The Role of Financial Institutions in Brazil in Fostering Impact Businesses and Combating Climate Change

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Abstract

This article contributes for a common understanding of the role of the financial community in promoting a low carbon economy and reflects the change of mental model of the financial community from a reactive to a proactive pattern, in which financial institutions not only analyze financial returns but also the risks and the socio-environmental impacts of financial activities, services, and products. The article also provides a mapping of laws and regulations that serve as instruments for financial institutions to combat climate change and foster the ecosystem of social finance and business impact in the country.

Key Words: Financial institutions, Brazil, Climate change, Socio-environmental liability, Impact businesses, Social Finance

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I. Introduction

The environmental liability regime (joint and strict), together with recent decisions and cases in Brazil involving financial institutions that financed projects that caused damages to the environment,[1] have fomented discussions over lender's environmental liability and the role of the financial community in combating climate change.

The limits of socio-environmental responsibility of financial institutions as well as the diligence that needs to be conducted prior to a financing of a particular project or activity to avoid environmental liability are still nebulous. The present article seeks to anticipate this lack of definition by bringing methods to mitigate the risks and preventing the occurrence of environmental damages in financed projects.

It goes even further. In addition to the indispensable preliminary environmental risk assessment, the article touches on a crucial point of the current Brazilian reality: the necessity of an environmental impact assessment. In a world where 195 countries and members of the United Nations Framework Convention on Climate Change (UNFCCC) agree on ways and solutions to combat global warming, assessing only the risks is no longer an option.[2]

The Paris Agreement is not perfect, but there is no denying that it has brought hope and a realistic way to achieve the central goal of limiting the average global temperature rise to well below 2°C above pre-industrial levels, with even greater efforts so that the temperature does not exceed 1.5ºC.

This article offers a conclusion to one of the main immediate effects of the agreement: signalizing to the market that there is no other path but to transition into a low carbon global economy where it is possible to reconcile economic

1. This article has no intention to provide an overview of the actions filed against financial institutions in the country. In any case, just to mention a few examples: (i) Public Civil Actions filed against Banco do Brasil (Banco do Brasil - process nº 0003828-41.2012. 4.01.3905), Banco da Amazônia - BASA (9th Federal Court of Belém - process nº 0010331-30.2011.4.01.3900), and INCRA, relating to the presence of workers in a condition similar to slaves, areas restricted by the federal environmental agency and lack of environmental licensing; and (ii) Infraction Notice from the federal environmental agency against Banco Santander Brasil SA, which imposes a fine of R$ 47,550,000.00 on the alleged financing of 95,000 bags of corn in the harvest of 2015 in an area of 572 hectares in the cities of Porto dos Gaúchos, Feliz Natal and Gaúcha do Norte (MT).
2. Renata Soares Piazzon, *COP-21: Sucesso em Paris. E Agora?*, JOTA (Jan. 9, 2016), https://jota.info/artigos/cop-21-sucesso-em-paris-e-agora-09012016 (December 12, 2015 will always be remembered as the date when, after 13 days of intense negotiations, the first agreement between the 195 member countries of the UNFCCC was signed.).

growth with environmental concern and financial return to the efficient use of natural resources. To achieve this goal, the article presents a path of sustainable financing by using Brazil as an example in fostering impact business and combating climate change.

II. Risk - Social and Environmental Responsibility of Financial Institutions

A. Brief Context

Much has been discussed about the social and environmental responsibility of banks in operations with significant exposure to socio-environmental risk, analyzing the applicability of objective environmental liability, the causal link, and the concept of polluter.[3]

The discussion has its origin in alarming court rulings in Brazil that have generated concerns within the financial community due to possible liabilities of banks regardless of fault for environmental damages caused by projects they financed.[4] A decision published in December 2009 that involved the Federal Public Ministry and a hardware manufacturer regarding environmental damages in a mangrove area would not have deserved much attention by financial institutions if the Superior Court of Justice had not broadly analyzed what additional entities could be liable for the environmental damages without regard to culpability.[5] Even though no financial institutions have been part of a suit involving a sensitive coastal system, this higher court, by a unanimous decision, sent an alarming message stating that

> *In order to highlight the causal link of environmental damage, equivalent responsibility attaches to those who do, those who do not when they should, those who fail to do, those who do not care what others do, those who finance what others do, and those who benefit when others do.*[6]

3. Federal Law No. 6,938/1981, de 31 de Agosto de 1981 (Braz.).
4. STJ, REsp No. 650.728/SC, Relator: Ministro Herman Bejamin, 23.10.2007, Diário do Judiciário Eletrônico [D.J.e.], 2.12.2009, (Braz.).
5. *Id.*
6. *Id.* ("Com a finalidade de evidenciar o nexo de causalidade do dano ambiental, a responsabilidade equivalente atribui a aqueles que fazem, aqueles que não fazem quando deveriam, aqueles que deixam de fazer, aqueles que não se importam que outros façam, aqueles que financiam o que os outros fazem, e aqueles que se beneficiam quando os outros fazem."); TRF-1, AG No.

This statement, particularly its reference to "those who finance what others do," spearheaded discussions regarding the banks' liability for the occurrence of environmental damages in the country.

In this context, it is worth emphasizing that Brazilian law (Federal Law 6.938/1981 or National Environmental Policy) provides for strict civil environmental liability and states that the polluter, understood as the one directly or indirectly responsible for the activity causing environmental degradation, is obliged to indemnify or repair damages caused to the environment and to the third parties affected by its activity regardless of fault.[7]

Also, environmental civil liability has a joint nature, which implies that all parties involved in the occurrence of certain environmental damage are jointly responsible for their remediation. The one who deals with remediation have the right of recourse against the other polluters involved in the occurrence of the damage.[8] Therefore, the Brazilian federal environmental statute imposes not only a strict liability scheme, but also a joint and several liability that means liability may be apportioned either among two or more parties or to only one or a few select members of a group at the adversary's discretion.

Given the regime of environmental civil liability in Brazil, the question often raised is whether a bank could be properly considered as "causing" the pollution and, therefore, be held liable as an indirect polluter.[9]

B. The Role of the Brazilian Central Bank

The Brazilian Central Bank (BCB), a federal agency that is part of the National Financial System, is one of the main monetary authorities in Brazil that is responsible for ensuring the stability of the Brazilian financial system.

2002.01.00.036329-1, 19.12.2003, (Braz.).; T.J.M.G., Ap. Civ. No. 1.0775.11.001630-7 /002, 2012, (Braz.); TRF-5, Ap. Civ. No. 200384000046696, Relator: Des. Federal Lazaro Guimarães, 12.09.2007, 628 (Braz.); TRF-4, AgIn No. 2008.04.00.027923-6 / SC, Relator: Des. João Pedro Gebran Neto, 19.11.2009, (Braz.) (highlighting additional important court decisions on this matter).

