



Climate Finance in Brazil: an overview of challenges and opportunities

Narrative report



15 June 2023



This report was prepared by NINT - Natural Intelligence within the contract GCT001660 with iCS - Institute for Climate and Society. The views presented in this document do not constitute investment or divestment recommendations.

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Acronyms and abbreviations

	Portuguese	English
Abrapp	Associação Brasileira de Entidades Fechadas de Previdência Complementar	Brazilian Pension Fund Association
AFAP	Agência de Fomento do Estado do Amapá S.A	Amapá State Development Agency S.A
AFEAM	Agência de Fomento do Estado do Amazonas	Amazonas State Development Agency
Age	Agência de Empreendedorismo de Pernambuco	Pernambuco Entrepreneurship Agency
Agerio	Agência Estadual de Fomento	State Development Agency
AGN	Agência de Fomento do Rio Grande do Norte S.A	Development Agency of Rio Grande do Norte S.A
AI	Inteligência Artificial	Artificial Intelligence
AMEC	Associação de Investidores no Mercado de Capitais	Capital Markets Investors Association
ANBIMA	Associação Brasileira das Entidades dos Mercados Financeiro e de Capitais	Brazilian Financial and Capital Markets Association
AuM	Ativos sob gestão	Asset Under Management
B3	Brasil, Bolsa, Balcão	Brazilian Exchange
BACEN	Banco Central do Brasil	Central Bank of Brazil
Badesc	Agência de Fomento do estado de Santa Catarina	Santa Catarina State Development Agency
Badesul	Agência de Fomento do Rio Grande do Sul	Development Agency of Rio Grande do Sul
Bandes	Banco de Desenvolvimento do Espírito Santo S.A	Development Bank of Espírito Santo
Banese	Banco do Estado de Sergipe	State Bank of Sergipe
Banestes	Banco do Estado do Espírito Santo	State Bank of Espírito Santo
Banpará	Banco do Estado do Pará S.A	State Bank of Pará S.A
Banrisul	Banco do Estado do Rio Grande do Sul	State Bank of Rio Grande do Sul
BASA	Banco da Amazônia	Bank of the Amazon
BB	Banco do Brasil S.A	Bank of Brazil
BCG	-	Boston Consulting Group
BDMG	Banco de Desenvolvimento de Minas Gerais	Minas Gerais Development Bank
BNDES	Banco Nacional de Desenvolvimento Econômico e Social	Brazilian Development Bank
BRB	Banco de Brasília	Bank of Brasília
BRDE	Banco Regional de Desenvolvimento do Extremo Sul	Southern Regional Development Bank
BRL	Real	Real
CA100+	-	Climate Action 100+
CBI	-	Climate Bonds Initiative

CDP	-	Carbon Disclosure Project
CEF	Caixa Econômica Federal	Federal Savings Bank
CIDE	Contribuição de Intervenção no Domínio Econômico	Economic Contribution Tax
CMN	Conselho Monetário Nacional	National Monetary Council
CNAE	Classificação Nacional de Atividade Econômica	National Classification of Economic Activities
CNPC	Conselho Nacional de Previdência Complementar	Complementary Pension Funds Council
CNseg	Confederação Nacional das Seguradoras	National Confederation of Insurance Companies
CNSP	Conselho Nacional de Seguros Privados	National Council of Private Insurance
CRA	Certificado de Recebíveis do Agronegócio	Agribusiness Receivables Certificate
Cresol	Cresol	Cresol
CRI	Certificado de Recebíveis Imobiliários	Real Estate Receivables Certificate
CVM	Comissão de Valores Mobiliários	Securities and Exchange Commission
COP27	Conferência do Clima da Organização das Nações Unidas	United Nations Climate Change Conference
Desenbahia	Agência de Fomento do Estado da Bahia	Bahia State Development Agency
Desenvolve	Agência de Fomento de Alagoas S.A	Development Agency of Alagoas S.A
Desenvolve MT	Agência de Fomento do Estado do Mato Grosso S.A	Mato Grosso State Development Agency S.A
Desenvolve Roraima	Agência de desenvolvimento de Roraima	Development Agency of Roraima
Desenvolve SP	Agência de Fomento de São Paulo	Development Agency of São Paulo
DFI	-	Development Financial institution
EAPC	Entidades Abertas de Previdência Complementar	Open Pension Funds
EFPC	Entidades Fechadas de Previdência Complementar	Closed Pension Funds
ESG	Ambiental, Social e Governança	Environmental, Social and Governance
ETS	-	EU Emissions Trading System
FEBRABAN	Federação Brasileira dos Bancos	Brazilian Banks Federation
FGI	Fundo Garantidor para Investimentos	Investment Guarantor Fund
FIDC	Fundo de Investimento em Direitos Creditórios	Credit Receivables Investment Funds
FII	Fundo de Investimento Imobiliário	Real Estate Fund
Finep	Financiadora de Estudos e Projetos	Funder of studies and projects
FIP	Fundo de Investimento em Participações	Equity Investment Fund
Fomento Paraná	Agência de Fomento do Estado do Paraná	Paraná State Development Agency
Fomento TO	Agência de Fomento do Estado do Tocantins	Tocantins State Development Agency
FUNBIO	Fundo Brasileiro para a Biodiversidade	Brazilian Fund for Biodiversity

GDP	-	Gross Domestic Product
GFANZ	-	Glasgow Financial Alliance for Net Zero
GHG	Gases de Efeito Estufa	Green House Gases
Goiás Fomento	Agência de Fomento do Estado de Goiás S.A	Goiás State Development Agency S.A
GRSAC	Relatório de Riscos e Oportunidades Sociais, Ambientais e Climáticas	Report on Social, Environmental and Climate Risks and Opportunities
GtCO2e	Toneladas de gás carbônico equivalente	Tons of carbon dioxide equivalent
ICO B3	Índice Carbono Eficiente	Carbon Efficient Index
INESC	Instituto de Estudos Socio-econômicos	Institute of Socio-economic Studies
INPE	Instituto Nacional de Pesquisas Espaciais	National Institute for Space Research
IPC	Investidores pelo Clima	Investors for Climate
ISS	-	Institutional Shareholder Services
ISE B3	Índice de Sustentabilidade Empresarial	Corporate Sustainability Index
LAB	Laboratório para Inovação Financeira	Financial Innovation Lab
LDO	Lei de Diretrizes Orçamentárias	Law of Budgetary Guidelines
LOA	Lei Orçamentária Anual	Annual Budget Law
MBRE	Mercado Brasileiro de Redução de Emissões	Brazilian Emissions Reduction Market
NBN	Banco do Nordeste	Bank of Northeast
NDC	Contribuição Nacionalmente Determinada	Nationally Determined Contribution
NINT	-	Natural Intelligence
NZAO	-	Net-Zero Asset Owner Alliance
NZBA	-	Net-Zero Banking Alliance
NZIA	-	Net-zero Insurance Alliance
OTC	-	Over the Counter
OECD	Organização para a Cooperação e Desenvolvimento Econômico	Organisation for Economic Co-operation and Development
PCAF	-	Partnership for Carbon Accounting Financials
PE	Princípios do Equador	Equator Principles
Piauí Fomento	Agência de Fomento e Desenvolvimento do Estado do Piauí	Bahia State Development Agency
PIS	Programa de Integração Social	Social Integration Programme
PMR	-	Partnership for Market Readiness
PPA	Plano Plurianual	Pluriannual Plan
PPP	Parcerias Público-Privadas	Public-Private Partnerships
PRB	-	Principles for Responsible Banking
Previc	Superintendência Nacional de Previdência Complementar	National Complementary Pension Funds Superintendency
PRI	-	Principles for Responsible Investment
PRSAC	Política de Responsabilidade Social, Ambiental e Climática	Social, Environmental and Climatic Responsibility Policy

PSI	-	Principles for Sustainable Insurance
SBTi	-	Science Based Target Initiative
SCR	Sistema de Informações de Crédito	Credit Information System
Sebrae	Serviço Brasileiro de Apoio às Micro e Pequenas Empresas	Brazilian Micro and Small Business Support Service
SFN	Sistema Financeiro Nacional	National Financial System
Sicoob	Sicoob	Sicoob
Sicredi	Sicredi	Sicredi
SINAPSE	Simulador Nacional de Políticas Setoriais e Emissões	National Sectorial Policies and Emissions Simulator
SLB	-	Sustainability-linked bonds
SPPC	Secretaria de Políticas de Previdência Complementar	Secretary of Complementary Welfare Policies
SSE	-	Sustainable Stock Exchanges Initiative
Susep	Superintendência de Seguros Privados	Private Insurance Superintendency
SWF	Fundo Soberano	Sovereign Wealth Fund
TCFD	-	Task-Force on Financial Disclosure
UK	Reino Unido	United Kingdom
UNFCCC	-	United Nations Framework Convention on Climate Change
UNEP-FI	-	United Nations Environmental Programme - Finance Initiative
UM SDGS	Objetivos de Desenvolvimento Sustentável da ONU	UN Sustainable Development Goals
W1SGI	-	Dow-Jones Sustainability World Index

Executive summary

Objective and scope

- This report aims to **characterise Brazil in terms of challenges and opportunities to accelerate large-scale financing for the transition to a net-zero economy.**
- It adopts a broad (but non-exhaustive) approach to **analyse public and private climate finance players and barriers** within the Brazilian context. By doing so, NINT expects to **provide relevant inputs to design initial aspects of Climate Arc's strategy in Brazil.**

Climate commitments and priorities

- Brazil has presented important climate commitments in the past. Those will probably be strengthened and improved in coming years based on a new presidential government agenda. Despite **improvement opportunities (especially related to Brazil's NDC and carbon pricing mechanisms)**, the country provides a relatively robust regulatory framework for addressing its commitments.
- Within the sustainable finance agenda, Brazil's Central Bank participates in the **Network for Greening the Financial System (NGFS)** and has recently developed important regulations related to climate risk disclosures for financial institutions. Recent federal commitments may indicate this agenda should gain even more traction in the short term.
- **Land use and agriculture** are key sectors for Brazil in terms of GHG emissions and strategic action to achieve its NDC. Still, much of the climate-related debt issued with CBI certification in Brazil is tied to **energy** projects, and **climate finance is needed in all economic sectors to ensure a just and equitable transition. Reducing deforestation and regulating carbon pricing mechanisms** are priority policy agendas to unlock additional climate finance.
- There is **no consensus on how much implementing Brazil's climate commitments would cost.** Studies estimate that this figure could range from US\$1 billion to US\$15 billion by 2030¹. **There is also no consensus or aggregate estimate on current investments in climate solutions**, as Brazil's public budget does not adopt a tagging system that could enable tracking cross-sectoral expenditures, and private financial flows are not systematically monitored either.
- The lack of a consistent figure on current climate finance is partially related to the **absence of an official federal taxonomy or a common tracking approach to what should count as climate finance within Brazil's context.** There are currently voluntary initiatives in this sense, such as FEBRABAN's

¹ Hof et al. (2017). [Global and regional abatement costs of Nationally Determined Contributions \(NDCs\) and of enhanced action to levels well below 2 °C and 1.5 °C.](#)



Green Taxonomy, and each financial institution tends to establish its own taxonomy (such as BNDES' Sustainable Taxonomy). In its recent **Sustainable Finance Policy**², CVM has publicly stated the intention to develop a sustainable finance taxonomy, which might leverage further climate finance tracking.

Private climate finance

- Private financial institutions are heterogeneous in terms of climate-related performance. The following figure summarises advances and critical points.

	Banks	Asset managers	Asset owners	Insurance companies
Commitments	One of the key banks is committed to SBTi and six are committed to PCAF. Two banks are members of the Net-Zero Banking Alliance (NZBA)	No key asset manager is committed to SBTi and four are committed to PCAF	One key asset owner is signatory of the IPC Commitment.	No key insurance company is committed to SBTi or PCAF
Initiatives	Banks are relatively well engaged in international initiatives such as PRB, PE and UNEP-FI. FEBRABAN's climate squad plays an important local role.	Engagement in local initiatives such as IPC is significant	Few asset owners are engaged in climate-related international initiatives (e.g., PRI) and IPC.	Engagement in climate-related international initiatives (e.g., PSI) is significant, but local initiatives are still gaining traction
Key policies and regulations	Well-designed regulations for banks' disclosure of climate risks management are in place	Regulations for labeling ESG funds and requesting climate-related disclosures from listed companies are in place	Regulations approaching broad ESG criteria are in place, but they lack climate-related specific requirements.	Well-designed regulations for insurance companies' disclosure of climate risk management are in place
Disclosure level	Banks are increasingly reporting climate-related data based on TCFD recommendations.	CDP and TCFD disclosures are relevant, but transparency, especially in terms of strategy, metrics and targets, need improvements	Asset owners are poorly engaged with reporting frameworks such as CDP and TCFD. Brazilian Pension Funds Association plays an important role fostering the engagement and transparency action of the sector.	Insurance companies are poorly engaged with reporting frameworks such as CDP and TCFD. CNseg plays an important role in fostering transparency at the local level.

² CVM (2023). [Portaria CVM/PTE N° 10/2023](#). Accessed on Feb. 10th 2023.



Advocacy

Larger banks are active in recent climate statements

Climate-related letters and joint statements are frequent in the past few years

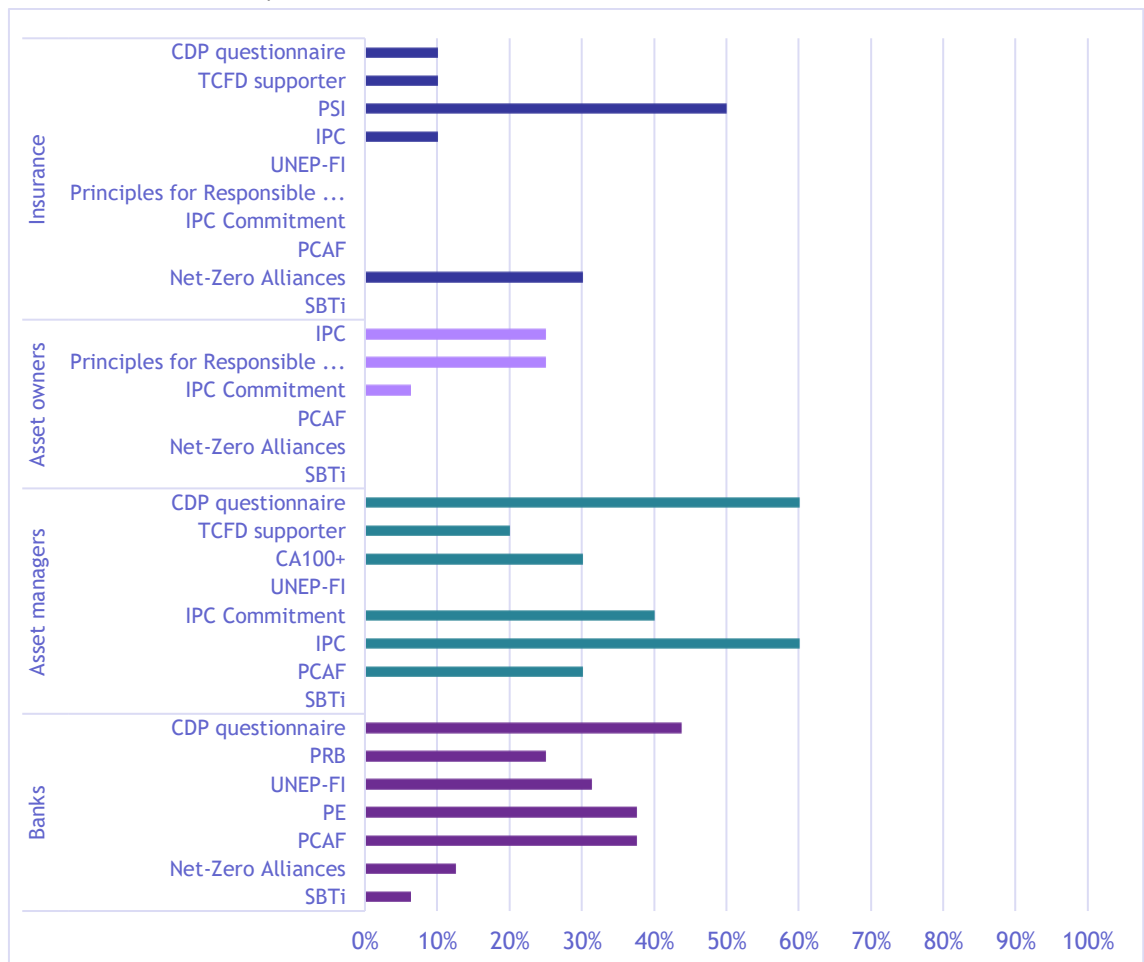
Involvement with climate-related advocacy activities is occasional and discrete.



