







SUSTAINABLE FINANCE AN OVERVIEW





Sustainable Finance: An Overview June 2020

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01 Introduction

It requires a deep transformation of our socioeconomic behaviour, structures and norms in order to ensure the stability and resilience of our livelihood. The acute consequences of inconsiderate consumption and production led to emerging sustainability risks for the global community.¹

On the other hand, the inevitable transformation of the "way of doing business" as we know it provides opportunities for future competitiveness, innovation, growth, prosperity, security as well as employment and safeguards social stability and an intact environment.

In order to avoid disruption, it requires timely, collaborative, systemic and forward-looking (inter)action. International agreements like the United Nations Sustainable Development Goals (SDGs)² and the Paris Agreement on Climate Change³ provide clear guidance.

It requires unprecedent financial resources to reach national and international sustainable development targets. It entails the involvement of both public and private sector to close this financing gap.

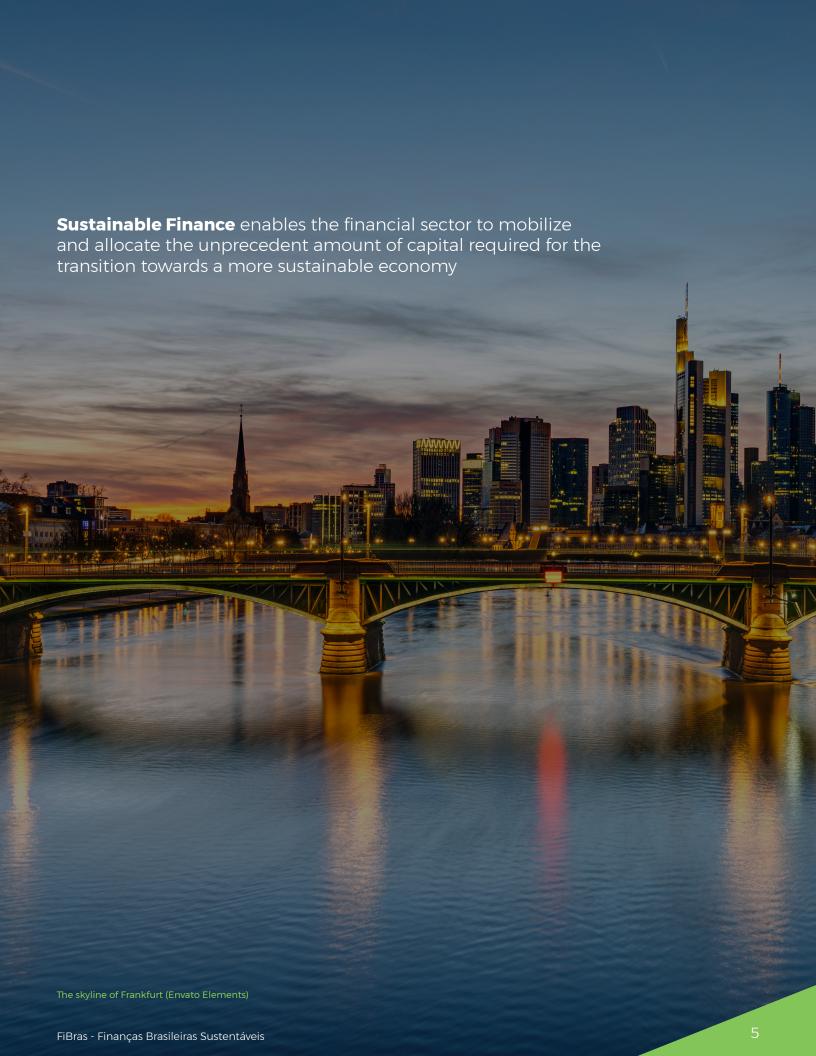
The financial sector plays an essential role in mobilizing and allocating the required capital for the transition. An efficient and stable financial sector (i) requires the right framework of policies and regulation and (ii) needs to integrate sustainability risks in its financing and investment decisions.

This document assesses these and other aspects of Sustainable Finance (SF). It suggests a definition to develop a common understanding on SF. It further shows the relevance of SF for the financial sector from (i) a sustainability, (ii) a risk and (iii) an efficiency perspective. The document also shows the roles and responsibilities of different stakeholders of the financial sector and their relation towards SF. Finally, it examines current developments and provides an outlook for the further progress of the matter, stressing the importance of national and international cooperation to develop successful SF solutions. The annex presents a list of the most important networks and initiatives in this area.

¹According to the 2020 WEF Global Risk Report, seven of the ten major economic risks which will affect the coming decade are sustainability risks: climate action failure, biodiversity loss, extreme weather, water supply crises, natural disasters, human-made environmental

² https://www.un.org/ sustainabledevelopment/sustainabledevelopment-goals/

3 https://unfccc.int/process-andmeetings/the-paris-agreement/theparis-agreement



02

Background, definition and categories

For the purpose of this document, Sustainable Finance (SF) refers to the integration of sustainability aspects in the decision-making processes of financial market actors, financial market policy and related institutional and market arrangements that contribute to the achievement of strong, sustainable, balanced and inclusive growth.⁴

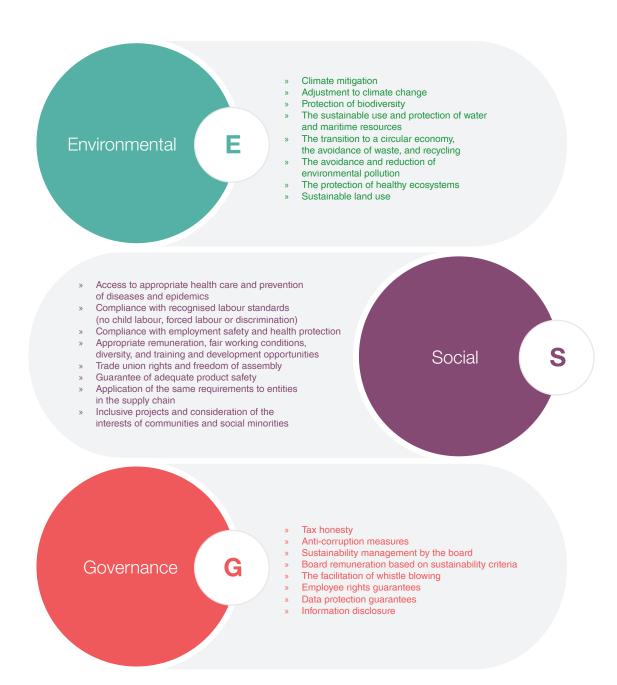
The current international debate on sustainability focuses on environmental, particularly climate change related aspects. However, the term of Sustainable Finance is conceptually broader, including the narrower term of green finance, but also social and governance-related aspects.



⁴ Several definitions include the following aspects in SF (1) fiscal policy, including Co2 pricing, taxation and subsidies; (2) carbon emissions trading; and/or (3) financial compensation schemes for loss and damage due to results from climate change. In this document, the focus is on the perspective of (public and private) financial sector actors regarding their decision-making towards financing (e.g. credit), investment and insurance practices and the requirement to disclose such practices.

