Implementing the TCFD recommendations: a roadmap for the Brazilian banking sector

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Prepared for:

FEBRABAN
Brazilian Federation of Banks

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FINANÇASdoBEM

1. Introduction

In 2018, the Brazilian Federation of Banks (FEBRABAN) implemented the first phase of an institutional project to support Brazilian banks in the adoption of the recommendations published by the Task Force on Climate-related Financial Disclosures (TCFD) of the Financial Stability Board. A roadmap with two types of actions was developed: (i) collective actions by the banking sector through FEBRABAN; and (ii) individual actions by the banks. The full report is available at FEBRABAN website.

2. Fostering the integration of E&S and climate factors into the Brazilian banking agenda

Besides working as an institutional channel between its 118 associated banks and their stakeholders (e.g. government, regulators, clients), FEBRABAN promotes dialogues and develop projects aiming to foster best practices in the industry. This work includes the engagement of banks to improve their management of environmental and social (E&S) risks, including climate.

The Sectoral Committee for Sustainability of FEBRABAN leads an agenda that includes studies, workshops, conferences, production of guides and elaboration of self-regulation norms on E&S issues. This committee periodically establishes working groups (WGs) in which banks focus on specific themes such as the quantification of credit flows to the green economy, sustainable forestry, renewable energy financing and deforestation risk management.

FEBRABAN frequently shares the findings of its work with all member banks and civil society. As an example, in the recent years, a range of studies addressing Climate Change issues were launched: "Guidelines for issuing green bonds in Brazil", "Climate risk management with a focus on carbon pricing", "Carbon management and pricing: risks and opportunities".

3. TCFD as a guide to address potential climate change impacts in the banking sector

Brazil is exposed to a set of risks and opportunities associated with the impacts of climate change, such as increasing temperatures, sea level rise and increased severity of extreme weather events. As a developing country with infrastructure, economic and welfare challenges, these impacts are particularly threatening.

Brazil's extensive agricultural activity, native forest stocks and concentration of densely populated cities on the coastline increase exposure to climate change impacts.

Agriculture and livestock activities accounted for nearly one-quarter of Brazil's gross domestic product (GDP) in 2017. Thus, the physical impacts of climate change may result in risks such as losses of agricultural production due to long droughts and productivity decline due to temperature rise. In urban areas, more than 60% of the Brazilian population lives in coastal cities, being vulnerable to impacts on urban infrastructure by sea level rise.

Brazil's energy mix also requires a reflection on how to deal with physical and transition impacts of climate change. The country is one of the ten largest oil producers in the world and its pre-salt reserves have yet a large production potential. At the same time, the country is the third major renewable energy generator according to the International Energy Agency. These sources account for more than 40% of the energy mix and more than 80% of the electricity mix. Biomass, wind and solar energy production have been increasing in the last years.

These figures pose relevant risks and opportunities for the Brazilian private sector and its financiers.

The engagement of banks in this topic led to the establishment of the Working Group on Climate Risks at FEBRABAN in 2018. Its main objective is to help banks understand how climate-related risks and opportunities affect their businesses. Eleven banks[1], which account for 76% of the active credit portfolio in Brazil, initiated this work and decided to use the TCFD recommendations as a guidance framework.

The first goals of these banks were to deepen their knowledge on the set of recommendations and discuss its implementation taking into account the Brazilian scenario, including current regulation on E&S risk management, good practices and the most critical challenges to deal with climate-related risks and opportunities. As a result, the group designed a roadmap to implement the TCFD recommendations in the upcoming years.

4. Banks' exposure to climate-related risks

The recent evolution of the E&S risks agenda in the Brazilian banking sector, especially since Resolution 4327/2014 was enacted by the National Monetary Council, opens the way for the implementation of the TCFD recommendations. In addition to regulatory obligations, banks with greater sensitivity to climate issues have been developing risk management processes for clients with higher exposure to climate change as well as processes to identify opportunities derived from the transition to a more resilient, low-carbon economy.

Identifying banks´ sensitivity to climate issues is the first step to prioritize management actions.