Key challenges

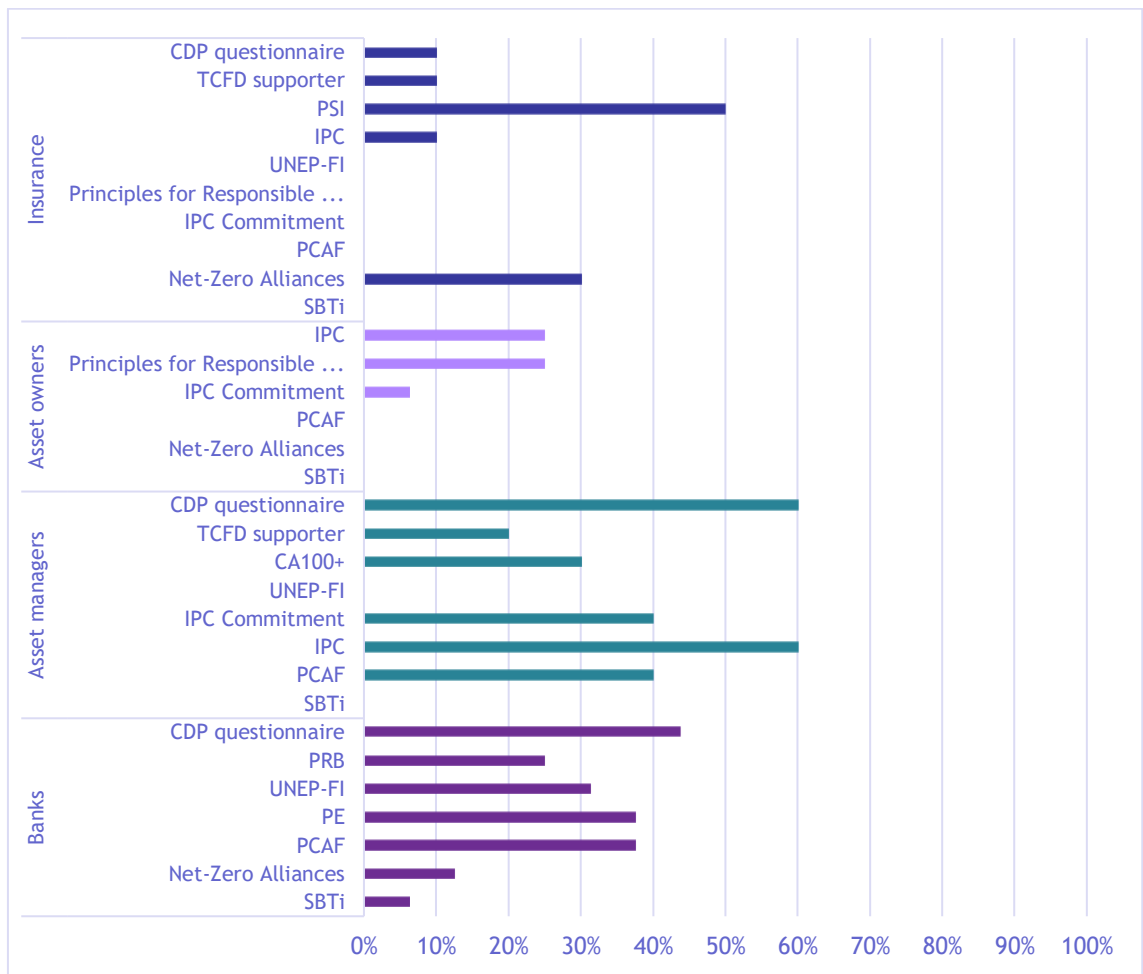
- Effectively implementing BACEN's regulation
- Integrating climate risks in credit analysis or risk models
- Methodological barriers to measuring GHG financed emissions and setting net-zero targets
- Applying climate-related criteria for funds and securities labelling
- Lack of climate-related disclosure, commitments and advocacy
- Risk centred perspective; net-zero is not yet a priority agenda
- Data limitations and internal modelling capacity

- The graph below synthesizes the proportional participation of key Brazilian institutions analysed in main climate related commitments, initiatives and disclosure actions³.



³ It should be noted that this analysis does not comprise all existing Brazilian financial institutions. A sample of key banks, asset managers, asset owners and insurance companies was selected based on its AuM.





Elaborated by NINT.

- When it comes to **service providers**, different aspects were observed:

Stock exchange

- As a service provider, B3 is a member of the Sustainable Stock Exchanges Initiative (SSE), showing commitment with the ESG and climate issues.
- As a listed company, B3 is aligned with climate-related initiatives (PRI, CDP and TCFD) and working groups. It has also established a climate governance structure, set GHG reduction targets and included climate issues as a relevant topic in its strategy and risk management.
- A relevant climate contribution is delivered through its thematic indexes, such as ISE B3 and ICO2 B3.

ESG rating agencies

- Several rating agencies operating in Brazil offer climate-related services, including the integration of climate risks and vulnerability in its assessments as well as specific analytic tools and indexes to evaluate investment portfolios.
- Brazilian companies' climate disclosure and net-zero trends presents opportunities for rating agencies to increase its climate-related services.

Audit and consultancy firms

- Consultancy and audit firms operating in Brazil are providing a range of climate-related services. Access to open and robust climate data is a commonly faced challenge. Artificial Intelligence is a promising approach to tackle climate models and scenarios, and some firms are making use of private tools or developing their own to address this opportunity.





Key challenges

- Difficulties in recruiting talent.
- Lack of regionalised tools regarding climate risks.
- Incorporation of AI tools in the management of climate-related issues.

Public climate finance

- Although the Brazilian federal budget is a consistent and robust instrument, it does not contain any official classification on the environmental impacts of its resource allocations, which **hinders the tracking of climate related expenditures**. The presidential government change is expected to bring more attention to the climate agenda, which might result in a better budgetary allocation towards environmental issues. **However, the country still funds massively carbon intensive agendas such as oil, gas and mining industries.**
- Responding to both national and international pressures and wanting to publicly reaffirm the government's commitment to the climate agenda, the National Treasury has revealed plans to issue **Brazil's first Sovereign Green/Sustainability Bond still in 2023**. A similar subnational bond operation is being carried by the state of Pará.
- Special funds (such as the Amazon Fund and the National Climate Fund) are essential for achieving the NDC targets. However, **strengthening non-repayable support within these funds is relevant** to foster the transition to a net-zero economy. The recent **relaunch of the Amazon Fund** is an important sign of the **country's renewed commitment to climate and the environment**, which is already resulting in additional international financial flows.
- **Brazilian Development Financial Institutions (DFIs) play a key role in climate finance**. Development banks and agencies offer several climate-related financing options with facilitated conditions, reaching companies and municipalities of different sizes and regions.

Blended finance

- There are still few Brazilian blended finance operations in compliance with OECD's principles. However, Brazil is a targeted country for climate-related blended finance transactions, and instruments and mechanisms are increasing in number and volume.
- Challenges for fostering climate-related blended finance includes **high transactional costs**; difficulties for **scaling up**; investors' **low risk appetite**; lack of **project pipeline aligned to the funding criteria** of large fund providers and **impact monitoring**. An important step towards increasing blended finance operations and its volume is to **establish a proper regulatory framework**.
- **Brazilian DFIs are key players in terms of blended finance opportunities**. Despite offering several solutions that leverage private capital, most of them are not familiar with blended finance as a concept. Building internal capacity,



as well as sharing best practices and lessons learned, are relevant steps to increase their engagement.

Challenges and Opportunities

- One of the country's barriers concerning tracking climate finance is the lack of common language to monitor climate related financial flows. There is no current consensus on taxonomies that are used by either public or private sector, which makes the tracking of climate related expenses challenging in both cases.
- Agriculture and Land Use are both Brazil's biggest source of GHG emissions and the sector with the most potential to support achieving the country's NDC. The sector still faces challenges when it comes to leveraging climate finance, including compliance with best practices and standards.
- Although Brazilian regulation, in relation to green and sustainable finance, has evolved in recent years, most agents have still to adhere to new legislation and have been facing technical difficulties in doing so.



Introduction

The Institute for Climate and Society (iCS) and Climate Arc are working to launch a Brazilian platform that brings together and articulates Brazilian actors from the financial sector. To this end, they will hold a workshop in early March 2023, which will gather a relevant set of actors from Brazil's National Financial System (SFN - *Sistema Financeiro Nacional*), both from the public and private sectors. Within this context, NINT was invited to contribute to this process through a report on Brazil's current climate finance landscape.

Objectives

This report aims to **characterise Brazil in terms of challenges and opportunities to accelerate large-scale financing for the transition to a net-zero economy**. It presents an **overview of key aspects related to public and private climate finance in Brazil**, offering inputs to shape Climate Arc's local strategy.

About the term “climate finance”

Throughout this document, the term “climate finance” is adopted to refer to **financial flows toward the transition to a net-zero economy**. This is a relevant delimitation, since the term can more broadly refer to financial flows “that seeks to support mitigation and adaptation actions that will address climate change”⁴. In this sense, in order to summarise the report's scope during its content, the term “climate finance” is adopted to refer only to mitigation actions, in particular related to a transition to net-zero.

How is this report organised?

The content is structured in five chapters. The first one introduces the foundations for guiding climate finance in Brazil, including relevant national commitments, key sectors for a net-zero economy and priority policy agendas. A brief overview of SFN, including its structure and normative composition, is presented in chapter two. Chapter three offers a panoramic view of Brazil's public resources operation and its possibilities to contribute to climate finance. It contains a brief description of Brazilian budgetary laws and procedures, as well as a state-of-the-art view in Development Financial Institutions (DFIs) and currently operating special legal funds.

Chapter four focuses on the state of private climate finance in Brazil. It approaches four groups of private financial institutions (banks, asset managers, asset owners and insurance companies) through seven lenses (key organisations, commitments, initiatives, key policies and regulation, disclosure level, advocacy and key challenges). In this chapter, the following icons are adopted to facilitate navigating through these lenses:

⁴ UNFCCC (2022). [Introduction to climate finance](#). Accessed on Feb. 6th 2023.





Key organisations



Commitments



Initiatives



*Regulation
and key
policies*



*Disclosure
level*



Advocacy



Key challenges

Additionally, chapter four also contains considerations regarding service providers and its climate-related aspects, including stock exchange, rating agencies and consulting firms.

Finally, chapter five presents a brief overview of existing blended finance initiatives in Brazil and identifies potential gaps and entry points for increasing climate finance through such mechanism.



1. Climate finance: where to?

This chapter introduces the foundations for guiding private climate finance in Brazil, including relevant national commitments, key sectors for a net-zero economy and priority policy agendas. Transitioning to a net-zero economy requires not only scaling up efforts to provide necessary resources, but also properly allocating them to achieve emissions reduction and neutralization, socioeconomic development and climate justice. By doing so, private climate finance should be recognized as a means to achieving a net-zero economy, not an end.

1.1 National commitments

As a requirement of being Party to the Paris Agreement, Brazil published its first NDC in 2015, in which the country's **proposal to cut greenhouse gas emissions and adapt to climate impacts** was presented. The Paris Agreement has been ratified by the National Congress, and by doing that, its NDC is demandable at the domestic level. Therefore, Brazil's NDC is an important external and domestic policy tool.⁵

The most recent version of Brazil's NDC, updated in April 2022, establishes as main targets **reducing GHG emissions in 37% by 2025 and in 50% by 2030, both comparing to its 2005 baseline**. Another NDC objective is that Brazil becomes **climate neutral by 2050**. These targets are considered, by different organizations, weak in terms of absolute emissions reductions and not in line with the Paris Agreement principle of progressively increasing ambition⁶. Besides that, the commitment was not followed by a long-term strategy detailing how it will be implemented.⁷

In terms of opportunities to improve Brazil's NDC, the Talanoa Institute⁸ extracted information from different independent analysis and highlighted five topics in the current NDC that should be maintained and reinforced: 1) Economy wide; 2) Absolute reduction; 3) Short term goal (5 years); 4) Climate neutrality by mid-century; 5) Implementation of the target not being conditioned by the external financial support. Further improvements should include increasing its transparency on how targets will be achieved; adjusting its ambition, as the most recent target was less restrictive than the previous one, which may not guarantee alignment with the 1.5C scenario; and strengthening its monitoring approach, since Brazil lacks instruments to provide systematic and continuous monitoring of its implementation.⁹

During COP26, Brazil made two other relevant commitments. First, the Glasgow Leaders Declaration on Forests and Land Use¹⁰ whose main objective is to end deforestation by 2030. It is worth mentioning that there is no differentiation be-

⁵ Talanoa Institute (2022). [Ambição. Série "NDC brasileira"](#). Accessed on 9th Feb, 2023.

⁶ Talanoa Institute (2022). [Credibilidade. Série "NDC brasileira"](#). Accessed on 9th Feb, 2023.

⁷ Climate Action Tracker (). [Brazil](#). Accessed on 8th Feb, 2023.

⁸ Talanoa Institute is a Brazilian institution dedicated to climate policy. See more at: [Sobre - Instituto Talanoa \(talanoainstitute.org\)](#).

⁹ Talanoa Institute (2022). [Credibilidade. Série "NDC brasileira"](#). Accessed on 9th Feb, 2023

¹⁰ The Glasgow Leaders (2021) [Declaration on Forests and Land Use](#).



tween legal and illegal deforestation in the text. Second, the Global Methane Commitment - this commitment is further explored below. The 2022 Brazilian NDC has also failed to internalize the commitments made at COP 26, specifically regarding zero deforestation and the 30%¹¹.

The Central Bank of Brasil (BACEN) is a member of the Network for Greening the Financial System (NGFS), a network of 114 central banks and other financial supervisors willing, on a voluntary basis, to share best practices in the financial system's transition toward a sustainable economy¹².

It is noteworthy that Brazil is going through a moment of change in its recent position regarding climate policies, including the reestablishment of several commitments. The country has resumed participation in the international climate agenda, with several signs and positions of the new government indicating that the topic will be central to its political agenda, and that there will be an allocation of resources to encourage sustainable development. Within this context, given the importance of governments acting in the induction and coordination of the transition processes to a low carbon economy, it is expected that there will be a strengthening of the climate agenda in Brazil as a whole.

It is also worth highlighting that when it comes to estimating figures on how much it would cost for Brazil to effectively implement its climate commitments - whether it would be for a 2030 or 2050 scenario - there is no consensus. The Climate and Development Initiative¹³ estimates that R\$ 92.2 billion (US\$ 1.78 billion) would be needed to implement key mitigation actions in Brazil by 2030, whereas Hof et al (2017)¹⁴ estimate that this figure could range from US\$ 1 billion to US\$ 15 billion by 2030 - but this does not include costs related to LULUCF reductions - a sector that responds to most Brazilian emissions.

This information gap is mainly due the lack of appropriate expense tracking in the climate agenda. Brazil's public budget does not adopt a tagging system that could enable tracking cross-sectoral expenditures related to climate solutions, and private financial flows are not systematically monitored either. Thus, even the current estimates should be handled with caution.

1.2 Key sectors for a net-zero economy

Two aspects are essential to understand an economic sector's contribution to a country transition to net-zero: its **current and historical contribution to GHG emissions** and its **climate policies' potential impact on GHG emissions reduction**.

¹¹ MMA (2021). [Programa Nacional de Crescimento Verde](#). Access on 2nd Feb 2023.

¹² [NGFS](#). Access on March 2nd, 2023.

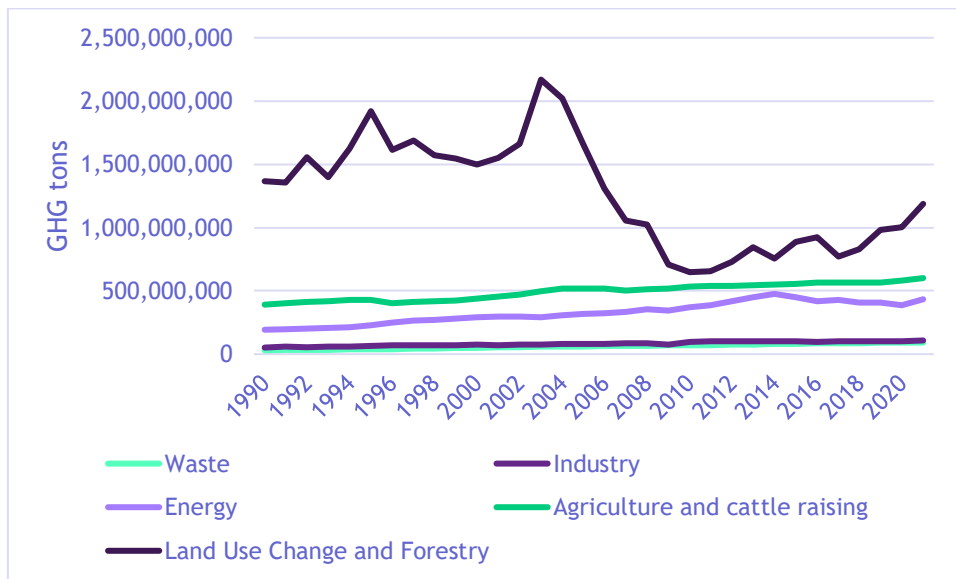
¹³ Clima e Desenvolvimento (2021): [Visões para o Brasil 2030](#).

