011/EU.

1.2.2. *Objective (ii) managing financial risks stemming from climate change, environmental degradation, and social issues*

Action 6: To better integrating sustainability in ratings (See on other challenges in the area of sustainable finance Chapter 5 by Macchiavello) and market research, a public consultation on possible revisions of the current legislative package on Credit Rating Agencies, which consists of a regulation [54] and a directive, [55] was launched after the process of reviewing the strategy for sustainable finance in April 2022. The consultation responses have been reported in a summary report which will be reflected accordingly in the preparation of any further Commission's initiative in this regard.

Action 7: Clarifying institutional investors' and asset managers' duties and obligations to ensure that environmental, social, and governance (ESG) factors and risks are adequately considered in investment decision-making process. A consultation process was launched in December 2018 in relation to integrating sustainability risks and factors considerations into AIFMD, UCITS, MiFID 2, Solvency 2 and IDD after the application of the EU Sustainable Finance Disclosure Regulation (SFDR; see on the SFDR Chapter 8 by Molinari), which brought, after the consultation, to the application of an overall legislative package published in August 2021. [56]

Action 8: Incorporating sustainability in prudential requirements by adjusting capital requirements for banks by i) integrating assessments of climate-related risks into the evaluation of banks' stability and ii) addressing the current shortfall in climate investments to bolster the transition to a low-carbon economy. This discussion gained increased prominence in April 2019 when the European Banking Authority was tasked by the Commission to assess whether a particular prudential regulation should be enforced to ensure that green assets align with environmental and social objectives. Subsequently, on October the 27th of 2021, the Commission presented two interrelated proposals to modify the Capital Requirements Regulation (CRR) [57] and the Capital Requirements Directives (CRD), [58] respectively. With the double objective of implementing the final provisions of the Basel Agreement and enhancing the uniformity of banking supervision within the EU. [59]

[54] Commission on credit rating agencies (Regulation) 462/2013/EU amending Regulation 1060/2009/EC.

[55] Commission (Directive) 2013/14/EU amending (Directive) 2003/41/EC, (Directive) 2009/65/EC (UCITS) and (Directive) 2011/61/EU (AIFMD).

[56] On 2 August 2021, the following were published in the Official Journal of the European Union: Commission Integration of sustainability factors, risks and preferences into certain organisational requirements and operating conditions for investment firms (Delegated Regulation) 2021/1253/EU amending (Delegated Regulation) 2017/565/EU; Commission Organisational requirements and operating conditions for investment firms (Delegated Regulation) 2021/1254/EU correcting (Delegated Regulation) 2017/565/EU; Commission Sustainability risks and sustainability factors to be taken into account by alternative investment fund managers (Delegated Regulation) 2021/1255/EU amending (Delegated Regulation) 231/2013/EU, supplements the Alternative Investment Fund Managers Directive 2011/61/EU (AIFMD); Commission integration of sustainability risks in the governance of insurance and reinsurance undertakings. (Delegated Regulation) 2021/1256/EU amending Delegated Regulation (EU) 2015/35 supplements the Solvency II (Directive) 2009/138/EC; Commission Integration of sustainability factors, risks and preferences into the product oversight and governance requirements for insurance undertakings and insurance distributors and into the rules on conduct of business and investment advice for insurance-based investment products (Delegated Regulation) 2021/1257/EU amending Delegated Regulations 2017/2358/EU and 2017/2359/EU supplement the Insurance Distribution Directive 2016/97/EU (IDD); Commission Sustainability risks and sustainability factors to be taken into account for UCITS (Delegated Directive) 2021/1270/EU amending Directive 2010/43/EU supplements the UCITS (Directive)2009/65/EC.

[57] Commission "Prudential requirements for credit institutions and investment firms" (Regulation) 575/2013/EU (CRR) amending (Regulation) 648/2012/EU.

[58] Commission "Access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms" (Directive) 2013/36/EU (CRD) amending (Directive) 2002/87/EC and repealing (Directives) 2006/48/EC and 2006/49/EC.

[59] European Parliament Think Thank, 2023 Amendments to capital requirements legislation, are: the introduction of an 'output floor', setting a minimum level for capital requirements determined using banks' internal methods, incorpo-

1.2.3. *Objective (iii) fostering transparency and long-termism in financial and economic activity*

Action 9: Strengthening sustainability disclosure and accounting rulemaking. In accordance with the Non-Financial Reporting Directive (NFRD), [60] the Commission has released non-binding guidelines aimed at assisting companies in disclosing pertinent non-financial information in a manner that is more consistent and comparable,followed by a public consultation.

A new directive, the Corporate Sustainability Reporting Directive (CSRD; [61] see on CSRD and Corporate due diligence Chapter 9 by Palazzini) entered into force on 5 January 2023. A modernized framework that enhances regulations surrounding the disclosure of social and environmental information includes a wider range of companies (as well as listed SMEs), which will now be required to report on sustainability. These companies falling under the CSRD are mandated to report using the European Sustainability Reporting Standards (ESRS). [62] These standards were crafted by EFRAG, formerly known as the European Financial Reporting Advisory Group, an independent entity that brings together diverse stakeholders.

Action 10: Fostering sustainable corporate governance and attenuating short-termism in capital markets. The European Commission in February 2022 has adopted a proposal for a Directive on corporate sustainability due diligence. [63] The proposal has the objective of promoting sustainable and responsible corporate behaviour within global value chains while embedding human rights and environmental considerations in the operations and governance of companies. The newly proposed regulations will guarantee that businesses confront the negative effects of their activities, both within and outside Europe, encompassing their entire value chains.

This in particular by: spreading culture of "do no harm" by reinforcing this norm worldwide and fostering engagement with third country suppliers, and avoiding disengagement; reducing defragmentation by limiting patchwork of rules, and avoiding administrative cost and burden; improving consistency with existing rules on due diligence and sustainability reporting; providing legal certainty and predictability regarding both: measures to be taken to prevent adverse impacts including in the value chain, and its consequences and ensure access to remedies; increasing transparency to support companies communication with investors and consumers' pressure; fostering proportionality and leveraging industry collaboration, to help SMEs to face indirect impacts and leverage.

The strategy outlined in the Action Plan is a first essential step in moving finance towards sustainability. However, to fully realize its impact, it must be supplemented by measures in various domains, then through the Green Deal a further step forward was realised.

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rating environmental, social, and governance (ESG) factors into risk assessments, and standardizing the appointment of board members and directors for credit institutions. The establishment of a provisional agreement was reached on June 29, 2023.

[60] Commission Disclosure of non-financial and diversity information by certain large undertakings and groups (NFRD) (Directive) 2014/95/EU amending (Directive) 2013/34/EU.

[61] Commission Corporate sustainability reporting (Directive) 2022/2464/EU amending (Regulation) 537/2014/EU, (Directives) 2004/109/EC, 2006/43/EC, 2013/34/EU.

[62] The ESRS officially published in the Official Journal on December 22, 2023, are delegated regulations customized to align with EU policies and simultaneously contribute to and draw from international standardization initiatives. Commission Sustainability reporting standards (Delegated Regulation) 2023/2772/EU supplementing (Directive) 2013/34/EU.

[63] Commission Corporate Sustainability Due Diligence (Proposal) amending (Directive) 2019/1937/EU. Difficult negotiations will likely lead to more reduced diligence duties.

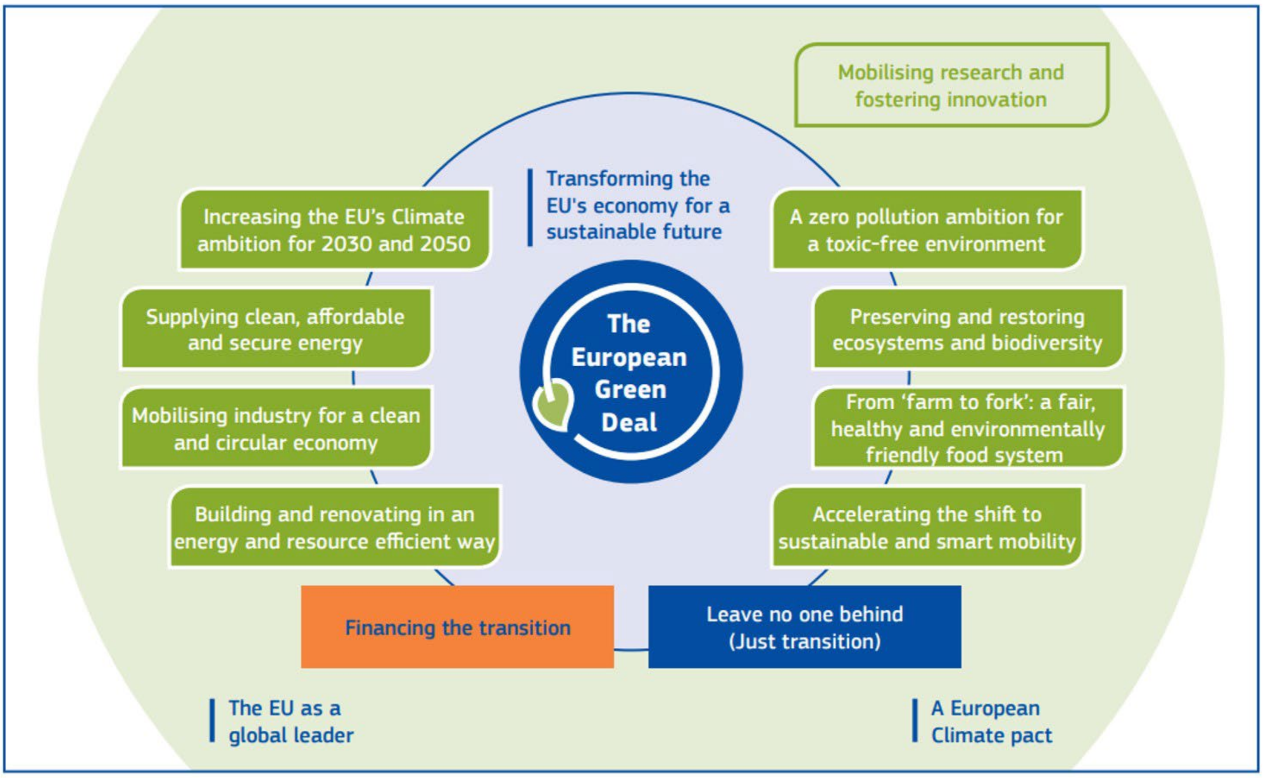
2. The Green Deal

2.1. Overview of the Green Deal

The European Green Deal (EGD) [64] is a package of policy initiatives, which followed in 2019 the Action Plan to set Europe on the path to a green transition. The main aim of the EGD is the goal of reaching climate neutrality by 2050 with a previous reduction of emissions by 55% by 2030.

Sustainable finance has a key role in delivering on the policy objectives of the EGD, which sets the blueprint to turning Europe into the first climate neutral continent by 2050. Then, the EGD ambition, to transform the EU into a modern resource-efficient and competitive economy, introduces a paradigm shift that extends beyond environmental considerations to reshape the entire EU polity, including – but not limited to – financial market operations. In 2020 and 2021, the Commission launched a series of action plans, strategies, regulations, and policies as tools for implementing the EGD throughout the entire economy. This impact extends beyond the financial sector, influencing various crucial sectors and industries, affecting society, and citizens through changes in food systems, living spaces, and employment. As showed in the following figure 2, the EGD paradigm leverages all these aspects indiscriminately towards the achievement of climate neutrality.

Figure 2. The EU Green Deal



Source: Commission (2019) EC Financing Sustainable Growth Factsheet 2019.

[64] Commission The European Green Deal" (Communication) COM/2019/640 final.

2.2. The Green Deal implementation

Although the Invest EU program was planned jointly with the Action Plan, further EU budget was strategically considered for the EGD implementation. The Sustainable Europe Investment Plan [65] is the investment pillar of the European Green Deal, to mobilise a budget of at least EUR 1 trillion over the next decade to "Financing the transition." The Sustainable Europe Investment Plan also covers the amounts used under the Just Transition Mechanism – "Leave no one behind." [66] These programs, to be implemented through a three stages process by: first, mobilising finance and facilitating public investment for transition through the just transition mechanism; second, to create an enabling framework for private investors and the public sector to invest in sustainable investments – financial institutions and private investor will be provided with the tools to properly identify sustainable investments (taxonomy, energy efficiency principle, etc.) – and third, to tailor support to public administrations and project promoters for sustainable projects.

Box 2: Sustainable Europe Investment Plan or European Green Deal Investment Plan: A Just Transition Mechanism program 2021-2027

"To leave no one behind, the Just Transition Mechanism will include financing from the EU budget, co-financing from the Member States as well as contributions from InvestEU and the EIB to reach EUR 100 billions of investments to be mobilised over 2021-27, which, extrapolated over 10 years, will reach EUR 143 billion to ensure a just transition".

The Just Transition Mechanism will consist of three pillars:

- Just Transition Fund,
- dedicated just transition scheme under InvestEU, and
- new public sector loan facility for additional investments to be leveraged by the European Investment Bank.

The European green deal new framework for sustainable finance become the financing instrument of all market system through the polarisation of the development of all sectors (circular economy, forestry, energy, finance, etc.) under climate neutrality. Climate neutrality is not only a green objective, as the name green deal make thinking, because involves the forestry strategy or the biodiversity strategy, in the same way as the circular economy, smart mobility and energy efficiency and agriculture ones. The EGD paradigm become legally binding through the Climate Law, [67] which states in article 2(1) the climate-neutrality objective and plans its realisation through the provisions of articles 10, 11, and 15. [68] The ESG paradigm leverages on all economic sectors without

[65] Commission Sustainable Europe Investment Plan European Green Deal Investment Plan" (Communication) COM/2020/21 final.

[66] Commission the Just Transition Mechanism.

[67] Commission European Climate Law (Regulation) EU/2021/1119 OJ L 243/1, Article 2 (1): Climate-neutrality objective: Union-wide emissions and removals of greenhouse gases regulated in Union law shall be balanced at the latest by 2050, thus reducing emissions to net zero by that date.

[68] These articles set out the rules for Member States to prepare a 30-year prospective strategy and goals consistent with the Union's climate-neutrality objective. The approach involves the active contribution of all economic sectors and the establishment of a multilevel climate and energy dialogue to discuss achievements. Additionally, Article 6 empowers the Commission to issue recommendations to Member States in case of inconsistency with EU measures. Member States are obliged to take these recommendations into account and to explain their actions in the first progress report. Furthermore, point 16 of the Law acknowledges the position of the Union as a global leader in the transition towards climate neutrality, who is determined to help raise global ambition and to strengthen the global response to climate change, by using all tools at its disposal, including climate diplomacy.

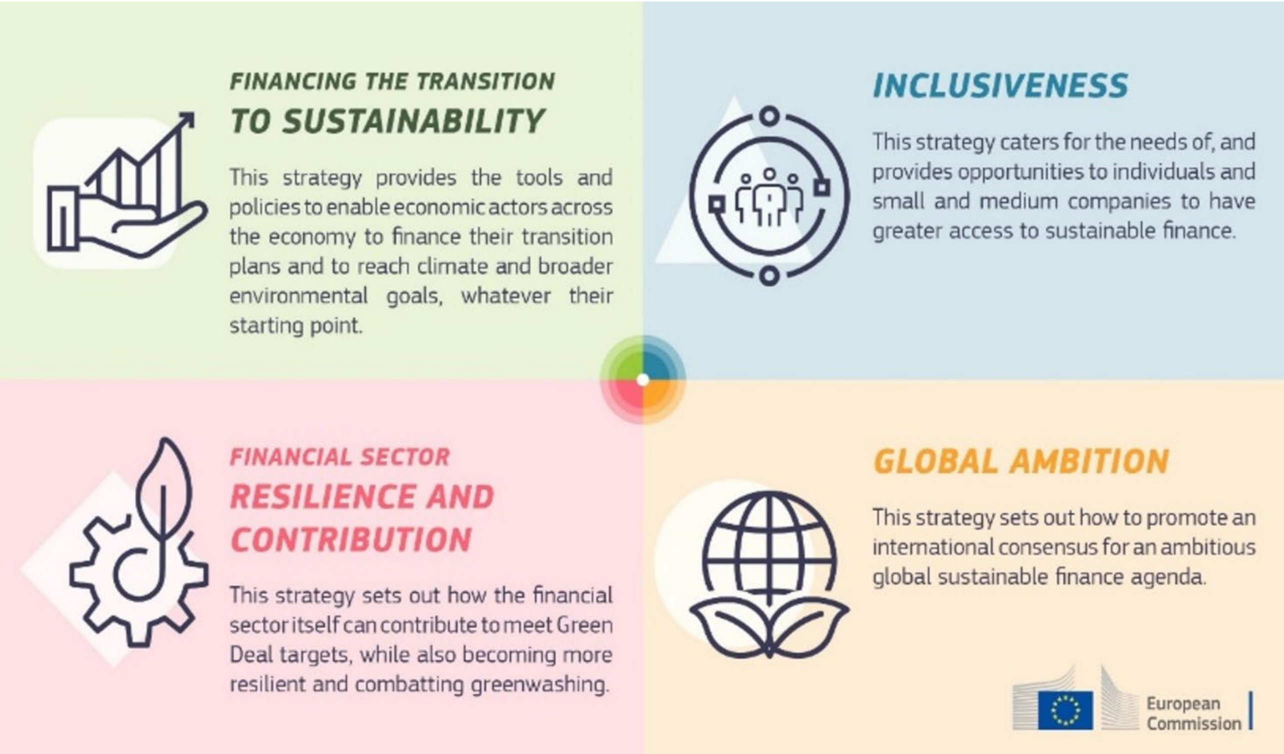
distinction to realise carbon neutrality. Then all financial flows are dedicated to the global economy change for climate neutrality, including public and private financial instruments, such as lines of credit and investment loans, grants, policy based and result based financing, equity and guarantees.

3. The Strategy for Financing the Transition to a Sustainable Economy

3.1. The "Renewed EU sustainable finance strategy"

In 2021 the Strategy for Financing the Transition to a Sustainable Economy [69] has been reviewed to increase effectiveness of transitional finance during the pending implementation of the EU Green Taxonomy (see on the EU Green Taxonomy Chapter 7 by Ceriana). The EU sustainable finance strategy builds on the Action plan on Financing Sustainable Growth (see paragraph 1 of this Chapter) and complements the European Green Deal Investment Plan (see paragraph 2 of this Chapter) to support the EGD implementation.

Figure 3. The Strategy for Financing the Transition to a Sustainable Economy



Source: Commission (2021) EU Sustainable Finance Strategy Factsheet 2021.