7. José Alfredo de Oliveira Baracho, Responsabilidade Civil por Dano ao Meio Ambiente 316 (2000) (The National Environmental Policy also establishes that government financial institutions should condition their disbursement of funds in accordance with the environmental licensing process and the rules and regulations established by the National Environmental Council (CONAMA), ensuring that the projects will acquire pollution control equipment when required by law.).
8. Paulo Affonso Leme Machado, Direito Ambiental Brasileiro 327 (14th ed. 2006).
9. Federal Law No. 6,938/1981.

The process of regulating socio-environmental responsibility in the National Financial System began on February 29, 2008, with the Resolution of the National Monetary Council (CMN) No. 3545/2008, which requires documentation of environmental compliance for the financing of agribusiness projects in the Amazon Region. [10] An important step subsequently was taken with the publication of BCB Circular No. 3547/2011, which included socio-environmental risks in the procedures and parameters related to the Internal Process for the Evaluation of Capital Adequacy (ICAAP).[11]

The ICAAP corresponds to the assessment of the capital adequacy maintained by the financial institution by considering its strategic objectives and the risks to which it is subject in the time horizon of one year.[12] Therefore, in the process of evaluating and calculating the need for capital, the institution must demonstrate how it considers the risks arising from exposure to socio-environmental damages generated by its activities.

Following the steps of previous regulations, BCB published Resolution No. 4,327/2014 on April 25, 2014, which provides guidelines for implementing the Social-Environmental Responsibility Policy (PRSA) by financial institutions and other institutions authorized to operate by BCB.[13] PRSA has thus been used as guidance for the social and environmental actions of the institution in its business and relations with stakeholders, including customers and users of products and services, internal community, and other people impacted by its activities.

The principles that should guide PRSA are those of relevance, which are reflected in the degree of exposure to the socio-environmental risk of the activities and operations of the institution and proportionality that reflects the compatibility of PRSA with the nature of the institution and the complexity of its activities, services, and financial products.

In addition, PRSA guides the social and environmental actions of the financial institution, including:

i) systems, routines and procedures to identify, classify, evaluate, monitor, mitigate and control the socio-environmental risk present in activities and operations of the institution; and

10. CMN Resol. No. 3,545/2008, de 29 de Fevereiro de 2008 (Braz.).
11. BCB Circular No. 3,547/2011, de 7 de Julho de 2011 (Braz.).
12. *Id.*
13. Banco Central do Brasil, Resolução Nº 4.327, de 25 de Abril de 2014 (2014), http://www.bcb.gov.br/pre/normativos/res/2014/pdf/res_4327_v1_O.pdf.

ii) prior assessment of the potential negative social and environmental impacts of new products and services, including reputational risk.[14]

Resolution No. 4,327/2014 was an important step since the discussion inaugurated by the 2009 decision of the Superior Court of Justice. Aiming to aggregate socio-environmental variables to the traditional economic-financial approach, PRSA contributed to the socio-environmental risk management process of financial activities, services, and products of banks in the country.

C. FEBRABAN Self-Regulation

In order to scale the policies that best align the financial system with sustainable development, the Brazilian Federation of Banks (FEBRABAN) published SARB Regulation No. 14/2014 (known as Self-Regulation), which formalized guidelines and procedures that are fundamental for the incorporation of socio-environmental practices by financial institutions in their businesses.[15]

Self-Regulation introduced criteria to ensure the management of the socio-environmental risk of the activities of the financial institutions in an attempt to provide guidance for the elaboration of the PRSAs and to determine the minimum socio-environmental diligence that should be conducted by the banks.[16] Self-Regulation has been proven more effective than traditional command and control regulations or other types of top-down regulatory mechanisms.

PRSA, as an example, was an effective instrument for creating the right incentives for financial institutions that imposed how the same financial institutions should act in combating climate change. After 3 years of the publication of FEBRABAN Self-Regulation, the majority of banks in Brazil

i) established social and environmental risk analysis department, if not existent before; and
ii) published their PRSA with general guidelines for risk analysis and prevention of occurrence of environmental damages.[17]

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14. *Id.*
15. Normativo Sarb Nº 14, de 28 de Agosto de 2014 (2014), https://cmsportal.febraban.org.br/Arquivos/documentos/PDF/PRSA_Normativo%20SARB%20014.pdf.
16. *Id.*
17. Febraban, Guia Prático para Elaboração e Implementação de Política de Responsabilida de Socioambiental (2015), https://cmsportal.febraban.org.br/Arquivos/documentos/PDF/GUIA%20PRATICO%20PRSA.pdf.

As a result of Self-Regulation, criteria for internal activities were created, such as efficiency in energy and natural resource consumption, adequate waste management, and conditions for the analysis of socio-environmental aspects of new products and services.[18]

Self-Regulation created general rules for evaluating projects that may cause harm to the environment and provided for financial institutions to establish their own due diligence criteria for making loans that are consistent and verifiable, either by analyzing the environmental licenses issued by public bodies or by verifying compliance with the current socio-environmental legislations of the project that will receive new investments.[19]

For example, in the attempt to anticipate hypotheses in which a rural property is offered as guarantee for the financing of a particular project, Self-Regulation provides that a financial institution must verify the legal reserve registration in the Rural Environmental Registry (CAR) for the property in which a particular project will be implemented. In addition, the financial institution must include a series of statements in the contractual instrument that the property does not have any restrictions on the use of socio-environmental nature.[20]

Also, minimum conditions were established for prior evaluation of financing potentially pollutant activities. They are listed as the following:

i) obligation of the borrower to comply with applicable environmental legislation;
ii) obligation of the borrower to observe the labor legislation, especially the standards on occupational health and safety and the absence of work analogous to slave or child;
iii) obligation of the borrower to monitor its activities in order to identify and mitigate non-foreseen environmental impacts at the time of credit contracting; and
iv) obligation of the borrower to monitor its direct and relevant suppliers with respect to environmental impacts, respect for social and labor

18. NORMATIVO SARB Nº 14, *supra* note 16.
19. *Id.*
20. As per Brazilian Forestry Code, areas of Legal Reserve are those located inside rural properties, aimed to preserve biodiversity and provide sustainable use of natural resources, which can be used only in a forest management regime. The area of Legal Reserve ranges from 20% to 80% of the total area of the property. With forest regulations enacted by the Federal Government, the enrollment in the Rural Environmental Registry (CAR) is mandatory for all rural properties and shall include the georeferenced plant of the property, indicating the areas of social interest and areas of public utility as well as the location of the remaining native vegetation.

> legislation, occupational safety and health standards as well as the lack of work analogous to the slave or child.[21]

Together with Resolution No. 4,327/2014, Self-Regulation became an important instrument to discipline the banks' social and environmental due diligence. Certainly, the dissemination of PRSAs by financial institutions and the improvement of the duty of diligence have boosted the sustainability of the economy in its different sectors given the growing importance of the financial system and the granting of credit in modern times.