Source: own graphic, based on European Commission (2017)

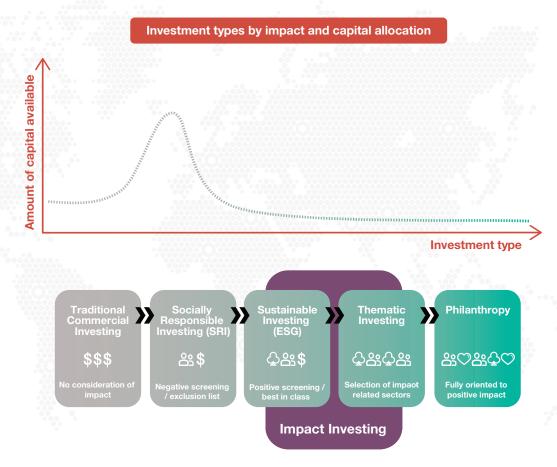
As with the term SF, there is also no universal definition of the composition of Environmental-Social- and Governance-related (ESG) aspects. The following graphic suggests some of the areas within each dimension that are included in the concept:



Source: own graphic, based on BaFin (2020)

⁵ The following non-exhaustive list provides methods of ESG integration in the order of increased rigorousness and resource-intensity in application (can be applied in combination): negative screening": exclusion or limitation on certain companies ESG-considerations, (2) "Positive list": identification of companies, sectors, regions, countries, etc that are preferred for investment. as a general result of compliance with certain (presumed or proven) class-approach": identification of investees that outperform their peer group for the sustainability criteria chosen, e.g. based on ESG-ratings, (4) "Standards based screening / ESG integration": sustainability takes a holistic approach to ESG integration, (5) "Performance based ESG integration": linkage of an incentive (e.g. lower interest rate) caused by positive ESG performance rights, engaging in dialogue with companies or exerting influence on sector organisations to actively encourage counterparties to adopt a more sustainable approach. (based on BAFIN, 2019) The financial sector offers a great variety of investment products. The degree to which ESG-aspects are integrated differs widely. The SDGs can provide a useful orientation for a methodological approach. The application of certain minimum (sustainability) standards can be legally obliged and apply to most financial sector processes. This includes laws to combat money laundering and the financing of terrorism as well as social minimum standards such as the protection against child and forced labour. Despite great investor

appetite and the fact that there is generally no trade-off with financial performance (see further discussion below), the - usually voluntary - further integration of ESG criteria⁵ is still in an early stage. Impact-only driven investments with no or limited capacity and expectations to provide financial returns will remain an instrument for selected impact investors, receiving limited asset allocation. Depending on the intent, ESG processes can be undertaken as a risk mitigation or value creation tool. (OECD, 2020)



Source: own graphic

Rationale and importance 03

Three interdependent perspectives drive the rationale behind the importance of Sustainable Finance:⁶

From a **sustainability perspective**, SF deals with the requirement to finance the transition towards a sustainable socioeconomic pathway. To close the financing gap, unprecedented investments are required. The financial sector plays an important role in mobilising and channelling these financial resources, thereby "shifting the trillions" of existing financial assets towards low-carbon, sustainable and resilient investments. Increasingly, asset owners, investment managers and banks consider this transition as a business opportunity and align their investment and financing strategy accordingly.

By redirecting capital flows, SF is a precondition to achieve the Sustainable Development Goals (SDGs) and the Paris Agreement. 10 Public resources alone will not be sufficient to close this financing gap.

Emerging solutions: The private financial sector, including banks and asset managers, as well as asset owners, increasingly integrate ESG-considerations in their financing decisions. 11 Financial instruments such as thematic bonds¹² (including transition, green¹³, social, blue, CAT and SDG bonds) and sustainable lending products¹⁴ (e.g. ESG-based or green/sustainability loans) can channel private and public capital to investments and activities with positive environmental impacts, such as renewable energy generation, energy efficiency in production and buildings, sanitation, as well as sustainable forestry and agriculture. 15 Public interventions can help to provide a conducive environment by creating rules and regulation as well as (financial and non-financial) incentives that affect risk/return considerations, thereby fostering ESG-based financing and investment decisions. This includes a rethinking of public financing and investments. For instance, blended finance instruments receive growing recognition, as a mean to utilise scarce public resources, following a subsidiarity principle to crowd-in private investments.

- ⁷ OECD estimates that around USD 6,3 trillion of infrastructure investment is needed each year until 2030 to meet the SDGs, increasing to USD 6,9 trillion a year to make this investment compatible with the goals of the Paris Agreement. (OECD, 2018) Brazil alone requires an estimated USD 1,3 trillion of investments in green infrastructure.
- ⁸ The IPCC refers to a global stock of USD 386 trillion of financial capital (USD 100 trillion in bonds, USD 60 trillion in equity and USD 226 trillion of loans managed by the banking system) that need to be aligned with climate targets. (Climate Transparency, 2019)
- ⁹ Recent examples include (i) the world's largest asset manager BlackRock, announcing early 2020 to put climate change in the centre of its investment strategy (New York Times, 2020), (ii) Goldman Sachs, reducing its investments in fossil fuel while at the same time identifying climate friendly activities as "a powerful business and investing case", targeting investments worth USD 750 billion over the next ten years. (Reuters, 2019)
- ¹⁰ The Paris Climate Change Convention requires that financial flows are consistent with a path towards a more climate-friendly economy (Art. 2.1 c).
- "1 The Principles for Responsible Investment (PRI) initiated by the United Nations in 2005 are a voluntary self-commitment to integrate ESG-criteria in investmen decision-making. As of January

- 2020, the PRI had roughly 2.800 signatories including asset owners, investment firms and advisers with about USD 90 trillion of assets under management. (source: https://www.unpri.org/)
- ¹² The total issuance of labelled bonds since the issuance of the first green bond in 2007 reached USD 915 billion by January 2020. Issuance of green, social and sustainability bonds grew ~40% in 2019. (Environmental Finance, 2020)
- ¹³ The growth of the green bond market has caught international attention as a tool to finance, among others, large sustainable infrastructure projects. It has grown rapidly, with annual issuance of labelled bonds reaching USD 165 billion, on average, during 2017 and 2018, compared to USD 62 billion in 2015/2016. To combat the adverse effects of climate change it is

estimated that green bond issuance needs to reach USD 1tn per annum by the early 2020s. (CBI, 2019)

- ¹⁴ The International Finance Corporation (IFC) estimated the total green loans and credits of banks in developing countries to the private sector in 2016 to be approximately USD 1.5 trillion, or about 7% of total claims on the private sector in emerging markets. (IFC, 2018a; IFC, 2018b)
- ¹⁶ The total size of Sustainable Finance investments and financing is unclear. Depending on definition and source, assumptions vary between 1% and 10% of global financial assets. However, there is a strong growth rate and emerging pressure from various types of market participant to increase ESG considerations. A useful source for climate finance indication is the annual CPI Global Landscape of

Climate Finance Report: "Annual tracked climate finance in 2017 and 2018 crossed the USD half-trillion mark for the first time. Annual flows rose to USD 579 billion, on average, over the two-year period of 2017/2018, representing a USD 116 billion (25%) increase from 2015/2016." (CPI, 2019)

⁶ For studies that include survey results on the reasons why financial institutions engage in SF, refer to EBA (2020), PRA (2018) or ACPR (2019).

This may also be a result of the so called "tragedy of horizons", a term coined by Mark Carney, Governor of the Bank of England in 2015. It describes the challenge that risks that are (in the medium to long term) material for a physical asset (e.g. power plant) or a company (e.g. electric utility) are not necessarily material for their investors (in particular in short-term investment horizons) and not necessarily priced in by financial analysts. (Carney, 2015)

¹⁷ Connected to these direct effects redated to climate change is the example of limited insurability. Housing markets in areas specifically vulnerable to increasing severe weather events suffer from devaluation. In certain coastal areas real estate has already become uninsurable.

¹⁸ Physical risks and transition risks are interdependent as the window for an orderly transition to a carbon-neutral economy is finite and closing. A sharp increase in physical risks increases incentives for the economy to transition more rapidly, leading in turn to higher transition risks. If the required reduction in greenhouse gas emissions is not carried out in time, physical risks and the pressure for action will increase. In the least favourable scenario, extreme climate-induced damages as a result of long delays in energy transition will eventually force a sudden and radical change in the economy.