The Strategy for Financing the Transition to a Sustainable Economy to reach the Green Deal climate neutrality goal, identify additional four main actions to the Action Plan for the financial sector to support both flows of private finance towards sustainable economic activities and scale up the capacity of the public sector.

[69] Commission Strategy for Financing the Transition to a Sustainable Economy (Communication) COM/2021/390 final.

3.2. The four strategic objectives of the Strategy

With the strategic objective one (Financing the transition to sustainability), the Commission has made another major step towards the achievement of the EGD goals by making sure that transition finance [70] will be available and accessible during taxonomy implementation phase to companies transiting toward sustainability. The Commission also issued recommendations [71] of transition finance to facilitate its implementation with investments in transitional activities, in line with the Taxonomy Regulation, when green technologies are not available yet. Transition finance has also been a central topic at the COP 28 [72] and Davos 2024. [73]

The objective two "Improve the inclusiveness of small and medium-sized enterprises (SMEs), and consumers" addresses sustainable finance inclusiveness by defining several instruments, such as: i) embracing a social taxonomy, although there are currently only a few standardised social indicators on which companies usually report, reporting in particular for SMEs should not become a disproportionated burden. ii) strategizing SMEs for digital economy leverage, to adopting digital sustainable finance tools and fostering comprehension of the sustainability impact of financial products among retail investors. Technological innovations, including artificial intelligence, blockchain, big data, and the Internet of Things, can significantly contribute to advancing sustainable finance objectives. Despite being essential enablers in the transition, there are apprehensions regarding the environmental repercussions and escalating energy demands associated with data centres and distributed ledger technologies, particularly concerning crypto-assets. iii) promoting a better insurance coverage for environment and climate protection risk. The recently adopted Climate Adaptation strategy [74] wants to support society's resilience to climate change by creating the enabling conditions to reduce climate risks.

The objective number three ("Financial sector contribution and resilience") wants to enhance the resilience of the economic and financial system to sustainability risks and ensure the integrity of the EU financial system and monitor its orderly transition to sustainability as physical impact of climate change and the loss of biodiversity create risks that can be systemic but not be visible at the individual asset level. Risks might also arise from a disorderly and sudden reaction to the transition. Hence, it is essential to comprehend the character and extent of these exposures, as well as their dynamics and evolution over time. [75]

Objective four ("Global ambition") consists in developing international sustainable finance initiatives and standards, and support EU partner countries. This strategic objective devises the international compromise to generate private finance to reach climate targets and other environmental challenges. It addresses the private sector, but also cooperation and international agents to support low- and middle-income countries in their transition toward access to sustainable finance.

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[70] Transitional finance is «the financing of what is transitioning to environment-friendly performance levels over time» https://finance.ec.europa.eu/sustainable-finance/overview-sustainable-finance_en.

[71] Commission Facilitating finance for the transition to a sustainable economy (Recommendation) 2023/1425/EU.

[72] Glasgow Financial Alliance for net zero (GFANZ) 2023 Progress Report on transition finance, presented at COP28 showed progress made on transition planning, and mobilizing capital in emerging and developing economies.

[73] Davos 2024 provided a platform for dialogue, collaboration, and innovation among the public and private sectors, as well as civil society and academia for transition finance (World Economic Forum).

[74] Commission Forging a climate-resilient Europe – the new EU Strategy on Adaptation to Climate Change (Communication) 2021/82 final.

[75] The Network for Greening the Financial System comprehends 114 central banks and financial supervisors that aims to accelerate understanding and volumes of green finance by developing recommendations for central banks' role for climate change. High level scenario analysis of physical and transition risk is available on their website: https://www.ngfs.net/en.

The Commission sees the need for an ambitious and robust international sustainable finance architecture encompassing strong international governance, a solid rulebook, and a monitoring framework. In this initial phase, the Commission proposes an expansion of the Financial Stability Board's (FSB) mandate to encompass the role of the financial system in advancing global climate and environmental goals.

The Commission is dedicated to fostering robust collaboration on an international scale, by closely cooperating with international partners through the International Platform on Sustainable Finance and in the G20 and its Sustainable Finance Working Group as well as with Multilateral Development Banks and EU Development Finance Institutions, notably in the context of the Neighbourhood, Development and International Cooperation Instrument (NDICI – Global Europe) and the Global Gateway.

4. A sustainable finance framework that works on the ground

The sustainable finance framework that works on the ground [76] is a Communication with which the Commission supports the sustainable finance package on 13th of June 2023, as an important step towards completing the sustainable finance framework. In particular, the Commission is introducing environmental activities to the EU Taxonomy and putting forward new regulations for Environmental, Social, and Governance (ESG) rating providers. These measures aim to enhance transparency in the sustainable investment market. The package also attempts to ensure that the sustainable finance framework reach companies seeking to invest in their transition to sustainability. Further analysis of the topics included in the Communication is disclosed in the paragraphs below.

4.1. The Taxonomy Delegate Acts on Environment

The Environmental Taxonomy Delegated Act [77] adoption will qualify investments in more sectors and economic activities to be recognised as environmentally sustainable. This by including activities and associated criteria for all six environmental objectives of the Taxonomy Regulation (see on the EU Green Taxonomy Chapter 7 by Ceriana).

4.2. ESG ratings and credit ratings

The proposal [78] for a regulation on transparency and integrity of environmental, social and governance (ESG) rating activities covers ratings methodologies, objectives, characteristics, and data

[76] Commission A sustainable finance framework that works on the ground (Communication) COM 2023/317/EU final.

[77] Commission Conditions under which an economic activity qualifies as contributing substantially to the sustainable use and protection of water and marine resources, to the transition to a circular economy, to pollution prevention and control, or to the protection and restoration of biodiversity and ecosystems and for determining whether that economic activity causes no significant harm to any of the other environmental objectives (Delegated Regulation) 2023/3851/ supplementing Regulation 2020/852/EU, amending Delegated Regulation 2021/2178/EU; Commission Conditions under which certain economic activities qualify as contributing substantially to climate change mitigation or climate change adaptation and for determining whether those activities cause no significant harm to any of the other environmental objectives (Delegated Regulation) 2023/3850/EU amending Delegated Regulation (EU) 2021/2139.

[78] Commission Regulation on the transparency and integrity of Environmental, Social and Governance (ESG) rating activities (Proposal) COM/2023/314 final.

sources to ensure that ESG ratings become a more reliable and transparent component of the sustainable finance value chain. Transparent, reliable, and qualitative ESG ratings will contribute to the effectiveness and integrity of the financial markets and investor protection because also preventing and mitigating potential risks associated with conflicts of interest. Furthermore, a more transparent ESG rating ecosystem will lead to a clearer identification and standardisation of the dimensions of sustainability.

4.3. Transition Finance

The Commission Recommendation for Transition finance (see also above paragraph 3.2 in this Chapter) illustrates efforts towards a globally leading legal framework that facilitates transition financing. Leveraging sustainability information and tools within this framework, private investors and financial institutions will increasingly have the capacity to recognise sustainable investments and transition projects in a more efficient and systematic manner. These disclosures and tools also offer companies a standardized opportunity to communicate their sustainability goals and transition pathways to investors and stakeholders.

4.4. Forthcoming European sustainability reporting standards

The standardization of sustainability information mandated for corporate reporting is a pivotal component of the legal framework and is soon achievable through the upcoming European Sustainability Reporting Standards (ESRS; see also paragraph 1.2.3 of this Chapter and Chapter 9 by Palazzini). The Commission is presently engaging stakeholders in consultations regarding the ultimate version of the initial ESRS set, derived from draft standards developed by the European Financial Reporting Advisory Group (EFRAG). These standards will provide companies with the necessary guidance to determine the data to be reported and how to ensure that the information provided is pertinent to their operations and beneficial for financial institutions.

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Part Two

A CLOSER FOCUS ON THE EU LEGAL FRAMEWORK FOR INVESTOR PROTECTION

Chapter 7

THE EU GREEN TAXONOMY

Ilaria Ceriana

1. Introduction

The European Green Taxonomy (EU Regulation No. 2020/825) is part of the European process of standardisation and definition of a common business model open to sustainability and the strengthening of sustainable finance, understood as a process of integration of environmental, social and corporate governance considerations (the so-called ESG factors).

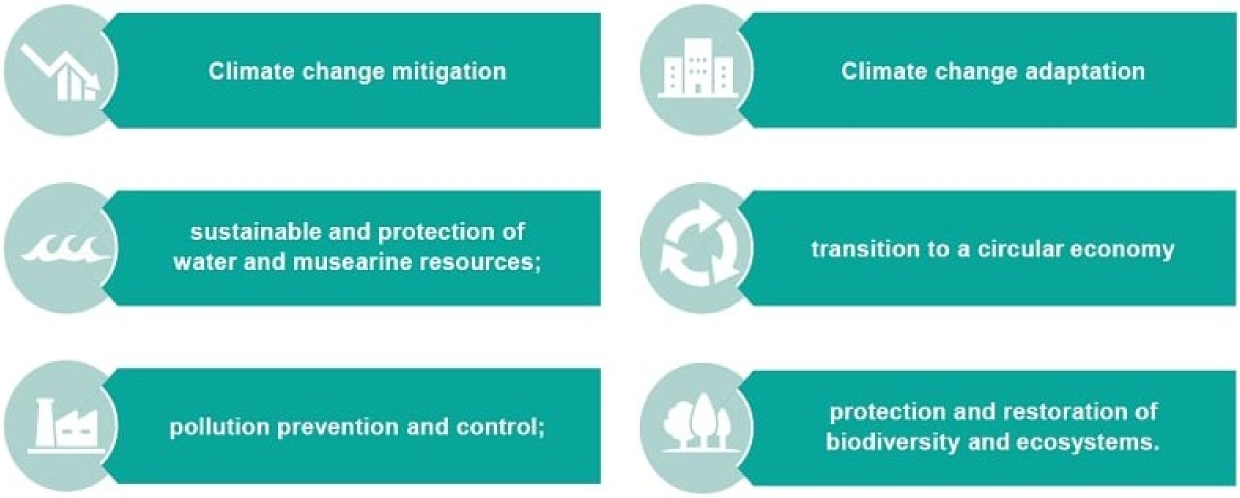
As part of this European sustainability process and the Action Plan on Financing Sustainable Growth (see Chapters 1 by Macchiavello and 6 by Nenci), the EU Regulation 2020/852 has aimed to promote the identification of criteria determining the environmental sustainability of economic activities – and consequently of investments in them – and the creation of homogeneous classification standards aimed at directing ESG-sensitive investors towards financially sustainable products. In other words, it is fair to say that the taxonomy is the first solid pillar of the European regulatory architecture for sustainability, aimed at fighting the phenomenon of greenwashing, i.e. environmental over-representation, by identifying objective and harmonised parameters (see Chapter 5 by Macchiavello).

To this end, it is worth highlighting the choice made by the European legislator with regard to the regulatory instrument chosen: the EU regulation clearly reflects the desire for a uniform and homogeneous application of rules in all Member States, excluding any margin of discretion in transposition, which is typical of the more flexible and versatile Community instrument of the directive. The criteria for assessing whether an activity is environmentally sustainable will therefore be the same throughout the internal market and operators will, for the first time, be able to rely on a harmonised European green code to help them select activities as sustainable investment targets.

2. The first of the three ESG pillars: the environment

Of the three ESG pillars (environmental, social and corporate governance), the European Green Taxonomy Regulation is devoted exclusively to defining a classification system for economic activities relating solely to the environmental pillar, based on the following criteria:

Figure 1. The six environmental objectives of the Taxonomy



Source: EU Technical Expert Group on Sustainable Finance, 2020.

An economic activity is considered to be environmentally sustainable if it significantly contributes to one or more of the environmental objectives listed in the legislation (see Fig. 1), while not causing significant harm to any of the others, while respecting the minimum safeguards relating to fundamental rights at work and the technical screening criteria established by the Commission.

The general "Do Not Significant Harm" (DNSH) principle is introduced, which is a cardinal principle of supranational sustainability legislation. This principle takes the form of an assessment of the conformity of the support measure with the taxonomy of environmentally sustainable activities.

It can therefore be concluded that one of the objectives of the EU Green Taxonomy Regulation is to steer the behaviour of companies towards the objective of environmentally-sustainable investment by establishing objectives and uniform criteria to distinguish green issuers from non-green issuers and to promote the convergence of private investment towards sustainable activities.

Figure 2. Taxonomy and the DNSH principle

Source: EU Technical Expert Group on Sustainable Finance, 2020.

3. Implementation of technical standards and delegated acts

With the support of the Sustainable Finance Platform, which aimed to strengthen the dialogue on the implementation of technical standards, the subsequent delegated acts – with the necessary adaptation of taxonomic forecasts to technical and scientific progress – defined the criteria on the basis of which it can be determined whether an economic activity makes a significant contribution to at least one of the six environmental objectives identified, without causing significant damage to any of the other five.

Specifically, two Delegated Regulations were published during 2021, the first of which – Del. Reg. (EU) 2021/2139 – known as the "Climate Delegated Act", sets out the technical screening criteria for certain industrial sectors, such as energy, construction, manufacturing and transport, to determine under which conditions a given economic activity makes a substantial contribution to the first two sustainability objectives, i.e. to climate change mitigation or adaptation.

The second Delegated Regulation (EU) 2021/2178 complements the EU Green Taxonomy Regulation by clarifying the content and presentation of non-financial information. In particular, companies subject to sustainability reporting requirements must include in the non-financial statement information on how and to what extent the company's activities are linked to economic activities that are considered environmentally sustainable according to the classification of the Taxonomy Regulation. The Delegated Regulation therefore identifies the environmental impact key performance indicators (KPIs) that are useful for measuring the degree of environmental sustainability of an economic activity – and therefore of an investment – taking into account the sector and size of the companies subject to the disclosure requirements.

In 2022, the Commission's Delegated Regulation No. 2022/1214 was adopted, adding to the list of economic activities in the European taxonomy specific activities related to the nuclear and gas energy sectors, in order to promote the green transition and the reduction of the use of solid or liquid fossil fuels.

Two other Delegated Regulations were adopted in 2023: Delegated Regulation (EU) 2023/2485 and Delegated Regulation No. 2023/2486. The latter aimed to define the technical screening criteria to determine under which conditions a given economic activity makes a substantial contribution to the remaining four taxonomic objectives, namely the sustainable use and protection of water and marine resources, the transition to a circular economy, the prevention and reduction of pollution, and the protection and restoration of biodiversity and ecosystems, without significantly harming any other environmental objective. The EU Delegated Regulation No. 2023/2485 amends the technical screening criteria for climate objectives contained in Del. Reg. 2021/2139 by including additional economic activities that contribute significantly to climate change mitigation and adaptation (mainly services for prevention of and response to disasters and climate emergencies).

4. Conclusions

The Taxonomy Regulation is the first step in the European process aimed at strengthening information transparency in non-financial matters: the ESG-sensitive investor will be able to compare the level of sustainability of the economic activity underlying a financial product on the basis of common and objectively measurable parameters dictated by the Taxonomy Regulation and its delegated acts.

Clearly, investors would lose confidence in a market of financial products labelled as sustainable but not comparable, and the costs and risks of greenwashing would increase dangerously. The Taxonomy Regulation is therefore a refined interpretation of the ambitious European project to strengthen the circular economy, which also includes the Sustainable Finance Disclosure Regulation (SFDR: see Chapter 8 by Molinari), introduced to improve transparency in the market for sustainable investment products, and the Corporate Sustainability Reporting Directive (CSRD: see Chapter 9 by Palazzini), which aims to improve the comparability of non-financial information provided by issuers, and the European Green Bond Standard Regulation (see Chapter 11 by Valenti), which aims to impose a harmonized standards for European green bonds as bonds pursuing environmentally sustainable objectives within the meaning of the EU Green Taxonomy Regulation.

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Chapter 8

SUSTAINABILITY REPORTING: THE SUSTAINABLE FINANCE DISCLOSURE REGULATION (SFDR)

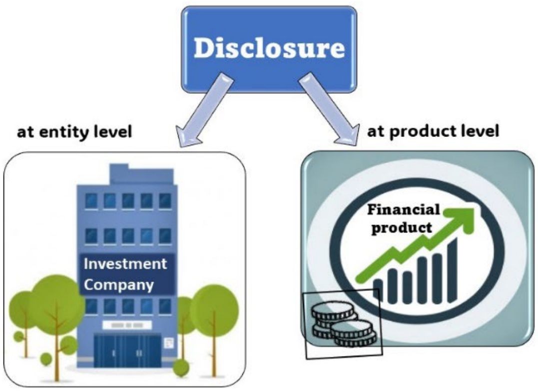
Anna Molinari

1. Genesis and core objective of the SFDR

The Sustainable Finance Disclosure Regulation (Reg. No. 2019/2088) was created as a key pillar of the European Commission's Action Plan on Sustainable Finance launched in 2018 (see Chapter 6 by Nenci), alongside the Taxonomy Regulation (see Chapter 7 by Ceriana) and the Low Carbon Benchmarks Regulation.

The Sustainable Finance Disclosure Regulation (hereinafter "SFDR") sets out how financial market participants and advisors must disclose sustainability information in order to help those investors who seek to put their money into companies and projects supporting sustainability objectives to make informed choices. The goal of this Regulation is to provide transparency: the SFDR is intended to enable investors to compare information in the investment process of investment firms about specific products they offer ("at product level"), but also relating to their respective firm as a whole ("at entity level"). Besides improving comparability and allowing investors to make informed investment decisions, the SFDR also is intended to mitigate fragmentation and competitive distortions, as well as reduce greenwashing. Greenwashing is defined by the Recital 11 of the Taxonomy Regulation as the «practice of gaining an unfair competitive advantage by marketing a financial product as environmentally friendly, when in fact basic environmental standards have not been met». [79]

Figure 1. Disclosure at entity level and at product level



Source: Anna Molinari, image from Illustration du bâtiment entreprise – Illustration libre de droits, IkonStudio, 23 janvier 2018.

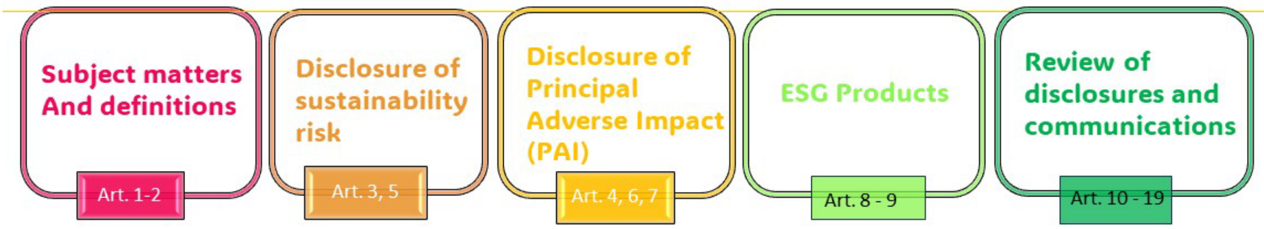
[79] For a more in-depth look at greenwashing see the ESAs Progress Report on greenwashing 2023 and Chapter 5 by Macchiavello.