By including socio-environmental issues previously established in PRSA in the process of analyzing and granting of credit, financial institutions not only contribute to environmental protection, but they also reduce the risk of occurrence of environmental damages in financed projects.

D. Prior Environmental Assessment for Risk Mitigation

The present section aims to present how banks should evaluate their financing decisions in order to prevent the occurrence of environmental damages. As further detailed below, financial institutions may request documents for attesting compliance under environmental matters as well as conduct independent researches.

A financial institution that demonstrates diligence and prudence through the incorporation of the socio-environmental variable in its daily credit granting practices duly performs its role in society and promotes the development of sustainable practices by its clients. Organized through FEBRABAN and especially after the publication of the Equator Principles, the Brazilian financial sector has been adopting measures to achieve this goal.[22]

In 2011, due to concerns regarding the responsibility of the financial sector, a working group was created in FEBRABAN with the commitment to

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21. NORMATIVO SARB Nº 14, *supra* note 15.

22. OS PRINCIPIOS DO EQUADOR JUNHO DE 2013, EQUATOR PRINCIPLES, http://www.equator-principles.com/resources/equator_principles_portuguese_2013.pdf (The Equator Principles, based on the International Finance Corporation (IFC) Performance Standards and the World Bank's Environmental, Health and Safety Guidelines, had their third edition released on June 4, 2013 and were adopted by financial institutions for the determination, evaluation, and management of social and environmental risks in the financing of projects in order to provide a minimum standard for social and environmental due diligence by such institutions. These principles have greatly increased attention and focus on socio-environmental standards of projects, including robust criteria for indigenous peoples, labor standards, and consultations with locally affected communities prior to the funding of a given project).

i) study the environmental responsibility of creditors;
ii) identify the risks arising from such liability;
iii) propose methods to mitigate these risks; and
iv) discuss issues related to environmental and social aspects.

Several strategic issues related to the liability of creditors were discussed in this forum, like the alignment of the level of environmental diligence to be adopted by financial institutions in their credit decision process to emphasize the importance of creating a PRSA for each financial institution.

Most of the Brazilian financial institutions have already incorporated the environmental variable and have their respective PRSA, which establishes the internal guidelines for the identification of environmental risks of projects to be financed. Some of these financial institutions also have a specialized multidisciplinary team that assesses the environmental compliance of the project and the potential client and, as the case may be, monitors the project to be developed.

The adoption of such practices has contributed to changes in the culture and behavior of customers in all market segments (large, medium, and small companies), which led to changes in the behavior in society as a whole.

The objective of the financial community is that all Brazilian financial institutions can follow such practices so that the sector is prepared as a unit to deal with environmental risks, which can contribute to the sustainable development of the country.

The minimum social and environmental diligence required when analyzing projects include the evaluations of

i) environmental licenses and studies, granting of water use rights, registration with the Brazilian Institute for the Environment and Renewable Natural Resources (IBAMA);
ii) the existence of legal reserve areas, permanent preservation areas, conservation units, indigenous lands, among other protected areas;
iii) environmental liabilities (contamination of soil, subsoil, surface water, and groundwater);
iv) the value chain (environmental regularity of suppliers and contractors for the disposal of solid waste); and
v) administrative and judicial proceedings relating to environmental matters.

Notwithstanding the request for documents, there is also the possibility of conducting independent research in various regulatory bodies. The table below summarizes the topics for independent research and the information that can be obtained:

Table 1

Object of research	Information to be obtained *online*
Contaminated areas	List of contaminated areas available on the websites of environmental agencies (São Paulo, Rio de Janeiro and Minas Gerais)
IBAMA embargo	Google Earth search (description and location)
IBAMA registration	IBAMA's website provides Federal Technical Registration, Environmental Declaratory Act, Negative Debt Certificate, Infraction Notice
Environmental licenses	Some state environmental agencies provide online environmental licensing processes, such as Companhia Ambiental do Estado de São Paulo (CETESB)
Location	Via site of the National Institute of Colonization and Agrarian Reform (INCRA), Google Earth research, Certificates of Land Management System (SISGEF), Maps of the Ministry of Environment
Indigenous communities	Funai maps
Conservation units	Maps of the Ministry of Environment
Administrative and judicial proceedings	Certificates issued by the Federal and State Public Prosecutor's Office, Civil Registry Distributor's Certificate, Federal Civil Service Distributor Certificate

Finally, in addition to the prior environmental assessment of risk mitigation, financial institutions provide for restrictive and impeditive criteria of granting credit or financing a given project as illustrated below:

(A) restrictive criteria:
  i) areas embargoed by IBAMA;
  ii) the existence of civil, administrative, and criminal actions in environmental matters; and
  iii) labor inspections and labor actions, such as noncompliance with labor standards related to worker health and safety, conditions analogous to slavery, child labor;

(B) impeditive criteria:
   i) absence of environmental license for the operation of potentially polluting activities;
   ii) no legal reserve or registration in the CAR of the registration of the property; and
   iii) final judicial judgments in labor matters recognizing the use of labor analogous to slavery or child labor.[23]

A good example is the Brazilian Development Bank (BNDES) program that finances cattle raising activities in the Amazon Region. As per the BNDES program and Rule No. 3545, financial institutions may assure that the area to be financed has no restriction of use from the Brazilian Federal Environmental Agency (IBAMA) and has all the proper environmental licenses and certificates. The non-compliance with such rules may result in civil class actions against financial institutions. That is the case of the Public Civil Actions filed against Banco do Brasil and Banco da Amazônia - BASA for financing activities in areas restricted by IBAMA and having none of the relevant environmental licenses.

E. Case of Success: How to Go Beyond?

As a result of discussions that lasted throughout 2015 within a working group, the Protocol of Good Environmental Practices for the Financial Sector in the State of Sao Paulo (Protocol) was signed during the 21st Climate Conference (COP-21) between the State of Sao Paulo Environmental Agency (SMA) and Febraban. It is intended for financial institutions associated with Febraban who voluntarily wish to (i) report their direct (Scope 1) and indirect (Scope 2) emissions of greenhouse gases (GHG) on an organizational basis (corporation, entity or other title), located in the State of Sao Paulo, in a given reference period (calendar year or fiscal year); and, (ii) manage the socio-environmental risk in the financing of projects.[24]

Scope 1 includes direct GHG emissions from sources that are owned or controlled by the financial institution, such as combustion emissions from boilers, kilns, and company vehicles, emissions from production of chemicals

23. Portaria Interministerial Nº 2, de 31 de Março de 2015 (Braz.).
24. Protocol of Good Environmental Practices for the Financial Sector in the State of Sao Paulo.

in process equipment, emissions from air conditioning and refrigeration systems, and etc.

In turn, Scope 2 includes indirect GHG emissions, like those derived from the acquisition of electric and thermal energy that is consumed by the financial institution (bought or brought to its organizational boundaries).