¹⁴ Hof et. Al (2017): [Global and regional abatement costs of Nationally Determined Contributions \(NDCs\) and of enhanced action to levels well below 2 °C and 1.5 °C](#)



Between 1990 and 2020, Brazil's GHG emissions increased from 2.05 (GtCO₂e) to 2.16 GtCO₂e¹⁵. As presented in the figure below Figure 1 extracted from the System of Greenhouse Gas Emissions and Removals Estimates (SEEG)¹⁶, **agriculture and land use activities accounted for more than 79% of Brazil's GHG emissions during this period**¹⁷. Deforestation increases to advance the agricultural frontier, livestock and enteric fermentation are the main responsible for these emissions¹⁸.

Figure 1 - Economy sector's evolution of GHG emissions (1990 - 2020)



Elaborated by NINT based on SEEG data.

According to the SINAPSE¹⁹ modeling²⁰, the most relevant sector for Brazil's GHG emissions also has the greatest potential to support the achievement of its NDC. When analyzing the potential contribution of each sector to the reduction of Brazil's GHG emissions trajectory, given the implementation of key policy measures, land use and agriculture is the most strategic sector for the achievement of Brazil's NDC, especially in terms of short- and medium-term impacts. Implementing key policies related to land use and agriculture could reduce the country's emissions by up to 59.47% by midcentury - Table 1.

¹⁵ SEEG (2021). [Análise das emissões brasileiras de GEE e suas implicações para as metas climáticas do Brasil 1970 - 2020](#). Access on 2nd Feb 2023.

¹⁶ The System of Greenhouse Gas Emissions and Removals Estimates (SEEG) is an initiative of the Climate Observatory, which comprises the production of annual estimates of greenhouse gas emissions (GHG) in Brazil, analytical documents on the evolution of emissions, and an Internet portal to make the system's methods and data available in a simple and clear manner. The tool is available in: < <https://seeg.eco.br>>.

¹⁷ Greenhouse Gas Emission and Removal Estimating System (SEEG, 2021). [Total Emissions](#). Access on 2nd Feb 2023.

¹⁸ MapBiomias (2022). [Land Use Data](#). Access on 2nd Feb 2023.

¹⁹ Brazilian Ministry of Science, Technology, and Innovation (2021). [SINAPSE National Modelling for Sectorial Policies and Emissions](#). Access on 2nd Feb 2023

²⁰ SINAPSE (National Sectorial Policies and Emissions Simulator) is an official Brazilian Government tool for modelling public policies implementation effects upon the GHG emissions trajectory.



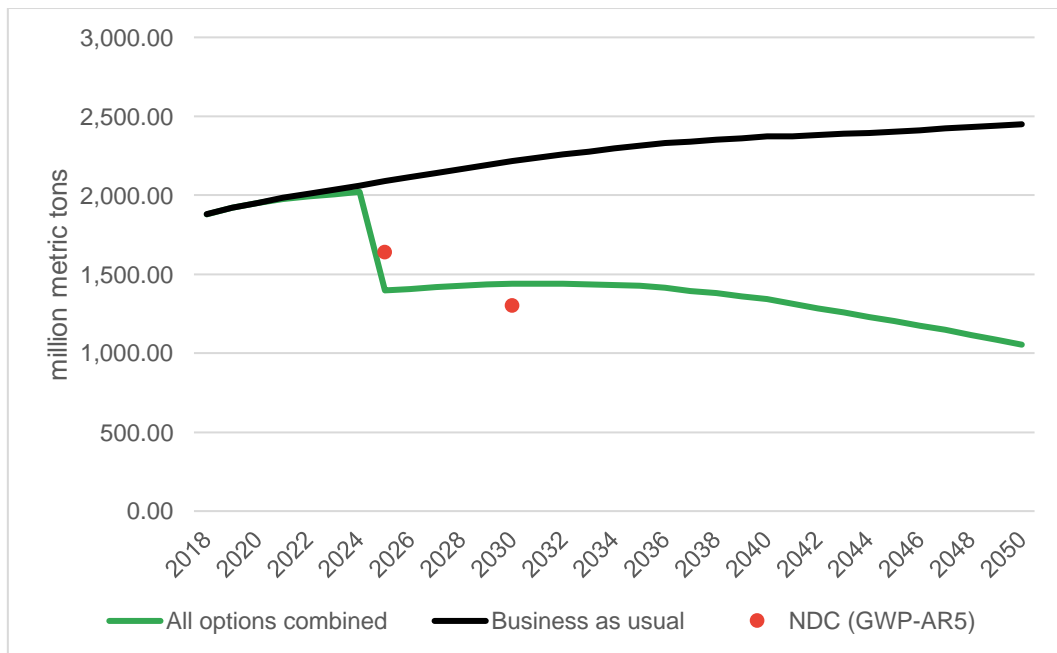
Table 1 - Sectors contribution to NDC

Sector	Contribution to reducing (National Sectorial Policies and Emissions Simulator - SINAPSE)		
	By 2025	By 2030	By 2050
<i>Key emission measures percentual effect upon Brazil's CO₂e emissions (NDC 2005 baseline)</i>			
Land Use and Agriculture	46,28%	44,55%	59,47%
Electricity	19,67%	14,73%	6,40%
Transportation	19,91%	15,64%	11,45%
Industry	20,36%	16,48%	12,71%
Edification	19,66%	14,72%	5,83%

Elaborated by NINT based on SINAPSE data.

In this sense, implementing key policies related to agriculture and land use alone would help the country achieve its NDC²¹ (Figure 2). These key policies include reforestation, forest restoration, zero deforestation, and fostering non-animal products.

Figure 2 - Land Use and Agriculture public policies impact on CO₂e emissions



Elaborated by NINT based on SINAPSE data.

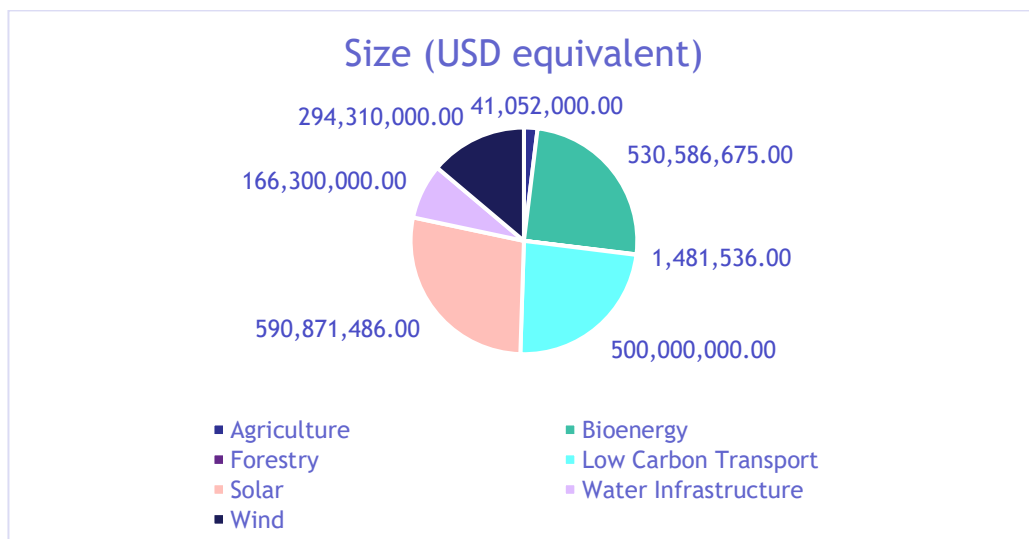
²¹ Considering the absolute CO₂e emission values per year, according to SINAPSE's model-ling data, related to business as usual, specific policies impact (NDC) and "all options combined" scenarios: (1) Afforestation and reforestation, (2) Avoided deforestation, (3) Forest restoration and (4) Shift to non-animal products



In addition to being the most strategic sector for the country to achieve its NDC, the land use and agriculture sector can be associated with significant financial returns. An investment of \$35 to \$76 billion per year by 2030 would increase the value added to the economy (GDP) by \$100 to \$153 billion, while reducing emissions by 1.3 GtCO₂, the amount needed to reach net zero by 2030. This would position Brazil as the world's leading green economy, potentially opening up large new export markets and foreign direct investment opportunities²².

One way to identify how much each sector is already accessing in terms of climate finance is to analyze Brazilian thematic bonds aligned to the Climate Bonds Initiative (CBI)²³ Standard and Certification Scheme. Between 2016 and 2023 the volume of Certified Climate Debt Instruments in the Brazilian market totaled more than USD 2.1 billion. As shown in Figure 3 the sector leading those emissions in USD volume is Solar energy (28%), followed by Bioenergy (25%), Low Carbon Transport (23%), Wind (14%), Water Infrastructure (8%), Agriculture (2%) and Forestry (less than 0,1%).²⁴ In this sense, the most strategic sector for achieving Brazil's NDC (land use and agriculture) is underrepresented in certified climate bonds.

Figure 3 - Climate bonds volume distribution by sector



Source: [CBI](#)

Figure 4 shows the evolution of the Climate Bonds market in Brazil since the first certified issuance in 2016. There was a large increase in the volume of issuances in 2020, followed by a decrease in the last two years. The total amount of bonds issued since 2016 accounts for 36, issued by 24 different issuers, including private companies, securitization companies and banks.

²² AYA Earth Partners (2022) [The Amazon's Marathon: Brazil to lead a low-carbon economy from the Amazon to the world](#). Access on 3rd Feb 2023

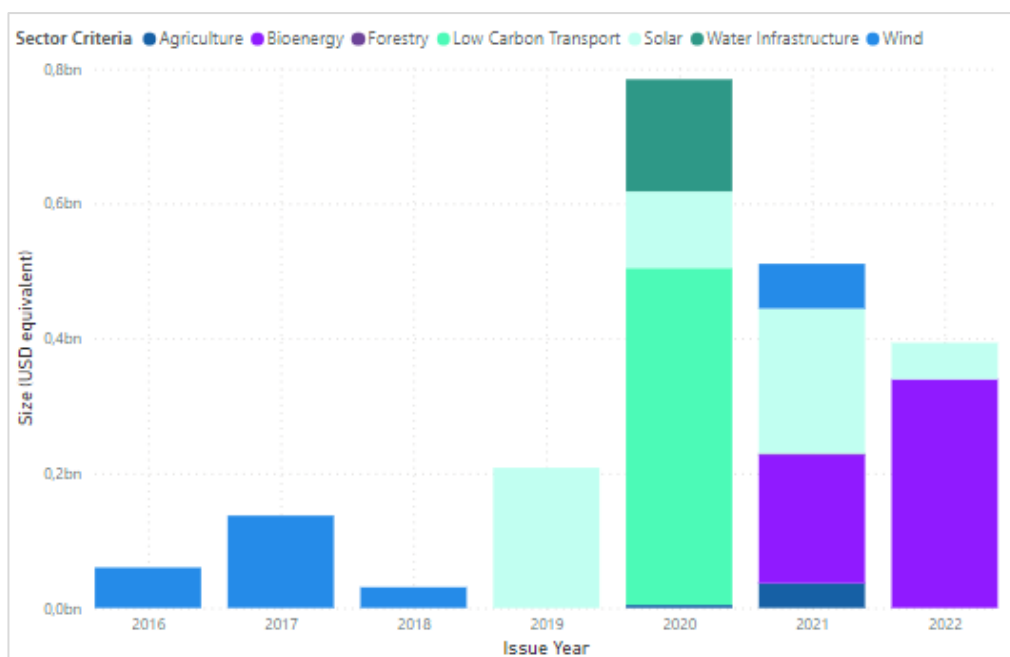
²³ The Climate Bonds Initiative is an international investor-focused not-for-profit organisation. It was founded in 2010 to promote large-scale investments that will deliver a low-carbon and climate-resilient global economy.

²⁴ CBI. [Certified Bonds](#). Accessed on 31st Jan, 2023



Besides climate bonds, there are other financial resources contributing to the agenda, even though it is not through bonds certified by CBI. Green and sustainable bonds are more widely spread in the Brazilian market than climate bonds, green and sustainability bonds are being mapped by the Green Bond Transparency Platform (GBTP) and published by the issuer in the platform, covering 70% of the Brazilian market in volume of issuances and includes bonds from the sectors cited above that have most allocated resources targeting climate related issues, such as Energy, Transport, Land-Use. Those bonds in Brazil are currently accounting for 88 bonds published in the platform, totaling more than USD 11 billion.²⁵

Figure 4 - Brazilian climate bonds market evolution



Source: [CBI](#)

1.3 Priority policy agendas

Brazil not only has the potential to accelerate the global net-zero economy but also has a relevant political framework to support it. This section briefly identifies the main policy agendas related to that context, based on NINT’s expertise and previous projects. These priority agendas are cross-cutting, but in this report are grouped according to four sectors:



²⁵ [Green Bond Transparency Platform \(GBTP\)](#). Accessed on 9th Jan, 2023.

Land use and Agriculture Energy Industry Transport

Due to its contribution to GHG emissions, deforestation is the first theme to be addressed. In Brazil, an average of 24,073 km² were deforested annually between 2010 and 2016. Avoiding deforestation must be a priority policy agenda that can change the current emissions scenario. Valuing indigenous populations and traditional communities also supports maintaining ecosystems' integrity and reducing deforestation. Figure 5 sums up other priority policy agendas that should be considered within this theme.

Figure 5 - Priority policies agendas for deforestation



Elaborated by NINT

Some existing national policies and plans related to deforestation can support initiatives to ensure the implementation of the mapped priority policies:

- Law on the Protection of Native Forests
- National Policy of Payments for Environmental Services²⁶
- The Low Carbon Agriculture Plan (ABC Plan)
- Action Plan for the Prevention and Control of Deforestation in the Legal Amazon (PPCDam)²⁷
- Action Plan for the Prevention and Control of Deforestation and Forest Fires in the Cerrado Biome (PPCerrado)²⁸

Regarding Brazil's climate and deforestation commitments, its NDC 2030 and 2050 targets, expert analysis²⁹ shows that the new version of the commitment does not

²⁶ Brazil (2021). [LEI Nº 14.119, DE 13 DE JANEIRO DE 2021.](#)

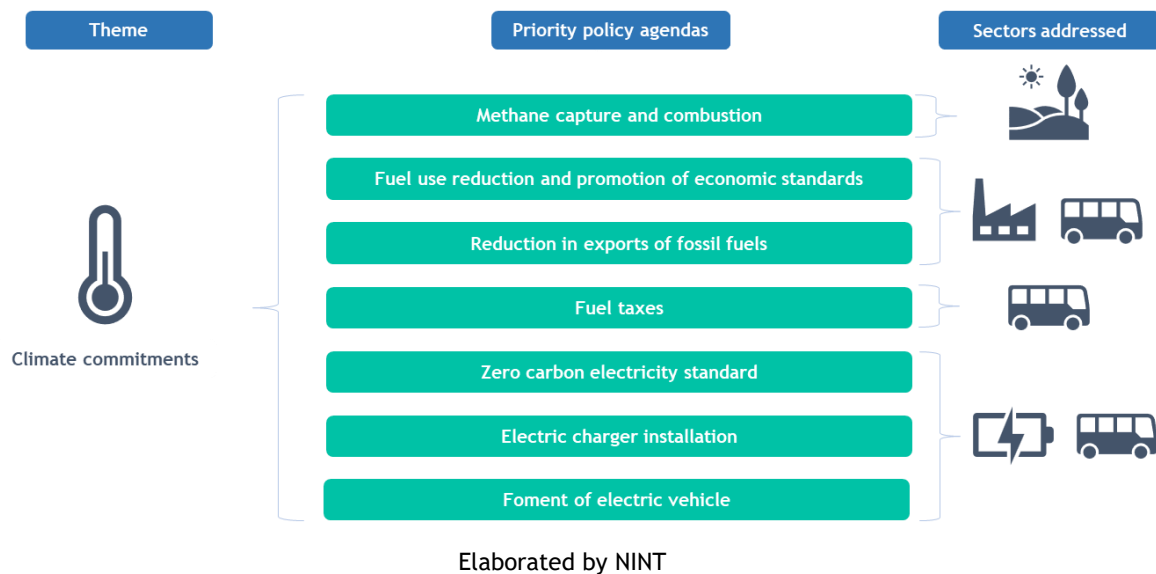
²⁷ Ministério do Meio Ambiente (2016). [Planos de Ação para a Prevenção e o Controle do Desmatamento Documento base: Contexto e análises.](#)

²⁸ Same as 21. Both programs were discontinued and will now be resumed under the new government.

²⁹ Política por Inteiro (2022). [Atualização da NDC brasileira vai contra Acordo de Paris ao não elevar ambição climática](#)

increase the country's climate ambition and is therefore inconsistent with the Paris Agreement. A particular gap in the country's international credibility is the lack of increased ambition in the new NDC. The short-term emissions are particularly worrisome, as they represent a larger increase in allowable emissions and potentially reduce Brazil's ability to implement emission reduction strategies in this timeframe. In this sense, in line with the country's potential to be a leader in this agenda, it is important to focus efforts not only on the targets set in the NDC, but also on more ambitious actions (Figure 6).