It is important to note that the SFDR does not force investment funds to consider ESG criteria when investing. Rather, it sets out rules that require them to justify the sustainability claims that they make about their financial products.

For what concerns the scope of application, the SFDR applies to financial market participants, [80] which are the manufacturers or providers to the market of certain financial products, and financial advisors, [81] that are the ones providing investment or insurance advice managing money on behalf of end investors (asset managers, insurance undertakings, occupational and other pension providers, as well as investment firms) that are based in the EU or that market their products to clients located in the EU.

Most of the SFDR provisions entered into force on the 10th of March 2021. However, after this date, the European Supervisory Authorities (ESAs: EBA, EIOPA and ESMA) have drawn up the Regulatory Technical Standards (also referred to as "RTSs") for implementing the first level legislation, the SFDR. The RTSs are second-level legislation that includes detailed technical indications on how to disclose the sustainability information required by the SFDR. The RTSs contain provisions that are generally mandatory, apart from the ones that are explicitly marked as voluntary. The Delegated Regulations containing the RTSs started to apply from January 2023, but might be amended in the future, as it has already been proposed. [82] The RTS will be analysed infra. [83]

Figure 2. SFDR structure



Source: by Anna Molinari.

[80] Financial market participants are listed by Article 2(1) SFDR: (a) an insurance undertaking which makes available an insurance-based investment product (IBIP); (b) an investment firm which provides portfolio management; (c) an institution for occupational retirement provision (IORP); (d) a manufacturer of a pension product; (e) an alternative investment fund manager (AIFM); (f) a pan-European personal pension product (PEPP) provider; (g) a manager of a qualifying venture capital fund; (h) a manager of a qualifying social entrepreneurship fund; (i) a management company of an undertaking for collective investment in transferable securities (UCITS management company); or (j) a credit institution which provides portfolio management. Therefore, are excluded the ones that merely receive, transmit or execute the clients' orders.

[81] Financial market advisors are enumerated by Article 2(11) SFDR: (a) an insurance intermediary which provides insurance advice with regard to IBIPs; (b) an insurance undertaking which provides insurance advice with regard to IBIPs; (c) a credit institution which provides investment advice; (d) an investment firm which provides investment advice; (e) an AIFM which provides investment; or (f) a UCITS management company which provides investment advice.

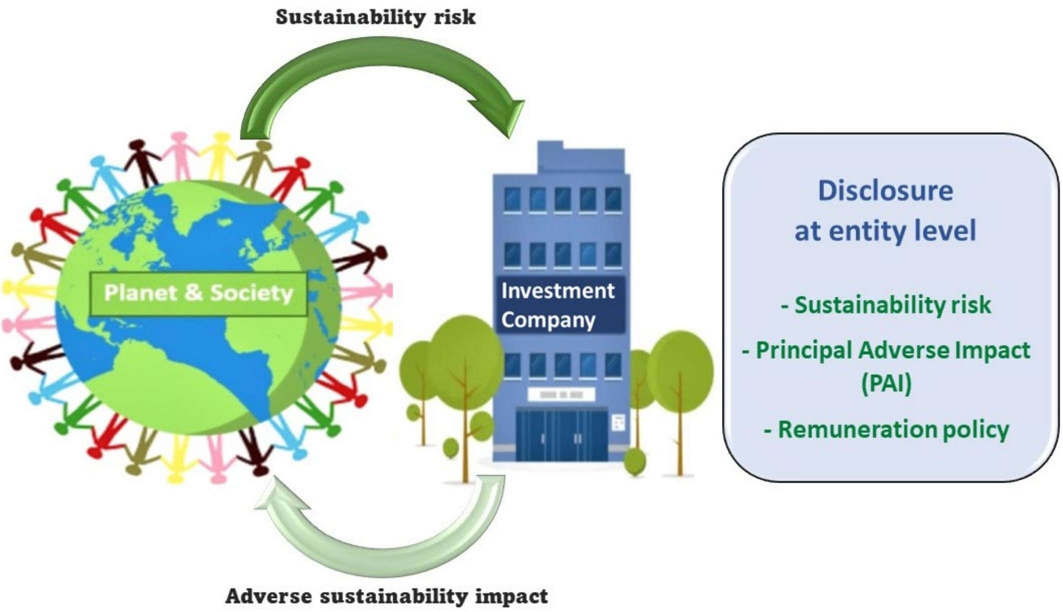
[82] In December 2023 the ESAs proposed amendments to the RTSs, the SFDR implementing regulation, in order to extend and simplify the sustainability disclosure requirements, to change the PAIs' disclosure framework and to introduce disclosure of financial products' decarbonisation targets. If the European Commission endorse this draft, the Council and the European Parliament will then have three months to approve or object.

[83] See paragraph 2 for the PAIs and paragraph 4 for the taxonomy-alignment of the Articles 8 and 9 products whose objective is environmentally sustainable investment.

2. Transparency at entity level: sustainability risk and PAI

The SFDR requires financial market participants and financial advisers to inform investors about how they consider the sustainability risks that can affect the value of and return on their investments ('outside-in' effect perspective) and the adverse sustainability impacts that such investments have on the environment and society ('inside-out' perspective), which reflects the "double-materiality" principle endorsed by the European Union.

Figure 3. Double materiality



Source: by Anna Molinari; image from Illustration du bâtiment entreprise – Illustration libre de droits, IkonStudio, 23 janvier 2018.

Therefore, the main disclosure objects are the sustainability risks and the principal adverse impacts (hereinafter, also "PAIs"). Financial market participants and advisers have to publish on their websites how they integrate the sustainability risks in the investment decision-making process/advice and how they consider the PAIs of investment decisions/advice on sustainability factors. Moreover, they have to disclose how the remuneration policies are consistent with the integration of sustainability risks. [84] All information has to be disclosed in a simple, concise, comprehensible, standardized, not misleading way and in a searchable electronic format to facilitate investors' understanding. They have to do so via their websites, in product pre-contractual documents and in annual reports.

More specifically, the sustainability risk is defined as "an environmental, social or governance event or condition that, if it occurs, could cause an actual or a potential material negative impact on the value of the investment". [85] Therefore, it is an "outside-in" effect, as it captures the potential risk for the investment value arising from the ESG factors.

On the other hand, transparency on the principal adverse impacts (PAI) involves the disclosure of any impact of investment decisions or advice that results in a negative effect on sustainability factors: this is the "inside-out" effect that investment decisions could have on environmental, social

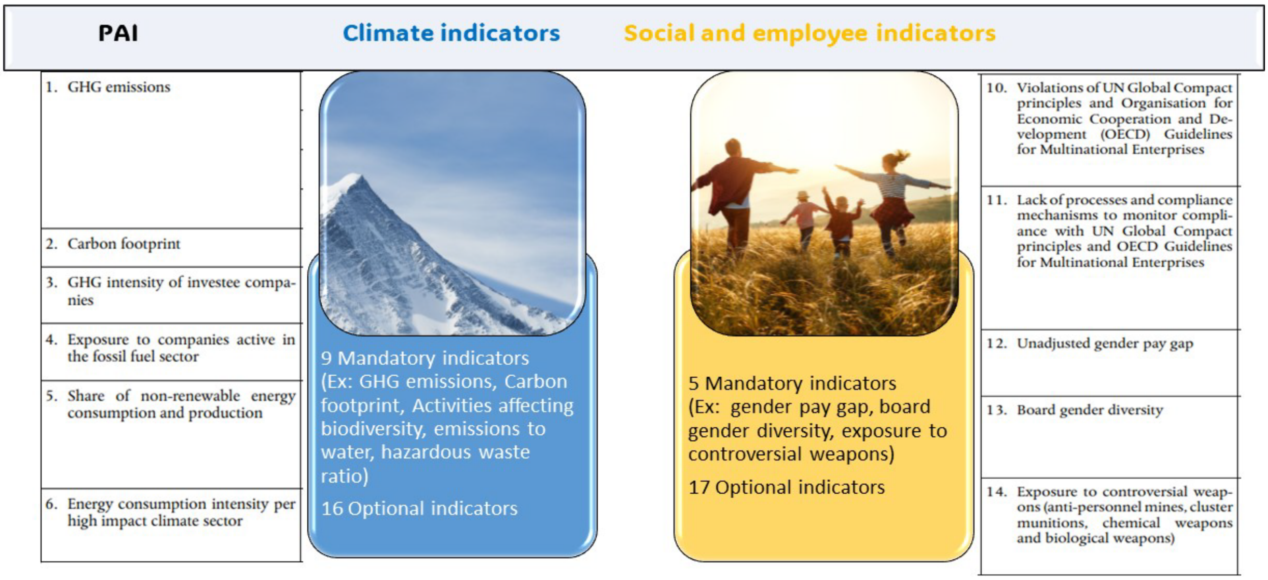
[84] Article 5 SFDR.

[85] Article 2(22) SFDR.

and employee matters, respect for human rights, anti-corruption and anti-bribery matters. [86] The SFDR mandates the publication on the website of a statement on due diligence policies on PAIs for large entities and large holdings. Vice versa, it applies a “comply or explain” approach to all the other entities, allowing them either to consider the PAI in the investment process and, consequently, publish on their website a statement on it or to not consider the PAI and to publish on their website clear reasons for why they do not do so, including information as to whether and when they intend to consider such adverse impacts.

To assure the comparability of information, the presentation of such information on the PAI has to be carried out following the Regulatory Technical Standards (RTSs) draft by ESAs on climate-related impacts, as well as social matters. The final text of the RTS provides a short list of mandatory indicators and a broader list of optional indicators. The indicators are classified into two areas: climate indicators and social and employee indicators. [87]

Figure 4. Principle Adverse



Source: by Anna Molinari, images from PowerPoint Stock Images.

3. Transparency at product level: ESG funds and the SFDR

3.1. Overview of sustainable financial products

Besides the disclosure of the sustainability risks and the PAIs at entity level, the SFDR imposes various new obligations for product disclosures concerning sustainability, both in pre-contractual disclosure, periodic reporting and website product disclosure. Indeed, the focus is to reduce information asymmetries between fund providers and clients about how products address sustainability risks and impacts. When the SFDR refers to financial products, it means individually managed portfolios, UCITS, AIFs, IBIPs, PEPPs, pension products and pension schemes. [88] Therefore, the SFDR

[86] Article 2(24) SFDR.

[87] See Annex I RTSs.

[88] Art. 2(12) SFDR.

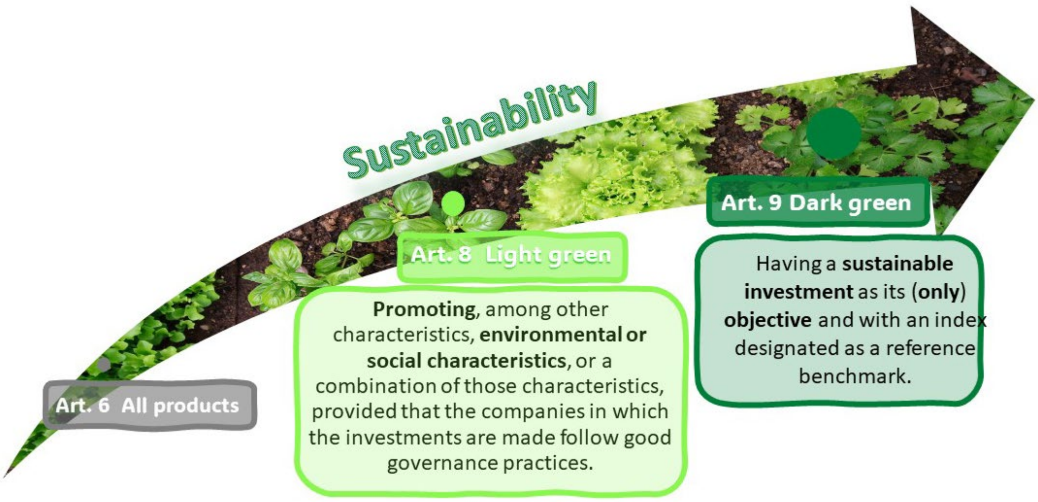
requires financial market participants and advisors to disclose some information when offering a financial product according to Articles 6, 8 and 9 of the SFDR: such information must be disclosed in the documents already prescribed by the legislation for each type of product (*i.e.* Prospectus Regulation, MIFID II Directive, UCITS Directive, AIFM Directive, PRIIPS Regulation, etc.). As an example, for all individual pension products, the disclosure in the SFDR must be done in short consumer-facing documents, whereas for other financial products such as UCITS funds, the disclosure from the SFDR must be done in longer pre-contractual documentation, such as a fund prospectus. [89]

According to Article 6, for each managed product, including the ones that are not marked as sustainable, financial market participants and advisers have to disclose information about the integration of sustainability risk in the investment decision/advice and the impact of sustainability risk on the investment return. When they deem sustainability risks not to be relevant, they have to explain why clearly and concisely. [90] Moreover, financial market participants (and not also financial advisers) that disclose the principal adverse impacts (PAI) at entity level have to provide a clear and reasoned explanation of whether and how a financial product considers PAI on sustainability factors. [91] These Article 6 funds are marked as "not sustainable" or "grey" as they neither prioritize nor promote environmental or social characteristics. [92]

3.2. Products promoting environmental or social characteristics

On the other hand, for the products that are marked as sustainability-related, the SFDR imposes additional disclosure requirements: according to the level of sustainability claimed we can distinguish two main types of financial products: Article 8, "light green" or mild sustainable, and Article 9, "dark green" or very sustainable. It should be noted that the SFDR is not a label of approval, but it is a transparency measure, so investors can know which sustainability measures have been taken.

Figure 5. Article 6, 8 and 9



Source: by Anna Molinari, images from PowerPoint Stock Images.

[89] European Supervisory Authorities (ESAs) Joint Committee (2023), 'Final Report on draft Regulatory Technical Standards.

[90] Article 6 SFDR.

[91] Article 7 SFDR.

[92] However, they do not constitute a separated category, see below paragraph 3.4.

As shown, there are two types of financial products with a different level of ambition regarding sustainability: [93] the first type, referred to as an "Article 8 product", consists of 'financial products that promote, among other characteristics, environmental or social characteristics, or a combination of those characteristics, provided that the companies in which the investments are made follow good governance practices'. [94] The SFDR does not define what is meant by promoting environmental or social characteristics. According to Recital 13 of the RTS Delegated Regulation, the term 'promotion' includes, as an example, direct or indirect claims in pre-contractual or periodic documents, in the products' names [95] or in any marketing communication about their investment strategy, financial product standards, labels they adhere to. As specified by the European Commission in a 2021 Q&A, Article 8 SFDR remains neutral in terms of the design of financial products and does not prescribe certain elements such as the composition of investments or minimum investment benchmarks. Consequently, the promotion of environmental or social characteristics may be implemented through various market practices, tools and strategies or a combination of those, such as screening, exclusion strategies, best-in-class/universe, thematic investing, or redistribution of profits or fees.

Article 8 products can also make sustainable investments: in that case, they are referred to as "Article 8 plus" or "light green plus" funds. Considered as a subcategory of Article 8, but not as a completely separated category, Article 8+ funds promote environmental or social characteristics, having a certain minimum commitment to making sustainable investments (passing the "do no significant harm" test, together with PAI indicators), and are compliant to good governance.

3.3. Products having sustainable investments as their objectives

Article 9 relates to a financial product that has sustainable investment as its objective and with an index designated as a reference benchmark. According to EU institutions' interpretation, now incorporated in Recital 15 RTS, Article 9 funds must make only sustainable investments. Where financial products do not have 'sustainable investment' as their objective, as referred to in Article 9 SFDR, they are considered to fall under Article 8 of that Regulation.

It is therefore fundamental to clarify the concept of sustainable investment is: Article 2(17) of the SFDR defines it as «an investment in an economic activity that contributes to a [measurable] environmental objective […] or to a social objective […], provided that such investments do not significantly harm any of those objectives and that the investee companies follow good governance practices». [96] Therefore, to determine whether an investment is sustainable under the SFDR, financial market participants need to assess whether: their financial product's investments are in economic activities that contribute to an environmental or social objective, the investment does not signifi-

[93] Recital 21 of the SFDR.

[94] Article 8 SFDR.

[95] ESMA's Draft guidelines on funds' names using ESG or sustainability-related terms. (see Chapter 1 by Macchiavello).

[96] The extended definition of sustainable investment contained in Article 2(17) is:
an investment in an economic activity that contributes to an environmental objective, as measured, for example, by key resource efficiency indicators on the use of energy, renewable energy, raw materials, water and land, on the production of waste, and greenhouse gas emissions, or on its impact on biodiversity and the circular economy, or an investment in an economic activity that contributes to a social objective, in particular an investment that contributes to tackling inequality or that fosters social cohesion, social integration and labour relations, or an investment in human capital or economically or socially disadvantaged communities, provided that such investments do not significantly harm any of those objectives and that the investee companies follow good governance practices.

cantly harm any environmental or social objective and investee companies follow good governance practices (see Chapter 1 by Macchiavello).

As specified by the European Supervisory Authorities in a Q&A, the SFDR does not set out minimum requirements that qualify concepts such as contribution, do no significant harm, or good governance, that are the key parameters of a 'sustainable investment'. Financial market participants must carry out their own assessment for each investment and disclose their underlying assumptions: the SFDR doesn't prescribe a single methodology to account for sustainable investments. Consequently, the participants have an increased responsibility both in measuring the key parameters of a sustainable investment and in disclosing the methodology used for it.

3.4. What should be disclosed in relation to an Article 8, 8+ or 9 product?

When offering a light green, a light green plus or a dark green product, financial market participants have to disclose in pre-contractual documents, in addition to the information mandated by Article 6, how the environmental or social characteristics/the sustainable objective are met, if there is an index as a benchmark how information on whether and how this index is consistent with those characteristics/objective and the methodology used for the calculation of the index. To be precise, Article 6 does not institute a separated category of products, but applies to all financial products (including sustainable products) [97] and prescribes the disclosure of the integration of sustainability risks in investment decisions and assessment of the sustainability risks on the return of the investment, as seen above.