The first part of the Protocol aims to establish environmental obligations on the financial institutions themselves. In accordance with the Protocol, the financial institution shall forward annually to the SMA a report containing its GHG emissions, which are calculated according to the GHG Protocol method. This report includes:

i) Direct emissions (Scope 1) expressed in tones of carbon dioxide equivalent (tCO2eq); Indirect emissions from energy consumption (Scope 2) expressed in tones of carbon dioxide equivalent (tCO2eq);
ii) Efficiency indicator calculated from the relationship between Scope 1 and Scope 2 emissions and the number of employees of the financial institution, on the last day of the fiscal year corresponding to the reporting period;
iii) Innovative practices of energy efficiency and water efficiency related to GHG emissions from activities performed in the State of Sao Paulo, if any; and
iv) Innovative practices of socio-environmental responsibility adopted by the financial institution, related to the GHG emissions of the activities carried out in the State of Sao Paulo.[25]

Furthermore, the Protocol also provides for additional rules to better assess the risk prior to any financing, as highlighted in Section D above. Prior to the financing of projects in the State of São Paulo, criteria for analyzing the project are also established by the financial institution as illustrated below:

(A) Project analysis phase

i) Request the client to present the pertinent environmental licenses according to the project's development phase and the previous environmental impact study (EIA/RIMA);
ii) Conduct media research on the company and the project;
iii) Request the client to grant the right to use water resources and/or supply agreement with the concessionaire of water services;

25. GHG PROTOCOL, http://www.ghgprotocol.org/.

iv) Request the client to present the Biosafety Quality Certificate issued by the National Technical Biosafety Commission (CTNBio) in cases where they develop research or project activities related to genetically modified organisms (GMOs); and
v) To verify the existence of an area embargoed by IBAMA.[26]

(B) Financing disbursement phase

i) Obligation of the borrower to observe applicable social and environmental legislation as well as those related to traditional communities;
ii) Obligation of the borrower to observe labor legislation, especially norms related to occupational health and safety and the absence of work similar to slave or child labor;
iii) Faculty of the financial institution to anticipate the expiration of the transaction in cases of environmental license cancellation, when applicable, and final conviction due to practice by the policyholder of acts that import child labor, work analogous to the slave, criminal prostitution, or damage to the environment;
iv) The borrower's obligation to monitor its activities in order to identify and mitigate non-foreseeable socio-environmental impacts at the time of credit contracting; and
v) Policyholder's obligation to monitor its direct and relevant suppliers regarding social and environmental impacts, compliance with social and labor legislation, health and occupational safety standards, and the absence of work similar to slave or child labor.[27]

(C) Socio-environmental risk management

i) To implement practices of management and evaluation of the socio-environmental risk of the project; and
ii) Consider the socio-environmental risk in the credit analysis process for project financing.[28]

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26. *Id.* (As a complement to the points highlighted in the Protocol, it is suggested that the financial institution verify, in addition to the technical aspects, the regularity of the project regarding the following matters: (i) Registration with IBAMA; (ii) Legal Reserve and Rural Environmental Registry; (iii) Evaluation of environmental liabilities (contamination of soil, groundwater and surface water); (iv) Evaluation of the value chain (suppliers, waste disposal); and (v) Existence of administrative and judicial proceedings).
27. Portaria Interministerial Nº 2.
28. Protocol of Good Environmental Practices for the Financial Sector in the State of Sao Paulo, *supra* note 24.

Contrary to the traditional logic of command and control of the country's environmental legislation, the intention of such document is to prevent the occurrence of environmental damages, especially in new water resource projects that are to be implemented.

The Protocol is an example of collective and voluntary construction of the role of the national financial system in reducing GHG emissions and contributing to a common understanding of the role of the financial system to promote a low carbon, resource efficient, and socially inclusive economy.

The document also reveals the change in the mental model of the financial community from a reactive pattern that analyzes only the return and the financial risk to a proactive pattern that analyzes the financial return, risk, and socio-environmental impact of a given project.

The following figure from the "Allocation for Impact G8 Task Force on Social Impact Investment" illustrates the shift from the mental model of financial return to impact:

Figure 1

III. Impact - The Role of Financial Institutions in Fostering Impact Businesses

> *"Making money doesn't have to come at the expense of making change."*
>
> *Mark & Craig Kielburger, Free the Children*

Having already gone through how banks should evaluate their financing decisions and how environmental impacts of financial institutions should be

reduced, the present section aims to discuss how to finance projects related to climate mitigation and adaptation.

Evaluating the impact of a given project presupposes a change of mentality in which one does not only evaluate the risk and the financial return, but also what the project intends to transform (the so-called theory of change), such as indices of education, change of habits and patterns consumption, progress in the area of clean and renewable energies, high standards of sustainability, indicators of quality of life, income of target communities, and etc.[29]

In the environmental field, impact must be seen as a business opportunity. To quote a few examples, impact measurement can take place in

i) efficiency in the use of natural resources (water and energy);
ii) reduction of direct and indirect emissions;
iii) evaluation of the production process and the value chain (raw material, suppliers);
iv) investments in promoting the green economy with sustainable products and services;
v) reduction of solid waste generation and disposal; and
vi) promotion of renewable energies.[30]

As an example, actions of the financial community can bridge the effervescent Brazilian entrepreneurial ecosystem with a view of directing the efforts for structuring and implementing reverse solid waste logistics systems, innovative composting, biodigestion, and recycling projects, which are in compliance with the Solid Waste National Policy (Federal Law No. 12,305/ 2010, or PNRS).

The idea of impact as opportunities follows three main aspects:

i) the market value of a business is directly linked to the prospect of future profitability (this is the rule in the financial market);
ii) the bar is rising, and consumers are increasingly aware of the various aspects of business performance, wanting to know more about products, origin, attitudes, and beliefs; and

29. República Federativa do Brasil, Pretendida Contribuição Nacionalmente Determinada Para Consecução do Objetivo da Convenção-Quadro Das Nações Unidas Sobre Mudança do Clima, http://www.itamaraty.gov.br/images/ed_desenvsust/BRASIL-iNDC-portugues.pdf.
30. *Id.*

iii) a business model has to be ready to live with these new demands and consider that the future of business is sustainable business. The challenge is to develop projects or initiatives with positive environmental impacts that are economically viable, that is, with a good risk and return equation and have adequate funding mechanisms.

As an example, the United Nations Environment Program (UNEP) launched a global survey in early 2014 with a group of countries entitled, "Inquiry: Design of a Sustainable Financial System," which is already in its third edition. A survey was conducted in 2016 with the participation of 14 institutions who were responsible for 87% of total loans to legal entities in the world.[31] The results reached R$ 316,932 million in loan balances for the green economy, representing 16.7% of the total loans granted to the legal entities by the 14 participating banks (R$ 1,893 billion) and 14.5% of the total balances of the banking sector (R$ 2.175 billion).[32] This work, a pioneer in the market, will help enable participating banks to know and manage the profile of their portfolios considering the exposure to socio-environmental risks It will also allow the identification of new business opportunities related to the transition into a low carbon economy.