Figure 6 - Priority policies agendas for climate commitments



The policies and plans below can support initiatives to ensure the implementation of the mapped priority policies:

- National Adaptation Plan to Climate Change³⁰
- Nationally Determined Contribution
- Zero Methane National Program³¹
- National Greenhouse Gasses Emission Reduction System³²

The transition to a net zero economy is a challenge for most countries, as it involves changes in well-established structures. As discussed at COP27, the transition must “ensure that global and local climate action protects the planet, people and the economy”³³, which means that responses to climate change must be integrated with social action and economic development, as some priority policy agendas (Figure 7).

³⁰ MMA (2016). [National Adaptation Plan to Climate Change. Volume I: General Strategy.](#)

³¹ Brazil (2021). [Programa Nacional Metano Zero](#)

³² Ministry of Economy (2021). [Federal Government Edits Decree that creates a Brazilian regulated carbon market.](#) Accessed 24 May 2022.

³³ COP 27 (2022). [Round table on “Just Transition”](#)

Figure 7 - Priority policies agendas for just transition



Elaborated by NINT

The agenda involves the participation of several stakeholders and there is no concrete direction on how to succeed, but in the case of Brazil, priority policies must be established that contemplate the country's reality of reaching net zero. These policies must address issues that consider:

- Incorporation of the needs of minority and/or more impacted groups, considering changes in the employment scenario;
- Consultations with surrounding communities and measures to reduce the impacts of projects on the most vulnerable populations;
- Action of the financial sector in the necessary investments and regulations

Another important cross-cutting theme for net zero goals is carbon pricing. Currently, the National Policy on Climate Change (Federal Law 12187/2009) foresees the creation of a “Brazilian Emissions Reduction Market” (MBRE, by its Portuguese acronym). According to this Policy, MBRE would be operationalized in commodities and futures exchanges, stock exchanges and organized over-the-counter entities, authorized by the Brazilian Securities Commission (CVM, by its Portuguese acronym), where the negotiation of securities representing certified avoided greenhouse gas emissions will take place. However, MBRE is not yet established and there is no regulatory framework for carbon pricing currently in force in Brazil, the proposal (PL 2148/2015) is under urgent procedure in the Chamber of Deputies and should be voted soon³⁴.

Despite the current regulatory gap, the “PMR Brazil” project³⁵, implemented between 2016 and 2020, played an important role in advancing regulatory efforts. Promoted under the Partnership for Market Readiness (PMR), a World Bank initiative that provides support to prepare climate change mitigation policies, especially carbon pricing, the initiative modelled several scenarios considering the adoption of an ETS

³⁴ As of March 2022.

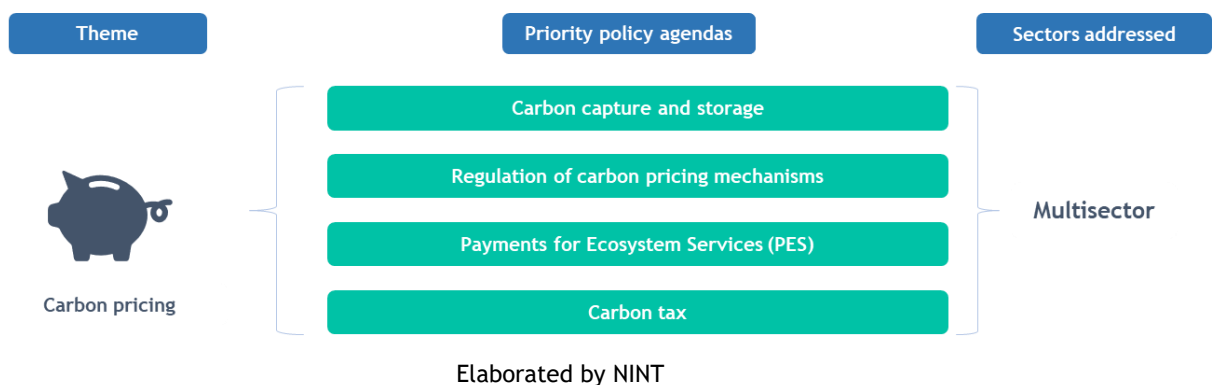
³⁵ Ministry of Economy, 2021. [Partnership for Market Readiness \(PMR\)](#). Accessed 07 February 2022.



with a price of € 4.79/tCO₂e³⁶ and exact compliance with the Brazilian NDC, each one customized with different conditions - including different scopes of regulated emissions, revenue allocations, and competitiveness and stabilization mechanisms.

The results indicate that all pricing scenarios lead to higher economic growth, increased employment and growth in average real income as a share of real disposable income of the poorest 20% of the Brazilian population, relative to the reference scenario. In terms of regulatory impact, the best performing scenario is the one whose scope of regulated emissions includes emissions from enteric fermentation of beef cattle raising (scope of 860 Mt CO₂e). While regulation does not happen, some main policies can be pointed out to be part of it, as showed in Figure 8.

Figure 8 - Priority policies agendas for carbon pricing



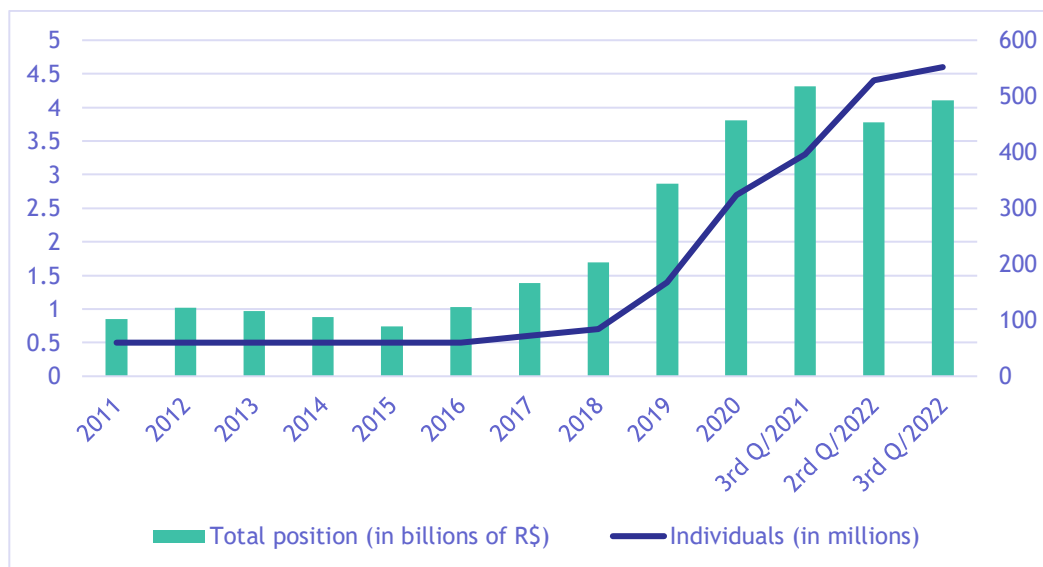
³⁶ R\$26,50, in Real to Euro Exchange rate as of February 2nd, 2023.

2. Diving into Brazil’s National Financial System

In this chapter we briefly present the institutional framework in which Brazilian financial institutions are inserted, from practical and normative views. It also contains a quick overview of financial trading numbers in the Country.

Brazil’s financial system is considered one of the most developed in Latin America. According to World Economic Forum’s Financial Development Report³⁷ (2012), Brazil had the second-best score for the Financial Development Index in the continent, losing only by three positions to Chile. Additionally, the World Bank³⁸ reports that, between 2015 and 2017, 70% of Brazilians aged 15 years or older had at least one account at a formal financial institution, and private credit by deposit money banks reached 63% of the country’s GDP. Figure 9 shows the recent explosion of private Brazilian individuals actively trading in Brazil’s stock market. There were, as of the 3rd quarter of 2022, around 4.6 million of individuals performing at least one stock trade action per month in Brazil.

Figure 9 - number of private Brazilian individuals actively trading in Brazil 1s stock market versus private persons total position (2011-2022).



Source: [B3](#).

Not only did the private individual operations in the financial market grow in Brazil over the last five to ten years, but there has also been a shift in Brazil’s financial system towards a greater amount of “FinTechs” and new banking operations. For instance, the number of these startups has quadrupled between 2011 and 2021, reaching the volume of \$3,8 billion dollars in total investment in the last referred

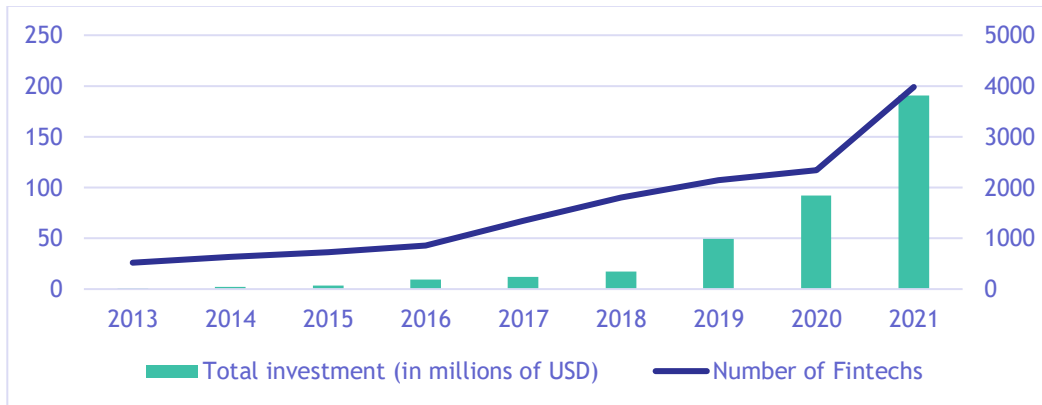
³⁷ [The Financial Development Report](#). World Economic Forum (WEF), 2012. Available online.

³⁸ [Global Financial Development Report 2019/2020](#). World Bank, 2020. Available online.



year³⁹. Figure 10 shows the rise of FinTechs in the Brazilian market throughout the years. In 2022, there were in total 1.289 FinTechs registered nationally⁴⁰. Their action scopes cover payment institutions, credit or allowances, crowdfunding, cryptocurrency, investment and financial education.

Figure 10 - The rise of Brazilian FinTechs



Source: [Insper research and education institute](#).

Regarding its normative composition, the Brazilian financial system (SFN) is made up of various types of financial institutions, including **commercial banks, development banks, cooperative banks, non-bank financial institutions, securities brokers, insurance companies, and other financial institutions**. The financial system is regulated and supervised by the **Central Bank of Brazil (Banco Central do Brasil or BACEN)**. BACEN is responsible for ensuring the stability of the currency, creating a sound, efficient, and competitive financial system, and promoting the economic well-being of society.⁴¹

Figure 11 lists Brazil’s principal financial agents, as well as its mandates, between normative bodies, supervisors and operators. According to current legislation (Law 4.595/64, art. 17), financial institutions are **public and private legal entities that have as their main or secondary activity the collection, intermediation, or application of their own- or third-party financial resources, in national or foreign currency, and the custody of third-party assets**. They are all under surveillance of the topnational financial authority, the **National Monetary Council (CMN)**. CMN is presided over by the Ministry of Finance (Fazenda) and composed of the Minister of Planning, Budget and Management and the President of BACEN. The executive functions of the Council are delegated to BACEN, the **Securities and Exchange Commission (CVM)**, the **Private Insurance Superintendency (Susep)** and the **National Complementary Pension Funds Council (CNPc)**.

³⁹Insper: [Number of Brazilian FinTechs is four times bigger than 10 years ago](#). Accessed on Feb. 2nd, 2023.

⁴⁰Simply Blog: [FinTechs in Brazil: Ecosystem’s evolution and benefits](#). Accessed on Feb. 2nd, 2023.

⁴¹[BACEN](#). Accessed on Feb. 2nd, 2023.



Figure 11 - Brazil's National Financial System

	CURRENCY, CREDIT, CAPITAL AND EXCHANGE	PRIVATE INSURANCE	CLOSED PENSIONS
NORMATIVE BODIES	National Monetary Council (CMN)	National Council of Private Insurance (CNSP)	National Complementary Pension Funds Council (CNPC)
SUPERVISORS	Brazil's Central Bank (BACEN)	Securities and Exchange Commission (CVM)	Private Insurance Superintendency (Susep)
OPERATORS	<ul style="list-style-type: none"> Banks and Federal Savings Bank (CEF) Credit cooperatives Payment institutions* Consortium managers Brokers and dealers** Other non-banking institutions 	<ul style="list-style-type: none"> Stock exchange Futures and commodities exchange 	<ul style="list-style-type: none"> Insurers and reinsurers Open pension funds Capitalization companies
			National Complementary Pension Funds Superintendency (Previc)
			Pension funds

Source: Adapted from [Brazil's Central Bank](#).

Besides being responsible for the country's monetary policy, **BACEN is the central executive body of the SFN**, responsible for supervising and enforcing the provisions that regulate the system's operation, in accordance with the rules issued by the CMN. Payment institutions, such as credit card operators, are not technically considered part of the National Financial System, but are, regardless, regulated by BACEN. **CVM, on the other hand, is a public body whose main responsibilities are related to ensuring the safety, stability and constant expansion of Brazilian financial system**, regarding mostly stock, futures and commodities exchanged markets. Although mostly under BACEN's regulation scope, brokers and dealers can also be inspected by CVM, depending on their activities.

The National Council of Private Insurance - CNSP is the body responsible for establishing the guidelines and norms of the private insurance policy⁴². It is composed of representatives from the Ministry of Finance (President), Ministry of Justice, Ministry of Welfare and Social Assistance, Private Insurance Superintendency (SUSEP), BACEN and CVM. Among the functions of the CNSP are supervising those that carry out activities subordinated to the national private insurance system, as well as the application of the penalties occasionally provided; establishing the general characteristics as guidelines of insurance, open private pension, capitalization and reinsurance contracts and operations; prescribing the criteria for the constitution of Insurance Companies, Capitalization Companies, Open Private Pension Entities and

⁴² [Brazilian Federal Government](#). Accessed on Feb. 2nd, 2023.



Reinsurers, with the establishment of the legal and technical limits of the respective operations and disciplining insurance brokerage and the broker profession⁴³.

Lastly, the **National Complementary Pension Funds Council (CNPC)** is the **body in charge of regulating the complementary pension fund system**⁴⁴. The CNPC is presided by the Minister of Finance and composed of representatives from the **National Supplementary Pension Funds Superintendency (Previc)**, from the Secretariat of Complementary Welfare Policies (SPPC), from the Civil House of the Presidency of the Republic, from the Ministries of Finance and Planning, Budget and Management, from the closed complementary welfare entities, from the sponsors and institutors of benefit plans of the closed complementary welfare entities and from the participants and beneficiaries of the benefit plans of the referred entities.

⁴³ [BACEN](#). Accessed on Feb. 2nd, 2023

⁴⁴ [Brazilian Federal Government](#). Accessed on Feb. 2nd, 2023.



3. Public climate finance

This chapter offers a panoramic view of Brazil's public resources operation and its opportunities to contribute to climate finance. It contains a brief description of Brazilian budgetary laws and procedures, as well as a status of development financial institutions and currently operating special legal funds.

3.1 Federal budget

As a Federal Union, Brazil has three budgetary instances: the Republic is constituted of 26 states and a Federal District - which upholds Brazil's capital, Brasília - and each state has its own Municipalities. Analogously, the federal, state, and municipal budgets are constructed and approved yearly by their respective LDO executive powers, according to a legislative framework to be addressed hereafter.

The Pluriannual Plan (Plano Pluriannual - PPA, in its Portuguese acronym) is Brazil's main instrument for long-term budgetary planning⁴⁵. It incorporates a law that establishes, in a regionalized manner, the guidelines, objectives, and goals of the federal public administration for capital expenditures and others resulting therefrom, and for those related to programs of continued duration. It is in force for four years, being elaborated in the first year of the presidential mandate, covering it until the first year of the following mandate⁴⁶. PPA serves as a guideline for the following year's annual budgetary laws, and its mismatch with presidential and other executive elections assures the intertemporal - and inter-mandate - consistency of national budgets.

Alongside the PPA, the Law of Budgetary Guidelines (Lei de Diretrizes Orçamentárias - LDO in its Portuguese acronym) comprises the goals and priorities of the Federal Public Administration, including capital expenditures for the following fiscal year⁴⁷. LDO is a yearly voted legislation and provides for changes in tax legislation, establishes the application policy for official development finance agencies and guides the preparation of the Annual Budget Law (Lei Orçamentária Anual - LOA). LOA, on the other hand, is the proper yearly budgetary piece: a special law that contains the breakdown of public revenue and expenditure, to show the government's financial economic policy and work program⁴⁸. Each of the three pieces must be created by the Executive Power and voted on by the Legislative Power in both national, state, and municipal instances.

Albeit a very robust and elaborate budgetary structure, Brazilian federal budget does not include any official classifications on the environmental impacts of its resource's destinations, which hinders the tracking of budget expenditures

⁴⁵ [Brazilian Federal Government](#). Accessed on Jan. 27th, 2023.

⁴⁶ [Brazil's National Treasury Glossary](#). Accessed on Jan. 27th, 2023.

⁴⁷ [Brazil's National Treasury Glossary](#). Accessed on Jan. 27th, 2023.