Moreover, in periodic reports, financial market participants have to include a description of the extent to which environmental or social characteristics are met for Article 8 funds and the overall sustainability-related impact of the Article 9 funds using relevant sustainability indicators, as well as, when an index is designated as a reference benchmark, a comparison between that impact and the impacts of the designated index and of a broad market index. [98]

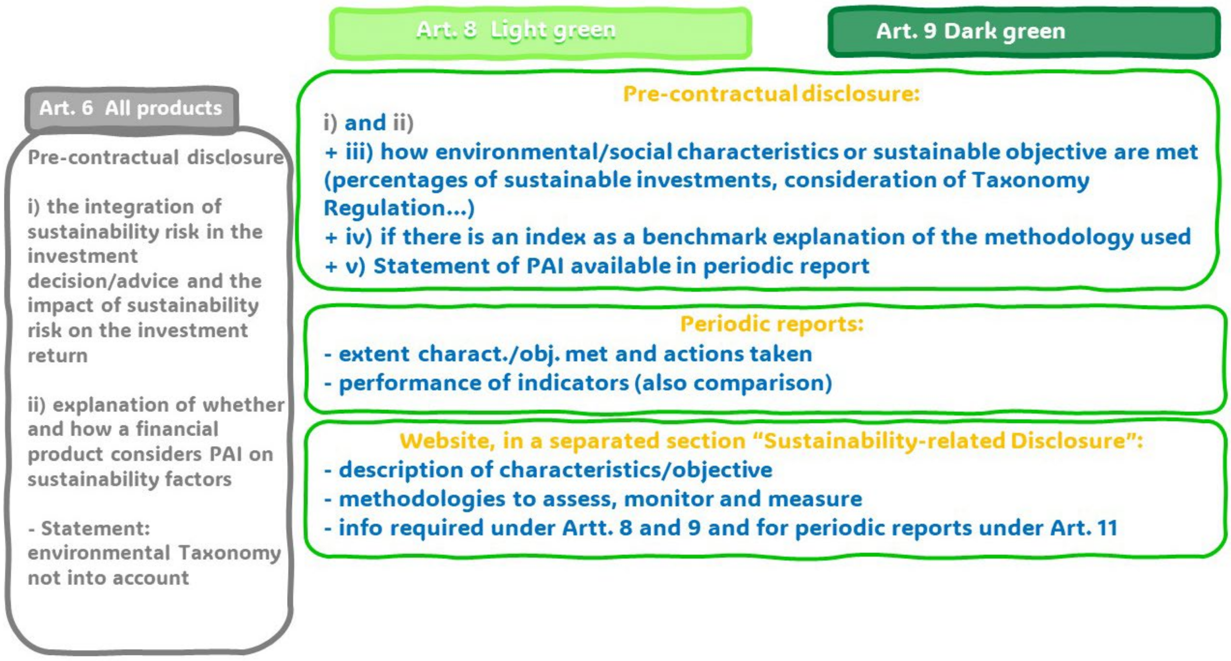
Lastly, financial market participants have to disclose on their website (in a separate section) and keep up to date all the information prescribed by Art. 8 and 9 for pre-contractual disclosure and by Art. 11 for periodic reports, as well as a description of the environmental or social characteristics or the sustainable investment objective and information on the methodologies used to assess, measure and monitor the environmental or social characteristics or the impact of the sustainable investments selected for the financial product. [99]

[97] Stanisław 2023.

[98] Article 11 SFDR.

[99] Article 10 SFDR.

Figure 6. Financial products disclosure



Source: by Anna Molinari.

4. Coordination between the SFDR and the Taxonomy Regulation

The SFDR provisions need to be coordinated with the Taxonomy Regulation [100] (also "TR") that, in establishing clear definitions of what is an environmentally sustainable activity (see Chapter 7 by Ceriana), completes the SFDR reporting requirements by imposing additional disclosure obligations both in pre-contractual disclosures and in periodic reports.

It should be underlined that the TR does not require that the environmental objective of Article 9 SFDR funds corresponds to one of the environmental objectives listed in the TR, but, in case that it does, it should disclose to which objectives listed in the TR it contributes, [101] which is also reflected in the provisions of the RTS. In particular, when a financial product as referred to as Article 8 or 9 invests in an economic activity that promotes environmental characteristics or contributes to one of the six environmental objectives within the meaning of the TR, [102] the disclosure involves also the information on the environmental objective to which the investment underlying the financial product contributes, a description of how and the percentage of turnover/expenditures underlying investments are in "environmentally sustainable" economic activities within the meaning of the TR. For Article 8 funds that are Taxonomy-aligned, i. e. taking into consideration "environmentally sustainable" economic activities, it should also be included a statement on the "do no significant harm" principle.

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[100] Regulation (EU) 2020/852 of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088.

[101] Articles 5(a) TR and 51(b); article 59(b) RTS.

[102] Specifically, (a) climate change mitigation; (b) climate change adaptation; (c) the sustainable use and protection of water and marine resources; (d) the transition to a circular economy; (e) pollution prevention and control; (f) the protection and restoration of biodiversity and ecosystems

To complicate the scene, despite their common name, the DNSH principle under the SFDR is a different concept from the DNSH principle in the Taxonomy Regulation, which relies on technical screening criteria for the covered activities. As stated in the Delegated Regulation,[103] financial product disclosures about the 'DNSH' principle under the meaning of the SFDR should explain how the indicators for principal impacts of investment decisions on sustainability factors have been taken into account. It is also appropriate to require additional information on the alignment of the investments with the minimum safeguards set out in the Taxonomy Regulation. The European Commission issued a guidance on the harmonization of the SFDR and the TR in order to provide a basis for simplified or even automatic qualification of investments in Taxonomy-aligned activities as fulfilling the SFDR's DNSH requirements.

Figure 7. Template pre-contractual disclosure for Article 8 and Article 9 financial products


Product name: [complete]
Legal entity identifier: [complete]

Article 9 — Sustainable investment objective
Environmental and/or social characteristics — Article 8

Does this financial product have a sustainable investment objective? *[tick and fill in as relevant, the percentage figure represents the minimum commitment to sustainable investments]*

X **Yes**
- It will make a minimum of **sustainable investments with an environmental objective:** ___%
  - in economic activities that qualify as environmentally sustainable under the EU Taxonomy
  - in economic activities that do not qualify as environmentally sustainable under the EU Taxonomy
- It will make a minimum of **sustainable investments with a social objective:** ___%

X **No**
- It **promotes Environmental/Social (E/S) characteristics** and while it does not have as its objective a sustainable investment, it will have a minimum proportion of ___% of sustainable investments
  - with an environmental objective in economic activities that qualify as environmentally sustainable under the EU Taxonomy
  - with an environmental objective in economic activities that do not qualify as environmentally sustainable under the EU Taxonomy
  - with a social objective
- It promotes E/S characteristics, but **will not make any sustainable investments**

Source: European Commission, ANNEX II and III RTS SFDR, 6.4.2022.

Definitions such as "promoting environmental and social characteristics" "sustainable investment" and its requirement of "do no significant harm" are extremely open-ended and have not prevented financial market participants from including carbon fuel investments in funds classified as Article 8 or Article 9. Moreover, financial market participants started to use Articles 8 and 9 as labels to claim that their products are "sustainable", enabled by the lack of an Ecolabel for investment products. As ESMA pointed out in its report, in the absence of an EU-wide labelling regime for ESG funds, some managers have also used Articles 8 and 9 as proxy labels for communication purposes.[104] This misuse of legislation can lead to confusion among investors as to whether a fund is ESG or not, thus reinforcing concerns over potential greenwashing. Asset managers are, in fact,

[103] Recital 22 of the Commission Delegated Regulation (EU) 2022/1288.

[104] See ESMA TRV Risk Analysis ESG names and claims in the EU fund industry, 2 October 2023, ESMA50-524821-2931. See also Och 2024; Partiti 2023.

marketing funds using these categories as proof for the fact that they are sustainable, but, since the SFDR does not set out minimum criteria to fit into Article 8 or Article 9 categories, this current "Article 9" and "Article 8" classification does not help appreciating the extent to which financial products and their investments are sustainable. To solve these shortcomings, in 2022 the ESMA published a consultation paper on Guidelines on funds' names using ESG or sustainability-related terms.[105] The proposal aims to set requirements for funds' names so that they are not misleading and can use ESG terminology only when supported in a material way by evidence of sustainability characteristics or objectives. According to the proposal, if a fund has any sustainability-related term in its name, the fund should apply a minimum proportion of at least 80% of its investment used to meet the environmental and social characteristics or objectives, apply the Paris-aligned Benchmark (PAB) exclusions, and invest meaningfully in sustainable investments defined in Article 2(17) SFDR, reflecting the expectation investors may have based on the fund's name.

As highlighted before, EU sustainability disclosure rules apply at each step of the financial intermediation chain, so that data provided by issuers is transformed into information regarding the characteristics of financial products. The sustainability-related amendments to MIFID II Regulation[106] ensure that that this information is considered when investment firms recommend or trade investment products on behalf of their clients, by introducing the concept of 'sustainable preferences' which the firms need to take into account within the suitability assessment procedure. For an insight into the relationship between the SFDR and the MIFID II regime (see Gargantini's Chapter 10, paragraph 5).

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[105] See ESMA Consultation Paper On Guidelines on funds' names using ESG or sustainability-related terms, 18 November 2022, ESMA34-472-373. See also ESMA Update on the guidelines on funds' names using ESG or sustainability-related terms, 14 December 2023, ESMA34-1592494965-554.

[106] Commission Delegated Regulation (EU) 2021/1253 of 21 April 2021 amending Delegated Regulation (EU) 2017/565 as regards the integration of sustainability factors, risks and preferences into certain organisational requirements and operating conditions for investment firms, OJ L 277, pp. 1-5.

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Chapter 9

THE IMPORTANCE OF INFORMATION FROM COMPANIES: CORPORATE SUSTAINABILITY REPORTING DIRECTIVE (CSRD) AND CORPORATE SUSTAINABILITY DUE DILIGENCE DIRECTIVE (CSDDD)

Francesca Palazzini

1. Importance of information from companies: the relevance of retail investors for the Action plan of 2018

The scale of investment required to address climate change is well beyond the capacity of the public sector. [107] Therefore, the Action Plan for Financing Sustainable Growth recognises the role of sustainable finance in channelling private capital into sustainable activities (see Chapter 6 by Nenci). [108] The disclosure of relevant, comparable, and reliable sustainability information by certain categories of companies is a prerequisite for achieving this objective. Indeed, without such information the financial sector cannot efficiently direct capital to investments that drive solutions to the sustainability crises and cannot effectively identify and manage the risks to investments that will arise from those crises.

The EU Taxonomy Regulation [109] has established a system for classifying sustainable economic activities in order to overcome the lack of agreed definitions and thus promote transparency and comparability (see Chapter 7 by Ceriana). In this context, the Sustainable Finance Disclosure Regulation (SFDR) [110] requires asset managers to disclose how they address sustainability risks in their investment policies and the potential impact of these risks on returns (see Chapter 8 by Molinari), while the Corporate Sustainability Reporting Directive (CSRD) [111] deals more generally with the sustainability information to be disclosed by companies. [112]

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[107] European Commission, Strategy for Financing the Transition to a Sustainable Economy. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions empty, 6 July 2021.

[108] On the definition of sustainable finance, see de Gioia-Carabellese and Macrì 2023.

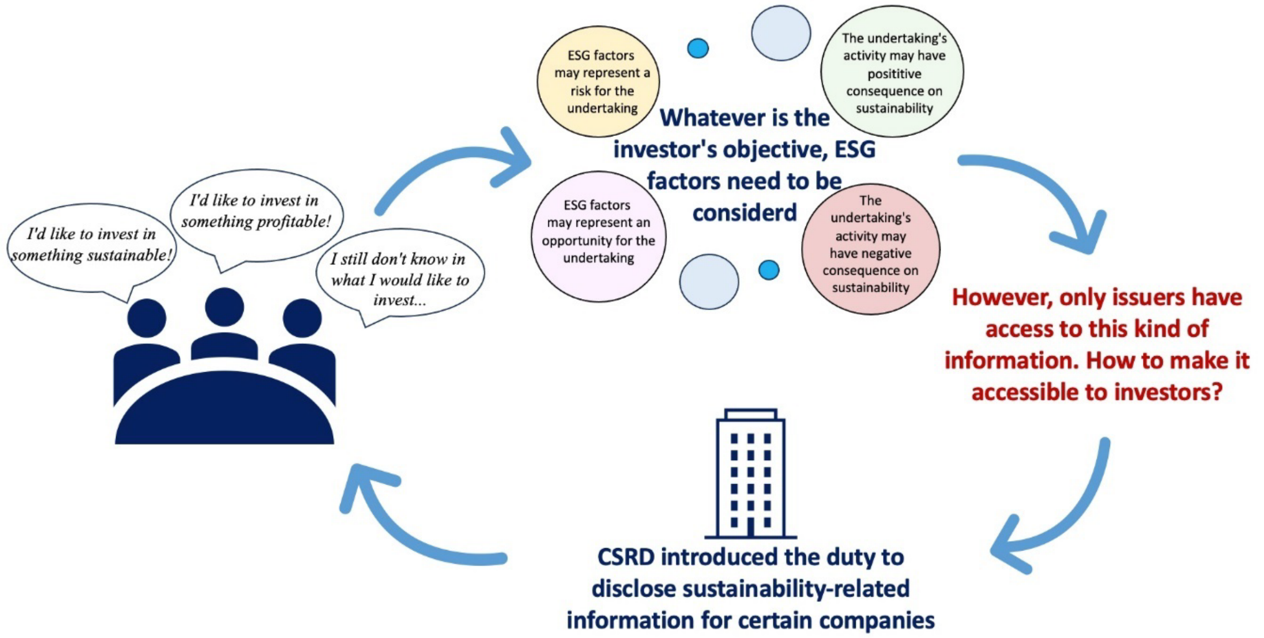
[109] Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088.

[110] Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector.

[111] Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting.

[112] On the general legal framework of CSRD, see D'Eri and Novembre 2022; Lykkesfeldt and Kjaergaard 2022.

Figure 1. Need for information



Source: by Francesca Palazzini.

2. From the NFRD to the CSRD

The CSRD was adopted on 22nd October 2022, amending the previous Non-Financial Reporting Directive (NFRD). [113]

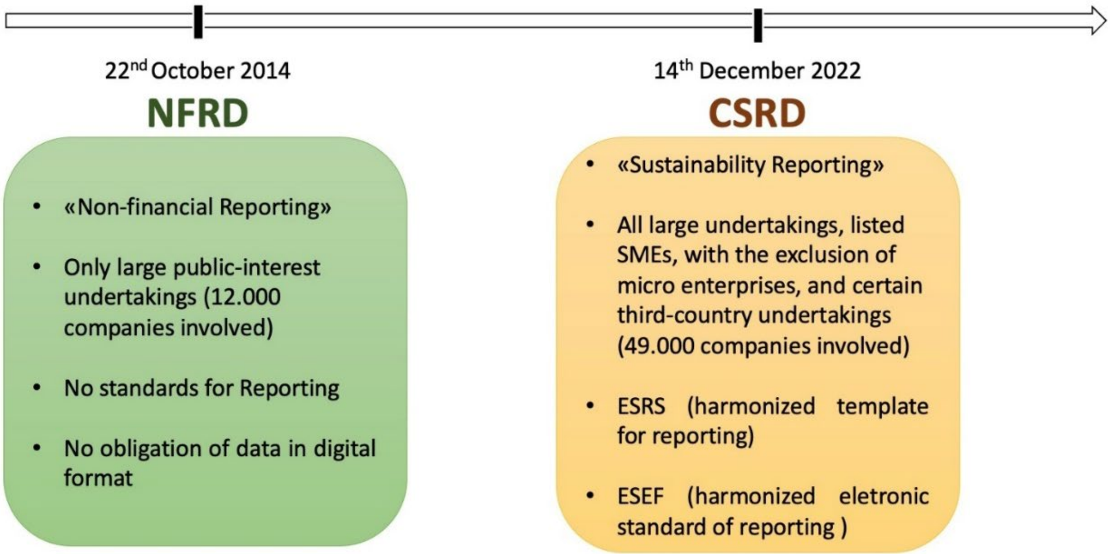
The NFRD introduced for the first time into European law the duty to disclose non-financial information for large undertakings that meet specific requirements, in the form preferred by the same. The 'non-financial information' is data on environmental, social and employee matters, respect for human rights, and bribery and corruption, to the extent that such information is necessary for an understanding of the company's development, performance, position and impact of its activities.

The CSRD is making now a step forward, providing the obligation to disclose a sustainability report which is standardized in the content and in the format, through respectively the European Sustainability Reporting Standards (ESRS) and the European Single Electronic Format (ESEF). In this way, the CSRD aims to improve the disclosure process and provide investors and consumers with a simpler, more consistent way to understand and compare the environmental, social and governance (ESG) impacts of economic activities. [114]

[113] Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups.

[114] On the criticism of NFRD that led to the CSRD, see Baumüller and Grbenic 2021; Balp and Strampelli 2022.

Figure 2. From NFRD to the CSRD: the most important changes



Source: by Francesca Palazzini.

3. Core objectives of CSRD

3.1. The new sustainability reporting: what does it change?

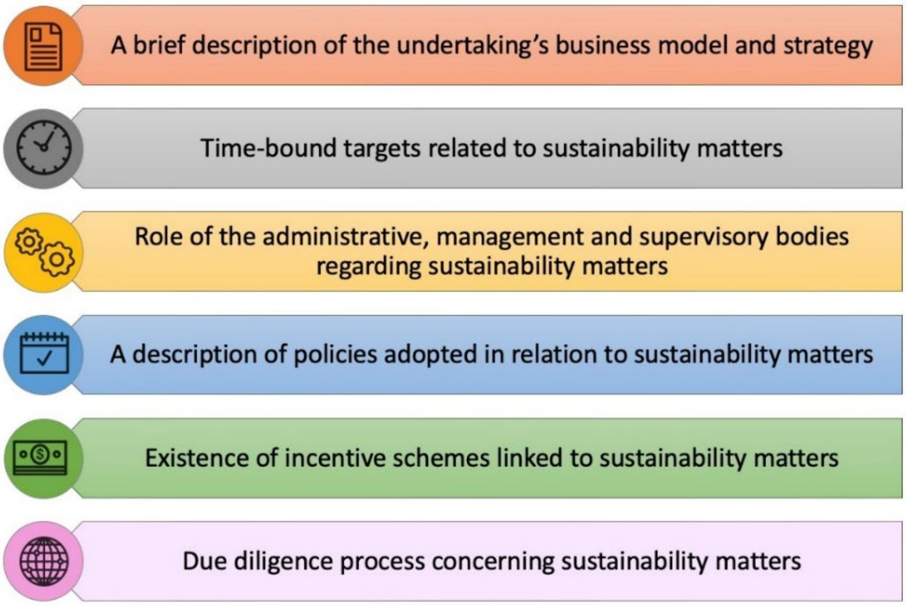
The old term "non-financial" reporting seemed to imply that the information gathered was not relevant for the financial plan. However, such information has become in fact of particular relevance also from a financial plan's perspective. [115] For this reason, the Directive has considered it appropriate to rename "non-financial reporting" as "sustainability reporting" and to require sustainability disclosures to be included in the annual report rather than in a separate document. This allows financial and non-financial information to be published at the same time, so that it can be read and analysed in an integrated manner. [116]

The sustainability report should include the following information:

[115] On the uncertainty of the term "non-financial information", see Haller 2017.