¹⁹ It is unlikely that policy responses will be introduced steadily and in a uniform manner. In that context, PRI has coined the term "Inevitable Policy Response". PRI predicts that it is inevitable that governments will be forced to act more decisively than they have so far. The longer the delay, the more disorderly, disruptive and abrupt the policy adjustments will inevitably be. Yet, a forceful policy response to climate change within the near term is not priced into today's markets, leaving investor portfolios exposed to significant risk. (PRI, 2019)

²⁰ The concept of "stranded assets" is based in particular on the assumption of a "carbon bubble". Achieving the goals of the Paris Agreement only allows for burning a small fraction of the world's known fossil fuel reserves to keep within the world's remaining carbon budget: Globally, a third of oil reserves, half of gas reserves and over 80% of current coal reserves would have to remain unused. This implies a current overvaluation of "brown" assets and potential massive undervaluation of future losses in assets connected to fossil-fuel-based energy production. Citigroup (2015) estimates the value of unburnable reserves to exceed USD 100 trillion. Limiting global warming to reach international agreements will require shifting energy production to alternative sources, thereby negatively influencing the economic viability of traditional extraction and energy-related industries.

²¹ Such an abrupt re-valuation was referred to by Mark Carney as the "climate Minsky Moment". (Carney, 2019)

From a risk perspective, sustainability-related risks (ESG risks) are increasingly considered as material financial risks. Such risks are thereby affecting the economic performance of any entity in the value chain, including investees, as well as the repayment capacity of borrowers. The financial industry is being required to adequately identify, assess and manage risks in connection with sustainability aspects, particularly environmental and climate change related sources of financial risks. Risks from pandemics, such as the 2020 COVID-19 outbreak, are equally included in this concept. Current asset valuation and risk management models do not adequately take ESG risks into consideration. 16 This may lead to significant financial losses and even sector-wide instability. In its 2020 Global Risk Report (WEF, 2020), the World Economic Forum lists the biggest threats to global economies. For the first time, the top seven risks in terms of likelihood are linked to the environment and health, led by "extreme weather events" and "failure of climate-change mitigation and adaptation". From these and other ESG-related sources, risks can materialize in different ways:

- Physical Risks result from damage to property, land, and infrastructure, e.g. from extreme weather-related events and broader climate trends and more broadly can lead to loss of life and migration. This reduces asset values, results in lower profitability for companies, damages public finances, and increases the cost of settling underwriting losses for insurers. Indirect effects on the macroeconomic environment, such as lower output and productivity, exacerbate these direct impacts.¹⁷
- » Transition Risks¹⁸ refer to risks resulting from economic costs and regulatory adjustments during the transition towards a more sustainable and carbon-neutral

economy. These risks can be related to climate mitigation efforts, whereby abrupt policy changes to reduce carbon emissions, and therewith limit global warming, could have significant impact on the economy. Disruptive technological change can be another source of transition risk, for example developments in alternative and cleaner sources of energy, as well as changing consumer and market behaviors towards 'greener' products and services, that can result in structural economic shifts. A third, and closely interlinked source is changing market sentiment, that can, for instance, result from an anticipation of policy changes and changing consumer behavior. In these processes towards a greener and carbon neutral economy, particularly when happening abruptly¹⁹, re-valuations of underlying financial assets are likely. A prominent example of risks related to re-valuation resulting from such a transition are so-called stranded assets.20

Although the impacts of climate change are highly uncertain, there is a high degree of certainty that some combination of physical and transition risks will materialize in the future. (NGFS, 2019)

A large range of assets will have to be reassessed and revalued as changes in policy, technology and physical risks create new costs and opportunities. (Carney, 2019) However, the time horizon of materialisation remains unclear. (EBA, 2020) Increasingly, experts warn that such a re-valuation of assets may not happen with a constant rate over the next decades. Dislocations may happen abruptly²¹ leading to severe risks of financial sector stability.

» Reputational risks become more relevant with the increasing awareness and sensitivity related to climate change and wider sustainability considerations (such as human or labour rights violation), amplified by the increasing importance of social media and other communication technology. It becomes socially unacceptable for financial institutions and asset owners to disregard ESG considerations.

» Liability risks may hit the perpetrators of environmental damage, entities (both public or private) that have fuelled climate change or have violated other ESGcriteria. They are being held responsible by governments, international organizations and courts, potentially irrespective of direct negligence or fault. It may also include the compensation paid by insurers of certain ESG-risks.

The potential impact of climate and other ESG risks is large, nonlinear, and hard to predict. ESG risks are interconnected, can materialize parallelly and can be mutually reinforcing. Taking the most prominent example: Measuring the financial risks from climate change is complex. It involves assessing the effect of multiple climate pathways, with different physical and transition effects, over several decades. Traditional environmental risk analysis methods typically rely on large historical datasets, which may no longer reflect the environmental and economic reality. Due to the changing average likelihood and magnitude of low probability, high-impact extremes, financial firms need to adopt a forward-looking and long-term approach to risk management. (CISL, 2018 and BoE, 2019) Similar dynamics with shorter time cycles apply in cases of pandemic healthrelated disruptions. There is a growing recognition that traditional approaches to incorporating ESG factors into risk management systems are insufficient in the face of their potential magnitude, which have reached new levels of scale, likelihood and interconnectedness.

At the same time, a mismatch of demand and supply of green/sustainable investments coupled with limited transparency and information asymmetries may even lead to a potential (future) overvaluation of certain green/sustainable assets, creating a "green bubble".

Emerging solutions: Widely acknowledged recommendations have emerged²² which may lead to industry standards. Banks have increasingly integrated ESG risks in their financing principles and risk management, e.g. by adhering to voluntary frameworks such as the Equator Principles. New kinds of risk management instruments are being developed such as stress testing considering scenario analysis, assessing climate-related financial risks based on different future scenarios (e.g. 1.5°, 3°, 6°C of global warming). This is supported by the building of new databases which enable companies and investors to better assess potential financial impacts of climate change and subsequently increase resilience to climate risks.

Central banks and financial regulators develop macroprudential policies that aim to manage the systemic risks of the financial system directed at financial institutions such as banks, insurance and investment companies, investment banks, etc. They set market rules that can shift investments, often driven by short-term yields, to long-term sustainable solutions. These include: 1) requirements to integrate climate-related risks into financial risk management practices, e.g. through stress tests using scenario analysis, as well as 2) liquidity instruments, lending limits, and differentiated reserve requirements factoring in climate related financial risks.²³

²² E.g. the recommendations developed by the "Task Force on Climate-related Financial Disclosures" (TCFD), an initiative by the Financial Stability Board (FSB). (https://www.fsb-tcfd.org/)

²³ For further examples refer to BIS (2020)

From an **efficiency perspective**, transparency of material information is essential to enable market participants to make well-informed decisions, to support long-termism in financial and economic activity and ensure a proper and efficient functioning of the financial sector. Increasingly, the requirement to account for and disclose material ESG information is interpreted as part of the "fiduciary duty" of financial advisors and investment managers. Most empirical studies find that there is either a positive correlation between ESG considerations in investment decisions and credit and financial performance or that investment decisions with ESG considerations do at least not underperform those without. This seems to be particularly true in times of crises and uncertainty, such as the 2020 COVID-pandemic, further strengthened by increased "stickiness" of ESG-based investments. Studies moreover indicate that this relationship additionally depends on factors such as regional differences or the sector of activity (refer to Verheyden et al. (2016), Khan et al. (2015) and Busch et al. (2015)). As certain ESG risks, like climate risks, may materialize over a longer period of time, such positive effects of ESG-integration may increase over time. (NGFS, 2019). However, challenges include 1) a lack of ESG data and databases, 2) instruments to determine their materiality, and 3) the lack of a common international understanding of a definition of what qualifies as green and/or sustainable investments. Client protection, including responsible data management, is an integral part of SF and receives increasing attention in times of digitalization and technological change.