⁴⁸ [Brazil's National Treasury Glossary](#). Accessed on Jan. 27th, 2023.



related to environmental⁴⁹ or climate⁵⁰ issues. In 2021, the OECD recommended⁵¹ that the country developed a system to monitor these expenditures and consider establishing a "green budget tagging system", in alignment with OECD/LEGAL/03454 recommendation⁵². However, such a system has not yet been developed, and a customized methodological approach is needed for identifying potential public sources of financing.

The recently inducted Minister of Environment and Climate Change, Marina Silva, advocates for a more transversal climate agenda in Brazil⁵³, but the new government - elected in November 2022 and inaugurated on January 1st, 2023 - **has yet to develop budget trackers that are able to correctly mark climate and environment related expenditures**, regardless of whether the Ministry of Environment is tagged as their managing unit.

The last 10 years nominal budget for said Ministry can offer a proxy to measure Brazilian government financial efforts in the climate agenda - as shown in

Figure 12. It is possible to identify an oscillating pattern, that reaches its peak in 2013, with approximately R\$4.4 billion and its valley in 2021, - approximately R\$1.7 billion. The graph also shows the percentage of the Ministry's budget officially destined to climate related budgetary programs, namely programs 2050, from 2012 to 2015, and 1058, from 2020 to 2023. For the remaining years, there was no specific budgetary destination to these programs, both named "Climate Change" in Brazil's Annual Budget Law⁵⁴. The visible decline between 2018 and 2021 is **potentially related with former president Jair Bolsonaro's mandate (2018-2022)**. Bolsonaro's mandate has been internationally criticized for its negligence towards climate and deforestation issues.

⁴⁹ Moura et al., 2017. [Gastos ambientais no Brasil: Proposta metodológica para aplicação no orçamento federal](#). Discussion Paper, No. 2354, Institute of Applied Economic Research (Ipea), Brasília.

⁵⁰ Tozato et al., 2019. [Abordagens metodológicas para a identificação dos gastos com mudança do clima: desafios para o Brasil](#). Regional Report, Urban and Environmental. Institute of Applied Economic Research (Ipea), Brasília.

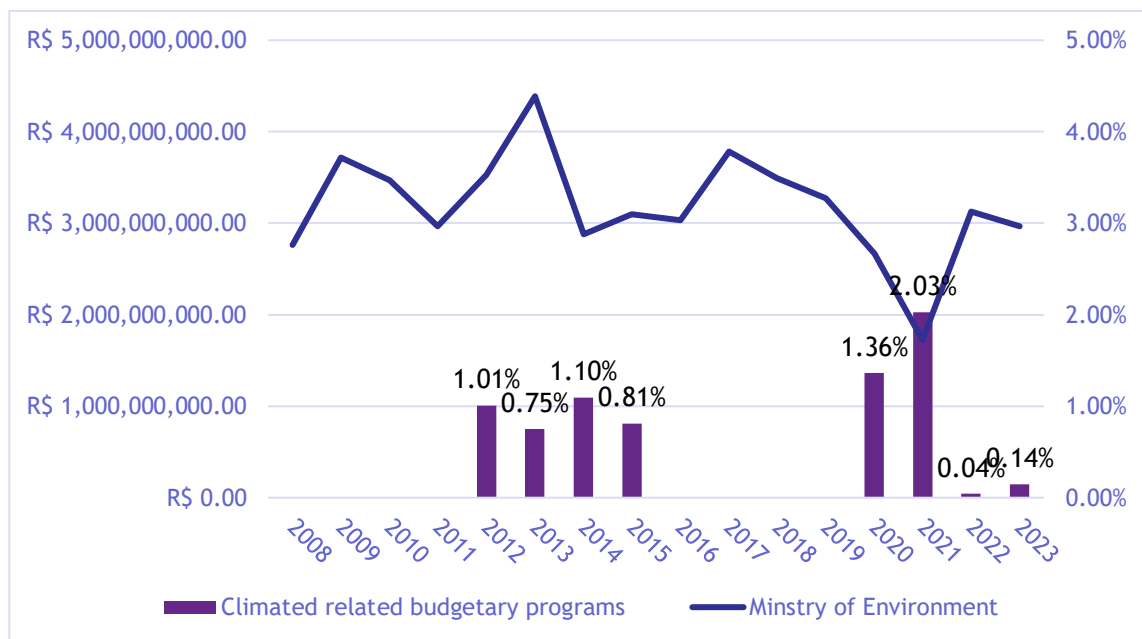
⁵¹ OECD, 2021. [Evaluating Brazil's progress in implementing Environmental Performance Review recommendations and promoting its alignment with OECD core acquis on the environment](#).

⁵² Available at [OECD's Legal Instruments](#).

⁵³ Valor Econômico: [Marina Silva wants "transversal" policies](#). Accessed on Jan. 27th, 2023.

⁵⁴ This does not mean, however, that there weren't any resources being allocated towards climate change in the referred period - only that it wasn't done so by allocating values in the proper budgetary program. It is, in fact, very unlikely that the budget for climate related programs would be completely cut between two consecutive years, especially because most projects in this agenda don't necessarily follow the nation's budgetary calendar. This further points out Brazilian government inconsistencies in reporting climate expenses and investments.

Figure 12 - Nominal values destined to Brazilian Ministry of Environment via Annual Budget Law (LOA), in Reais (R\$) and the share destined to climate related programs (%)



Source: [Brazilian Federal Budget Panel](#).

Amongst the government’s efforts to reprioritize the climate agenda, the possibility of accelerating the **issuance of Brazil’s first Sovereign Green Bond**⁵⁵ is being analysed by financial authorities, such as the National Treasury and the country’s Central Bank. The National Treasury secretary, Rogério Ceron, has confirmed to the press that the issuance may come out in 2023. According to the secretary, the idea is that the bonds finance projects or programs related to the environmental agenda, the energy transition, the transition to green industry, and sustainable agriculture⁵⁶. These can be later expanded to include social projects. **The issuance of a sovereign Green Bond could be beneficial to reinforce Brazil’s recently resurfaced environmental commitments**, as well as possibly provide an important additional source of financing to this agenda, whose resources have been diminishing over the last dec-

⁵⁵ Interamerican Development Bank (IDB): [Treasury plans to accelerate green bonds project for 2023 emission](#). Accessed on Jan. 27th, 2023.

⁵⁶ G1 News: [To reinforce commitment with the environment, Treasury might issue green bond still in 2023, claims Secretary](#). Accessed on Jan. 27th, 2023.



ade. Moreover, it could also facilitate the process of tracking environmental and climate related public expenditures.

In this sense, **the international pressure towards a sovereign issuance of green, social, or sustainable bonds has been increasing in recent years**, which resonates with a greater market expectancy in the emission of yet another category of climate related financial instruments, the **sustainability-linked bonds (SLBs - hereafter)**. In December 2022, UK bank NatWest strategists proposed a \$10 billion Brazilian government bond in the SLB category.⁵⁷ If issued, this would be the world's largest ever sustainability-linked bond.

When it comes to other forms of sovereign SLBs, **the State of Pará has recently gone public on its intentions to capture between R\$300 and R\$350 million with the mechanism**. The idea is to raise funds in the capital market to strengthen the State's environmental policy, with indicators associated with the conservation of local rivers⁵⁸. Therefore, **SLBs could be a great instrument to not only finance Brazil's climate transition but to also incentivize the creation of feasible and trackable climate and environmental targets**, as well as setting the Brazilian national and subnational government's public commitment towards the climate agenda.

Although Brazil's role in the climate agenda has been gaining great international attention, especially since the 2022 presidential elections, **the country has yet to address its large numbers of subsidies for controversial industries**, namely in the fossil fuel sector. According to Brazilian Institute of Socio-economic Studies (INESC), **the subsidies for fossil fuels in Brazil totalled R\$ 118.2 billion in 2021⁵⁹**, which represents a decrease of 4.17% in relation to the amount in 2020. **R\$ 71.9 billion were allocated for consumption subsidies** - which represents around 60% of the total amount. The biggest subsidy to production comes from **Repetro**, a mechanism that exempts from taxes the import and domestic production of machinery and equipment for oil and gas exploration. **The second largest subsidy went to gasoline and diesel consumers**, the amounts resulting from the government's loss of revenue due to successive reductions in two taxes on fuel, the PIS taxation on fuels, the PIS/Cofins and a special tax (CIDE - *Contribuição de Intervenção no Domínio Econômico*) for fossil fuels.

The Institute also identifies some controversial points in Brazil's fossil fuel production policies. Firstly, the **ongoing and elevated subsidies to oil production**, despite already being one of the most productive countries in this sector, and alongside Brazilian national oil company, Petrobras⁶⁰, having its largest profits in history in

⁵⁷ Reuters: [Bank floats \\$10 bln Brazilian bond plan to halt Amazon deforestation](#). Accessed on Jan. 27th, 2023.

⁵⁸ Capital Reset: [Pará wants to capture debt linked to sustainability metrics](#). Accessed on Jan. 31st, 2023.

⁵⁹ Brazilian Institute of Socio-economic Studies (INESC): [Fossil Fuels Subsidies in Brazil: know, assess and reform \(5th edition\)](#). Accessed on Jan. 31st, 2023.

⁶⁰ It is important to note, however, that since 2016, and especially after 2019, several operations of Petrobras have been either privatized or opened to private concessions, which shifted the company's strategies towards maximizing shareholder value. This means that the new profit records cannot be exclusively attributed to government subsidies, as there were relevant structural changes in the company.



2021⁶¹. Secondly, **the various subsidies to diesel and gasoline consumption**, which, although justifiable by social justice and fiscal standards, given the recent rise in international oil prices, have reached the amount of R\$60 billion in 2021 and are neither being constructed within a restricted timeframe nor being focalized in vulnerable populations. Lastly, the **coal subsidies** in the same year were three times bigger than the value destined to renewable sources of energy - a questionable resource allocation, given that coal represents only 2.7% of Brazil’s electricity supply and responds, simultaneously, to 30% of electricity related emissions in the country.

3.2 Development Financial Institutions (DFIs)

The National Development System (SNF - *Sistema Nacional de Fomento*) is a network of development finance institutions (DFIs) that share a common goal, to foster the long-term and sustainable development of the Brazilian economy, and is composed of federal public banks, commercial public banks with development portfolios, development banks controlled by States, development agencies, cooperative banks, in addition to the public development companies Finep and Sebrae.

These DFIs are distributed throughout the country, as can be seen in Table 2 - *DFIS within the SNF* and are able to offer credit locally, regionally, and federally. This distribution gives the SNF a unique characteristic within the National Financial System (SFN), the possibility of reaching smaller companies, such as Micro, Small and Medium-Sized Enterprises (MPMES), besides offering credit to companies and the public sector in smaller municipalities and those farther away from the large centres, taking the possibility of promoting economic growth and social development to territories that are often outside the area of operation of the largest financial institutions of the SFN, decentralizing the supply of credit regionally.

Table 2 - *DFIS within the SNF*

DFI name	Scope	Federative Unit Covered (UF)	Type of financial institution	Control Type
Agerio	State-wide	Rio de Janeiro	Development Agency	Public
Desenvolve SP	State-wide	São Paulo	Development Agency	Public
Desenvolve Roraima	State-wide	Roraima	Development Agency	Public
Age	State-wide	Pernambuco	Development Agency	Public
Desenvolve	State-wide	Alagoas	Development Agency	Public
Desenbahia	State-wide	Bahia	Development Agency	Public
Badesc	State-wide	Santa Catarina	Development Agency	Public
Desenvolve MT	State-wide	Mato Grosso	Development Agency	Public
Goíás Fomento	State-wide	Goíás	Development Agency	Public
AFAP	State-wide	Amapá	Development Agency	Public
AFEAM	State-wide	Amazonas	Development Agency	Public

⁶¹ G1 News: [Petrobras registers record net profit of R\\$106,6 billion in 2021](#). Accessed on Jan. 31st, 2023.



Fomento Paraná	State-wide	Paraná	Development Agency	Public
Fomento TO	State-wide	Tocantins	Development Agency	Public
AGN	State-wide	Rio Grande do Norte	Development Agency	Public
Badesul	State-wide	Rio Grande do Sul	Development Agency	Public
Piauí Fomento	State-wide	Piauí	Development Agency	Public
BASA	Regional	Northern Region	Commercial Bank	Public
BNDES	Federal	Brazil	Development Bank	Public
BRDE	Regional	Southern Region	Development Bank	Public
BDMG	State-wide	Minas Gerais	Development Bank	Public
Bandes	State-wide	Espírito Santo	Development Bank	Public
BRB	Federal	Brazil	Universal Bank	Public
Banco do Brasil (BB)	Federal	Brazil	Universal Bank	Public
Banese	State-wide	Sergipe	Universal Bank	Public
Banestes	State-wide	Espírito Santo	Universal Bank	Public
Banpará	State-wide	Pará	Universal Bank	Public
Banrisul	State-wide	Agerio	Universal Bank	Public
BNB	Regional	Northeast Region	Universal Bank	Public
Sicredi	Federal	Brazil	Universal Cooperative Bank	Private
Sicoob	Federal	Brazil	Banking Conglomerate	Private
Cresol	Federal	Brazil	Credit Cooperative	Private
Finep	Federal	Brazil	Public Development Company	Public
Sebrae	Federal	Brazil	Public Development Company	Public

Source: [ABDE website](#)

Relevance and outreach

The Brazilian Development Association (ABDE) conducts actions to strengthen the SNF “Through national representation in governmental, social and productive spheres in Brazil, the production and dissemination of studies and the promotion and dissemination of various types of courses and activities”. In this sense, ABDE “supports the actions of its members to contribute to an efficient and accessible financing for Brazilian development.”⁶²

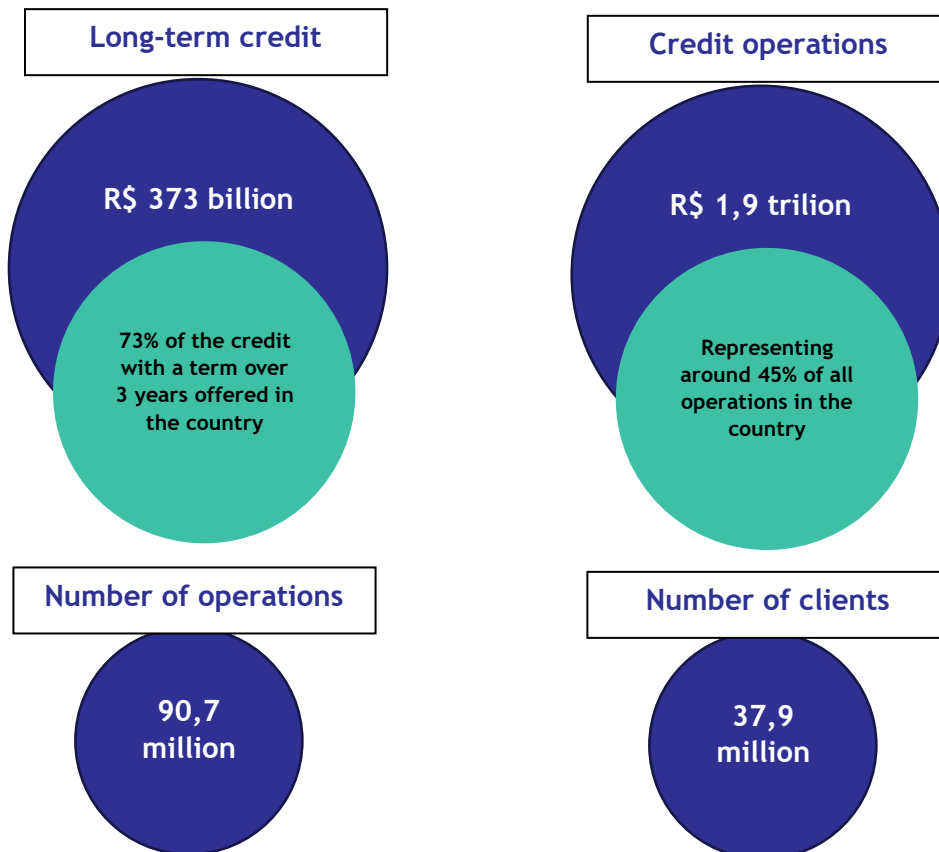
It should be noted that ABDE does not perform regulatory or supervisory functions in relation to DFIs, it acts to enhance and develop strategies that strengthen these institutions within the agendas considered pertinent, such as climate.

⁶² Available at [ABDE website](#), accessed on Feb. 8th, 2023.



According to the report prepared by the association "SNF in Numbers"⁶³, the system was responsible for the largest portion of the national long-term credit, carried out a significant number of operations and reached the level of 45% of the total lending transactions carried out in the country by the National Financial System, as can be seen in Figure 13 below.

Figure 13 - SNF Numbers



Source: [ABDE nº2](#)- accessed on Feb. 2nd, 2023.

The transition to a low-carbon economy will be a long and gradual journey in which companies and governments will be challenged to adapt their physical and governance structures. This effort will require financial resources on terms that the financial market is usually unable to provide without the right incentives, with longer than average maturities and more attractive interest rates. As we can see from the images above, the SNF is already the main source of the long-term credit offered in Brazil, in addition to offering more attractive interest rates with the aim of fostering national economic development.