[116] For further information, cfr. EFRAG, European Sustainability Reporting Standards, 22 June 2022.

Figure 3. Information to be disclosed



Source: by Francesca Palazzini.

3.2. The double materiality

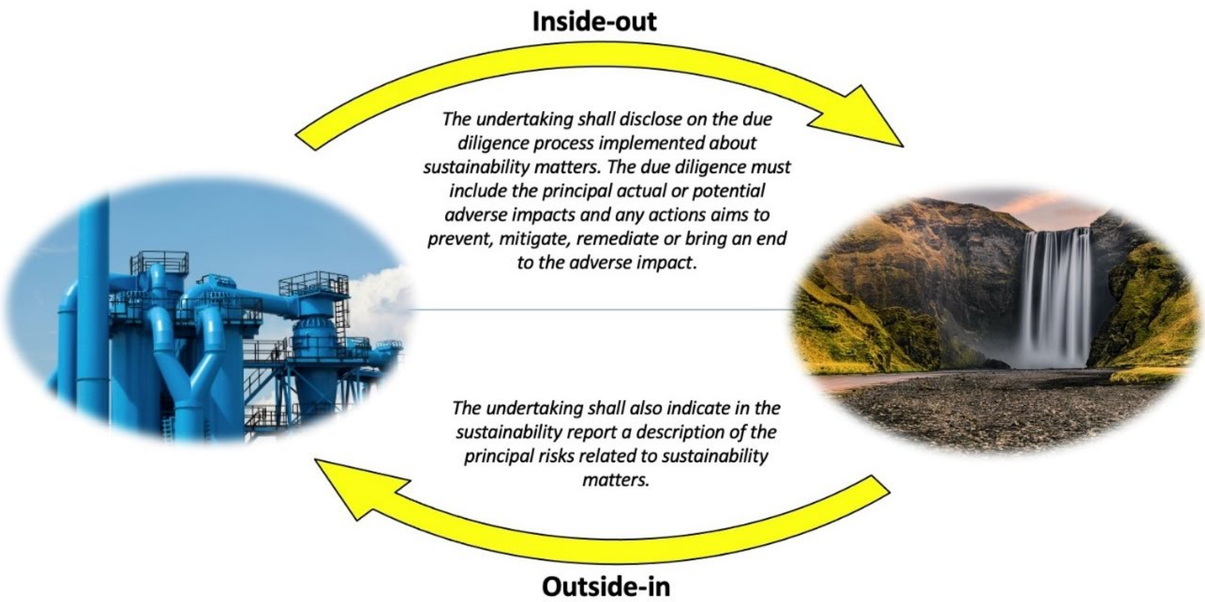
One of the most notable changes made by the sustainability reporting regime is the – explicit – introduction of the principle of "double materiality". [117] Indeed, the concept was already present in the NFDR, [118] but it was considered by many stakeholders not to be sufficiently clear and comprehensive. [119] According to the double materiality principle, the information regarding sustainability matters should be looked from two different perspectives: how the company's activities impact society and the environment (inside-out perspective) and how sustainability factors influence the company's development and performance (outside-in perspective).

[117] On the development of the principle of materiality within the EU, see Baumüller and Sopp 2022; De Cristofaro and Galluscio 2023.

[118] European Commission, Guidelines on non-financial reporting: Supplement on reporting climate-related information, 2019.

[119] European Commission, Summary Report of the Public Consultation on the Review of the Non-Financial Reporting Directive, 20 February 2020-11 June 2020.

Figure 4. Inside-out and otside-in



Source: by Francesca Palazzini.

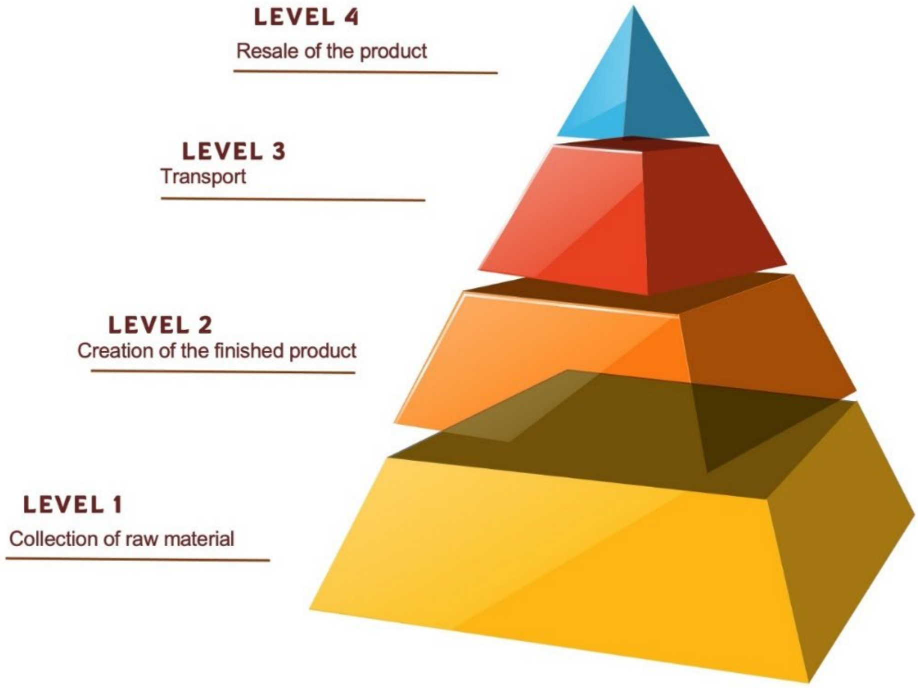
It is worth noticing that this approach has been chosen by the European Union, while at the international law level still prevails the single materiality approach. This is the case of the Sustainability Accounting Standards Board (SASB) and Global Reporting Initiative (GRI). The single materiality approach considers ESG factors only to the extent that they determine risks or opportunities for undertakings, so only from the outside-in perspective.

The regulatory choice made by the European Union is also reflected in other pieces of legislation, such as the SFDR. The SFDR incorporates the principle of double materiality by mandating firms to disclose how they manage sustainability risks that affect their financial performance, as well as how their investment decisions impact sustainability factors (see Chapter 8 by Molinari).

3.3. The value chain

Information on material impacts to be included within the sustainability report regards the undertaking's own operations as well as the operations with its value chain, including its products and services, and its business relationships. Information about the undertaking's whole value chain may also include third countries partners, if the undertaking's value chain extends outside the Union.

Figure 5. Example of value chain



Source: by Francesca Palazzini.

3.4. Scope of application

The CSRD has extended the scope of the NFDR from approximately 12,000 to 49,000 companies. Indeed, the new Regulation now applies to the following entities:

- EU large undertakings
  These include every undertaking established in the EU that meet the requirement of Directive 2013/34/EU [120] (see Box 1: How to determine the company's size and nature).
- EU small and medium undertakings of public-interest

These include small and medium undertakings established in the EU that are of "public-interest" according to the Directive 2013/34/EU (see Box 1: How to determine the company's size and nature).

- Third-country undertakings
  These include third-country undertakings with annual EU revenues of at least EUR 150 million in the most recent two years, which also own:

– a large EU-based undertaking, or
– an EU-based subsidiary with securities listed on an EU-regulated market exchange, or
– an EU branch office with at least EUR 40 million in net turnover.

[120] Directive 2013/34/EU of the European Parliament and of the Council of 26 June 2013 on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings, amending Directive 2006/43/EC of the European Parliament and of the Council and repealing Council Directives 78/660/EEC and 83/349/EEC.

Box 1: How to determine the company's size and nature

- **How is the size of a company determined?** Depending on three criteria: the balance sheet, the net turnover and the number of employees.
  At EU level, the Directive 2013/34/EU fix a harmonized standard which aims at uniformity and comparability of budgets in the EU. Undertakings have to meet at least two of the following thresholds:

	Micro	Small	Medium	Large
BALANCE SHEET	< 350,000	< 4mln	< 20 mln	= o > 20 mln
NET TURNOVER	< 700,000	< 8 mln	< 40 mln	= o > 40 mln
N. EMPLOYEES	< 10	< 50	< 250	= o > 250

Member States may set different threshold within a certain perimeter, so you should look at the specific legislation of your Country of establishment.

- **Which undertakings are public interest entities?** Public interest entities are listed in Art. 2 of the Directive 2013/34/EU, that are listed companies, credit institutions, insurance undertakings and all the other companies designed by national authorities as public-interest companies.

3.5. A quick look at the ESRS

The CSRD foreseen a European standard that companies should follow when preparing their sustainability reports: the European Sustainability Reporting Standards (ESRS). The formulation of standards is one of the greatest novelties, as the previous NFRD only provided for general guidelines. Indeed, the CSRD shifts from a qualitative to a quantitative assessment.

The ESRS endorsed by the Commission are based on technical advice from the European Financial Reporting Advisory Group (EFRAG), an independent advisory advisory body funded by the EU. Its draft standards are developed with the involvement of investors, companies, auditors, civil society, trade unions, academics and national standard setters. As a result, the standards reflect the best practices adopted by companies for environmental, social and governance factors. For environmental sustainability, the normative reference remains that of the Taxonomy Regulation [121] (see Chapter 7 by Ceriana).

For small and medium sized undertakings EFRAG will develop simplified ESRS by the 30th of June 2024, as to consider their specific needs and characteristics. SMEs represent the 99% of all businesses in the EU, therefore it is of paramount importance to include them in sustainability reporting.

[121] Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending regulation (EU) 2019/2088.

Box 2: A closer look at the standards

There are currently 12 ESRS that cover a wide range of sustainability issues. In particular, 2 delas with the sustainability reporting in general, 5 with environmental matters, 4 with social matters and 1 with the governance[1].

Group	Number	Subject
Cross-cutting	ESRS 1	General requirement
Cross-cutting	ESRS 2	General disclosure
Environment	ESRS E1	Climate
Environment	ESRS E2	Pollution
Environment	ESRS E3	Water and marine resources
Environment	ESRS E4	Biodiversity and ecosystems
Environment	ESRS E5	Resource use and circular economy
Social	ESRS S1	Own workforce
Social	ESRS S2	Workers in the value chain
Social	ESRS S3	Affected communities
Social	ESRS S4	Consumers and end users
Governance	ESRS G1	Business conduct

3.6. The digitalization of information: ESEF and ESAP

Another great novelty brought by the CSRD is the European Single Electronic Format (ESEF), which is an electronic standard for reporting information in order to have data that is more accessible, as it is in digital format, and comparable, as it is consistent to a single standard. In particular, the financial statements and the annual report will have to be prepared in XHTML format and sustainability information will have to be tagged. [122] This digital tagging system will be closely linked to the implementation of the European Single Access Point (ESAP), a system being developed at European level that will provide centralised electronic access to relevant information for capital markets and financial services.

3.7. Limited assurance and reasonable assurance

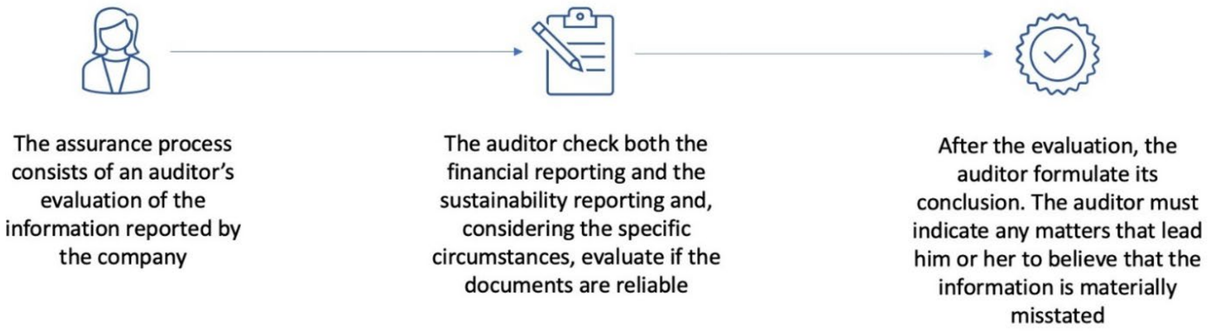
Under the NFRD companies were not required to provide external assurance for their sustainability information. This was a great difference in comparison to their financial information, which is assured by their statutory auditor. The objective of CSRD is to guarantee an equal level of reliabil-

[122] For further information cfr. ESMA, Video Tutorial on the European Single Electronic Format, 2018.

ity to financial reporting and sustainability reporting. [123] To do so, the EU adopted a progressive approach, introducing a regime of limited assurance review for sustainability reports, with an option to move towards a reasonable assurance requirement at a later stage.

The assurance process consists of a statutory auditor or audit firm expressing an opinion on the compliance of the sustainability reporting with the requirements of the CSRD, ensuring that the document is not a self-referential tool but presents as objectively as possible the business to which it relates.

Figure 6. Assurance process



Source: by Francesca Palazzini.

The "limited assurance" engagement differs from the "reasonable assurance" engagement, which is typical of financial reporting, because the auditor performs fewer tests. Moreover, in a limited assurance engagement, the conclusion is typically expressed negatively, stating that the auditor has not identified any material misstatements in the subject matter; while in a reasonable assurance engagement the conclusion is expressed positively, and results in providing an opinion on the truthfulness of the information reported.

In a limited assurance regime, the auditor's assessment should cover the following matters:

- Whether the sustainability reporting is compliant with Union sustainability reporting standards;
- Which process has been carried out by the undertaking to identify the information reported pursuant to the sustainability reporting standards;
- Whether the sustainability reporting mark up with the requirement provided by law;
- Whether sustainability reporting complies with the reporting requirements of Article 8 of Taxonomy Regulation.

By the 1st October 2028, the Commission will assesses whether a reasonable assurance regime is feasible for auditors and for undertakings and adopt delegated acts in order to provide for reasonable assurance standards.

4. Future legislative trends: from information disclosure to corporate due diligence

On the 23rd February 2022, the European Commission has made a more ambitious step adopting a proposal on Corporate Sustainability Due Diligence Directive (CSDDD). [124] This proposal is par-

[123] On more benefits deriving from assurance process to sustainability reporting, see Junior, Best and Cotter 2013.

ticularly important as it marks the transition from transparency obligations to rules of conduct for companies.

The proposed Directive set obligations upon large companies to identify, prevent, stop, and mitigate actual and potential adverse human rights impacts and adverse environmental impacts. The impacts may be generated along the supply-chain, for this reason the due diligence must address the entire value chain inside and outside Europe. Should a negative impact occur and cause damage, the company will be held civilly liable.

Moreover, companies will also have to adopt a plan to ensure that the business model and strategy of the company are compatible with the transition to a sustainable economy and with the limiting of global warming to 1.5 °C in line with the Paris Agreement (i.e. transition plan).

Figure 7. Key objectives of CSDDD

Source: by Francesca Palazzini.

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[124] European Commission, Proposal for a Directive of the European Parliament and of the Council on Corporate Sustainability Due Diligence and amending Directive (EU) 2019/1937.

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Chapter 10

THE NEW ROLE OF SUSTAINABILITY PREFERENCES IN THE REGULATION OF INVESTMENT SERVICES

Matteo Gargantini

1. A new role for sustainability preferences

How "green" are your investment preferences? And how about the value you attach to social matters such as the protection of employees' rights or avoidance of child labour? Are you willing to give away part of your returns in exchange for a more sustainable impact of your investment?

These questions are very difficult to answer for everyone, but they will be more difficult to dodge in the future. Despite their complexity, these are matters that is worth addressing, however. Whether we like it or not, our investment decisions do have an impact on environmental, social and governance (ESG) factors, so that the more we are (made) aware of that, the more we can control those consequences and have a say on them.

As this Chapter shows, a recent reform of the regulatory framework for the provision of investment services has granted a new role to investors' sustainability preferences. Before these rules came into effect, investors were of course able to share their sustainability preferences with their bank or investment firm (hereinafter: "intermediaries") under the general regime on investment services, which in the EU is set forth in the Markets in Financial Instruments Directive (Directive 2014/65/EU – MiFID II). Banks and investment firms would then have to follow suit and select the investments accordingly, under their general duty to act in the best interest of the clients. The European authority (ESMA) even recommended this kind of information gathering.

However, very few intermediaries (if any) would address the sustainability preferences of their clients unless these latter took the initiative in bringing their wishes up. This was not very common, not least because, as we have seen, expressing one's sustainability preferences in straightforward words may be difficult. Mandating that intermediaries pay due consideration to the client sustainability preferences can therefore be beneficial in many respects. First, it allows investors to better understand, under the guidance of their intermediaries, their own preferences. Second, it facilitates matching investor preferences with the financial product that can better satisfy their profile on sustainability matters. Third, it can to some extent ease the flow of funding to sustainable investments.

To be sure, these beneficial outcomes are not without drawbacks. In particular, the hard time everyone faces when trying to answer questions on sustainability preferences reveals some risks. If you are uncertain on what you precisely expect from an investment, a smart counterparty will have an easy life nudging you towards the outcome it desires, by steering your answers. On a larger scale, a systematic abuse of this kind can lead to perverse effects of different nature. On the one hand, the European sustainable finance policies may become less effective, when sustainability preferences are disregarded in favour of unsustainable investments. On the other hand, manipulating investor preferences can lead to the inflation of green asset bubbles, when demand is instrumentally driven towards ESG-compliant investments, considering the relative scarcity of these products.

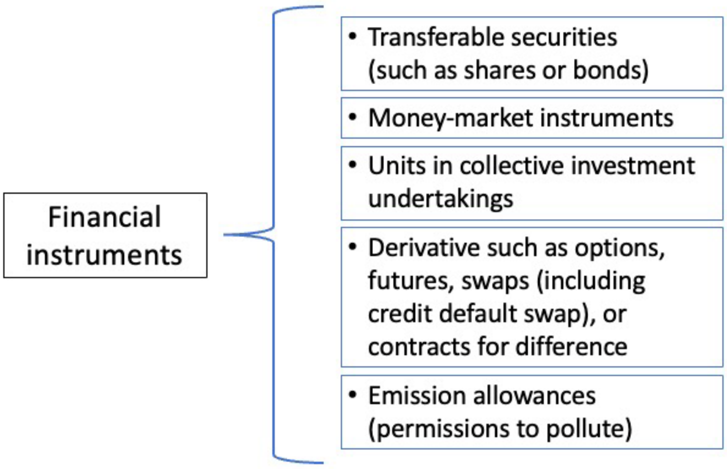
As the new rules have entered into force, [125] questions on sustainability preferences (of the kind we mentioned at the beginning of this Chapter) will be part of the assessment that every intermediary must consider before providing certain investment services, namely investment advice and individual portfolio management.