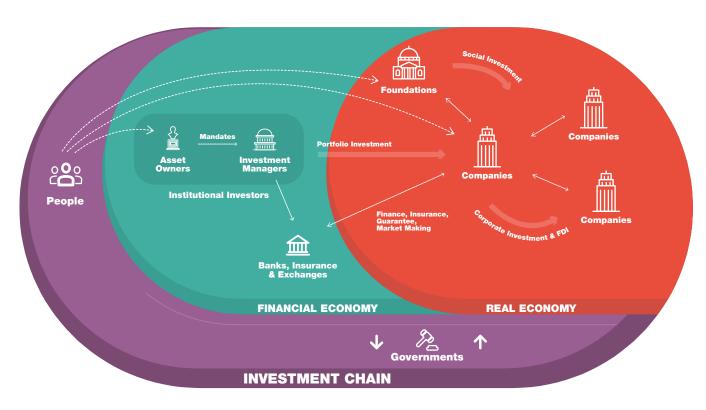
Emerging solutions: Central banks and financial supervisory authorities have developed rules on disclosure and transparency requirements. Financial institutions have engaged in voluntary commitments to increase transparency. Alongside the established rating agencies that invested heavily in either building-up internal ESG competencies or acquiring external expertise, new specialised service providers emerge to offer tailor-made ESG data and tools for their inclusion. Various public and private stakeholders have developed definitions ("taxonomy") to determine if economic activities qualify as green/sustainable for their individual institution, members or jurisdiction.²⁴ Digitalisation and technologybased financial sector intermediaries (Fintechs) provide opportunities to increase efficiency, transparency (e.g. via blockchain-technology) and accountability in the financial sector. To unlock the full potential, regulators have developed innovative approaches to shape the future regulatory environment in a participatory way (e.g. "regulatory sandboxes") to provide a temporary testing ground for new business models. (FCA, 2015) Some proponents of the integration of sustainability factors in the financial sector argue for an equitable incorporation of ESG aspects alongside economic analysis. The development of the term EESG (economic, environmental, social and governance) avoids that ESG is seen as a compromising appendix. (Favoretto, 2020)

²⁴ Stakeholders which developed, or are in the process of developing, such definitions, catalogues and taxonomies include financial institutions (e.g. European Investment Bank, International Finance Corporation), governments or financial regulators (e.g. China, France, European Union, Malaysia) as well as individual networks or standard-setters such as the Climate Bonds Initiative (CBI) and International Organization for Standardization (ISO).

Effects on different financial 04 sector stakeholders

SF affects all stakeholders in the financing and investment chain. It requires, in particular:

- 1) the public sector to set a coherent framework²⁵, that enables and incentivizes
- 2) companies to develop / transition to sustainable business models and 26
- 3) banks, asset managers and asset owners to demand a sustainable utilisation of their financial resources.²⁷



Source: adapted from UN (2020)

28 One example is the ongoing debate about the role of central banks and other financial regulators in supporting SF, in particular in their action against climate change. (Volz, 2017) Intensified through the financial crisis of 2007/2008, central banks increasingly go in their actions beyond their traditional core mandates of maintaining price and financial sector stability. (Park and Kim, 2020) Some central banks, including Banco Central do Brasil are active in pursuing green central banking policies and explicitly included sustainability in their mandate. The increasing membership of the Central Banks and Supervisors Network for Greening the Financial System (NGFs) has already subsumed that the management of climate-risks falls into its mandate.

28 Interventions in the financial sector alone are regarded as a "second best policy approach" only. In order to be effective, the development of the required framework conditions must create the "right" incentives for all economic activities, targeting producers and consumers alike. This includes the pricing of externalities (such as CO2 emissions) as well as alignment of subsidies with the sustainability agenda. The results of such interventions will be priced into the investment and financing decisions of the financial sector.

27 It is important to note that the financial agents of the financial sector have the principle role of effective redistribution of capital by managing an appropriate risk/return profile. A framework must be created in which private financial agents identify and receive a (financial) benefit to contribute towards sustainability.

Stakholder	Mandates and Roles	Interests	Dependencies	Potential Interventions in SF
Governments	 » Prosperity and security of the population » (Sustainable) Economic development » Define the policy environment 	 » Re-election » Satisfaction among population » Sustainable infrastructure 	 » National and international investors to finance public debts » Data and information from the economy and financial sector intermediaries » Availability of (potential) sustainable projects and industries 	 » Provide incentives to mobilise (sustainable) investments » Set rules and regulation to promote sustainable economic practices » Invest own funds more sustainably (including blended finance instruments; integration of ESG criteria) » Support transparency, promote knowledge, common definition
Population	» Vote and behave as consumer and market participant in a way that represents individual and communal interests	 » Personal current and future well-being » Potentially wider societal well-being » Safe and profitable investments (taking into consideration all relevant risks) 	 » Data and information from financial sector intermediary and/or from investee » Sustainable financial products and investment possibilities 	 » Invest own funds more sustainably » Use own consumption to create positive impact for society and the environment (triple bottom line) » Request information on the utilisation of their assets » Vote for responsible political leaders
Regulators and Supervisors	 Maintain price and financial sector stability (some have broader mandate including sustainability aspects) 	» Understand, identify, measure and integrate risks that effect prices and financial sector stability	» Data and information from the economy and financial sector intermediaries	 » Set rules, regulation and standards that promote long-term stability » Integrating sustainability factors into own portfolio management » Support transparency, increase in knowledge, joint understanding/definition
Institutional Investors	» Maximize shareholder value vs. stakeholder value (i.e. create value for individuals or solutions to societal problems and needs)	» Grow assets under management and create financial return » Act solely in the client's best interest (fiduciary standard) » Understand and integrate all (material) risks and opportunities related to the investment » Concerned with reputational risks related to unsustainable investments	» Data and information from investees and economy Instruments and models to integrate material ESG information » Investable pipeline	 » Increase transparency and report on ESG-related aspects » Invest own funds more sustainably » Integrate sustainability in advisory to customers » Engagement with investees
Banks, Insurers, Exchanges	Maximize shareholder value vs. stakeholder value Provide financial services	» Interest in growing financial returns, assets and transactions » Understand and integrate all (material) risks and opportunities related to the investment » Concerned with reputational risks related to unsustainable investments/ credit provision	» Data and information from investees and economy » Instruments and models to integrate material ESG information » Investable/bankable pipeline	» Increase transparency and report on ESG-related aspects » Invest own funds more sustainably Integrate sustainability in advisory to customers » Engagement with investees/borrowers
Foundations	» Pursue purpose of the foundation (often for societal benefit)	» Interested in economic, social and environmental return	» Data to evaluate and report on ESG risks	 Invest own funds more sustainably Support transition with capacity development, development of tools and solution, data availability, etc.
Companies	Maximize shareholder value vs. stakeholder value Provide goods and services	 » Growth and profitability » Concerned with reputational risks related to unsustainable economic activities » May act as investor; interest in financial return 	 External finance Market for their products and services Data and information from investees and economy 	Provide ESG data to investors and clients Reduce and manage exposure to ESG risks



05

Further development and outlook

There is a large and increasing interest for green and sustainable investments. This demand results from various factors, including

- increasing public and private market attention and sensitized asset owners valuing triple bottom line returns in SF²⁸,
- increasing awareness that ESG-risks have a direct and increasing effect on financial performance, leading to the integration of the above-mentioned risks in financing and investment decisions.
- 3) public policies and regulation stimulating sustainable investments and
- 4) financial industry's voluntary selfcommitments and self-regulations.

The increasingly rising demand for sustainable investment opportunities itself can be interpreted as a promising sign to help close the financing gap. However, current levels of green/sustainable investments are far from what is necessary to allow for the required transition towards a sustainable economy. This in turn leads to amplified risks for the financial sector in the future, when climate change impacts and other ESG-related risks materialize at an increasingly severe scale, delayed policy actions are abruptly taken, and social unrest may unfold.