Although the SNF is distributed throughout the country, its portfolio is concentrated in the Southeast (43.30%) and South (20.10%) regions, which together hold 63.4% of the portfolio, while the North (5.20%), Northeast (15.20%) and Center-West (14.40%) regions account for 34.80%. The three regions least covered by the SNF have

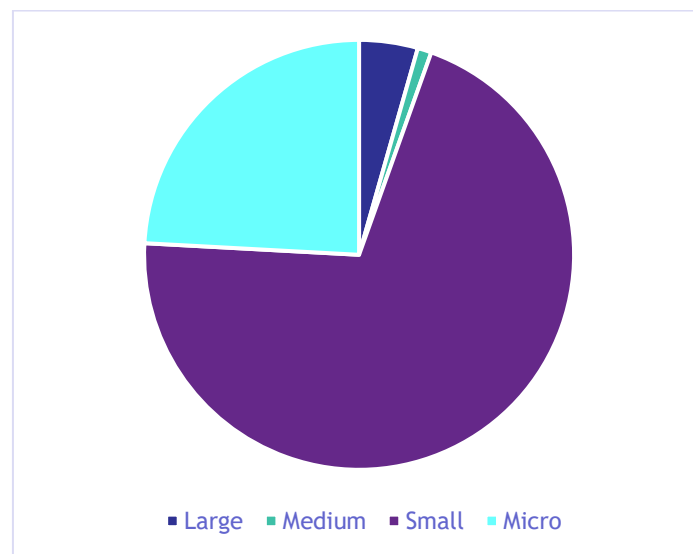
⁶³ ABDE (2022) [SNF em números](#). accessed on Feb. 2nd, 2023.



strategic biomes (Amazon, Caatinga and Cerrado) that are responsible for a considerable portion of deforestation and GHG emissions in the country. The gap in the supply of financing to these regions is one of the challenges to the development of sustainable economic activities, since the lack of resources for these productive structures encourages the predatory exploitation of the biomes.

When we observe the portfolio by the size of the companies that received credit in *Figure 14 - Participation in the portfolio per company size*, we notice that large companies have the largest participation in the portfolio, which may be related to the nature of the amounts required by these companies, generally larger than the other sizes, followed by medium, small and micro-companies.

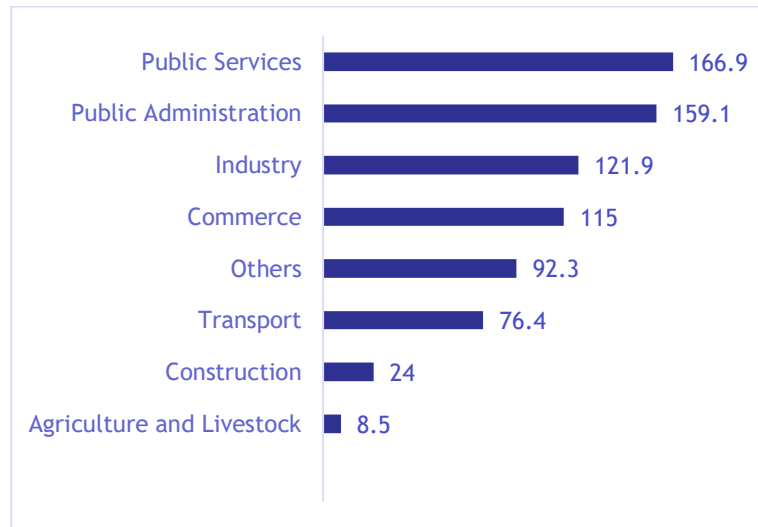
Figure 14 - Participation in the portfolio per company size



Source: [ABDE n°2](#)- accessed on Feb. 2nd, 2023.

Looking at the economic sectors that have benefited from the credit offered by the SNF in *Figure 15*, we see that the public sector represents a significant share in the receipt of these resources, followed by the Industry and Trade sector. By financing the public sector, DFIs can encourage or strengthen State or Municipal transition plans, as well as encourage public low-carbon projects. Given the importance of public authorities in coordinating the transition, encouraging, and making investments, as well as the limitations faced by federal entities in financing their projects, the SNF is in a strategic position to develop climate-oriented actions with the public sector.

Figure 15 - Credit portfolio by economic sector (R\$ billions)



Source: [ABDE n°2](#)- accessed on Feb. 2nd, 2023.

Although the presented overview might enlighten the principal recipients of Brazilian DFI’s resources, it is not possible to identify whether or not the sectoral funding provided by DFIs adheres to any environmental or climate sectoral standards, as there are activities within all sectors that can either contribute or deteriorate the climate agenda in Brazil. This barrier relates to the lack of a common taxonomy that can systematically classify Brazil’s climate finance flows.

ABDE and its 2030 Sustainable Development Plan

The ABDE 2030 Plan for Sustainable Development⁶⁴ brings together a series of proposals aimed at guiding and strengthening the role of the SNF within the 2030 Agenda. It is based on the methodology being developed by the institution, in partnership with the United Nations Development Programme - UNDP, who still haven’t been published yet, to measure the contributions of the SNF to the SDGs.⁶⁵

The plan comprises two parts and in the first a brief analysis on the fulfilment of the SDGs in Brazil and a mapping of the SNF’s performance in the environmental, social, economic and institutional dimensions of the 2030 Agenda is made.

The part 2 is dedicated to describing how the SNF can accelerate and scale up the implementation of the SDGs in Brazil, looking to develop “strategic missions to guide the design of policies to promote the achievement of the SDGs and recommendations for policies and initiatives to strengthen the SNF and its activities to comply with the 2030 Agenda”⁶⁶. This part is divided into five missions, among which we can highlight two, for their climate focus.

⁶⁴ ABDE (2022) [Executive Summary - ABDE 2030](#) and [ABDE 2030 Plan - Complete](#). accessed on Feb. 7th, 2023

⁶⁵ [ABDE 2030 Plan - Complete](#). (pg. 30) accessed on Feb. 7th, 2023

⁶⁶ ABDE (2022) [Executive Summary - ABDE 2030](#). accessed on Feb. 7th, 2023



Mission 2 - Innovation ecosystem in bioeconomy and the Amazon:

- A. Support in business management, capacity building and risk mitigation and training in bioeconomy
- B. Science and technology program focused on biotechnology
- C. Economic incentives for valuation of environmental assets and control of deforestation in the Amazon.

Mission 4 - Infrastructure and sustainable cities:

- A. Diversification and development of renewable energy sources and energy efficiency
- B. Broad access to water and waste management
- C. Inclusive urban mobility.

Sources and financial instruments

By bringing together several financial institutions with different legal and financial natures, it is important to note that the sources used by each type of DFI may vary. This is a limiting factor for many of these institutions, since the ability to provide finance is directly linked to fundraising. **Figure 16** below summarizes the sources available for each type of DFI:

Figure 16 - Funding sources

	Commercial and Regional and Federal Banks	Federal Development Bank	Development Banks controlled by UFs	State Commercial Banks	Funding Agencies	Cooperative Banks
Public Deposits	Available	Unavailable	Unavailable	Available	Unavailable	Available
Access to public funds - own risk	Available	Available	Unavailable	Available	Unavailable	Unavailable
Access to public funds - third-party risk	Available	Unavailable	Available	Available	Available	Unavailable
Issuance of bonds and financial bills	Available	Available	Available	Available	Unavailable	Available
International fundraising	Available	Available	Available	Available	Available	Available
Use of funds from other institutions (intermediation)	Available	Available	Available	Available	Available	Available
Own resources	Available	Available	Available	Available	Available	Available

Available source	Unavailable source
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Source: ABDE - accessed on Feb. 2nd, 2023.



As we can see in, the Development Agencies in the figure above are the institutions with the most limitations in terms of fundraising, while the Commercial, Regional, Federal and State Banks have wider sources.

The SNF uses several financial instruments to raise and distribute resources:

- Loans and financing
- Management of fiscal and parafiscal funds
- On lending of resources to other financial agents
- Non-reimbursable loans (grants)
- Contributions of resources to corporate equity funds
- Direct participation in companies
- Equalization of interest rates
- Guarantee mechanisms
- Structuring of Public-Private Partnerships (PPPs) projects
- Training of economic agents
- Support in technical cooperation
- Management of public policies
- Other financial services

DFIs' climate disclosure

The state of climate disclosure within Development Finance Institutions is heterogeneous, with some having advanced in improving their management and decision structures as well as climate reporting, while others are still at the beginning of the process of climate integration.

Of the 33 institutions that are part of the SNF, **only two (Banco do Brasil and Badesc) answered CDP's climate change questionnaire**, while three (BRB, Banestes and BNB) were invited to participate and did not answer the questionnaire. Only Banco do Brasil has a public score, which is B ("management" level).

Among the SNF institutions, only Banco do Brasil is a TCFD Supporter. Sicredi⁶⁷ and Banpará⁶⁸ signaled its intention to implement the TCFD recommendations.

SNF in action

The SNF has integrated the climate agenda into its actions through several credit lines, that is, financing lines that take climate factors into consideration when granting resources. Some of the institutions are more advanced than others, with BNDES and Banco do Brasil standing out. Some of the credit lines are presented in *Table 3 - Credit lines for renewable energy and resource use* and *Table 4*.

⁶⁷ Sicredi (2021) [Relatório sustentabilidade Sicredi 2021](#). accessed on Feb. 9th, 2023.

⁶⁸ Banrapá (2020) [Agenda-ASG-Banpará](#). accessed on Feb. 9th, 2023.



Table 3 - Credit lines for renewable energy and resource use

DFI	Credit line	Description	Source
Goiás Fomento	Solar Energy/Energy Efficiency MEI	Credit line directed towards the acquisition of goods and services related to projects that provide savings in energy consumption, including the assembly and installation of the equipment and other items necessary for its operation.	https://www.goiasfomento.com/linhas-de-credito/
BDMG	BDMG Sustainability	BDMG's credit line to make long-term projects feasible, focused on energy generation.	BDMG - Banco de Desenvolvimento de Minas Gerais: Médias Empresas
BRDE	Smart Cities and Sustainable Projects: Energy Efficiency	The following projects can be financed: Energy efficiency of buildings, focusing on air conditioning, lighting, envelope and distributed generation, including cogeneration, for new or existing units (retrofit), according to criteria defined by BNDES; Public lighting; Energy efficiency of production processes, focusing on cogeneration, use of process gases as an energy source and other interventions prioritized by BNDES; Repowering of power plants; Smart electric networks.	https://www.brde.com.br/servicos/cidades-inteligentes-e-projetos-sustentaveis/
Fomento Paraná	Fomento Energy	Financing line for micro and small companies for the purchase of equipment to generate energy from renewable sources or to replace light bulbs and equivalent equipment to improve energy efficiency.	https://www.fomento.pr.gov.br/Credito/FOMENTO-Energia
BDMG	BDMG Sustainability	Support for municipalities that invest in projects related to the Sustainable Development Goals (SDGs). The line finances up to 100% of the projects in the areas of: energy efficiency, smart cities, renewable and clean energy generation, including distributed generation (DG), water supply system, sewage treatment, and urban solid waste.	https://www.bdmg.mg.gov.br/municipios/
BASA	FNO- Amazon Green Infrastructure	Credit line directed towards infrastructure for water and sewage, power generation from renewable sources, composting plants and/or sustainable landfills, energy storage from renewable sources, sustainable ports and airports, energy transmission and distribution, fixed or mobile telephony and broadband systems in communities, and other ecological and sustainable structuring works.	Financiamentos (bancoamazonia.com.br)



BanPará	BNDES Finame - Low Carbon	This is a credit line aimed at financing the acquisition and commercialization of solar and wind power generation systems, solar heaters, electric, hybrid and biofuel-only buses and trucks, and other machinery and equipment with higher energy efficiency indexes or that contribute to reduce greenhouse gas emissions. All products must be new, of national manufacture, and accredited in the Finame Accreditation (CFI) of the BNDES System	Banpará BNDES (banpara.b.br)
BNB	FNE Water	Credit line aimed at enhancing access, efficient management, and sustainable use of water in the region.	https://bnb.gov.br/fne-agua

Source: institutions web sites- accessed during 2022

Table 4 - Credit lines for land use and agriculture

DFI	Credit line	Description	Source
BRDE	Forests and Integrated Production Systems-ABC	Increase agricultural production on a sustainable basis.	https://www.brde.com.br/servicos/florestas-e-sistemas-integrados-de-producao/
BASA	Biodiversity	A credit line aimed at financing green projects, such as direct planting systems "in the straw", recovery of degraded pastures, use of biological nitrogen fixation, reforestation with native species. In addition, the FNO Biodiversity also encourages proposals for the recovery and sustainable use of springs, cultivation of medicinal and aromatic plants, waste treatment systems for generating energy and composting, among other projects.	https://www.bancoamazonia.com.br/index.php/rural/fnc-abc
Sicredi	ABC Mais - Program for Adaptation to Climate Change and Low Carbon Emissions in Agriculture	Credit line aimed at encouraging investment in agricultural and cattle-raising projects that reduce greenhouse gas emissions and defor-	https://www.sicredi.com.br/site/credito/para-agronegocio/investimento/



estation, besides expanding the area of cultivated forests, and stimulating the recovery of degraded areas.

Source: institutions web sites- accessed during 2022

National Bank for Economic and Social Development (BNDES)

The National Bank for Economic and Social Development (BNDES - *Banco Nacional para o Desenvolvimento Socioeconômico*) is the largest Brazilian DFI, being responsible for a considerable part of the long-term financing offered in the country. The bank has relationships with some of the largest development funds in the country, such as the Guarantee Fund for Investment (FGI), which the bank manages, and which guarantees on-lending by BNDES, the Workers Support Fund (FAT). These funds were created with the aim of providing long-term credit in the national financial market, which is historically concentrated in short-term operations. The BNDES also operates with the Climate Fund, passing on the portion of reimbursable resources of the fund. In these operations, the BNDES transfers these resources to smaller DFIs, such as development agencies and local and regional development banks, which offer them to the market through credit lines structured by BNDES.

The bank offers credit in three ways, directly, for amounts above R\$ 20 million, indirectly⁶⁹, for amounts below R\$ 10 million, and in a mixed manner. When working indirectly, the bank relies on partner institutions such as DFIs. For this, the bank has a series of credit lines with a climate bias, with highlight to Finame low carbon⁷⁰, Finem - Recovery and Conservation of Ecosystems and Biodiversity⁷¹, Pronaf ABC + Bioeconomy⁷².

BNDES has assumed several public climate-related commitments, as summarized below:

- Carbon neutrality by 2050
- Neutralization of emissions in scopes 1, 2 and those related to business travel and employee commuting (home-work) as of 2025
- Finalizing the inventory of emissions financed in scope 3 for the BNDES' other portfolios in 2023
- Definition, in 2023, of neutrality targets for the direct and indirect credit and variable income portfolios
- Definition, in 2023, of engagement goals to accelerate the transition of its clients to carbon neutrality

⁶⁹ In the indirect support, the BNDES' partner financial institutions act as intermediaries in granting the financing, assuming the credit risk (risk of non-payment by the client) totally or partially.

⁷⁰ Available at [BNDES Finame - Baixo Carbono](#), accessed on Feb. 8th, 2023.

⁷¹ Available at [BNDES Finem - Meio Ambiente - Recuperação e Conservação de Ecossistemas e Biodiversidade](#), accessed on Feb. 8th, 2023.

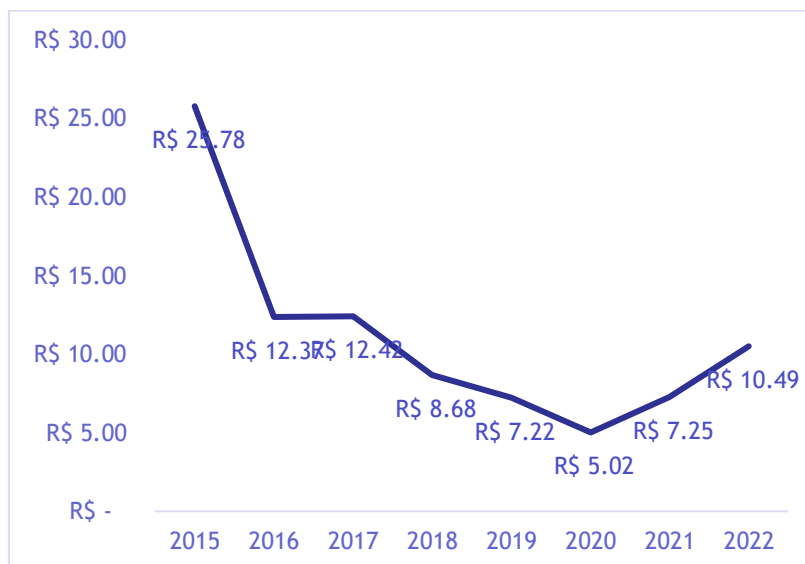
⁷² Available at [Pronaf ABC+ Bioeconomia](#), accessed on Feb. 8th, 2023.