A. Social Finance and the Era of Impact Businesses

> *"It is urgent that governments throughout the world commit themselves to developing an international framework capable of promoting a market of high impact investments and thus to combating an economy which excludes and discards."*
>
> *Pope Francis, June 2014.*

In order to foster a global market for social impact investments and to attract more capital to fund innovative solutions that respond to social problems, the Social Finance Task Force (FTFS), an arm of the Investment Control Group of Global Social Impact Investment Steering Group (GSG), was created in Brazil.

FTFS has produced, analyzed, and debated information on the field of social finance and business impacts in Brazil, which consist essentially of investments that generate both social return and financial profitability and the so-called impact businesses. Impact businesses are businesses that meet four key principles:

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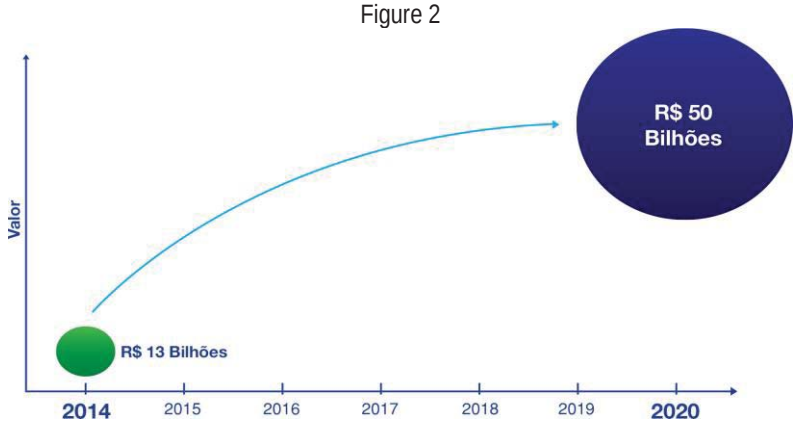
31. UN ENVIRONMENT, http://web.unep.org/inquiry.
32. *Id.*

a social and/or environmental mission, monitoring their social and environmental impact, economic and effective logic, and inclusive governance.[33]

Therefore, impact businesses are those with an explicit mission to generate socio-environmental impact while generating a positive financial result in a sustainable way. According to the assessment made by FTFS in May 2015, the social finance ecosystem is in strong growth and expects to move in the next few years to about US $1 trillion (one trillion dollars) in the world and R$50 billion (fifty billion Real) in Brazil:

Figure 2



Source: Mapping of Financial Resources available in the social field of Brazil with the objective of identifying potential resources for Social Finance, Social Finance Task Force, May 2015.

Financial institutions, federal development agencies, financial market regulators, and investment funds should encourage the movement of resources to the field of social finance. The following chart presents some types of incentive in which the socio-environmental impact can be seen as a business opportunity:

Table 2

Entity	Area	Incentive
Financial institutions	Credit	Flexibility of financing rules (Sao Paulo Municipal Law 16,174/2015, which establishes financial incentive mechanisms related to efficiency in the use of natural resources)

33. Força Tarefa de Finanças Sociais, http://forcatarefafinancassociais.org.br/.

Entity	Area	Incentive
Federal development agencies (BNDES, FINEP), State (Invest SP) and multilateral agencies (IDB, IFC)	Credit	Use of BNDES social sub-credit for impact businesses * For loans above R$ 100 million, 0.5% shall be used in the social agenda
	Investment	Incorporation of the impact investment theme in the definition of criteria for calls for contributions in private equity and venture capital funds
Financial Market Regulatory Agencies (Central Bank and CVM)	Financing	Innovative digital platforms for fundraising for companies, especially early stage
Funds	Investment	Creation of sectorial investment funds for strategic issues (solid waste and reverse logistics systems)[34]

It is not the purpose of this article to deal specifically with each form of incentives, but rather the purpose is to map the system and grant instruments for financial institutions to combat climate change. Thus, in addition to the above summarized forms of incentive, Annex I provides a chart with a mapping of federal laws and regulations that can guide the next steps in order to foster the eco-system of social finance and business impact in the country.

B. Rankings and Certifications

The rankings and certifications are other ways of evaluating the sustainability and socio-environmental impact of a given project. Below is the evolution of the certifications that can and should be consulted by the financial market prior to the granting of credit and/or financing.

These various rankings and certifications are being used by financial institutions in Brazil as guidelines on how to apply social and environmental performance standards according to the economic sector when assessing projects with medium and high impacts. Notwithstanding that seeking profits is the main purpose of corporations, achievements of some standards demonstrate that shareholders have understood that companies need to seek other goals as well, including noble environmental and social goals.

34. Força Tarefa de Finanças Sociais, Mapeamento dos Recursos Financeiros Disponíveis no Campo Social do Brasil com o Objetivo de Identificar Recursos Potenciais para Finanças Sociais (2015), http://forcatarefafinancassociais.org.br/wp-content/uploads/ 2015/ 05/MapeamentoOfertaCapital.pdf.

That being said, rankings and certifications contribute to the path towards development of the country in sustainable ways.

1. Dow Jones Sustainability Indexes (DJSI)

The DJSI, launched in 1999, evaluates the sustainability performance of the 2,500 largest companies listed on the Dow Jones Global Stock Market Index.[35] Based on an analysis of economic, environmental and corporate social performance, the index also assesses issues of corporate governance, risk management, branding, climate change mitigation, supply chain standards, and work practices. As a result, the index has become a benchmark for investment in sustainable enterprises.

To be incorporated into the DJSI, companies are evaluated and selected based on their long-term economic, social, and environmental management plans. The selection criteria evolve every year and companies should continue to refine their sustainability plans to remain in the index.

2. Carbon Disclosure Project (CDP)

CDP is a non-profit organization whose goal is to create a relationship between shareholders and companies focused on business opportunities arising from global warming.[36] It is a questionnaire formulated by investors and addressed to companies listed on the world's major stock exchanges, which seek information on their climate change policies.

In 2014, more than 5,000 companies responded to CDP's requests for information on climate change, water, and forests through CDP's online response system. The data collected enables investors and governments to assess risk mitigation processes for the use of energy and natural resources and to identify opportunities for responsible investment.

3. Global Reporting Initiative (GRI)

The GRI is an independent international organization that helps companies, governments, and other organizations understand and communicate their impacts on issues such as climate change, human rights, and corruption.[37] By

35. *Dow Jones Global Total Stock Market Index*, WALL ST. J., http://quotes.wsj.com/index/XX/DWG.
36. CDP, https://www.cdp.net/en.
37. GRI, https://www.globalreporting.org/Pages/default.aspx.

2015, 7,500 organizations have used GRI guidelines to produce their sustainability reports.

The guidelines apply to multinational organizations, public agencies, small and medium-sized enterprises, NGOs, industrial groups, and etc.