In 2014, Resolution 4327 of the National Monetary Council introduced the concepts of relevance and proportionality as a basis to the definition of E&S policies by the Brazilian banks. The 'relevance' principle is related to the E&S risk exposure of clients in the banks' portfolios, including their economic sectors and location. The 'proportionality' principle refers to the complexity of banking services and products, depending on variables such as volume, tenor, guarantees and instruments used in financial transactions with clients. Based on

[1] B3, Banco do Brasil, Bradesco, BTG Pactual, Caixa Econômica Federal, CCB Brasil, Citibank, Itaú Unibanco, Rabobank, Santander Brasil and Votorantim

these principles, banks can assess their credit portfolio and design fit-for-purpose E&S risk management practices. The same logic applies to climate risk management, in which the identification and measurement of the main risks are among the most critical challenges.

Since Brazilian banks are acquainted with these concepts, the FEBRABAN WG on Climate Risks developed a Climate Risk Sensitivity Tool. It supports the identification and a preliminary measurement of climate risk exposure at three levels: by economic sector in the credit portfolio, by client and by financial transaction.

The tool considers the following factors to assess the relevance and proportionality of climate risks:

Levels of assessment	Variables	
	Relevance	Proportionality
Sector risk	• Likelihood of climate-related financial impacts, by economic sector* • Credit quality of each economic sector in the portfolio (based on credit ratings)	• Credit exposure, by economic sector
Client risk	• Likelihood of climate-related financial impacts, by economic sector • Client credit rating	• Weighted average tenor of client exposure • Credit exposure, by client
Transaction risk	• Likelihood of climate-related financial impacts, by economic sector • Credit rating of the financial transaction • Locational risk of the transaction	• Transaction tenor • Transaction amount

* It was based on the TCFD list of sectors potentially most affected by climate change.

The application of this tool results in one preliminary diagnosis of the overall corporate credit portfolio sensitiveness to climate risks. It can help banks to map their exposure by sector and to identify the main risk drivers (e.g. location, number of clients, concentration on specific clients). The tool can be used to prioritize strategic actions and assess the materiality for reporting.

5. TCFD recommendations vs typical frameworks on disclosure of E&S aspects

The WG also concluded that implementing TCFD recommended disclosures should take into account existing reporting and risk management processes. We conducted an assessment to identify the relationship between several risk management and sustainability frameworks and the TCFD, at the Guidance level[2].

It was similar to the assessment made by the TCFD to CDP (formerly the Carbon Disclosure Project), the Global Reporting Initiative (GRI) and other frameworks at the Recommended Disclosures level. We divided the Guidance into 57 items and evaluated whether they are aligned with the indicators, questions, norms or guidelines provided by the following frameworks relevant in the Brazilian context: GRI, CDP, Securities and Exchange Commission's (SEC) 20-F Form, Brazilian Securities and Exchange Commission (CVM) Reference Form, Questionnaire of Brazil Stock Exchange Sustainability Index (ISE), National Monetary Council resolutions on E&S risk management and FEBRABAN's self-regulation norm on E&S risk management.

As a result, we produced a tool that can be used by Brazilian banks to assess the alignment of each TCFD Guidance item to other existing frameworks.

[2] TCFD provide a Guidance for each Recommended Disclosure.

6. Responding to climate-related risks and opportunities

The CDP Climate Change Questionnaire provides a good overview of how companies deal with climate-related risks and opportunities. Nearly 90% of financial institutions that answered the CDP Climate Change Questionnaire (2017) informed that they integrate climate-related issues into their strategy and almost 80% provide incentives to employees that are related to the company's performance on climate change. However, less than a quarter of participating financial institutions adopt an internal carbon price or measure its financed emissions, for example.

We combined two approaches to benchmark climate change management by financial institutions at the international level:

- quantitative approach: assessment of financial institutions answers to CDP questions most aligned to the TCFD Guidance;
- qualitative approach: assessment of practices by early adopters' banks to incorporate TCFD recommendations.

The international benchmark highlighted the importance of: (i) actively engaging senior management; (ii) conducting pilot scenario analysis for economic sectors potentially most affected by climate change and relevant for banks' credit portfolio; (iii) reviewing tools and processes to incorporate climate change issues into the investment decision-making process. These practices are enabling some front-running banks to report climate change issues as a key-factor for business performance and raise awareness of investors and other stakeholders on how they are dealing with climate-related opportunities and risks.