Prevailing challenges in the attempt to increase the amount of SF include

- a clear and universal understanding of which economic activities contribute towards a green/sustainable environment and therefore qualify as sustainable finance,
- development of a comprehensive set of stringent and coherent policies and regulations that create a suitable and levelplaying field for the required transition²⁹,
- 3) a general lack of a pipeline of investable sustainable projects,

4) relevant data, forecast and modelling methods.

There is an increasing international recognition of the importance of the topic as well as international coordination and exchange.

Nevertheless, commitment and coordination with respect to the general transformation towards sustainability is still lacking.

Fragmented local or regional solutions remain insufficient to tackle the common challenge in a highly interconnected global financial system. This is of particular importance in times of global free flow of capital to avoid a "race to the bottom" of a decreasing number of irresponsible investors, looking for investment opportunities in countries with least restrictions.

The complex collective action problem related to climate change and general sustainability requires coordinating actions among many players including governments, the private sector, civil society and the international community.

It remains to be proven in how far the financial industry, international community and individual Governments manage to uphold the sustainability agenda in their attempts to deal with the socio-economic results of the COVID-19 epidemic. There is a growing understanding that the answer to the crisis requires sustainability-aligned stimulus packages to increase future resilience.

28 "Triple bottom line" refers to the combination of potential environmental, social and economic returns.

²⁹ Within the design of a suitable policy and regulatory environment, the topic of a "just transition" plays an increasing role. Policy changes must not only be technically and politically feasible, but also socially acceptable to be successful.

Annex 1

International and Brazilian initiatives, networks, standards and goals

The emergence and rapidly growing recognition of sustainable finance is closely connected to the international awareness of the sustainability agenda as a whole with a special focus on climate-related aspects. It requires not only national, but international cooperation and the development of common objectives, goals and standards.

The centrepiece and orientation of supranational dialogue are the ambitious targets, as outlined in both the United Nations (UN) Sustainable Development Goals (SDGs) and the Paris Agreement on climate change. In order to reach these goals many aspects of the economy, including production and

consumption patterns require a transformation. From a market and therefore financial sector perspective, these changes result in an uncertain landscape of risks and opportunities.

Both, private and public sector stakeholders have reacted accordingly by integrating sustainability issues in existing structures and activities as well as by the establishment of various new initiatives, networks, standards and goals that have emerged particularly over the past 5-10 years.

The following table lists selected international and Brazilian measures which are supporting the further development of SF:

Name includes hyperlink	Type / Institution	Participants / Members	Objective and Approach
Coalition of Finance Ministers for Climate Action (CFMCA)	Inter-governmental	Finance Ministers, initially from more than 20 countries. (currently 51 members as a result of Santiago Action Plan) (Without Brazilian participation)	The Coalition intends to help countries mobilize and align the financial resources needed to implement their national climate action plans; establish best practices such as carbon pricing, climate budgeting and strategies for green investment and procurement; and factor climate risks and vulnerabilities into members' economic planning.
Santiago Action Plan (under the CFMCA)	Inter-governmental	51 countries covering 30 percent of global GDP (Without Brazilian participation)	Detailed plan on how to achieve the Helsinki Principles: to accelerate national climate action; especially through carbon pricing, macroeconomic and fiscal policy (e.g. green budgeting), financial sector policies (e.g. transparency and disclosure of climate-related financial risks, risks to financial stability), and development of (own) competencies and tools.

Name includes hyperlink	Type / Institution	Participants / Members	Objective and Approach
European Union EU Action Plan on Financing Sustainable Growth	Inter-governmental	Member states of the European Union (Without Brazilian participation)	The EU Action Plan on Financing Sustainable Growth, published by the European Commission in March 2018, has 3 main objectives: 1) reorient capital flows towards sustainable investment for sustainable and inclusive growth; 2) manage financial risks stemming from climate change, environmental degrading and social issues, and 3) foster transparency and long-termism in financial and economic activity. These objectives are supported by 10 actions, which include: (i) establishing an EU classification system for sustainable activities; (ii) creating standards and labels for green financial products; (iii) fostering investment in sustainable projects; (iv) incorporating sustainability when providing financial advice; (v) developing sustainability in ratings and market research; (vii) clarifying institutional investors' and asset managers' duties; (viii) incorporating sustainability into prudential requirements; (ix) strengthening sustainability and (x) fostering sustainable corporate governance and attenuating short-termism in capital markets.
International Platform on Sustainable Finance (IPSF)	Inter-governmental	Authorities from the EU, Argentina, Canada, Chile, China, India, Kenya, Morocco, Switzerland, Indonesia, Norway and observers such as EIB, UNEP FI and the NGFS. (Without Brazilian participation)	Founded in October 2019, the objective of the IPSF is to scale up the mobilization of private capital towards environmentally sustainable investments. The IPSF will deepen international cooperation and, where appropriate, coordination on approaches and initiatives for the capital markets (such as taxonomies, disclosures, standards and labels), that are fundamental for investors to identify and seize environmentally sustainable investment opportunities globally.
Central Banks and Supervisors Network for Greening the Financial System (NGFS)	Inter-governmental / regulators / supervisors / standard setters	63 members and 12 observers, including central banks and regulatory authorities. Representative from Brazil: Central Bank of Brazil (since 04/2020)	The Network's purpose is to help strengthen the global response required to meet the goals of the Paris Agreement and to enhance the role of the financial system to manage risks and to mobilize capital for green and low-carbon investments in the broader context of environmentally sustainable development.
G20 Sustainable Finance Study Group	Interg-overnmental	G20 Finance Ministers and Central Bank Governors, initiatives and work streams. (No information on Brazilian input)	Aims to identify institutional and market barriers to green finance, and based on country experiences, develop options on how to enhance the ability of the financial system to mobilize private capital for green investment. The Sustainable Finance Study Group focuses on green finance-related topics but will also take into account other sustainability co-benefits such as job creation and income equality. Initiated by China under their presidency in 2016, followed through by Germany (2017) and Argentina (2018). Less engagement with the topic during Japan (2019) and Saudi Arabian (2020) presidency.
International Network for Financial Centers for Sustainability (FC4S)	Supranational (UNEP) / interg- overnmental / PPP / private financial networks	22 financial centres globally (Without Brazilian participation)	A partnership between leading financial centres and the United Nations Environment Programme. Objective: to enable financial centres to exchange experience, drive convergence, and take action on shared priorities to accelerate the expansion of green and sustainable finance.

Name includes hyperlink	Type / Institution	Participants / Members	Objective and Approach
Centre of Green Finance and Investment (CGFI)	Inter-governmental	OECD member countries (and beyond) (Without Brazilian participation)	The Centre's mission is to help catalyze and support the transition to a green, low-emissions and climate-resilient economy through the development of effective policies, institutions and instruments for green finance and investment.
(by OECD)			
Climate Action 100+	Investors initiative	370 investors signatories (Without Brazilian investors as signatories; three Brazilian corporations as focus companies)	Initiative by investors (with a combined \$41 trillion assets under management) that works with the investee companies to communicate the need for greater disclosure around climate change risk and company strategies aligned with the Paris Agreement.
Green Bond Transparency Platform	Inter-governmental	LAC countries	Digital tool to promote transparency in the Latin American and Caribbean's green bond markets.
UN COP / Paris Agreement	Inter-governmental	197 countries Representatives of Brazil: MRE	Making financial flows consistent with the commitment to limit global warming.
Financial Stability Board (FSB) – Task Force on Climate-related Financial Disclosures (TCFD)	Inter-governmental / regulators / supervisors / standard setters / industry (financial and real market)	Initiated by G7 and G20 Representatives of Brazil: BCB, CVM, ME	In June 2017, the Task Force on Climate-related Financial Disclosures (TCFD), established within the FSB, published its report setting out some recommendations to provide guidance for businesses and the financial sector to disclose climate-related financial risks and opportunities within the context of their existing disclosure requirements. Supported by the project FiBraS, TCFD has launched a Portuguese translation of the recommendations in May, 2020.
Equator Principles	Voluntary standard	101 financial institutions from 38 countries Representatives of Brazil: Bradesco, Banco do Brazil, Banco Votorantim, CAIXA, Itaú	Developed in 2010, the Equator Principles establish thresholds and criteria to determine, assess and manage environmental and social risk in projects. They apply globally to all industry sectors and to four financial products: (i) project finance advisory services; (ii) project finance; (iii) project-related corporate loans; and (iv) bridge loans. It is an international voluntary framework for managing environmental and social risk in project lending and the basis on which most instruments for management of nontechnical risks have been created in international lending. The financial institutions that are signatories of the Equator Principles undertake to conduct due diligence on the projects they finance in accordance with the World Bank environmental and social standards and notably the International Finance Corporation's Performance Standards, and they also undertake to ensure that the borrower analyses the potential impact of their project and draws up action plans to reduce these impacts as much as possible and offset those that cannot be avoided.