4. Corporate Sustainability Index (ISE)

Created in 2005, the ISE of the Sao Paulo Stock Exchange (BOVESPA) aims to foster an investment environment compatible with the demands of sustainable development of society and encourages corporate ethical responsibility through good business practices.[38]

The ISE also aims to offer investors a portfolio option composed of shares of companies that show a recognized commitment to social responsibility and corporate sustainability. The index adopts the international Triple Bottom Line (TBL) concept that assesses in an integrated way, the economic-financial, social, and environmental dimensions of companies as well as the criteria and indicators of corporate governance.

5. Principles for Responsible Investment (PRI)

The PRI, supported by the United Nations, aims to guide the sustainability implications for investors and support signatories to incorporate such issues into their investment decisions.[39] Through the implementation of the six principles, PRI signatories contribute to the development of a more sustainable global financial system.

The principles are voluntary and they include possible actions to incorporate environmental, social, and corporate governance (ESG) issues into asset investments (responsible investment). Responsible investment must be tailored to suit the investment strategy, approach, and resources of each organization. In November 2016, 1,600 signatories representing US $62 trillion in assets under management became signatories to the PRI.

The six criteria are: (1) incorporation of ESG issues into the processes of investment analysis and decision making; (2) incorporation of ESG issues into the policies and practices of the invested assets; (3) appropriate disclosure on ESG issues by the target entities; (4) implementation of the principles in the investment sector; (5) working together to improve and implement the

38. FGC Centro de Estudos em Sustentabilidade, https://www.isebvmf.com.br/.
39. Principles for Responsible Investment, https://www.unpri.org/.

principles; (6) reporting activities and progress in implementing the principles.[40]

6. Impact Reporting & Investment Standards (IRIS)

IRIS, established in 2009, is an initiative of the Global Impact Investing Network (GIIN), a non-profit organization dedicated to increase the scale and effectiveness of global impact investment. [41] GIIN recognizes impact measurement as a central feature of impact investment and provides IRIS with support for transparency, credibility, and accountability in impact measurement practices across the impact investment industry. Through IRIS metrics, which can be used as a complement to the PRI, investors more easily evaluate potential investments that can generate socio-environmental impacts beyond financial returns.

7. Global Impact Investing Rating System (GIIRS)

GIIRS is yet another metric for impact investments that consist of rigorous, comprehensive, and comparable appraisals of a company or the social and environmental impact of a fund. The impact assessments of companies and funds are derived from Impact Assessment B (criterion for selection and evaluation of a company, which aims at social and environmental development as a business model).[42]

The B Impact Assessment covers 5 major groups: (i) governance; (ii) community; (iii) employees; (iv) environment; and (v) impact business models. [43] The evaluation process also includes request for supporting documentation, signature by the company of a term sheet, and the amendment of its bylaws to contemplate in its corporate purpose, the economic, social, environmental, and legal effects of short and long-term operations of the company in relation to active employees, suppliers, consumers and other creditors as well as the relationship of the community in which it operates locally and globally.

The table below presents some practices adopted by Brazilian B companies (for example, Natura Cosméticos):

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40. *Id.*
41. IRIS, https://iris.thegiin.org/.
42. ANALYTICS, http://b-analytics.net/giirs-funds.
43. IMPACT ASSESSMENT, http://bimpactassessment.net/.

Table 3

Department	Practice
Sustainability	Support to different areas of the company to adopt practices that favor the purchase of impact business products
Purchase	Evaluation of suppliers and targets for acquisition of impact business products
Commercial	Differentiated business conditions for impact businesses when purchasing products and services
Research and Development	Partnerships with impact businesses to innovate the company's products and services

IV. The Role of Financial Institutions in Combating Climate Change

On the occasion of the 21st UNFCCC Convention on Climate Change, Brazil presented its intended Nationally Determined Contribution (iNDC), which was finally approved by the signing and subsequent ratification of the Paris Agreement. The iNDCs were not only recognized, but a system was also created for its improvement and its revision every 5 years, forbidding any retrogression.

All policies, measures, and actions for the implementation of iNDCs in Brazil were established by the Federal Government in the scope of the National Policy on Climate Change (Federal Law 12,187/2009), the Law on Protection of Native Forests (Federal Law 12.651/2012, or Forestry Code), the Law of the National System of Conservation Units (Federal Law 9.985/2000), and related planning instruments and processes.

Brazilian iNDC has a broad scope, which includes mitigation, adaptation, and means of implementation, such as: [44]

44. REPÚBLICA FEDERATIVA DO BRASIL, *supra* note 29.

Table 4

Mitigation	Adaptation	Implementation
Reduced greenhouse gas emissions by 37% below 2005 levels by 2025 and by 43% below 2005 levels by 2030.	Implementation of policies and measures to adapt to climate change to build resilience of populations, ecosystems, infrastructure and production systems. The social dimension is at the heart of Brazil's adaptation strategy, bearing in mind the need to protect vulnerable populations from the negative effects of climate change and strengthen their capacity for resilience. In this context, Brazil is working on the development of new public policies, based on the National Adaptation Plan (NAP)	Policies, measures and actions to achieve iNDC will be implemented without prejudice to the use of the financial mechanism of the Convention as well as any other modalities of international cooperation and support, with a view to strengthening effectiveness and/or anticipating implementation.

The goals proposed by this paper are indeed promising, and the country played a decisive role in the success of the Paris Agreement. But conditions need to be created for iNDCs to become an effective instrument for sustainable development. To this end, the agreement establishes an innovative system of review and transparency in which it will be necessary to measure, report, and attest the achievement of goals.

The Paris Agreement has 31 pages and was divided into "Decisions of the COP-21," with 140 paragraphs of less force in the international agreement and "Paris Agreement," with 29 articles of greater binding force.[45]

One of the most discussed issues during COP-21 was the need to find ways to finance mitigation (cut-off) and adaptation (protection against climate change) projects from the effects of global warming. Developed countries made commitments to grant US $100 billion a year to low carbon projects and ventures from 2020. The value will be reviewed in 2025.

Developing countries will make voluntary investments, with no mention of private initiatives. In addition, through the new voluntary mechanism highlighted in Articles 5 and 6 of the Paris Agreement, countries are invited to take measures to develop policies and compensatory mechanisms that encourage the reduction of emissions from deforestation, degradation, and sustainable management of forests.[46]

45. *The Paris Agreement*, UN FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/paris_agreement/items/9485.php.
46. *Id.*

In this sense, Brazil undertook to achieve zero illegal deforestation by 2030 in the Brazilian Amazon and to offset greenhouse gas emissions from legal suppression of vegetation by 2030.

In addition, Brazilian commitments include the restoration and reforestation of 12 million hectares of forests and the strengthening of the Plan ABC (Low Carbon Agriculture) in the agricultural sector with the prediction of an additional restoration of 15 million hectares of degraded pastures by 2030.

To achieve the objectives, adequate public policies that focus on the implementation of the Forestry Code, the financing of low-carbon agriculture, and sustainable food production will be necessary.