- Incorporation, in 2023, of carbon accounting in the approval processes for support of new projects

In addition, the bank is committed to contributing to the achievement of the Brazilian NDC, as well as to the Sustainable Development Goals (SDGs), through its activities. To this end, it has developed methodologies to measure and monitor these contributions. In its SDG portal, BNDES demonstrates its contributions to the 2030 Agenda. BNDES' strategy is based on the strategic guidelines (or "missions") established in its Long-Term Strategic Planning and on the intermediate goals established in the Triennial Plans. Thus, the portal quantitatively identifies the resources earmarked for each SDG in the context of Brazilian development, where we can highlight SDG 13 for its climate contribution in Figure 17.

Figure 17 - SDG 13 - Action Against Global Climate Change (R\$ billions)



Source: [BNDES SDGs Portal](#) accessed on Feb. 2nd, 2023.

To monitor the contribution of the projects that the bank supports to Brazil's NDC, three groups of indicators were created, divided in terms of avoided GHG emissions, Disbursements⁷³ and Deliveries⁷⁴. To calculate the avoided GHG emissions, BNDES used the Climate Fund Emissions Calculator, applying data related to operations carried out or structured in the types of projects covered by the tool, i.e., limiting data collection to the possibilities offered by the Calculator. Using the tool, BNDES accounted for 86.6 million tons in avoided CO₂ emissions⁷⁵ until September 2022. It is noteworthy that the limitations described in the sub-chapter dedicated to the Climate Fund about its methodology for measuring avoided GHG emissions remain in BNDES' measurement.

⁷³ Available at [Desembolsos que contribuem para redução de emissões](#), accessed on Feb. 7nd, 2023

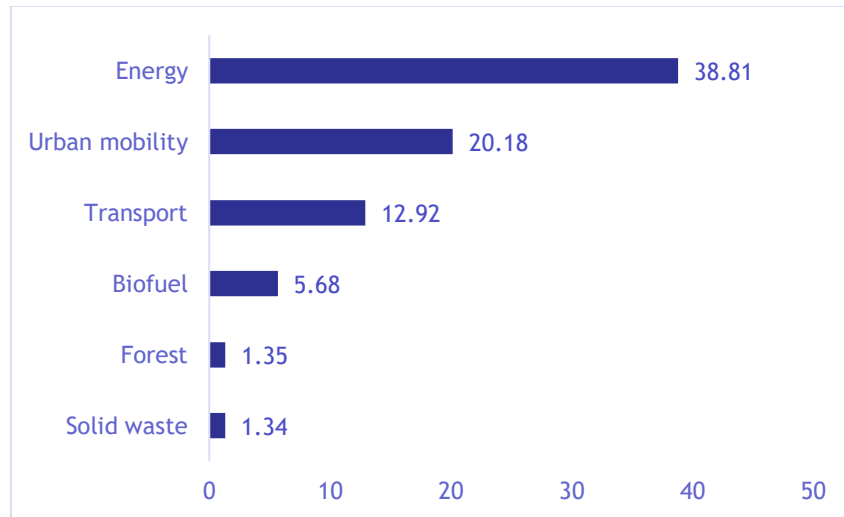
⁷⁴ Available at [Entregas associadas à Contribuição Nacionalmente Determinada \(NDC\)](#), accessed on Feb. 6nd, 2023

⁷⁵ Total emissions that will be avoided by the approved projects throughout their useful lives. This includes financing projects approved by BNDES to receive resources from the Climate Fund and projects structured by BNDES whose auctions took place in the same period.



In terms of disbursements, BNDES presents the amounts of financing granted to six sectors (Energy, Forestry, Urban Mobility, Biofuels, Solid Waste, and Transportation) spread throughout Brazil, as we can see in Figure 18. In terms of Deliverables, there is an accounting of several targets related to the same sectors.

Figure 18 - Contributions to Brazils NDC by sectors (R\$ billion)



Source: [BNDES website](#) - accessed on Feb. 2nd, 2023.

In the absence of a national taxonomy, comparisons between data from different institutions may diverge. The methodology developed by the BNDES is being improved as the bank integrates the theme into its internal structure. In 2021, the BNDES' Taxonomy of Sustainability⁷⁶ was launched, where its classifications are consolidated under two indicators, the Social Development Indicator, and the Green Economy Indicator. In addition to the BNDES Taxonomy, the Brazilian Banks Federation (Febraban) has also developed a Green Taxonomy, further explored in section 4.1, which classifies green economy sectors according to Brazilian National Classification of Economic Activities (CNAE). In its **Sustainable Finance Policy**⁷⁷, CVM has also publicly stated the intention to develop a sustainable finance taxonomy.

BNDES also operates through its subsidiary BNDES Participações (BNDESPAR), which seeks to support companies with variable income instruments (directly), by purchasing shares, and fixed income (indirectly), by investing in investment funds. In this field of operation, support for carbon-intensive sectors is representative: from 2007 to 2021, BNDESPAR's portfolio was mostly allocated to the oil and gas (29.5%), mining (18.3%) and food (11.4%) sectors⁷⁸.

Still within the scope of BNDESPAR, when we observe the subsidiary's climate governance, there is no disclosure of emissions financed by its portfolio. In addition, the bank and the subsidiary are in climate litigation process promoted by a civil soci-

⁷⁶ [Taxonomia de Sustentabilidade - BNDES](#)

⁷⁷ CVM (2023). [Portaria CVM/PTE N° 10/2023](#). Accessed on Feb. 10th 2023.

⁷⁸ [Principais projetos financiados](#)



ety organization⁷⁹, in which BNDESPAR is accused of contributing negatively to Brazil's commitment in the Paris Agreement through its actions. In this lawsuit, both are asked to take measures that will lead to greater transparency of their actions in contributing to the Brazilian commitment, as well as to take measures to commit their investments to reduce GHG emissions.

3.3 Special Funds

Essential for maintaining national development initiatives, special funds are resources for activities that benefit society in the medium and long term. They are divided into accounting, mixed and financial funds. Access to these funds can be done through credit and financing lines, with resources provided by various sources, such as governments, financial institutions, private initiatives, and multilateral agencies.

In addition to being essential for national development, they have the potential to stimulate private capital to further engage in projects with a longer return on investment. This can be done through concessions, public-private partnerships and other fundraising. In the environmental agenda, these funds guarantee resources for maintaining protected areas, rehabilitating degraded areas, best practices in agriculture, low-carbon activities and energy efficiency.

Amazon Fund (Decree n° 6.527)⁸⁰

The Amazon Fund was created in 2008 after a federal government plan to control and prevent deforestation, together with discussions at the UN Conference of the Parties (COP 13) on climate. The Fund's objective is to provide non-reimbursable financial support for actions to prevent, monitor and combat deforestation and to promote sustainable use of biodiversity in the Legal Amazon. In more than ten years, the Fund supported 102 projects worth a total of BRL 1.8 billion, with BRL 1.4 billion disbursed⁸¹. The main topics supported are (i) sustainable production, (ii) monitoring and control, (iii) territorial planning and (iv) science, innovation and economic instruments.

Its resources come from donations through the REDD+ mechanism, an incentive developed under the United Nations Framework Convention on Climate Change (UNFCCC) that provides payment for results (the reduction of deforestation). In total, BRL 3.39 billion in donations were received, with great participation of the Norwegian Government (93.8%), followed by the German International Development Bank (5.7%) and Petrobras (0.5%). The National Bank for Economic and Social Development (BNDES) is the manager of the Amazon Fund, providing fundraisings, approving and monitoring Amazon Fund's projects. BNDES also provides annual accounts to donors and disseminates the results, especially in relation to the Fund's logical framework.

⁷⁹ [Conectas Direitos Humanos v. BNDES and BNDESPAR - Brazil - Climate Change Laws of the World \(climate-laws.org\)](#)

⁸⁰ Brazil, 2008. [Decreto n° 6.527, de 1° de agosto de 2008](#). Accessed on Feb 10th, 2023.

⁸¹ Fundo Amazônia, 2021. [Fundo Amazônia](#). Accessed on Feb 10th, 2023.



The Fund was frozen until 2022, and the main obstacle to the continuity of donations was the weakening of the Fund's governance mechanism. President Jair Bolsonaro's government abolished the Amazon Fund's Technical Committee (COFA), along with its Steering Committee. In doing so, he also weakened the presence of NGOs in the Fund's governance.

Changes in the country's political landscape after the elections in 2022 demonstrated a potential closure in this issue and the possibility of re-establishing the Amazon Fund's former governance committees, given that structured governance of the Fund is key for attracting donors and investors. In January 2023, the Norwegian government resumed its donations to the Amazon Fund⁸², due to the resumption of Brazil's environmental policies.

National Fund on Climate Change (Law nº 12.114/2009)

This fund was seen as a milestone in Brazil's global climate leadership and its ambition to address climate change. The Climate Fund (Fundo Clima - FC) has its revenues from allocations of the federal Annual Budgetary Law (LOA). They are composed of up to 60% of the 10% special participation revenues from oil exploration; allocations established in the Annual Budgetary Law of the Federation and in its Supplementary Funds; resources resulting from agreements, adjustments, contracts and pacts concluded with public administration bodies and entities, among others.

The resources of the Climate Fund are divided into non-repayable loans, managed by the MMA, and repayable loans, managed by BNDES. From 2009 to 2022, R\$ 4.36 billion has been approved for the FC, the majority of which (95%) for use by BNDES. This discrepancy between repayable and non-repayable disbursements is an aspect that should be analysed, as in the context of emerging countries⁸³, there is a greater demand for donated resources for actions related to the environmental and climate agenda.

According to expert analysis⁸⁴, both reimbursable and non-reimbursable projects are properly aligned with the priority sectors for achieving the goals set in the NDC and the Paris Agreement. However, there is no project selection strategy in line with the goals of the NDC and the Paris Agreement, and there is no indication of indicators to monitor the climate capability of projects to achieve such goals.

BNDES is responsible for monitoring the GHG emissions avoided in the operations it carries out with funds from the Climate Fund; this calculation is made using the Climate Fund's tool for measuring avoided emissions (emissions calculator)⁸⁵, which considers 8 of the 10 subprograms. It is worth mentioning that among the limitations of these data, the value of avoided emissions accounted and disclosed by BNDES is global and annual, that is, there is no breakdown by project or subprogram, making it impossible to take a more granular approach to this efficiency.

⁸² Reuters, 2023. [Norway says fund to reduce Amazon deforestation in Brazil back in business](#). Accessed on Feb 10th, 2023.

⁸³ THÉRY, H; MELLO, N. A. 2009. [Mecanismos globais na construção das políticas ambientais, GEF e MAB](#).

⁸⁴ INESC (2022). [Fundo Nacional sobre Mudança do Clima: governança, recursos, gestão e desafios](#). Accessed on Feb 10th, 2023.

⁸⁵ BNDES (2021). [Programa Fundo Clima - Ferramenta de Cálculo de redução de GEE's](#). Accessed on Feb 10th, 2023.



The fund's target for 2021 was estimated to be a reduction of approximately 400,000 tCO₂e_q over the life of the projects. The data is updated annually⁸⁶ and the deadlines for achieving the 2025 and 2030 targets are not measured by clear reduction indicators, as the reference base is the useful life of the projects.

FUNBIO

Funbio is a private, non-profit national financing mechanism. It works in partnership with governments, the private sector and civil society to provide resources for biodiversity conservation. The Fund's main activities include the financial management of projects, the design of financial mechanisms and the study of new sources of funding for conservation. It also purchases and contracts goods and services.

Since the beginning of its activities in 1996, FUNBIO has supported 306 programs and projects that have benefited 255 institutions throughout the country and 350 conservation units⁸⁷. Funbio is an accredited implementing agency of the Global Environment Facility (GEF) and Green Climate Fund (GCF).

The Fund does not use resources from the Brazilian public budget, it is maintained by private donations, bi- and multilateral agreements signed by the Brazilian government, international cooperation and legal obligations of the Brazilian business sector. The projects are selected through public calls for proposals, and each call for proposals has a list of eligible institutions.

One of the Fund's characteristics is that it invests in the form of non-repayable loans. This is in high demand due to the nature of the projects, which often require investments in innovative activities that involve risk and uncertainty. It can be assumed that the fund has a strong focus on supporting climate change mitigation projects, as it enables biodiversity conservation activities. In addition, some of its supporters are large funds focused on the issue, such as the GCF.

4. Private climate finance

This section presents the state of private climate finance in Brazil. It approaches four groups of private financial institutions (banks, asset managers, asset owners and insurance companies) through seven lenses (key organisations, commitments, initiatives, key policies and regulation, disclosure level, advocacy and key challenges).

⁸⁶ BNDES (2021). [FUNDO NACIONAL SOBRE MUDANÇA DO CLIMA - Relatório Anual de Prestação de Contas](#) Accessed on Feb 10th, 2023.

⁸⁷ [Funbio's financial results](#). Accessed on Feb 10th, 2023.



4.1 Banks



Key organizations

Brazil's banking system is mostly composed of universal banks, a characteristic that is directly reflected in BACEN's classification of banking conglomerates: the Central Bank divides Brazilian banks into (b1) commercial banks, universal banks with commercial portfolios or savings banks; (b2) Universal banks without commercial portfolios, exchange banks or investment banks; (b3S) singular credit cooperatives; (b3C) Central of confederation of credit unions; (b4) development banks; (n1) non-banking credit institution; (n2) non-banking capital markets institution; (n4) payment institutions.

Considering both BACEN'S classification and recent market trends in Brazil, the key private banks organizations are divided in Table 5 according to their primary functions⁸⁸ - be it commercial, investment, federal savings of the recently trending FinTechs⁸⁹ - and ranked by their total assets within each category.

Table 5 - Key banking organizations in Brazil

Field	Banking cong.	Commercial name	Total assets (in millions)
Commercial	b1	Itaú	R\$2,22,407,940
	b1	Banco do Brasil	R\$2,127,442,384
	b1	Bradesco	R\$1,674,914,143
	b1	Santander	R\$1,035,799,883
	b1	Banco Safra	R\$248,546,045
Investment and Savings	b1	BTG Pactual	R\$431,902,952
	b1	XP ⁹⁰	R\$133,491,820
	b1	JP Morgan Chase	R\$106,083,628
	b1	BNP Paribas	R\$77,153,162
	b1	Credit Suisse	R\$42,809,604
Federal Savings	b1	Caixa Econômica Federal (CEF)	R\$1,561,332,997

⁸⁸Exchange banks are not mentioned in the table because, in Brazil, the currency exchanging activity is also primarily exercised by multiple banks, leaving the existing exchange banks as not as important players. However, for disclosure reasons, we list the four exchange banks that are directly mentioned in BACEN's website, with their respective total assets: MS Bank (R\$776,669), Bexs (R\$29,059), INTL FCStone (R\$241,118), MoneyCorp (R\$160,976).

⁸⁹ Although FinTechs are technically not considered banks, because since 2013 (law 12.865) they are regulated under BACEN's legislation as payment institutions, the public understanding, and use, of FinTechs places them as banking players in the Brazilian market. Thus, the decision to include them in this quick overview of key organizations in the private banking system. For further understanding of how BACEN views FinTechs in a normative manner, see [Instituições de pagamento e seus modelos de negócio - Estudo Especial nº88/2020 - Banco Central do Brasil](#).

⁹⁰ XP Inc. is Brazilian financial holding, which accounts for several institutions under the XP brand. The XP Bank was founded in 2019 and granted a multiple bank license by BACEN - although the XP Inc. group had already been present in Brazilian market for over two decades as an asset manager.



FinTechs	n1/n4	Nubank (Holding) ⁹¹	R\$206,200,670
	n4	Banco Inter	R\$43,574,634
	n4	C6	R\$39,658,484
	n4	PagueSeguro	R\$27,293,749
	n4	Mercado Pago	R\$19,128,228

Source: [IFData](#) - Brazil's Central Bank.

Besides the banks themselves, the **Brazilian Banks Federation - Febraban** is also a major agent in Brazilian banking. Febraban is the main representative entity of the Brazilian banking sector. Founded in 1967, it is a non-profit association committed to strengthening the financial system and its relations with society, and to contributing to the economic, social and sustainable development of the country⁹². The entity's membership includes **119 members financial institutions from a universe of 155 in operation in Brazil**, which represents 98% of total assets and 97% of the net worth of Brazilian banking institutions.



Commitments

There are three major climate-related international commitments that can be signed/endorsed by Brazilian Private Banks. The **Science-Based Targets Initiative (SBTi)**, the **Net-Zero Banking Alliance (NZBA)** and the **Principles for Carbon Accounting Financials (PCAF)**. There is at least one Brazilian bank in each commitment, and Table 6 summarizes the participations by bank and commitment. The names in bold letters represent banks presented in the key organization section.

Table 6 - International commitments and participation of Brazilian Banks

Bank	SBTi	NZBA	PCAF	Observations
Banco do Brasil	✓			Committed to near term and Net-Zero targets.
Bradesco		✓	✓	Discloses financed emissions.
Itaú		✓	✓	Has published NZBA Net-Zero targets. Discloses financed emissions.
Banco BV			✓	
Banco PAN			✓	
BTG Pactual			✓	
XP			✓	Discloses financed emissions.

Sources: [SBTi](#), [NZBA](#) and [PCAF](#).