In addition to following international best practice, the Brazilian banking industry shall understand how progress on E&S risk management frameworks may provide enabling conditions for specific improvements on the climate risk agenda. The requirements of Resolution 4327/2014 pushed banks to review their policies, governance and practices on E&S risk management.

Some banks highly exposed to climate change effects have been increasing transparency, adoption of E&S risk management tools and seizing opportunities from the green economy and low-carbon transition. A research conducted by FEBRABAN with banks representing 91% of the credit portfolio of its members indicated that more than 60% of the respondents already consider exposure to climate-related aspects on their E&S risk assessment procedures.

The incorporation of climate-related questions into E&S Questionnaire for corporate clients is one best practice already adopted by some Brazilian banks. Those highly active in the agribusiness industry also assess how climate extreme events affect the production of their clients.

The creation of sustainability committees with the participation of senior management and the establishment of action plans to implement the E&S responsibility policies are two widely-adopted practices that shall be enablers for the implementation of TCFD recommendations by the banking sector in Brazil.

In February 2018, Itaú Unibanco released a paper document stating its practices and vision regarding the impact of climate change in its business and the efforts to implement TCFD recommendations.

Lessons from the UNEP-FI Pilot Project

The United Nations Environment Programme Finance Initiative (UNEP-FI) led, in 2017, a pilot project to assist selected banks with the implementation of the TCFD's Recommendations. Two Brazilian banks – Bradesco and Itaú Unibanco - jointly worked with other 14 peers to build tools and models for the implementation of scenario analysis of climate-related physical and transition risks of credit portfolios. Citi and Santander – whose Brazilian staff participated in the FEBRABAN WG – were also part of UNEP-FI pilot project.

The project partnered banks, specialists from climate research institutions and the financial sector in order to develop scenario analysis methodologies. These actors then tested the methodology and identified their limitation, along with limitations coming from the banks itself and their capacity to implement these complex tools. The results from this project – publicly available in "Extending Our Horizons" and "Navigating a New Climate" reports – were also shared with FEBRABAN WG and incorporate to the design of a roadmap for Brazilian banks.

7. A roadmap for the Brazilian banking sector

7.1. Actions at the banks' level

The assessment of practices adopted by Brazilian banks resulted in a list of main challenges and enablers for the implementation of TCFD recommendations. A set of actions for the next years was recommended in order to help banks addressing the identified gaps. These actions were placed in a suggested chronological order according to complexity and urgency.

Set of recommended actions for banks, in chronological order

Actions	Potential results
1. Application of the Climate Risk Sensitivity Tool	• Improved understanding of the materiality of climate issues • Action prioritization
2. Revision of governance around climate-related risks and opportunities (who is responsible, what are the responsibilities)	• Increased transparency regarding the responsibilities within the risk management structure • Assignment of responsibilities for the implementation of the TCFD Recommendations
3. Revision of publicly available information in bank documents and other reporting frameworks	• Diagnosis of current alignment to the Recommendations and the main gaps, in order to bridge them
4. Incorporation of a specific implementation agenda for the TCFD recommendations by sustainability committees and the board	• Top management involvement • Design of a work agenda in line with the Action Plan of the Social and Environmental Responsibility Policy
5. Monitoring of the corporate credit portfolio's exposure to critical sectors and climate opportunities	• Identification of critically exposed sectors to prioritize sector-specific actions to manage climate risks & opportunities

Actions	Potential results
6. Recommendation of adherence to voluntary reporting commitments (e.g. CDP, GHG Protocol) for clients with high exposure	• Educating clients about the importance of considering the impacts of climate change on business • Increased availability of comparable and dependable data regarding client exposure
7. Incorporation of climate change issues into strategic planning	• Identification of climate risks and opportunities over the short, medium and long term
8. Elaboration of institutional positioning/specific reports on climate change, to formalize comprehension of the theme, initiatives and commitments	• Improved communication with investors, clients and stakeholders about banks´ approach to climate-related risks and opportunities
9. Development of climate scenario analysis for portfolios, starting from pilot projects	• Estimation of potential impacts of climate change over the medium and long term • Identification of critical sectors to prioritize sector-specific actions
10. Incorporation of climate-related information into financial reporting	• Improved communication with investors, clients and stakeholders about exposure to climate risks and opportunities, as well as actions to manage it
11. Revision of E&S credit risk instruments to incorporate information client exposure to climate change	• Greater availability of comparable and reliable data about clients' exposure • Greater basis for decision-making in credit and risk teams
12. Incorporation of climate risks into overall risk management models	• Educating clients on the importance of considering the impacts of climate change on business • Greater basis for decision-making in credit and risk teams, allowing prioritization of transactions that are less exposed to climate risk
13. Incorporation of the climate variable into the development and assessment of new products	• Seizure of opportunities related to the support of low-carbon or climate resilient projects and sectors