As can be seen, the Paris Agreement represents recognition of climate justice, the integrity of ecosystems, and the role of the private sector in providing incentives to reduce emissions. But resources, training, national capacity building, scientific quality, transparency, and new technologies will be needed for Brazil to reach and exceed its goals.[47]

In order to enforce Brazilian iNDC, Brazil has committed itself, among other measures, to increase the share of sustainable bioenergy in the Brazilian energy matrix, expand the consumption of biofuels, promote new standards of clean technologies, expand energy efficiency measures, and improve transport infrastructure and public transport in urban areas. To do so, it will be necessary to regulate the current National Policy on Climate Change instituted by the Federal Law No. 12,187/2009. Federal Law No. 12,187/2009, regulated by the Federal Decree No. 7,390/2010, establishes the use of financial and economic instruments to promote mitigation and adaptation actions to climate change as one of its guidelines.

The instruments include: (i) the specific lines of credit and financing of public and private financial agents; (ii) the financial and economic mechanisms for mitigating climate change and adapting to the effects of climate change that exist under the UNFCCC and the Kyoto Protocol; and (iii) the financial and economic mechanisms at the national level for mitigation and adaptation to climate change.[48]

Along these same lines, the PNMC provides that official financial institutions may provide specific lines of credit and finance to develop actions and activities

47. According to the IPCC, countries should promote large-scale measures for land-use change and forests as well as significantly increase the share of non-emission or low-carbon energy sources in the world's energy matrix by 2050, http://www.ipcc-wg3.de/news/ipcc-wgiii-releases-special-report-on-renewable-energy-sources-and-climate-change-mitigation.

48. REPÚBLICA FEDERATIVA DO BRASIL, *supra* note 29.

that meet the policy objectives and aims at inducing the private agents to comply and execute PNMC within the scope of their actions and social responsibilities.[49] It was therefore essential to establish a system to enforce the targets as well as to create and strengthen market mechanisms and public financing policies that include the pricing of fossil fuel-based production. It will also be necessary for the various sectors of society to create the conditions for public policies to be put into practice, which includes, as an example, a better evaluation by the private sector and the financial community of what constitutes sustainable production and what makes a low carbon project.[50]

A. UNEP Initiatives

The United Nations Environmental Program (UNEP) has been leading sustainable finance initiatives around the world (so-called green finance), in particular, through the "Inquiry into the Design of Sustainable Financial System".

One of them, launched at the World Economic Forum in 2017, is the so-called "Green Digital Finance Alliance", an initiative in partnership with Ant Financial Services Group that is China's leading provider of online financial services in order to encourage the advancement of technology for financing.

The initiative hopes to influence, through the alignment of the financial system with the objectives of sustainable development, to make decisions throughout financing value chain.

With already 72 million customers in 2017, the Alipay application, a digital platform, provides users a credit account and a carbon account through which they can reduce their carbon footprint and acquire green credits to be converted in the future.[51]

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49. Federal Law No. 12,187/2009, de 20 de Dezembro de 2009 (Braz.).

50. There is also a need for consumer awareness of the impact of habits and patterns and the key role of their choices in redirecting the economy, industry, and new business models, but that is a subject for another article.

51. *Green Finance is Being Driven by Developing Nations*, CLIMATE ACTION (Jan. 16, 2017), http://www.climateactionprogramme.org/news/green_finance_is_being_driven_by_developing_nations (In August 2016, Alipay launched a CO2 Emissions Calculator, which notifies users of the amount of carbon emissions they have prevented through online payments or other activities, such as using public transportation instead of driving. Accumulated green credits are converted to tree planting in Mongolia. By 2017, 520,000 trees had already been planted).

On January 30, 2017, the UNEP Finance Initiative (UNEP-FI) also launched the so-called "The Principles for Positive Impact Finance – A Common Framework to Finance the Sustainable Development Goals."[52] The principles demonstrate the willingness of financial institutions to go beyond current practices and contribute to promoting more sustainable development and advocating a holistic analysis of the positive and negative impacts on economic development, humanity, and the environment. Principles are the necessary tools to enable the business and financial community to work and innovate together and to meet the challenges of the UN Sustainable Development Goals (SDG).[53]

The four principles are divided into:

i) Principle One - Definition: it defines a positive impact investment as one that promotes financing for impact projects that favor at least one of the pillars of sustainability (economic, social and environmental), and includes an overall assessment of the positive and negative impacts of activities, projects, programs, and entities to be financed (Projects);
ii) Principle Two - Structure: brings the need for processes, methodologies, and tools to identify and monitor the positive impact of the Projects;
iii) Principle Three - Transparency: it presents the need for transparency and communication of Projects considered as having a positive impact and the processes that determine impact verification, project eligibility, and monitoring; and
iv) Principle Four - Report: which should be based on the impacts generated by the Projects and can be done both internally and independently by auditors. The impact report shall consider the

52. THE PRINCIPLES FOR POSITIVE IMPACT FINANCE: A COMMON FRAMEWORK TO FINANCE THE SUSTAINABLE DEVELOPMENT GOALS, IMPACT, http://www.unepfi.org/wordpress/wp-content/uploads/2017/ 01/POSITIVE-IMPACT-PRINCIPLES-AW-WEB.pdf.

53. *Sustainable Development Goals*, SUSTAINABLE DEV. KNOWLEDGE PLATFORM, https://sustainable development. un.org/?menu=1300 (They are considered as a complement to existing instruments for the financial market, such as the Green Bond Principles, the Principles for Responsible Investment, and the Equator Principles. The 17 SDGs are: 1. Eradication of poverty; 2. Zero hunger; 3. Good health and well-being; 4. Quality education; 5. Gender equality; 6. Clean water and sanitation; 7. Accessible and clean energy; 8. Decent employment and economic growth; 9. Industry, innovation and infrastructure; 10. Reducing inequalities; 11. Sustainable cities and communities; 12. Responsible consumption and production; 13. Combating climate change; 14. Life underwater; 15. Life on earth; 16. Peace, justice and strong institutions; and 17. Targeted partnerships).

> variety, magnitude, scalability, and level of the positive impacts generated.[54]

The process of adherence to the principles must still be defined by UNEP-FI and is part of a roadmap that includes building solutions and developing business models for global finance.

V. Final Considerations

Some points for analysis based on the lessons contained in this article are highlighted:

1. **Banks should not wait to devise and implement effective socio-environmental risk analysis strategies.** Socio-environmental compliance is the starting point for any socio-environmental management process. Actions to mitigate socio-environmental risk include the evaluation by the financial community of what constitutes sustainable production and what makes a low-carbon project, implementation of PRSA and adherence to voluntary commitments, and day-to-day risk prevention and control of financial institutions;

2. **Availability of a wide range of economic instruments - differentiated credit and financing lines, guarantee modalities and insurance - for the implementation of public policies.** Actions may include flexibility in financing rules for impact businesses that ensure compliance with socio-environmental legislation, embracing projects aimed at the implementation of PNRS, PNMC, and adaptation/mitigation projects;

3. **Evaluation of the results with investments in the promotion of the green economy and the promotion of sustainable products and services.** Actions include the adoption by the financial institution of Environmental Management System to optimize the use of natural resources (energy and water) and insertion of socio-environmental criteria in the acquisition of products and contracting services, environmentally sound management, and management of the solid waste generated;

54. The Principles for Positive Impact Finance: A Common Framework to Finance the Sustainable Development Goals, *supra* note 52.