Name includes hyperlink	Type / Institution	Participants / Members	Objective and Approach
Sustainable Banking Network (SBN)	Inter-governmental / regulators / supervisors / standard setters	Hosted by IFC; voluntary community of financial sector regulatory agencies and banking associations from emerging markets. 38-member countries represent US\$43 trillion (85 percent) of the total banking assets in emerging markets. Representatives of Brazil: BCB, FEBRABAN	Formally launched in 2012, SBN members are committed to moving their financial sectors towards sustainability, with the twin goals of improved ESG risk management (including disclosure of climate risks) and increased capital flows to activities with positive climate impact. It is a platform for knowledge sharing (including a Global and individual Country Progress Reports, see link to document on the right) and capacity building that facilitates the mobilization of practical support for members to design and implement national initiatives.
Institute of International Finance (IIF): Sustainable Finance Working Group (SFWG)	Public and private financial sector organizations network	More than 450 members from more than 70 countries. Members include commercial and investment banks, asset managers, insurance companies, sovereign wealth funds, hedge funds, central banks and development banks. Representatives of Brazil: Bradesco, FEBRABAN, BOCOM BBM, Itaú	IIF is the global association of the financial industry. Its mission is to support the financial industry in the prudent management of risks; to develop sound industry practices; and to advocate for regulatory, financial and economic policies that are in the broad interests of its members and foster global financial stability and sustainable economic growth. The IIF joins the public and private sector through the Sustainable Finance Working Group (SFWG) to identify and promote capital markets solutions that support the development and growth of green finance. SFWG includes representatives from major institutional investors, commercial banks, ratings agencies and other interested stakeholders, as well as public sector collaborators. Broad themes covered by SFWG include scaling the green finance market, collaboration with official sector initiatives and translating political momentum to tangible action that facilitates market development.
United Nations (UN) UN Principles for Responsible Investments (PRI)	Interg-overnmental / regulators / supervisors / standard setters	Advisors, asset owners, service providers; roughlt 2.800 asset owners, investment firms and advisers with more than USD 90 trillion AUM Signatories from Brazil: 14 asset owners, 7 service providers and 27 investment managers	The PRI aims to support its international network of investor signatories in incorporating the 6 principles (1. We will incorporate ESG issues into investment analysis and decision-making processes. 2. We will be active owners and incorporate ESG issues into our ownership policies and practices. 3. We will seek appropriate disclosure on ESG issues by the entities in which we invest. 4. We will promote acceptance and implementation of the Principles within the investment industry. 5. We will work together to enhance our effectiveness in implementing the Principles. 6. We will each report on our activities and progress towards implementing the Principles) into their investment and ownership decisions. The PRI acts in the long-term interests of its signatories, of the financial markets and economies in which they operate and ultimately of the environment and society as a whole.

Name includes hyperlink	Type / Institution	Participants / Members	Objective and Approach
United Nations (UN) UNEP FI Principles for Responsible Banking (PRB)	Inter-governmental / regulators / supervisors / standard setters	130 banks from 49 countries Signatories from Brazil: Bradesco (founding member), Itaú	The Principles provide the framework for a sustainable banking system, and help the industry to demonstrate how it makes a positive contribution to society. The Principles help any bank to align its business strategy with society's goals.
United Nations (UN) UNEP FI Principles for Sustainable Insurance (PSI)	Inter-governmental / regulators / supervisors / standard setters	78 insurance companies, insurance associations and regulators Signatories from Brazil: 12 insurance companies (e.g. Itau, Bradesco, Caixa, etc.)	The PSI build on the foundation the insurance industry has laid in supporting a sustainable society. The PSI use their intellectual, operational and capital capacities to implement the Principles for Sustainable Insurance (the 'Principles') across their spheres of influence, subject to applicable laws, rules and regulations and duties owed to shareholders and policyholders.
United Nations (UN) SDG – Sustainable Development Goals	Inter-governmental	193 countries Representatives of Brazil: MRE	Launched in 2015 under the 2030 Agenda for Sustainable Development, the SDG comprises in 17 different and complimentary goals addressing global challenges like poverty, inequality, climate, environmental degradation, prosperity etc.
Sustainable Stock Exchanges (SSE) initiative	UN Partnership Programme Inter- governmental / private sector stock exchanges and financial centres	Organized by UNCTAD, UN Global Compact, UNEP FI and UN PRI. Partners are 93 exchanges and 16 financial regulators. Representatives of Brazil: B3 (B3 launched the ISE (sustainable corporate index)	Launched in 2009 by the UN Secretary General, the SSE's mission is to provide a global platform for exploring how exchanges, in collaboration with investors, companies (issuers), regulators, policymakers and relevant international organizations, can enhance performance on ESG (environmental, social and corporate governance) issues and encourage sustainable investment, including the financing of the UN Sustainable Development Goals. The SSE seeks to achieve this mission through an integrated programme of conducting evidence-based policy analysis, facilitating a network and forum for multi-stakeholder consensus- building, and providing technical assistance and advisory services.
Global Alliance for Banking on Values (GABV)	Bank Network	62 financial institutions and 16 strategic partners globally with over \$200 billion USD AUM (Without Brazilian participation)	Founded in 2009, the Global Alliance for Banking on Values is an independent network of banks using finance to deliver sustainable economic, social and environmental development.
Sustainable Insurance Forum (SIF)	Inter-governmental / regulators / supervisors / standard setters	Members include insurance supervisors and regulators from different countries, the EU and the International Association of Insurance Supervisors (IAIS). Members from Brazil: SUSEP	The SIF aims to strengthen insurance supervisors' and regulators' understanding of, and responses to sustainability challenges and opportunities for the business of insurance, focusing on environmental issues such as climate change.