7.2. Actions at the banking sector level

FEBRABAN is committed to the development of initiatives that assist the banking sector in the transition to a low carbon economy by addressing key issues in which an industry approach is most effective.

These initiatives are primarily related to sharing knowledge and raising awareness on the importance of climate change management and associated tools, as well as to the harmonization of some issues where further research and analysis may be warranted, as highlighted by the TCFD. FEBRABAN is a TCFD supporter and is committed to developing these supporting initiatives in the next two years (2019 and 2020).

Themes of FEBRABAN support for banks

<table>
<tr><th>Issues that require further work according to the TCFD Final Report 2017</th><th colspan="2">Cross-thematic support</th></tr>
<tr><td>Relationship with other reporting initiatives</td><td rowspan="4">Raising the level of awareness in banks and non-financial companies</td><td rowspan="4">Consolidation of bank's capacities</td></tr>
<tr><td>Scenario analysis</td></tr>
<tr><td>Availability and quality of climate-related information and its financial impact</td></tr>
<tr><td>Examples of disclosure in line with the Recommendations</td></tr>
</table>

These themes will be addressed by FEBRABAN through the following actions:

Set of actions at the banking sector level, in chronological order

Completed	Elaboration of a roadmap for the Brazilian banking sector
Started	Provision of the Climate Risk Sensitivity Tool for banks
Started	Provision of the Correlation Tool (TCFD vs Other Frameworks) for banks
Started	Initial dialogue with business associations
Not started	Provision of training on TCFD recommendation for banks' technical staff
Not started	Raising awareness and engagement of top management
Completed	Formalization of FEBRABAN's commitment as TCFD supporter
Not started	Development of national-level climate scenarios
Not started	Incorporating a climate approach to the FEBRABAN methodology for measuring resources allocated to the green economy and critical sectors
Not started	Curating of existent tools that provide inputs for climate risk assessment
Not started	Provision of training on TCFD recommendations for FEBRABAN commissions
Not started	Revision Proposal for the National Classification of Economic Activies, to make easier the categorization of clients and projects according to their mitigation or intensification of climate change
Not started	Discussion on the development of a self-regulatory standard to guide the quantification of financed emissions
Not started	Incorporation of TCFD progress into a discussion of financial losses caused by E&S damages, currently in progress at FEBRABAN

About FEBRABAN

The Brazilian Federation of Banks (FEBRABAN) is the main representative body of the Brazilian banking sector. Founded in 1967 in São Paulo, it is a non-profit association with a commitment to strengthen the financial system and its relations with society, while contributing to Brazil's sustainable development.

FEBRABAN has 118 associated banks, which account for 99% of the total assets of the entire segment in Brazil. Its permanent objectives include: representing its associates in all spheres of government, interacting with authorities and institutions in the elaboration and improvement of the regulatory system, developing initiatives to improve the productivity of the banking sector as well as directing efforts to enable the population's access to financial products and services, thus helping to strengthen Brazil's market and growth prospects.

About SITAWI

SITAWI Finance for Good is a Brazilian organization whose mission is to mobilize capital for positive social and environmental impact. It develops financial solutions for social impact and advises the financial sector on how to incorporate environmental, social and climate issues into strategy, risk management and investment analysis. Among its solutions, SITAWI conducts qualitative and quantitative analysis on climate risks and opportunities, and provides advisory for a better disclosure of climate-related financial impacts.

SITAWI runs Latin America's largest practice on sustainable finance and ESG research, now boasting 19 professionals based out of offices in Rio de Janeiro and São Paulo. It was ranked one of the 10 best ESG research houses for investors according to Extel Independent Research in Responsible Investment - IRRI 2017 and is Latin America's first non-financial organization to support the Principles for Responsible Banking.

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