4. **The impact should be seen as a business opportunity.** There is a wide range of impact businesses that can and should be prioritized, such as those involving (i) efficiency in the use of natural resources (water and energy); (ii) reduction of direct and indirect emissions; (iii) evaluation of the production process (raw material, suppliers); (iv) investments in promoting the green economy with sustainable products and services; (v) reduction of solid waste generation and disposal; and (vi) promotion of renewable energies;

5. **The role of the financial community in fostering impact business and combating climate change.** Actions of the financial community should bridge the effervescent Brazilian entrepreneurial ecosystem with a view to direct efforts towards, for example, structuring and implementing reverse solid waste logistics systems, innovative composting, biodigestion, and recycling projects that are in compliance with PNRS guidelines and principles; and

6. **Interlocution between the different stakeholders.** Financing for sustainable development can only be accelerated if (i) financial institutions identify, promote, and communicate funding for positive socio-environmental impact Projects, such as those for infrastructure, renewable energy and consumption, water, waste, basic sanitation, and sustainable agriculture; (ii) corporations structure their projects and business models with a positive social and environmental impact in order to promote a low carbon economy and achieve the ODS; (iii) government entities promote public policies that encourage positive impact of the Projects and control the social and environmental impact of corporations in an effective way; and (iv) civil society identifies and develops technical capacity to collaborate with other stakeholders in the search for new impact business models.

It is therefore imperative that the various sectors of society create the conditions for strengthening market mechanisms and implement public policies that promote sustainable financing that are in line with ODS 17, which aims to promote partnerships for sustainable development. Only well-orchestrated work among financial institutions, government entities, and entrepreneurs will it appropriately address and lead the transition to a low-carbon economy.

Annex I - Mapping of laws and regulations that can guide the next steps and foster the eco-system of social finance and business impact in the country

Environmental Law	Subject	Guidance for ecosystem development
Federal Law No. 12,187/2009	Reduction of direct and indirect GHG emissions	The official financial institutions may provide specific lines of credit and financing to develop actions and activities that meet the objectives of the law and are aimed at inducing the conduct of private agents to the observance and execution of the National Policy on Climate Change
Federal Law No. 12,305/2010	Solid Waste National Policy	The preparation of a state/municipal solid waste plan is a condition for States/Municipalities to have access to Union resources destined to enterprises and services related to solid waste management, or to be benefited by incentives or financing from federal credit or development entities for such purpose
Federal Decree No. 4,339/2002	Biodiversity	Conservation and sustainable use of biodiversity are a common concern of humankind but with differentiated responsibilities, with developed countries having to contribute new and additional financial resources and facilitating adequate access to relevant technologies to meet the needs of developing countries
BCB Rule No. 4,267/2013	Reduction of direct and indirect GHG emissions	National Climate Change Fund
BCB Rule No. 3,896/2010	Forestry Code	Rural Credit Low Carbon Agriculture
BCB Rule No. 3,545/2008	Forestry Code	Rural Credit Amazonia
BCB Rule No. 4,327/2014	Duty to assess socio-environmental impact	Prior evaluation of potential socio-environmental impacts of new product and service modalities by financial institutions and other institutions authorized to operate by the Brazilian Central Bank.
FEBRABAN Rule No. 14/2014	Duty to assess socio-environmental impact	Prior evaluation of potential socio-environmental impacts of new product and service modalities

Environmental Law	Subject	Guidance for ecosystem development
Protocol on Good Socio-Environmental Practices for the Financial Sector in the State of São Paulo	Reduction of direct and indirect GHG emissions	Voluntary reporting of direct and indirect GHG emissions by financial institutions. Collective construction of the role of the national financial system in reducing emissions, encouraging a low carbon, resource efficient and socially inclusive economy
Federal Decree No. 5,940/2006	Solid Waste	Separation of recyclable waste discarded by the organs and entities of the federal direct and indirect public administration, at the generating source, and its destination to the associations and cooperatives of the collectors of recyclable materials
Federal Law No. 6,938/1981	Duty to assess socio-environmental impact	Entities and financing bodies and governmental incentives will condition the approval of projects authorized to these benefits to the licensing procedure, in the form of this law, and to the compliance with the standards and criteria issued by CONAMA
Federal Law No. 11,105/2005	Genetically modified organisms	Public and private, national, foreign or international organizations, funders or sponsors of activities or projects referred in this law shall require the submission of a Biosafety Quality Certificate, issued by CTNBio
Federal Law No. 12,651/2012	Forestry Code	After December 31, 2017, financial institutions may only grant agricultural credit to owners of rural properties that are enrolled in the Rural Environmental Registry
Federal Law No. 10,295/2001	Efficiency in the use of natural resources	National Policy of Conservation and Rational Use of Energy that aims at the efficient allocation of energy resources and the preservation of the environment
Federal Law No. 10,831/2003	Food	Deals with organic agriculture
Federal Decree No. 7,794/2012	Food	Instituted the National Policy on Agro ecology and Organic Production
Federal Law No. 12,349/2010	Supply chain	Establishes a margin of preference of up to 25% for manufactured products and national services that meet Brazilian technical norms and incorporate innovation
Federal Law No. 9,433/1997	Efficiency in the use of natural resources	It provides for the rationalization of water use

Environmental Law	Subject	Guidance for ecosystem development
Federal Law No. 12,305/2010	Solid Waste	Priority, in government procurement and contracting, for recycled and recyclable products and for goods, services and works that consider criteria compatible with socially and environmentally sustainable consumption patterns
Federal Normative Rule No. 01/2010	Sustainable procurement	Criteria for environmental sustainability in the acquisition of goods, contracting services or works in the Federal Public Administration
Federal Decree No. 7,746/2012	Sustainable procurement	General criteria, practices and guidelines for the promotion of sustainable national development through contracting by the federal direct, autarchic and foundational public administration and by the state-owned companies
Federal Law No. 12,187/2009	Efficiency in the use of natural resources	Preference criteria in public tenders for proposals that provide greater energy, water and other natural resource savings
Federal Decree No. 2,783/1998	Reduction of direct and indirect GHG emissions	Prohibits federal government entities from purchasing products or equipment containing substances that deplete the ozone layer
Federal Law No. 11,947/2009	Food	Provides for school feeding and provides that 30% of the resources passed on by the Union to the States and Municipalities, should be applied in the purchase of products from family agriculture

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