Name includes hyperlink	Type / Institution	Participants / Members	Objective and Approach
International Organization of Securities Commission (IOSCO)	Inter-governmental / regulators / supervisors / standard setters	Regulators and authorities, development banks Representatives of Brazil: CVM, ANBIMA, BSM	The International Organization of Securities Commissions (IOSCO) is the international body that brings together the world's securities regulators and is recognized as the global standard setter for the securities sector. IOSCO develops, implements and promotes adherence to internationally recognized standards for securities regulation. It has launched the Sustainable Finance Network and issued a Statement on Disclosure of ESG Matters by Issuers. IOSCO's Growth and Emerging Markets Committee (GEMC) initiated a project on sustainable finance in emerging markets and the role of securities regulators. In October 2017, the GEMC established a Working Group on Sustainability in Emerging Markets (WGS). Members include CVM Brazil. IOSCO works intensively with the G20 and the Financial Stability Board (FSB) on the global regulatory reform agenda.
International Capital Market Association (ICMA) The Green Bond Principles / The Social Bond Principles / The Sustainable Bond Guideline	Inter-governmental / regulators / supervisors / standard setters	Central Banks, commercial banks, insurers, development banks, Representatives of Brazil: ANBIMA, BTG Pactual, Santander Brasil, Itaú	The objectives of ICMA are to provide a basis for joint examination and discussion of questions relating to the international capital and securities markets and to issue rules and make recommendations governing their operations. It furthermore provides services and assistance to participants in the international capital and securities markets. ICMA has issued the voluntary, but internationally recognized Green Bond Principles, the Social Bond Principles and the Sustainability Bond Guidelines, which build the reference point for all national/regional standards/regulations.
ICMA "The Principles" (Green, Social and Sustainable Bond Principles & Guidelines)	Inter-governmental / regulators / supervisors / standard setters	Launched by ICMA. Signatories include financial institutions, investment firms, central banks, NGOs and think tanks	Leading framework for global issuance of green, social and sustainability bonds. "The Principles" promote integrity in the Bond market through guidelines that recommend transparency, disclosure and reporting. They are intended for use by market participants and are designed to drive the provision of information needed to increase capital allocation to sustainable and green projects.
Loan Market Association - LMA	Standard setters / regulators / private companies	Regulators, financial institutions, private sector (over 750 institutions) Representatives of Brazil: Itaú BBA	The Loan Market Association (LMA) has as its key objective improving liquidity, efficiency and transparency in the primary and secondary syndicated loan markets in Europe, the Middle East and Africa (EMEA). By establishing sound, widely accepted market practice, the LMA seeks to promote the syndicated loan as one of the key debt products available to borrowers across the region.

Name includes hyperlink	Type / Institution	Participants / Members	Objective and Approach
CPI Lab	Inter-governmental / regulators / private companies	Funders and members include both national and international as well as private market participants, such as GIZ, World Bank, Allianz, ministries and regulators	The Lab network accelerates well-designed financial instruments that intend to unlock billions for investments in energy efficiency, renewable energy, sustainable transport, climate smart agriculture, and curbing deforestation, while also reducing private investors' risks and improving their financial returns. A public-private partnership, the Lab brings together and catalyzes broader government and private sector efforts to scale up climate finance. The initiative has two focused project calls, one in India (India LAB) and one in Brazil (Brazil LAB).
ACMF – ASEAN Capital Markets Forum	Regulators	10 National Asian Countries security regulators	High-level grouping of capital market regulators from all 10 ASEAN jurisdictions: Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam. The ACMF issued the ASEAN Green, Social and Sustainability bond standards.
Marrakech Pledge	Regulators and stock exchangers	19 signatories representing 23 African countries	The Marrakech Pledge for Fostering Green Capital Markets in Africa is an initiative to scale-up and enable the development of green capital markets in Africa and also constitutes a venue for knowledge exchange and experience sharing.
CDP (former Carbon Disclosure Project)	Standard reporting on climate / private companies	CDP: coordinator, database manager, private and public institutions	CDP is a not-for-profit charity that runs the global disclosure system for investors, companies, cities, states and regions to manage their environmental impacts. Brazil has, by far, the most expressive number of corporations answering the CDP in Latin America. In 2017, 421 companies have publicly disclosed environmental information. There are answers of Brazilian companies since 2010.
Natural Capital Protocol + Supplement (Finance)	Standard reporting on climate / private companies	+300 organizations from civil society, science & academia, business, membership organizations, standard setters & disclosure, finance and government & policy Representatives of Brazil: CEBEDS, Natura	Hosted by the Institute of Chartered Accountants in England and Wales (ICAEW), the Protocol is a standardized framework for organizations to identify, measure, and value their direct and indirect impacts (positive and negative) and dependencies on natural capital. Financial institutions are largely aware that sustainability or 'environmental, social, and governance' (ESG) issues can create risks for their banking, investment, and insurance outcomes. These institutions are also increasingly recognizing opportunities from active consideration of ESG factors.

Brazilian initiatives

Name includes hyperlink	Type / Institution	Participants / Members	Objective and Approach
Laboratório de Inovação Financeira	Inter-governmental / regulators / supervisors / standard setters	Jointly, IDB, CVM, ABDE and GIZ manage the LAB. Membership of 160 national and international institutions	Co-financed by the German International Climate Initiative (IKI), the LAB was founded by IDB together with ABDE and CVM. In 2019, the GIZ project FiBraS joined the executive group. The LAB is organized in 4 different working groups dealing with financial innovation and sustainability in the Brazilian Financial Sector.
Comissão Setorial de Responsabilidade Social e Sustentabilidade - CRSS	Working group	FEBRABAN, ANBIMA, Cnseg, B3 and other associations that represent the financial market stakeholders	30 participating institutions, representing about 80% of the total assets of the banking sector, promotes initiatives and develops studies to integrate sustainable development into banks business practice, thereby contributing to the sector's compliance with regulations and socioenvironmental legislation.
Brazilian Green Finance Initiative (BGIF)	Discussion forum / Inter-governmental / regulators / supervisors / standard setters	CEBDS and CBI are secretariat	Created in 2017, the initiative brings together private and public actors with over USD 73 billion AUM to support development of green finance in the country. Discussions involve issues such ESG risks, sovereign and corporate risk pricing, international market trends in green finance, and the launch of green bond criteria for the agricultural sector.
Brazilian GHG Protocol Program	Standard reporting on climate / private companies	FGV (GVCes) (secretariat), public and private sector companies	Launched in 2008, aims at encouraging corporate culture to elaborate and publish greenhouse gas emission (GHG) inventories, providing the participants with access to world-class instruments and standards.
FiBraS – Finanças Brasileiras Sustentáveis	International development project	German Government, Brazilian Government	In 2018, Brazil and Germany started a technical cooperation project to foster green and sustainable finance. The project is organized into three lines of actions aiming at: Assessing and raising the importance of green and sustainable finance in Brazil's political agenda; strengthening the implementation of social and environmental risk management in the national financial system; and expanding the offer of financial products and services aimed at financing sustainable development in Brazil.
Prosperity Fund	International development project	UK Government, Brazilian Government	Announced in the 2015, Strategic Defense and Security Review, and represents a key component of the prosperity pillar of the UK Aid Strategy.

Brazilian initiatives

Name includes hyperlink	Type / Institution	Participants / Members	Objective and Approach
Amazon Fund	National results payment instrument	Funded by Norwegian and German Governments, managed by BNDES	Supports projects related to preventing, monitoring and combating deforestation and promoting the conservation and sustainable use of the Brazilian Amazon.
Green Finance and the Transformation of Rural Property in Brazil: Building New Theoretical and Empirical Knowledge	International academic research project	Supported by Newton Fund and British Academy; academic exchange between University of Bristol and the Federal University of São Paulo (UNIFESP)	Established in March 2018, this project supports academic partnership and research on the area of green bonds, with a special focus on its regulatory framework, opportunities, risks and impacts on property regimes and, more generally, sustainable economic development and welfare. In 2019, the academic institutions in partnership with SITAWI, CBI and BNDES formed an "intellectual network". Their current work focuses on five green bonds from the pulp & paper industry. A report is expected for 2020.
Green Protocol (protocolo verde)	National MOU with federal government and private banking sector	MMA, and several private banking's	Establish the convergence of efforts to undertake banking policies and practices that are precursor, multiplier, demonstrative or exemplary in terms of social and environmental responsibility and that are in harmony with the objective of promoting development that does not compromise the needs of future generations by updating the commitments of the Green Protocol, signed in 1995.
Iniciativa Mercado de Capitais (IMK)	Federal Government internal "discussion platform" on capital market development	Brazilian Federal Government, coordinated by the Ministry of the Economy, with participation of Central Bank of Brazil (BCB) and other regulators (Capital Market Regulator (CVM), Superintendence of Private Insurance (SUSEP) and National Superintendence of Public Pension Funds (PREVIC))	In the past, the predecessor initiative GTMK (Grupo de Trabalho sobre Mercado de Capitais e Poupança a Longo Prazo) already covered relevant topics related to Green and Sustainable Finance. IMK, established in 2019, can further build on this potential as it brings together public, high-level stakeholders of the Brazilian financial system to assess and recommend initiatives and regulations to improve the capital markets in Brazil.