The European policymakers have indeed decided to amend the pre-existing rules so that intermediaries are now bound to support their clients with regard to the assessment and the pursuance of their sustainability preferences. These new rules that bind intermediaries on sustainability matters do not come out of the blue. Rather, they fit within the broader regulatory context on client protection in the provision of investment services – the rules that define this regulatory context are normally referred to as "conduct of business rules" and will be the subject of the next paragraphs.

2. The scope of application of the new regime on sustainability preferences: investment advice and portfolio management

Imagine you are lucky enough to have some liquidity on your bank account and you want to avoid the detrimental effect of inflation, which reduces the purchasing power of your money over time, while also saving something for your future needs – going on vacation to a place you like next summer, buying a new computer in one year, or having some additional financial resources for your retirement. There are many different things you can do to achieve such purposes. Some of these will likely involve the purchase of what the law calls "financial instruments". Financial instruments include, broadly speaking, securities (such as bonds or shares) or other similar assets such as units of investment funds. As you can see from the picture below, the list of financial instruments does not include all the investments you can potentially make. Among the main missing ones are insurance contracts (including insurance contracts with an investment purpose) and pension funds. For the time being, while insurance contracts are subject to rules on sustainability preferences that are comparable to those we describe in this Chapter, pension funds do not yet enjoy a similar regime.

Figure 1. Financial instruments: a composite notion



Source: by Matteo Gargantini.

[125] The new rules were introduced by Regulation (EU) 2021/1253, which amended Regulation (EU) 2017/565, which supplements MiFID II (for the sake of clarity, we will refer to this latter Regulation its consolidated version).

In any event, financial instruments are the most common forms of investments. As you follow up on your decision to put your money in a better allocation than the bank deposit you are therefore likely to stumble upon the need to buy a financial instrument. At this point, you can try to gather all the information you can and decide on your own what share, bond, or fund unit can better suit your need, or you can rely on the expertise of a provider of investment services. In the first instance, unless you know someone that already owns the financial instruments you want to buy, you will likely need to resort to a financial intermediary to find them. In this case, the intermediary will look for the financial instruments in your interest and on your behalf, but it will not play a decisive role in your determination to buy a specific financial instrument – in other words, it will work as a "broker". The only check a broker must perform in this case relates to whether you have the knowledge and skills needed to understand the risks involved in your investment choice, and to alert you in case it deems this is not the case. This kind of services are not part of the new regime on sustainability in the world of investment services, so we will leave them aside.

If, instead, you are uncertain as to the investment that could suit your needs because you do not have the skills required to make that choice (or simply do not have the time to gather all the information you need and to analyse it), you can resort to another kind of service. For instance, you can ask your intermediary, such as your bank, to give you some recommendations as to what securities you should purchase, before addressing a broker with the order to buy. The law defines this service as "investment advice". If you like, you can leave the whole decision process to select and purchase the best financial instrument to the intermediary, which is thus entrusted with the power to directly determine the risks you are taking on – in this case, your involvement is limited to the initial instructions you share with the intermediary, but (unless you take the initiative) you will not be consulted for every purchase. The law defines this service "portfolio management".

These distinctions are relevant because the new regime on sustainability preferences applies to investment advice and portfolio management alone and not, as we said, to the other investment services where the choice of the investment is left to investors alone. The reason is that only in these two services does the intermediary support the very selection of the investment. Therefore, only in these two services the intermediary can support investors in matching their sustainability preferences with the right investment. As we mentioned, the new rules complement the existing framework on the conduct of business rules that define how intermediaries ensure that investments correspond to their clients' features. We analyse these rules in the next section, which focuses exclusively on investment advice and portfolio management.

3. The context of the new regime for sustainability preferences: conduct of business rules

To grasp how your preferences on sustainability contribute to shaping the recommendations you receive form your advisor (or, in case of portfolio management, your manager's decisions on the composition of your portfolio) it is crucial to understand how intermediaries select investments that match their clients' features.

Every time clients receive a recommendation from their intermediary (or every time the intermediary buys or sell financial instrument on behalf of their clients) they will first have to share some information about themselves. This information helps intermediaries select the financial instruments that are more suitable to their investors' features and needs. Investing to save money for the next vacation is not like investing for retirement. Investing the equivalent of 1,000 EUR is not the same for a non-affluent and a rich person. Finally, investing 1,000 EUR is not the same for a client that is familiar with stock trading, on the one hand, and for someone who has previously never purchased a stock.

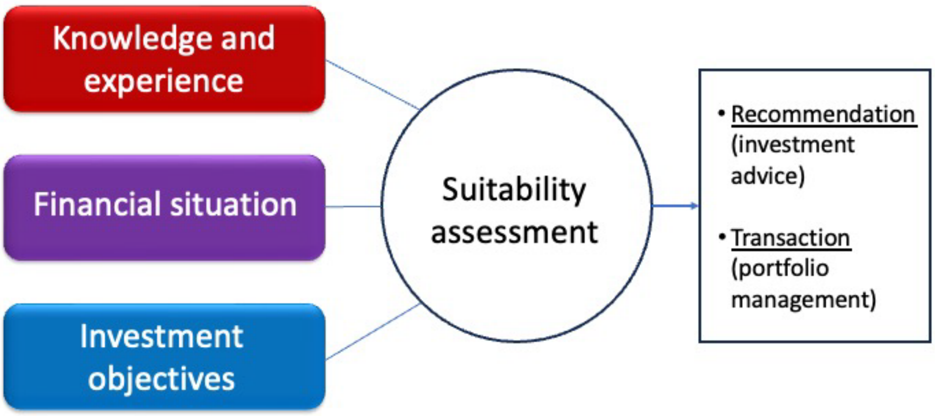
The intake of new customers therefore requires intermediaries to obtain some essential information regarding three elements, as the chart below shows (“know your customer rule”):

Figure 2. Know your customer: the building blocks

Source: by Matteo Gargantini.

As the next picture shows, the information on your profile as an investor is one of the two sets of data that intermediaries considers to make sure it will recommend (or buy) only financial instruments that match your features and needs (“suitability test” or “suitability assessment”), the other set of data being information on the financial product that the intermediary considers for recommendation or purchase (or sale, in case the financial instrument does not fit any more with your portfolio) (“know your product” rule).

Figure 3. Suitability assessment, and its outcomes



Source: by Matteo Gargantini.

The first element intermediaries must ascertain is their clients' knowledge and experience in the specific type of financial products that the clients may buy. [126] In this context, your intermediary will ask you – with a level of detail that depends on the service and the financial instruments involved – with which services and financial instruments (if any) you are familiar, whether you have carried out transactions in financial instruments in the past (and, if so, the volume, frequency and period of such transactions) and, finally, whether you have a relevant professional experience or education. [127]

The second set of information intermediaries must ask relates to your financial situation. [128] This means that your intermediary will have to inquiry about the source of your income (are you receiving a monthly salary? Or are you self-employed? In this case, how regular are your revenues?) and your overall asset, including their level of liquidity (is the bulk of your asset represented by real estate, such as the house where you live, or do you have a high level of liquidity?). Just like in any balance sheet, the complete picture of a financial situation requires to assess not only the asset side, but also the liability side of it. Hence, your intermediary will also ask you about your financial commitment, such as those originating from a rental contract or mortgage payments. [129] This kind of information is also meant to understand your ability to bear losses, which boils down to ascertain the level of risk you can take on without jeopardizing your standard of living – or, worse, without going into financial distress.

Finally, the third and last kind of information your intermediary needs to know is the objective of your investment. [130] As in the examples above: are you planning to save money for retirement? Or is your investment meant to reduce the impact of inflation and, therefore, to protect your purchasing power with a view to some purchase you are planning of for the future? Therefore, an information item the intermediary will ask you about relates to the purpose of your investment as well as the length of time for which you wish to hold it. But this third element of analysis also includes crucial information on both your preference regarding risk taking (or risk appetite) and your risk tolerance. [131]

In this regard, the intermediary will ask you some questions and may run some simulation to ascertain, first, the amount of risk that you are overall willing to accept to reach your investment objectives. This defines a typical subjective and individual feature. Any investment brings about a certain level of risk, including keeping money on a bank account does – even if the risk of default of the bank is negligible and deposits under 100,000 EUR are covered by the deposit guarantee scheme, [132] the loss of purchasing power remains. However, each of us has a personal inclination towards the level of risk we are willing to take, overall. Some investors are willing to seek for higher risks in exchange for a higher level of expected returns (and thus show a higher level of risk appetite), while others prefer to accept lower potential returns provided that they take on lower risks (thus being more risk averse). Part of the intermediaries' job consists of assessing your level of risk appetite and suggest (or enter) investments that are compatible with it, at an aggregate level.

Of course, the available investments that perfectly match the clients' risk appetite is limited, so that a properly designed portfolio will likely include a range of financial instruments that will involve risks that are both higher and lower than the aggregate risk appetite. The deviations from that

[126] Article 25(2) MiFID II.

[127] Article 55 Regulation (EU) 2017/565.

[128] Article 25(2) MiFID II.

[129] Article 54(4) Regulation (EU) 2017/565.

[130] Article 25(2) MiFID II.

[131] Article 54(5) Regulation (EU) 2017/565.

[132] Article 6 Directive 2014/49/EU.

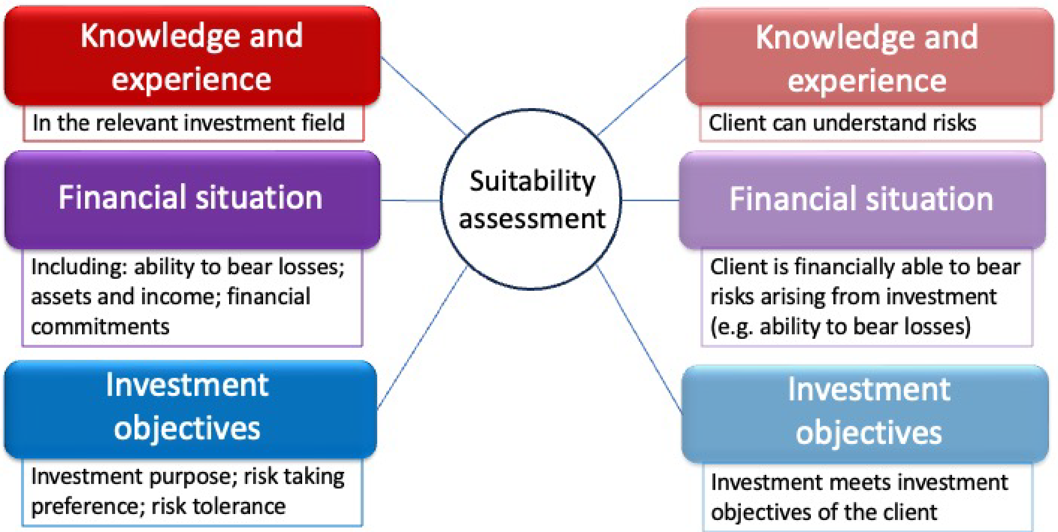
aggregate amount cannot however exceed a certain level or maximum risk that the investor is willing to accept, this level of deviation being measured by the risk tolerance.

All the information that describes your profile as an investor must be of high quality, because the accuracy of the recommendations (or the transactions) the intermediary will give (or carry out) depend on its reliability. Therefore, your intermediary must do every effort to make sure that you understand the questions you receive, which also means these questions shall be as much as possible of a non-technical nature and able to adequately capture your characteristics and preferences regarding investments [133] – an important provision in the field of sustainability preferences, as we shall see.

A decisive element for the reliability of the information you provide lies with the fact that the intermediary cannot ask you to run any form of self-assessment. One way or another, we are all subject to some cognitive biases that tend to make our view on our own features – including our ability to understand the implication of financial risks [134] – less reliable. For this reason, your intermediary is bound to raise your attention on the importance that you provide accurate and updated information. In turn, the intermediary will have to make sure that it deploys adequate tools for the profiling exercise, so that every possible limitation in their accuracy can be spotted and managed. [135] Hence, if you share information that is not consistent, it is the intermediaries' responsibility to ascertain your actual characteristics and dispel any uncertainty in this regard.

The next picture shows how the suitability assessment matches the elements that define your profile as an investor with the features of the financial instruments that the intermediary considers for recommendation or purchase (or sale, in case the financial instrument does not fit any more with your portfolio)

Figure 4. Suitability assessment: matching clients and products



Source: by Matteo Gargantini.

The essence of the suitability assessment is, therefore, to ensure that the recommended investment or the transaction meet your investment objectives (including your risk tolerance), that it does

[133] Article 54(7) Regulation (EU) 2017/565.

[134] For instance, people tend to overestimate their ability to understand complex dynamics, such as those involving the assessment to financial risks.

[135] Article 54(7) Regulation (EU) 2017/565.

not expose you to a risk of losses that you cannot bear, and that is an investment you can understand (in case of a recommendation).

4. Introducing sustainability preferences in the big picture

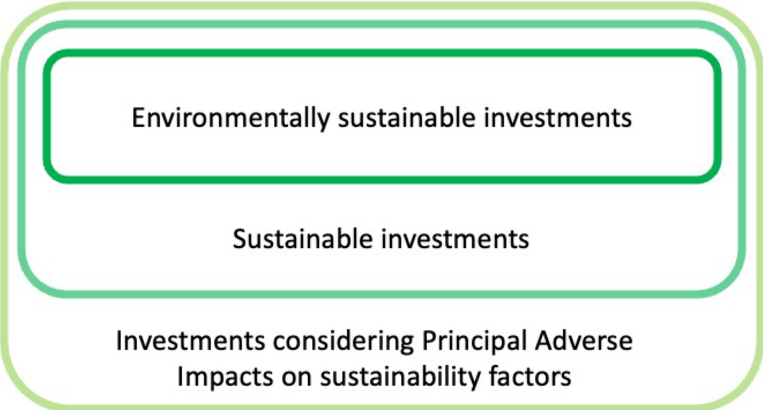
The new rules on sustainability have recently introduced an additional layer to the information that intermediaries shall gather form their clients before providing recommendations when performing investment advice or deciding to enter a transaction when managing individual portfolios. This information relates to the need to ascertain the "sustainability preferences" of their clients.

The legal definition of "sustainability preferences" is quite complex and does not facilitate a straightforward assessment of the client's wishes. It relates, in fact, to certain categories of financial instruments that are difficult to interpret, in and of themselves, and to connect to other existing definitions in other laws. However, it is part of the intermediaries' duties to support their clients so that these latter can convey their sustainability preferences in a clear manner, and to have a dialogue with them that clarifies any doubts in this regard. This is a general duty in the collection of information, which equally applies to sustainability matters. [136] To this end, intermediaries shall provide all the required explanations in a non-technical language. [137]

In a nutshell, intermediaries will start by ascertaining whether you have preferences on sustainability matters. [138] If so, they will explore what these preferences look like. In this regard, intermediaries will measure your preferences along three lines concerning your choice as to whether – and, if so, to what extent – certain financial instruments should be part of the assets you wish to hold in your portfolio.

The three lines – each referring to a kind of financial instruments – are sketched out in the chart below:

Figure 5. Sustainability preferences: the legal classification



Source: by Matteo Gargantini.

[136] Art. 52(3)(c) Regulation (EU) 2017/565; Recital 6 Regulation (EU) 2021/1253.

[137] ESMA, Guidelines on certain aspects of the MiFID II suitability requirements (ESMA35-43-3172), 3 April 2023, § 16.

[138] ESMA, Guidelines on certain aspects of the MiFID II suitability requirements (ESMA35-43-3172), 3 April 2023, § 26.

The first line of preferences is about environmental investments and is meant to ascertain if you wish to hold financial instruments for which a minimum proportion is invested in environmentally sustainable activities. These are defined according to the generally applicable Taxonomy Regulation, which means that the investments shall contribute substantially to an environmental objective among those deemed eligible by that regulation, while at the same time not harming any of the other objectives [139] (for more detailed information on environmentally sustainable economic activities under the Taxonomy Regulation, see Chapter 7 by Ceriana). The intermediary will also ask you about the minimum proportion of environmentally sustainable investments you wish those financial instruments to include.

The second line of preferences is about sustainable investments more in general. In this case, the preference relates to sustainable preferences, which *can* fund environmentally sustainable activities but also sustainable activities (broadly understood) – such as activities that promote social goals, including for instance better employment conditions or educational projects. Hence, this preference is more generic than that defining the first group above and leaves the intermediary broader margins for flexibility when identifying the financial instrument(s) to recommend or buy. In this case, the eligible investments are those defined under the Sustainable Finance Disclosure Regulation, which include investments in economic activities that contribute to either an environmental or a social objective, while at the same time not harming any of those objectives. [140] Just like with environmentally sustainable financial instruments, the intermediary will also ask you about the minimum proportion of sustainable investments tout court you wish sustainable financial instruments to include.

The third line of preferences relates to financial instruments that consider principal adverse impacts on sustainability factors. These are financial instruments that mitigate the negative impact of the funded activity on the environment, the employment conditions, the social consequence of the entrepreneurial activity, human rights. [141] Hence, these investments may lead to some significant harm to one or more objectives pertaining to sustainability or environmental sustainability, but aim nonetheless to reduce the impact of the funded activities on certain relevant ESG factors. With regard to this kind of financial instruments, investors determine how such consideration for sustainability factors shall be defined, which can happen through qualitative or quantitative elements (or both), at their choice.

Note that, with regard to all the three kinds of financial instruments, the law is thus requiring clients to express – and intermediaries to ascertain – two separate although connected kinds of quantifications. The first one is about how much of the investor's portfolio should include financial instruments of the first, second and third line. In other words, this preference relates to the size of each of the green areas relative to the overall size of the client's portfolio. The second quantification relates to the minimum proportion that, for each of the financial instruments of the first and second group that the investor wishes to have, shall be invested in sustainable activities. For the third group of financial instruments, investor identify, instead of the minimum proportion, the quantitative or qualitative elements that track consideration for sustainability factors. In other words, the second quantification relates to how green should be each of the tree green areas in the chart above.

For instance, clients can state that they wish to have at least 10 percent of their portfolio invested into environmentally sustainable financial instruments, at least another 15 percent into sustainable

[139] Examples of eligible objectives are climate change mitigation or adaptation, the transition to a circular economy and the protection and restoration of biodiversity and ecosystems (Arts 2(1) and 9 Reg. (EU) 2020/852 – Taxonomy Regulation). For more detailed information on environmentally sustainable economic activities under the Taxonomy Regulation see Chapter 7 by Ceriana.