References

Autoridade de Supervisão e Resolução Prudencial da França (ACPR) (2019): "French banking groups facing climate change-related risks"; https://acpr.banque-france.fr/sites/default/files/medias/documents/as_101_climate_risk_banks_en.pdf.

Bundesanstalt für Finanzdienstleistungen (BaFin) (2019): Guidance Notice on Dealing with Sustainability Risks; https://www.bafin.de/SharedDocs/Downloads/EN/Merkblatt/dl_mb_Nachhaltigkeitsrisiken_en.pdf?__blob=publicationFile&v=5.

Bank for International Settlements (2020): "The green swan: Central banking and financial stability in the age of climate change"; https://www.bis.org/publ/othp31.pdf.

Bank of England (BoE) (2019): "Discussion Paper: The 2021 biennial exploratory scenario on the financial risks from climate change"; https://www.bankofengland.co.uk/-/media/boe/files/paper/2019/the-2021-biennial-exploratory-scenario-on-the-financial-risks-from-climate-change.pdf.

Carney, M. (2015): Speech "Breaking the tragedy of the horizon - climate change and financial stability"; https://www.bankofengland.co.uk/speech/2015/breaking-the-tragedy-of-the-horizon-climate-change-and-financial-stability.

Carney, M. (2019). "Open letter on climate-related financial risks"; https://www.bankofengland.co.uk/news/2019/april/open-letter-on-climate-related-financial-risks.

CISL (2018): "Embedding environmental Scenario Analysis into Routine financial Decision Making"; https://www.cisl.cam.ac.uk/resources/sustainable-finance-publications/embedding-environmental-scenario-analysis-into-routine-financial-decision-making-in-mexico.

Citigroup (2015): "Energy Darwinism II: Why a Low Carbon Future doesn't have to cost the Earth"; https://ir.citi.com/hsq32Jl1m4alzicMqH8sBkPnbsqfnwy4Jgb1J2klPYWlw5eM8y D3FY9VbGpK%2Baax.

Climate Bonds Initiatives (2019): "Green Infrastructure Investment Opportunities: Brazil 2019"; https://www.climatebonds.net/files/reports/cbi_giio_2019_02c_0.pdf.

Climate Policy Initiative (CPI) (2019): "Global Landscape of Climate Finance 2019"; https://climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2019/.

Climate Transparency (2019): "Brown to Green: The G20 Transition towards a net-zero Emissions Economy"; https://www.climate-transparency.org/wp-content/uploads/2019/11/Brown-to-Green-Report-2019.pdf.

European Banking Authority (2020): "Sustainable Finance: Market Practices"; https://eba.europa.eu/sites/default/documents/files/document_library//Sustainable%20finance%20Market%20 practices.pdf.

Environmental Finance (2020): "Green Bond Comment January 2020: Towards the first trillion"; https://www.environmental-finance.com/content/analysis/green-bond-comment-january-2020-towards-the-first-trillion.html.

European Commission (EC), High Level Expert Group (2017): "Financing a Sustainable European Economy"; https://ec.europa.eu/info/sites/info/files/170713-sustainable-finance-report_en.pdf.

Favoretto, A. (2020) "EESG, o novo ESG: E diz respeito à economia, que se soma aos conceitos ESG"; Valor Econômico, 14.04.2020; https://valor.globo.com/financas/coluna/eesg-o-novo-esg.ghtml.

Financial Conduct Authority (FCA) (2015): "Regulatory Sandbox"; https://www.fca.org.uk/publication/research/regulatory-sandbox.pdf.

Friede, G., Busch, T., and Bassen, A. (2015) "ESG and financial performance: aggregated evidence from more than 2000 empirical studies, Journal of Sustainable Finance & Investment"; 5(4), p.210-233.

International Capital Market Association (ICMA) (2020): "Sustainable finance: Compendium of international policy initiatives & best market practice"; https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/ICMA-Sustainable-finance-Compendium-of-international-policy-initiatives-best-market-practice-February-2020-200220.pdf.

International Finance Corporation (IFC) (2018a): "Raising US\$ 23 trillion: Greening banks and capital markets for growth. G20 input paper on emerging markets"; http://unepinquiry.org/wp-content/uploads/2018/11/Raising_23_Trillion_Greening_Banks_and_Capital_Markets_for_Growth.pdf.

International Finance Corporation (IFC) (2018b): "Sustainable Banking Network (SBN) Global Progress Report"; https://www.ifc.org/wps/wcm/connect/ae589874-6578-4ca9-9b3c-caef967ed52c/SBN-GlobalProgressReport.pdf?MOD=AJPERES&CVID=md0nvNj.

Khan, M., Serafeim, G., and Yoon, A. (2015): "Corporate Sustainability: First Evidence on Materiality"; Harvard Business School Working Paper, No. 15-073.

Network for Greening the Financial System (NGFS) (2019): "NGFS First Comprehensive Report: A Call for Action - Climate Change as a Source of Financial Risk"; https://www.ngfs.net/en/first-comprehensive-report-call-action.

New York Times (14.01.2020): "BlackRock C.E.O. Larry Fink: Climate Crisis Will Reshape Finance"; https://www.nytimes.com/2020/01/14/business/dealbook/larry-fink-blackrock-climate-change.html.

OECD (2018): "Financing Climate Futures: Rethinking Infrastructure"; https://www.oecd.org/environment/cc/climate-futures/policy-highlights-financing-climate-futures.pdf.

OECD (2020), "Blended Finance Funds and Facilities - 2018 Survey Results Part II: Development Performance"; https://doi.org/10.1787/7c194ce5-en.

Park, H., Kim, J. (2020): "Transition towards green banking: role of financial regulators and financial institutions"; Asian Journal of Sustainability and Social Responsibility; https://doi.org/10.1186/s41180-020-00034-3.

Principles for Responsible Investments (PRI) (2019): "The inevitable Policy Response: Policy Forecasts"; https://www.unpri.org/download?ac=9832.

Prudential Regulation Authority (PRA), Bank of England (2018): "Transition in thinking: the impact of climate change on the UK Banking Sector"; https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/report/transition-in-thinking-the-impact-of-climate-change-on-the-uk-banking-sector.pdf?la=en&hash=A0C99529978C94AC8E1C6B4CE1EECD8C05CBF40D.

Reuters (16.12.2019): "Goldman Sachs says it will support 'green' initiatives more forcefully"; https://www.reuters.com/article/us-goldman-sachs-environment/goldman-sachs-says-it-will-support-green-initiatives-more-forcefully-idUSKBN1YK1U6.

United Nations (UN) (2020): "Global Compact Action Platform Financial Innovation for the SDGs"; https://www.unglobalcompact.org/take-action/action-platforms/financial-innovation.

Verheyden, T., Eccles, R.G., and Feiner, A. (2016): "ESG for All? The Impact of ESG Screening on Return, Risk, and Diversification", Journal of Applied Corporate Finance, 28(2), p.47-55.

Volz, U. (2017):" On the role of central banks in enhancing green finance"; UNEP-inquiry working paper; http://unepinquiry.org/wp-content/uploads/2017/02/On_the_Role_of_Central_Banks_in_Enhancing_Green_Finance.pdf.

World Economic Forum (WEF) (2020): "Global Risk Report 2020"; http://www3.weforum.org/docs/WEF_Global_Risk_Report_2020.pdf.

About GIZ

As a federal enterprise, the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH supports the federal German government in achieving its international cooperation objectives. Together, Brazil and Germany face global challenges such as preserving biodiversity and fighting climate change. The German Cooperation for Sustainable Development therefore operates primarily in two areas: Protection and Sustainable Use of Rain Forests as well as Renewable Energies and Energy Efficiency. More information about the GIZ Brazil can be found at www.giz.de/brazil.