[140] Art. 2(17) Reg. (EU) 2019/2088 on sustainability-related disclosures in the financial services sector (SFDR).

[141] See Art. 2(24) SFDR and Question 6, ESAs Joint Committee, Consolidated questions and answers (Q&A) on the SFDR (Regulation (EU) 2019/2088) and the SFDR Delegated Regulation (Commission Delegated Regulation (EU) 2022/1288).

financial instruments tout court and, finally, at least another 20 percent into financial instruments that consider principal adverse impacts on sustainability factors. As to the 10 percent of environmentally sustainable financial instrument, clients may express their wish that half of them (amounting to 5 percent of the portfolio) be entirely invested in environmentally sustainable activities, while the remaining 5 percent should have at least 50 percent of their value invested in those activities. As to the 15 percent of financial instruments representing investments into sustainable activities, the client may for instance determine that the proportion of those activities should be 50% of the total activities that such financial instruments represent. Finally, the client may determine that half of the financial instruments that consider principal adverse impacts on sustainability factors (which equals to 10% of the global portfolio) do so by excluding activities whose revenues originates for more than 30% from fossil fuels, and that the remaining half excludes activities which are exposed to the risk of exploiting child labour. [142]

Figure 6. An example of sustainability preferences

Type of financial instruments	Weight into portfolio	Min. proportion / elements
Financial instruments with minimum proportion invested in environmentally sustainable objectives	5%	100%
	5%	50%
Financial instruments with minimum proportion invested in sustainable objectives	15%	50%
Financial instruments considering principal adverse impacts	10%	Rev. from fossil fuels < 30%
	10%	Equal employment condit.

Source: by Matteo Gargantini.

As one can easily tell, ascertaining sustainability preferences is far from easy and the risk is high that the very process of gathering information may have an influence on the respondent client, which can easily produce an image that is distorting the original genuine preferences. To curb these risks, intermediaries shall assist their clients and explain all the technicalities surrounding the analysis. An additional tool to protect investors lies with the information these must receive. In particular, each intermediary providing portfolio management and investment advice shall make public information concerning its approach to sustainability at the entity level, as well as product-specific information on the sustainability features of each product. [143]

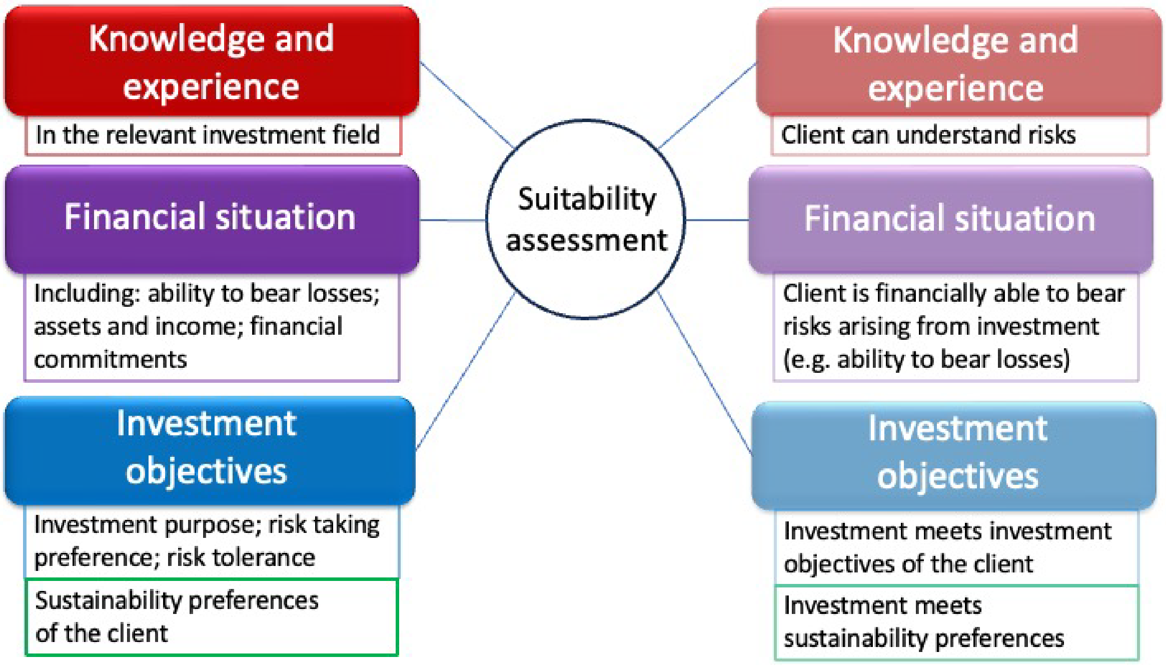
[142] A list of indicators that can be used to ascertain the clients' preferences on principal adverse impact can be found in Annex I, Reg. (EU) 2022/1288 (supplementing SFDR). See also ESMA, Guidelines on certain aspects of the MiFID II suitability requirements (ESMA35-43-3172), 3 April 2023, § 27, suggesting focusing on categories of principal adverse impact indicators, rather than on each specific indicator.

[143] For more information on these duties see Chapter 8 by Molinari.

5. How does your intermediary follow up on your sustainability preferences?

Once your intermediary will have driven you through the analysis of your sustainability preferences, it will have to factor those preferences into the suitability assessment to identify the financial instruments to recommend or purchase. As the chart below shows, the law considers sustainability preferences as part of the investors' objectives:

Figure 7. Sustainability preferences in the suitability assessment



Source: by Matteo Gargantini.

Despite their inclusion among the investors' objectives, sustainability preferences do not have the very same ranking as these latter. There are two reasons for this.

First, the general rule on the suitability assessment states that, when clients do not provide information on their investment objectives (just like on any other elements of the "know your customer" analysis), intermediaries cannot recommend the financial instruments or trade on it. [144] This does not apply to sustainability preferences. Hence, if investors refuse to share their views on sustainability matters, intermediaries shall simply take sustainability out of the equation and consider them as "sustainability-neutral", thus considering both sustainable and non-sustainable financial instruments as eligible for recommendation or trading. [145]

Second, sustainability preferences only step into the analysis of suitability after the assessment is completed in its traditional shape, described above. [146] This ensures that sustainability considerations can never trump a perfect correspondence between the investors' characteristics and the features of the product. The assessment of sustainability will only concern financial instruments

[144] Art. 54(8) Regulation (EU) 2017/565.

[145] ESMA, Guidelines on certain aspects of the MiFID II suitability requirements (ESMA35-43-3172), 3 April 2023, § 85.

[146] Recital 5 Regulation (EU) 2021/1253; ESMA, Guidelines on certain aspects of the MiFID II suitability requirements (ESMA35-43-3172), 3 April 2023, § 81.

that are deemed suitable from the perspective of their risk-return profile in the light of the clients' financial interests, with a reduced ability of sustainability factors to compensate, among the suitable financial instruments and in the quest for the most suitable financial instrument, [147] other priorities.

This approach protects the clients' financial interests, but also exacerbates the problems related to the limited amount of sustainable financial instruments on the market. The risk therefore exists that no financial instrument, among those who qualify as suitable under the traditional assessment, can satisfy the clients' preferences on sustainability. Therefore, to avoid the risk that sustainability preferences curb investor access to the market, the law allows that, when no financial instrument meets the investors' sustainability preferences, the client may decide to adapt its own sustainability preferences by scaling them down. [148] This is an exceptional provision that allows to relax the clients' profile, a flexibility that is not granted for any other component of the "know your client" assessment. As this is just a measure that facilitates market access in specific circumstances, the relaxation of the clients' preferences regarding sustainability only applies to the specific assessment, and not the client profile as such. [149] Hence, future provisions of recommendations or future trades by the intermediaries should start the entire process based on the genuine investors' preferences.

Just like with the rest of the suitability assessment, products' features must match clients' features. This seems an obvious statement in light of the general provisions on the suitability assessment, but the relative novelty of sustainability as a general criterion to assess investments, combined with the lack of consolidated criteria to assess compliance with ESG variables, makes the task daunting. For this reason, the law has extended the general duty that intermediaries "know their products" to the impact that such products have on sustainability factors. [150]

During this exercise, intermediaries may find some support in the new rules on the product governance regime, which was also amended to facilitate the assessment of the sustainability features of financial instruments. [151] The expression "product governance" refers to the production and distribution process of financial instruments, which is subject to a detailed set of rules aimed at ensuring that financial instruments are designed since their original conception and then distributed, at the end of the supply chain, to meet pre-defined needs of their target clients. As the identification of the products' features in terms of sustainability should follow the same criteria that guide the assessment of clients' sustainability preferences, [152] intermediaries should often be able to spot the characteristics they need to run the suitability test.

Despite this facilitation, however, some problems remain that make the assessment of product suitability a difficult endeavour. Two examples will clarify the point.

First, in spite of its pervasiveness, the distinction between "dark green", "light green" and other products under the SFRD does not have strong correspondence with the sustainability preferences under the MiFID II regime described above. [153] Hence, intermediaries cannot rely excessively on that regulatory framework. To be sure, dark green products (those addressed under Article 9 SFDR) are likely to match a minimum proportion of 100% of sustainable investments, whether they are environ-

[147] Art. 54(9) Regulation (EU) 2017/565.

[148] Art. 54(10) Regulation (EU) 2017/565.

[149] Recital 8 Regulation (EU) 2021/1253.

[150] Art. 54(9) Regulation (EU) 2017/565.

[151] Dir. (EU) 2021/1269, amending Dir. (EU) 2017/593.

[152] ESMA, Guidelines on certain aspects of the MiFID II suitability requirements (ESMA35-43-3172), 3 April 2023, § 72.

[153] For more information on the SFRD and the different products regulated under that regime see Chapter 8 by Molinari.

mentally oriented or not. For the rest, intermediaries will need to ascertain the correspondence between the product and the client without relying excessively on the product categorization under the SFDR.

Second, clients' preferences are often expressed, as per legal requirement, in terms of minimum percentage of sustainable activities underlying the financial instrument. This approach best adapts to packaged products, such as units of collective investment schemes, which combine various underlying financial instruments. As each financial instrument displays its own level of sustainability, the weighted aggregation of those components within the packaged unit, as defined by the applicable investment policy of the manager, will determine the proportion of the sustainable investments within the unit. Unfortunately, this kind of assessment proves much less straightforward with other financial instruments, such as shares or bonds (especially when these latter do not qualify as green bonds). In this case, the calculation of the – actual, rather than minimum [154] – proportion of underlying sustainable investments may not be easy, unless the issuer disseminates such information, possibly with the incentive of making its securities more attractive. A similar problem affects derivative, for which a suitability assessment may easily lead to the conclusion that the financial instrument cannot satisfy sustainability preferences. [155]

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[154] ESMA, Consultation Paper Review of the Guidelines on MiFID II product governance requirements, 8 July 2022 (ESMA35-43-3114), Q1 § 26.

[155] ESMA, Guidelines on certain aspects of the MiFID II suitability requirements (ESMA35-43-3172), 3 April 2023, Q4 § 26.

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Chapter 11

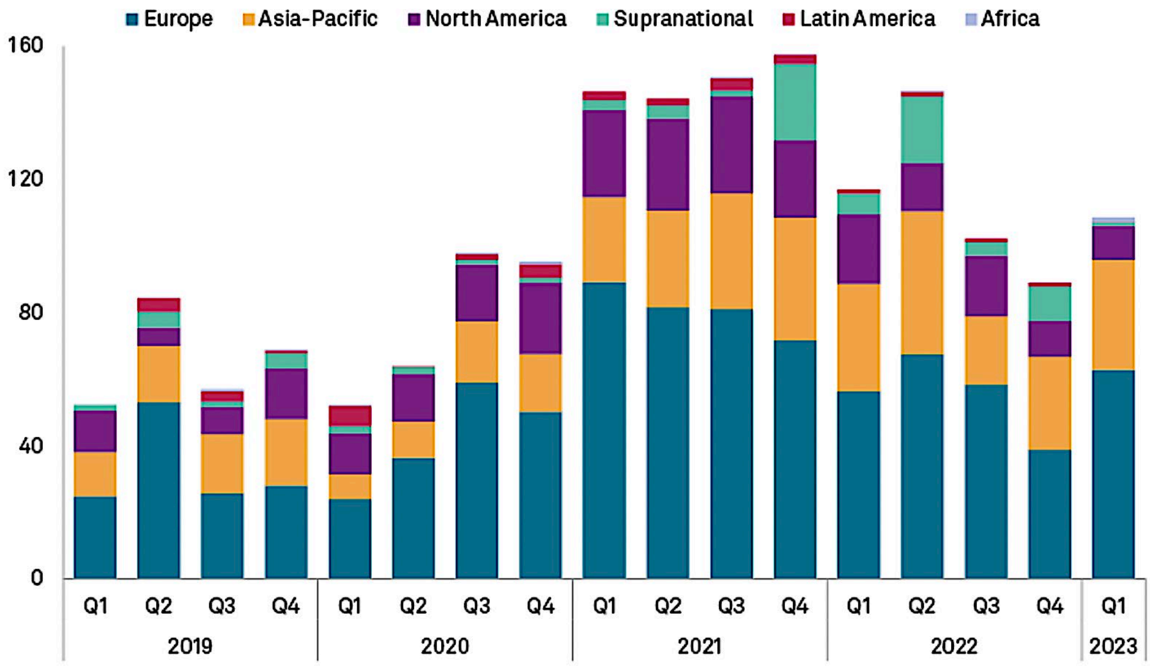
THE EU GREEN BOND STANDARD

Chiara Valenti

1. The green bond market: barriers and existing standards

Green bonds are considered one of the most promising instruments to convey funds to environment and climate-related activities. The first green bonds appeared in 2007, when the European Investment Bank (EIB) issued the first green securities and since then, the green bond market has been growing fast. It is, however, still a small fraction of the overall bond market [156] (see Chapter 2 by Piserà and Nieri).

Figure 1. Growth of the global Green Bond Market



Source: S&P Global 2023.

Despite its increasing growth, the standards for green bonds in the EU have not been harmonized for years. As a consequence, in the absence of a universally accepted classification and reference

[156] See latest European Environment Agency's Report for a European Union-level overview and the Financial Times' Report for a global overview.

standard, the green bond market has relied on private standards. The Green Bond Principles (GBP) and the Climate Bonds Standard (CBS) are the two most well-known international market-based standards that are available to any issuer as voluntary process guidelines for issuing green bonds, but they also serve as certification mechanisms for the assessment of the eligibility and credentials of green bonds. The first has been issued in 2014 by the International Capital Market Association (ICMA), whereas the not-for-profit organisation Climate Bonds Initiative (CBI) issued the first Climate Bond Standard in 2011 [157] (see Chapter 2 by Piserà and Nieri).

Figure 2. The Green Bond Principles and the Climate Bonds Standard

Characteristics	GBP	CBS	Limits
Eligibility Requirements	Alignment with the four Core Components: a) Use of proceeds, b) Process for Project evaluation and selection, c) Management of proceeds, d) Reporting The CBS presents more detailed requirements and criteria under each pillar		Lack of a harmonized set of rules
Green Definitions	Non-exhaustive list of eligible Green and Social Project categories + issuers can reference existing standards and taxonomies	Sector specific definitions, that fall into eight broad categories under the Climate Bonds Taxonomy	Lack of commonly agreed definitions and taxonomies
Certification	No certification, just alignment with the Core Components of the GBP	Certification process by a network of Climate Bonds Approved Verifiers	
External Review	Recommended for both pre- and post-issuance	Recommended as an additional option, beyond the mandatory pre- and post-issuance certification by an approved Verifier	Use of different methodologies, lack of transparency and supervision
Disclosure Requirements	Suggested metrics and templates provided by ICMA	Green Finance Framework or equivalent document	Absence of uniform disclosure requirements based on standardized templates

Source: by Chiara Valenti.

Although these private standards contributed significantly to the development of the green bond market, by providing some standardization in market practices, inconsistencies still remain. What hinders the further development of this market is mostly related to the lack of a homogenous framework regarding the definitions of green projects, the disclosure requirements in charge of issuers and the performance of external reviews.

The lack of commonly agreed definitions and taxonomies is a major barrier to the development of the green bond market. Issuers, often, have problems to understand whether their project is eligible for financing, mainly because of the uncertainty about what could be perceived as 'green' from the markets. These concerns are strictly related to the fear of greenwashing [158] perceived by the issuers, i.e., the unfair practice of marketing bonds as green even though they do not finance environmentally sustainable economic activities. This risk is present not only at the time of issuance, but

[157] For further information on GBP and CBS see Lóránt and Szabadkai 2022. See also Ehlers and F. Packer 2017.

[158] For further details about greenwashing see here and Chapter 5 by Macchiavello.

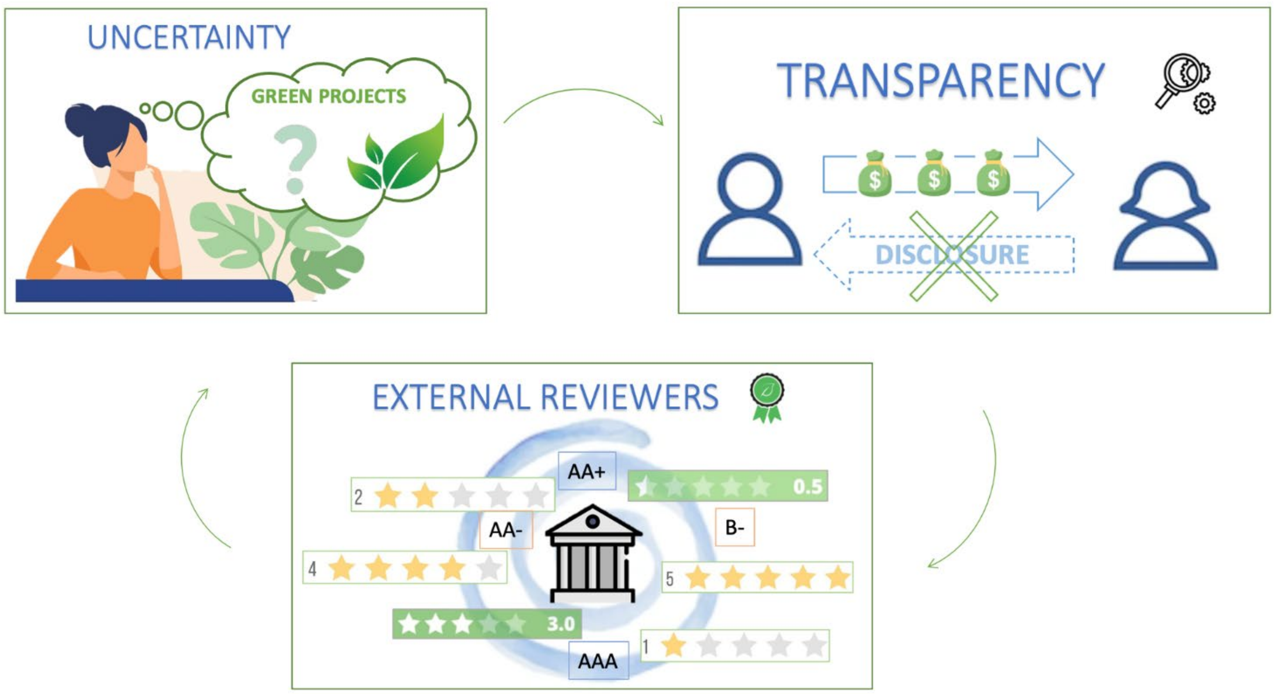
also *ex post*, when the issuer should disclose the necessary information about the allocation of the proceeds. On the other side, investors experience the same fears, as they are discouraged from investing their money in projects whose nature and allocation of revenues is not transparent (see on sustainable finance's challenges Chapter 5 by Macchiavello).

Another issue regards external reviewers [159]. This broad category includes four types of organizations:

a) non-financial rating agencies and sustainability consultancies that provide second-party opinions
b) audit firms supplying mostly post-issuance verification or assurance services,
c) credit rating agencies and
d) global technical inspection and certification bodies.

Although the recourse to external reviews is voluntary and just recommended by GBP and CBS, the market for these green reviews and certification schemes is growing fast (Allman and Lock 2022). However, it is affected by several issues, being perceived as a complex and opaque market. The use of proprietary and divergent methodologies to assess green bonds leads to an increasing confusion among both issuers and investors and results in a lack of transparency, making it difficult to compare different ratings (Maragopoulos 2022; Badenhoop 2022).

Figure 3. The Green Bond Market: Barriers



Source: by Chiara Valenti.

[159] For further information about external reviewers see Allman E. and Lock B. 2022, and Ehlers and Packer 2017.

2. Proposal for a Regulation on European Green Bonds

In order to overcome these obstacles and to achieve the Union's environmental sustainability objectives, the European Commission (EC), in the context of the European Green Deal, has reinforced its intention (already highlighted in the Action Plan on Financing sustainable growth) to "develop an EU green bond standard that facilitates sustainable investment in the most convenient way" [160].

In fact, the Commission committed to create standards and labels for green financial products already in 2018 within the Financing Sustainable Growth Action Plan [161] under action No. 2 (see Chapter 6 by Nenci). The Technical Expert Group on Sustainable Finance (TEG) [162] was mandated to prepare a report on an EU Green Bond Standard by Q2 2019, based on market practices, as represented by the GBP and the CBS. Following that, on 6 July 2021, the European Commission issued a Proposal for Regulation "on European Green Bonds". Such proposal was approved with revisions, after the trilateral negotiations, on 28 February 2023 and published in the official journal on 30 November 2023.

Looking at the general structure, it consists of four main elements (further analysed in § 3.1):

a) alignment with the Taxonomy Regulation (Regulation (EU) 2020/852; see Chapter 7 by Ceriana)
b) publication of a Green Bond Framework [163]
c) allocation and impact reporting
d) mandatory verification from external reviewers.

In this respect, the EU Green Bond Standard (GBS) differs from the existing market-based standards in three ways. The first significant difference lays in the funds raised by the bond, which should be allocated fully and exclusively to EU Taxonomy-aligned projects, namely to environmentally sustainable assets and economic activities in line with the relevant Regulation. The GBP only suggest categories for assets and projects to be financed by a green bond (it is up to investors to judge the green qualities of individual bonds), whereas the CBS provides sector specific definitions, that fall into eight broad categories under the Climate Bonds Taxonomy. But still, the green bond market lacks commonly agreed definitions and taxonomies, creating uncertainty for both issuers and investors.

Secondly, to ensure full transparency on the allocation of proceeds, issuers should be subject to strict disclosure requirements, as provided by the EU Green Bond Standard. Under the GBP and CBS, issuers have to disclose an annual report, providing information on the allocation of the bond's proceeds. The CBS is more prescriptive in this respect, since it requires a statement of compliance with the Climate Bonds Standard, a statement of environmental objectives and a list of eligible assets and projects, among others. On the other side, the GBP does not require detailed criteria, but prefer the most precise disclosure possible (including project-by-project environmental im-

[160] European Commission (2019), 'The European Green Deal, Communication from the Commission to the European Parliament, the European Council, the Council, the European Central Bank, the European Economic and Social Committee and the Committee of the Regions', COM (2019) 640 final, December, at 17.

[161] "Action 2: Creating standards and labels for green financial products" of the Communication from the Commission to the European Parliament, the European Council, the Council, the European Central Bank, the European Economic and Social Committee and the Committee of the Regions, Action Plan: Financing Sustainable Growth, COM/2018/097 final.

[162] The TEG is a group of experts in the sustainable finance area, appointed by the EC to assist it in developing recommendations and other technical criteria of sustainable finance-related Regulations. For further details see here.

[163] This document provides information to investors about how their investments in green bonds will be used and how the issuer will meet the requirements of the standard.

pacts described by qualitative and quantitative indicators, but also consider it acceptable for the issuer to disclose general allocation information for the portfolio, given the large number of projects).

The absence of uniform disclosure requirements based on standardized templates, causes confusion and often, the information provided is not sufficient to evaluate issuers' commitment to environmental goals.

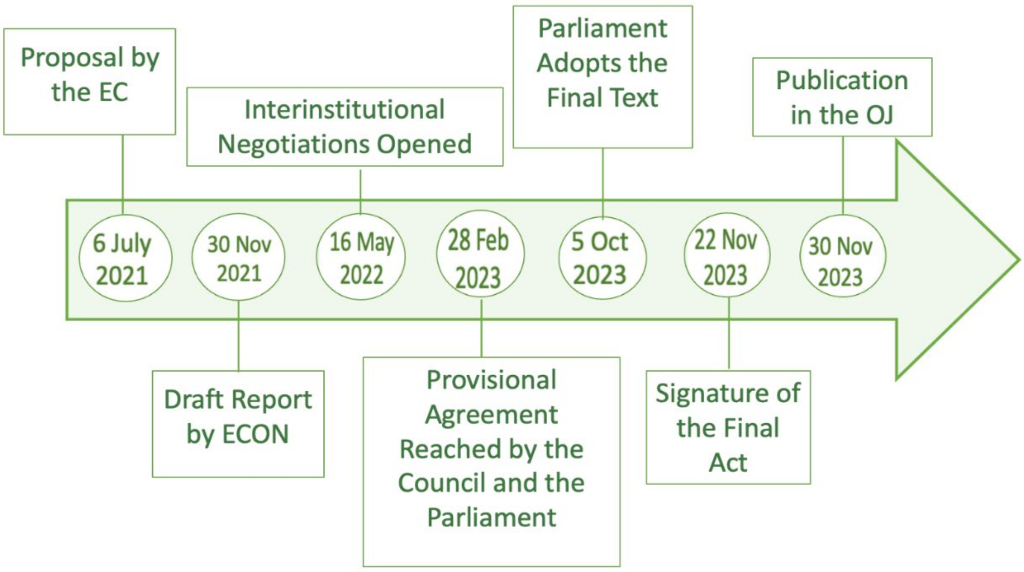
Thirdly, under the EU GBS, external reviewers must check the compliance with the disclosure rules and, in particular, that the funded projects are taxonomy-aligned. Such external reviewers will have to be registered with and supervised by the European Securities and Markets Authority (ESMA), in order to ensure the reliability of their reviews and to protect investors.

While the GBP only recommend the appointment of an external reviewer to ensure that the issuance complies with the Core Components of the standard and a post-issuance verification of the allocation of funds, the CBS requires a pre- and post-issuance certification by an approved Verifier. The Verifiers have to be approved by the CBS Board, whereas the GBP do not endorse any external review providers, but solely provide an overview of external review services (Maragopoulos 2022; Lóránt and Szabadkai 2022; ICMA 2023; CBI 2023).

3. The Regulation on European Green Bonds

Having briefly described the path that led to the development of the Regulation on European Green Bonds, the following paragraphs deal with the details of the final legislative text, that was published in the Official Journal on 30 November 2023 as Regulation (EU) 2023/2631.[164] The Regulation entered into force on the twentieth day following that of its publication and shall apply from 21 December 2024.

Figure 4. Timeline of the EuGB Regulation



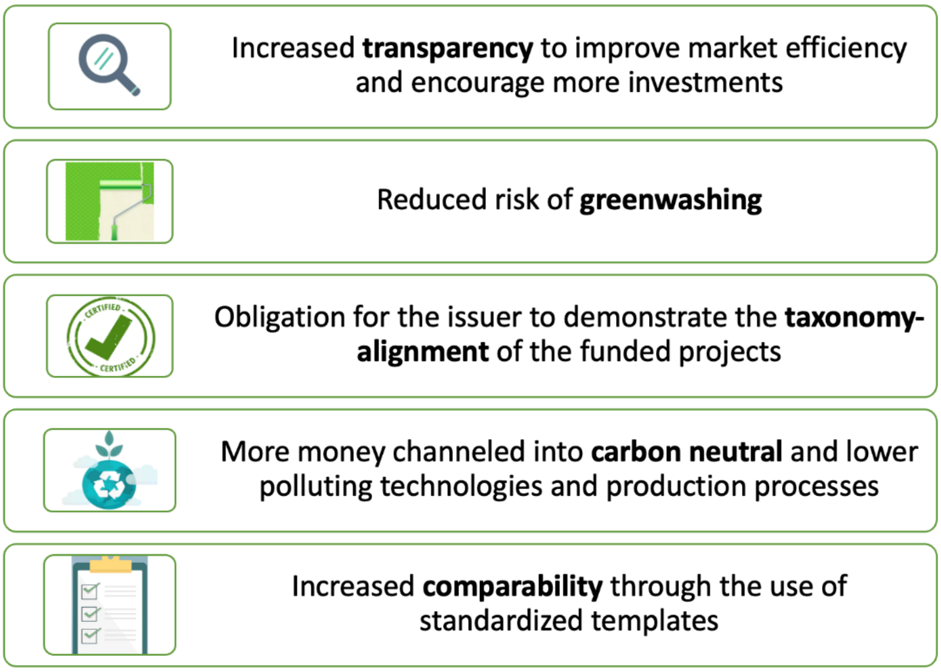
Source: by Chiara Valenti.

[164] Regulation (EU) 2023/2631 of the European Parliament and of the Council of 22 November 2023 on European Green Bonds and optional disclosures for bonds marketed as environmentally sustainable and for sustainability-linked bonds.

The EU Green Bond Standard is the first voluntary standard to lay down uniform requirements (i.e., it presents a higher degree of stringency and it provides a greater harmonization, relative to existing green bond standards, such as GBP and CBS) for issuers of bonds who wish to use the designation "European Green Bond" or "EuGB" for their bonds that are made available to investors in the Union. [165]

The EuGB Regulation's stated objectives are multiple. It affords investors with greater confidence in directing their money towards more sustainable activities, since it helps to identify, trust and compare environmentally sustainable bonds and ensures adequate investor protection also from greenwashing. Moreover, it provides legal certainty to both issuers and investors.

Figure 5. The EU Green Bond Standard: Benefits



Source: by Chiara Valenti.

The scope of application of the Regulation covers bonds marketed as environmentally sustainable and sustainability-linked bonds. [166] In particular, for the purposes of this Regulation, the definition of sustainability-linked bonds includes only bonds whose financial or structural characteristics vary depending on whether the issuer achieves predefined environmental sustainability objectives. Therefore, social and governance objectives fall outside of this definition.

The EUGB designation is open to both EU and most non-EU issuers, [167] if they adhere to the requirements of the Regulation and if bonds are offered to the public or admitted to trading on an EU

[165] See Article 1 Regulation (EU) 2023/2631.

[166] "Bond marketed as environmentally sustainable" means a bond whose issuer provides investors with a commitment or any form of pre-contractual claim that the bond proceeds are allocated to economic activities that contribute to an environmental objective (Art. 2(5) Regulation (EU) 2023/2631).

"Sustainability-linked bond" means a bond whose financial or structural characteristics vary depending on the achievement by the issuer of predefined environmental sustainability objectives (Art. 2(6) Regulation (EU) 2023/2631).

[167] As per Article 9 Regulation (EU) 2023/2631, the European green bond designation is not open to non-EU issuers from countries deemed by the EU to be either non-cooperative tax jurisdictions or high-risk jurisdictions.

regulated market. Moreover, this applies to both corporate and sovereign issuers. There are certain exemptions or variations laid down in the GB Regulation for sovereign issuers, who may, for instance, also allocate the proceeds of European Green Bonds to tax relief, subsidies or other types of public expenditure, provided that the proceeds are allocated in accordance with the Taxonomy requirements [168] (Badenhoop 2022; Schneider et al. 2023).

3.1. A focus on the main characteristics of the Green Bond Standard

As highlighted above in § 2, the most important characteristics of the European Green Bond Standard can be summed up in the following key features:

a) Voluntary nature
As discussed above, this standard is open to both EU and non-EU issuers for all main types of bonds. It establishes requirements for issuers who want to employ the EuGB designation and also optional sustainability disclosure requirements for bonds not meeting the EuGB standard, but marketed as environmentally sustainable or as sustainability-linked bonds in the EU.

b) Alignment with the Eu Taxonomy and "flexibility pocket"
All the funds raised by the bonds need to be allocated to economic activities that align with the EU Taxonomy Regulation. By way of derogation, however, up to 15% of the net EuGB proceeds may be allocated to economic activities for which no technical screening criteria under the Taxonomy exist yet, but which otherwise comply with the Taxonomy requirements. [169]

c) Transparency
Issuers must comply with detailed reporting requirements, using standardized templates, inserted in the Annexes of the Regulation.' The templates include information about the allocation of proceeds, but also about how those investments feed into the transition plans of the company as a whole (when appropriate). In particular, issuers must disclose the intended allocation before the issuance as well as the progresses made in this regard on a yearly base. They need the approval from an external reviewer both before the bond issuance and upon full allocation.

d) External reviewers
The EuGB creates a new category of professionals: the external reviewers. These have to be registered with and supervised by the ESMA. As above-mentioned, they are responsible for ensuring the compliance of EuGBs with the relevant Regulation and, in particular, with the Taxonomy Regulation. External reviewers must comply with certain procedural and governance requirements, as well as requirements regarding pre-issuance and post-issuance reviews. [170]

e) Competent supervisory authority
The National Competent Authority (NCA) of the home Member State is tasked with the supervision of the green bond market, relying on supervisory and investigatory powers to ensure that issuers comply with their obligations under the new standard. In the event of non-compliance, NCAs may withdraw the EuGB designation, prohibit an issuer from issuing EuGBs for up to a year, suspend the approval of the prospectus and impose certain administrative fines. Moreover, the Green Bond Regulation provides that EU Member States have the right to provide for and impose criminal penalties.

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[168] See Article 4(3) Regulation (EU) 2023/2631.

[169] Articles 4 and 5 of Regulation (EU) 2023/2631.

[170] ESMA is in charge of establishing the various detailed requirements for the authorization and operation of external reviewers.

3.2. Critical analysis of the Regulation

After the publication of the legislative proposal of 2021, different stakeholders and co-legislators raised remarks about certain crucial points of the text. While some of the shortcomings have been addressed in the final legislative text, a few aspects still remain under discussion.

Regarding the voluntary nature of the Green Bond Standard, there were some institutions (as the European Central Bank (ECB) and the Committee on Economic and Monetary Affairs of the European Parliament (ECON)) that stood in favour of a mandatory adoption of the standard and its requirements for issuers or at least to make it mandatory within a reasonable time horizon. The Commission's final choice not to impose the use of the standard, is based on the potential consequences that would affect the issuers of green bonds and the market. The rationale of this choice is to avoid a possible migration of issuers to other non-EU green bond markets with less stringent requirements and, also, to prevent a switch of issuers to other traditional funding sources. In fact, the results from the online consultations, launched by the EC, showed that a voluntary standard would appeal to issuers of high-quality green bonds. [171]

Another discussed point concerns the "grandfathering period", that grants a period of flexibility (grace period) if there is a change of the technical screening criteria under the Taxonomy Regulation after a bond issuance (on the EU Green Taxonomy, see again Chapter 7 by Ceriana). Since the proceeds have to be invested in economic activities aligned with the Taxonomy Regulation, when a change of the above-mentioned criteria occurs, the issuer should reallocate the proceeds by applying the updated criteria within five years from their entry into application (as per the Proposal). Some institutions, as the ECB, supported the full grandfathering of the EuGB designation, in other words that the issuers should not have to reallocate the bond's proceeds. In the final text of the Regulation, the Commission opted for a grandfathering period of seven years, only for the proceeds that are not yet allocated and the proceeds that have not yet met the taxonomy requirements (Maragopoulos 2022).

Further, some concerns arise regarding issuers outside the EU. Since the GB Regulation requires to publish the prospectus, [172] issuers, who are not familiar with European regulation or are used to issue green bonds in other markets, may be unable or unwilling to prepare such documentation. This could limit the usage of the EU GBS outside the EU and hence, reduce the chances of becoming the 'gold' standard for green bonds. Moreover, as non-EU issuers will be supervised by their NCA, this could result in divergent regulatory frameworks and supervisory mechanisms across EU and non-EU countries (Schneider et al. 2023; Duplat et al. 2023).

Another issue regards the supervisory regime for issuers and, in particular, the challenging risk of greenwashing. Bondholders, in fact, may not be properly equipped with enough tools in case of green default. [173] According to Pyka, the sanctions, that issuers would incur, could not be enough to protect investors against these risks.

It remains to be seen, whether the supervisory measures provided by the GB Regulation will be sufficient to prevent greenwashing in the green bond market (Pyka 2023).

Despite the uncertainties about the potentials and the widespread use of the EuGB Standard, the hope is that it will fulfill the promised benefits. Indeed, the ultimate goal of the Regulation is to ensure a strong development of the green bond market as well as to foster investors with greater confidence in directing their money towards more sustainable activities and to provide them the adequate protection.

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[171] See footnote 9 about Regulation (EU) 2023/2631 on European Green Bonds.

[172] Under Article 14 of Regulation (EU) 2023/2631, issuers that wish to issue an EuGB are required to publish a prospectus in compliance with the EU Prospectus Regulation.

[173] For further details on green default see Pyka 2023.

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