⁹¹ The Nubank holding accounts for both Nubank (total assets R\$72.907.101), a credit Fintech classified as n1, and Nu Pagamentos S.A. (total assets R\$65.299.582), classified as a payment institution (n4) by BACEN. Nubank is a Brazilian startup that currently beholds the mark of 70 million users in Brazil and 75 million in Latin America. In number of users, Nubank is the fifth biggest financial institution in Brazil (source: [Poder 360](#)).

⁹² [Febraban's Institutional Page](#). Accessed on Feb. 6th, 2023.





Initiatives

Amongst the main international initiatives, there is a significant participation of Brazilian banks in the **Principles for Responsible Banking (PRB)**, the **Equator Principles (EP)**, and in the **United Nations Environment Programme - finance initiative (UNEP-FI)**. There are four Brazilian banks signing the PRB, which is also endorsed by Febraban. When it comes to the Equator Principles, the list grows to six Brazilian banks signing. Table 7 summarizes the participations by bank and initiative. The names in bold letters represent banks presented in the key organization section.

Table 7 - International initiatives and participation of Brazilian Banks

Bank	PRB	PE	UNEP-FI	Observations
Bradesco	✓	✓	✓	
BTG Pactual	✓	✓	✓	Fist year implementation of PE
Banco BV	✓		✓	Doesn't have published reports
Itaú	✓	✓	✓	
Banco do Brasil		✓		
Banco Votorantim		✓		
Caixa Econômica Federal		✓	✓	

Sources: [PRB](#), [Equator Principles](#) and [UNEP-FI](#).

Additionally, there is significant participation of Brazilian banks' stocks in two sustainability-oriented indexes: the **Corporate Sustainability Index (Índice de Sustentabilidade Empresarial - ISE)**, provided by B3, and the **Dow-Jones Sustainability World Index (W1SGI)**. Table 8 summarizes Brazilian banks stock participation in both the indexes compositions, as of February 9th, 2023.

Table 8 - Brazilian bank's stocks in sustainability indexes in 02/09/2023

Bank	ISE B3	W1SGI
Bradesco	✓	✓
BTG Pactual	✓	
Itaú	✓	✓
Banco do Brasil	✓	✓
Caixa Econômica Federal		
Santander	✓	

Sources: [B3](#) and [S&P](#).



Key policies and regulations

Considering the regulatory and political instances, there are two Brazilian institutions actively involved in the climate agenda: **the Central Bank (BACEN)** - and by extension, **CMN** - and **the Brazilian Banking Federation (Febraban)**.

As the superior normative institution in Brazil's financial system, **the Cen-**



tral Bank of Brazil (BACEN) can be considered one of the pioneers when it comes to the sustainability agenda, starting the development of Environmental Responsibility Policy guidelines in 2014. From that year on, the Central Bank further developed the theme, first by including it in its "BC# Agenda". The plan, which constitutes an expansion of the former BC+ Agenda, was formulated in 2020 and has five axes: **inclusion, competitiveness, transparency, education and sustainability**⁹³ - this last one aiming to promote sustainable finances and contribute to the reduction of socio-environmental and climate risks in the economy and the National Financial System.

As a development of public consultations, the CMN launched a series of two resolutions, [4.943](#) and [4.945](#), which **seeks to integrate the management of social, environmental and climate risks into BACEN's instruments and policies, as well as into the risk management of institutions under Central Bank supervision**. These resolutions specifically address the new requirements related to risk management structures of the institutions under supervision, with the addition of new climate-related risk categories.

Resolution 4.943, in that sense, **defines environmental, social and climate risks, as well as the events linked to these risk categories**. Furthermore, this resolution deals with the risk and capital management structure, as well as the disclosure of information. **The institutions' risk management framework must demonstrate their capacity to identify, evaluate and monitor the risks to which they are exposed in an integrated manner, whether these are climatic, social, environmental, market, credit, among others**.

The CMN Resolution 4.945, on the other hand, deals with the **Social, Environmental and Climatic Responsibility Policy (PRSAC)**, which is a policy consisting of principles and guidelines of social, environmental and climatic nature that must guide the institutions under supervision in their business. It is important to highlight that the risk management structure mentioned in resolution 4.943 must follow the principles established by PRSAC. Also as an outcome of public consultations, BACEN launched [Resolution 139](#), which addresses the **disclosure of the Report on Social, Environmental and Climate Risks and Opportunities (GRSAC) by institutions under supervision**. The GRSAC should cover the environmental, social and corporate governance risk management processes. Lastly, [Resolution 151](#) defines that financial institutions **must send to the Brazilian Central Bank information on the assessment of social, environmental and climate risks of their exposures in credit operations and securities, and of their respective debtors**.

The Central Bank has also developed a series of measures and norms in line with the global sustainability agenda and launched several works focused on the integration of environmental and social aspects in its instruments and policies. This includes the institution of the **Central Bank's own**

⁹³[BACEN](#). Accessed on Feb. 07th, 2023.



Social and Environmental Responsibility policies and reporting⁹⁴, and BACEN’s formal adherence to TCFD in 2020.

Regarding Febraban, the institution’s efforts towards sustainability cover continuously **improving the banking management of socio-environmental and climate related risks**; channeling resources towards **green and inclusive business**; including **ESG aspects in bank’s business strategies**; and **disseminating the agenda amongst stakeholders**⁹⁵. The Federation is also a formal member of the Financial Stability Board’s Task Force on Climate-Related Financial Disclosure (TCFD) and officially endorses the Principles of Responsible Banking (PRB), as previously mentioned.

Besides having a dedicated **Sustainability, Financial Citizenship, Consumer Relations, and Self-Regulation Board**, Febraban additionally holds a committee dedicated to sustainability issues, composed of about 30 member banks. Lastly, their **Intersectoral Sustainability Commission** meets periodically to align the actions of the National Financial System. Participating in this Commission are Brazilian Association of Closed Pension Funds (**ABRAPP**), Capital Markets Investors Association (**AMEC**), Brazilian Financial and Capital Markets Association (**ANBIMA**), Brazilian Stock Exchange (**B3**), National Confederation of Insurers (**CNseg**), and **Febraban**.

It is also worth mentioning that, since 2015, **the volume of bank’s credit destined to green economy sectors in Brazil is monitored by Febraban**. As of 2019, the monitoring system uses Brazilian Central Bank’s Credit Information System (SCR), which allows for the **computing of 100% of the credit offered for legal entities in Brazil**. For this monitoring to be effective, Febraban developed a **Green Taxonomy** that classifies the green economy sectors in three divisions, according to Brazilian National Classification of Economic Activities (CNAE): **“Green Economy”**, **“Exposure to Climate Change”** and **“Exposure to Environmental Risks”**. Both the [Green Taxonomy](#) and the latest reports on [Sustainability and Climate Change](#) are publicly available on Febraban’s website.



Disclosure level

When it comes to disclosure, **there are five Brazilian banks currently supporting the Task-Force on Financial Disclosure (TCFD): Bradesco, Banco do Brasil, Banco PAN, BTG Pactual and Itaú**⁹⁶. Febraban, which is a member of the initiative, **has also been working on implementing TCFD in Brazil’s banking sector through a Roadmap**⁹⁷ developed in 2018 and monitored ever since. The document presents both collective actions to be taken by the banking sector through Febraban itself and individual actions to be led by the banks.

⁹⁴ [Socio-environmental and Climate Risks and Opportunities Report](#) - Central Bank of Brazil, Sep. 2021.

⁹⁵ Febraban: [Socio-environmental responsibility](#). Available on Febraban’s Website. Accessed on Feb. 06th, 2023.

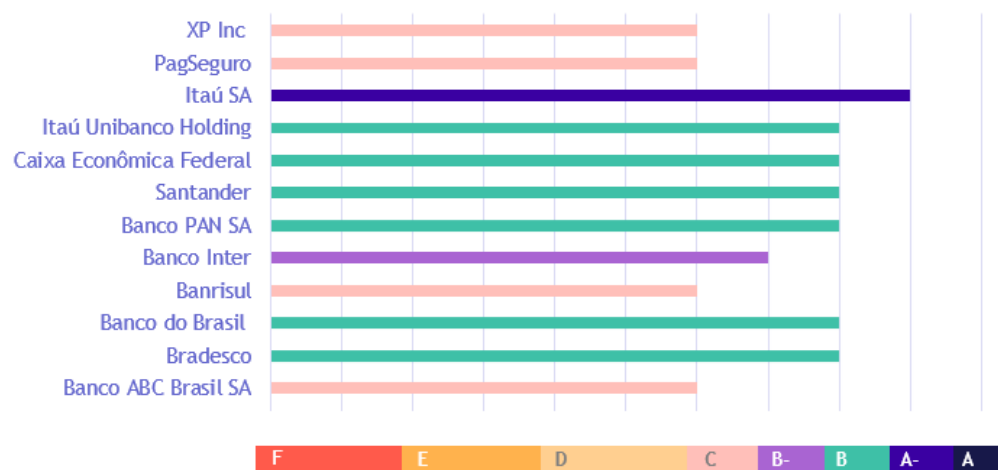
⁹⁶ Full list of supporters available at [TCFD’s website](#). Accessed on Feb. 07th, 2023.

⁹⁷ Febraban: [Implementing the TCFD Recommendations: a roadmap for the Brazilian banking sector](#). English version released on Feb 2019. Accessed on Feb. 07th, 2023.

According to their last public report⁹⁸, there was an **increase of 130% of actions under development by banks** between 2019 and 2020. **All actions also had an increase in the number of banks involved**, and more than half had at least 50% of banks engaged. This increase in bank participation demonstrates the recognition and concern of the sector about climate issues, given that they offer risks and opportunities for these institutions. Still according to Febraban, the **main gaps** in the number of participating banks in the report's given period were in the actions of "**Incorporation of climate risk in the credit analysis model**" and in "**Incorporation of the climate variable in the development and evaluation of new products**". It is important to highlight, however, that the levels of maturity in which TCFD recommendations - as well as the climate agenda as whole - are incorporated in each bank vary widely, ranging from incipient to fully developed.

There are, additionally, **thirteen Brazilian financial institutions that openly report to the Carbon Disclosure Project (CDP)**, with scores ranging from C to A-, with a majority (8 banks) of B scores. Figure 19 shows the distribution of CDP scores for the year of 2022.

Figure 19 - Brazilian Banks CDP Scores - 2022



Source: [CDP Latin America](#).



Advocacy

The Brazilian banking sector has improved its advocacy actions, especially since the COVID-19 pandemic. In 2020, five banks (namely Banco Alfa, Bradesco, Itaú, Rabobank and Santander) and one payment institution (Sodexo) signed a [Statement from the Brazilian business sector](#), which reaffirms the signatories' commitments towards the sustainable development agenda.

The sector has also had an important role in COP27. Besides having the **second largest delegation**, Brazil's participation was also marked by a

⁹⁸ Febraban. [Acompanhamento da implementação do roadmap TCFDF/FSB pelo setor bancário brasileiro](#). Accessed on Feb. 07th, 2023.

substantial presence of the country's private sector. According to an executive of the field, **the Brazilian private initiative has shown a level of interest and engagement in sustainability goals well above average, which reinforces the expectation that the country (re)assumes leading global role⁹⁹**. Some of the main actions starred by Brazilian banks were:

- The realization of a carbon market themed panel¹⁰⁰, conducted by Banco do Brasil, Caixa Econômica Federal and BNDES;
- The launch of a protocol of intensions formalizing a partnership between Banco do Brasil Foundation and BNDES¹⁰¹, in the Floresta Viva project - a R\$20 million investment in a non-profit that executes actions for the recovery of Brazilian biomes;
- The announcement of **Biomass project**, a company dedicated to activities of forest restoration, conservancy and preservation, created by Itaú, Marfrig, Santander, Suzano, Vale and Rabobank.



Key challenges

The previous analysis of Brazilian banking sector shows some gaps and opportunities that could be addressed to provide better sector adherence to climate finance:

- **Commercial and universal banks (BACEN's b1 category) are notoriously more advanced in incorporating the climate agenda** than any other banking subsector, but even in the referred segment the progress is heterogenous.
- **There is little public information available regarding FinTechs involvement in climate agendas**, which suggests that the sector's rapid growth hasn't been followed by an analogous improvement in their commitments, initiatives or management of climate related risks;
- The main difficulties of the private banking sector regarding the TCFD implementation are the **incorporation of climate risks in credit analysis or risk models, as well as the development and evaluation of new climate change related products.**
- **Although Brazilian legislation has evolved in recent years, banks have still to adhere to them**, finding difficulties especially in the correct reporting of climate risks.
- The incipient participation of Brazilian banks in disclosures initiatives can be attributed to methodological difficulties and lack of knowledge about how to calculate financed and facilitated emissions.
- In summary, **the lack of human and financial resources, gaps in databases, lack of knowledge of appropriate tools, and conceptual challenges in the choice of appropriate scenarios and models** are the biggest current challenges for implementing a climate agenda in Brazilian banks.

⁹⁹ CNN Brasil: [Brasil assume papel de protagonismo na COP-27](#). Dec. 19th, 2022. Accessed on Feb. 08th, 2023.

¹⁰⁰ Brazil: [Presidentes do Banco do Brasil, CAIXA e BNDES participam de painéis sobre mercado de carbono no estande do Brasil na COP 27](#). Nov. 15th, 2022. Accessed on Feb. 08th, 2023.

¹⁰¹ Banco do Brasil Press: [Fundação BB e BNDES assinam parceria na COP27](#). Nov. 16th, 2022. Accessed on Feb 08th, 2023.



4.2 Asset managers



Key organisations

The Brazilian financial sector is relatively centred in few institutions, which implies **some repetition in commercial names when ranking banks and asset managers**. Table 9 shows the ten greatest Brazilian asset managers, considering the sum of each institution's Assets under Management (AuM).

Table 9 - Key Asset Managers in Brazil

Commercial name	Total assets (in millions)
BB Asset Management	R\$1,398,984.88
Itaú Unibanco Asset Management	R\$836,386.28
Bradesco Asset Management	R\$569,225.63
Caixa Asset	R\$481,650.46
Santander	R\$306,795.92
BTG Pactual Asset Management	R\$281,894.57
BRL DTVM	R\$196,832.06
XP Asset Management	R\$155,494.81
Safra	R\$98,932.56
BW Gestão de Investimento	R\$98,866.20

Source: [Brazilian Financial and Capital Markets Association - ANBIMA](#).

Another key player in the Brazilian asset management sector is the **Brazilian Financial and Capital Markets Association (ANBIMA)**. ANBIMA represents banks, managers, brokers, distributors and asset administrators. Created in 2009 from the union of two entities, the Association's performance model is organized around four commitments: **represent, self-regulate, inform and educate**¹⁰². According to ANBIMA, the sum of Assets under Manage by financial institutions and Asset Managers in Brazil was of **R\$7,2 trillion** in December 2022.



Commitments

Besides the previously mentioned commitments, there is another relevant commitment in the Brazilian asset management scenario: the **Investors for Climate (IPC) commitment**. Released in 2019, the commitment is an open letter in which Brazilian asset managers commit to publicly report their progress in managing their portfolio's climate risks and opportunities, according to TCFD Framework; and to undertake active ownership activities (stewardship) towards addressing climate change in the companies' policies and practices to at least one investee company or asset manager per year.

As shown in Table 10, that lists the Brazilian asset managers involved in public climate commitments, it is interesting to highlight that the **participation of the sector is majorly represented by bigger managers that compose multi-purpose**

¹⁰² [ANBIMA](#). Accessed on Feb 08th, 2023.

financial institutions, with no representation of companies exclusively dedicated to asset management. **Also, there is no registered participation of Brazilian asset managers in SBTi.**

Table 10 - National and international commitments and participation of Brazilian asset managers

Asset Manager	SBTi	PCAF	IPC	Observations
Bradesco Asset Management		✓	✓	
BTG Pactual Asset Management		✓	✓	
Itaú Asset Management		✓	✓	
Santander Asset Management		✓	✓	

Sources: [SBTi](#), [PCAF](#) and [IPC](#).



Initiatives

Brazil's most relevant climate related financial initiative for asset managers is IPC. IPC was developed as a pioneering approach, with the main objective of engaging and empowering local professional investors to advance their portfolio decarbonisation agenda while seeking better risk-adjusted returns. The movement, which started in the second half of 2019, is formed by a plural group of **49 Brazilian professional investors**, including asset managers, pension funds, insurance companies and family offices, with **assets under management of over R\$2.5 trillion**, as of February 2023¹⁰³. While signatories of the IPC commitment previously mentioned have explicit commitments, there are no minimal requirements for members.

However, **the involvement of Brazilian asset managers in international climate initiative is minor.** Although nationally IPC holds 48 signatories, including ANBI-MA, there is no significant participation of the sector in other initiatives. For instance, there are only three Brazilian asset managers registered as investor participants in **Climate Action 100+ (CA100+)** - a \$68 trillion in assets investor-led initiative to ensure the world's largest corporate greenhouse gas emitters take necessary action on climate change¹⁰⁴. There is also **no registered participation of Brazilian Asset Managers as members of UNEP-FI.** Table 11 summarizes the participations by asset manager and initiative. The names in bold letters represent banks presented in the key organizations section.

Table 11 - National and international initiatives and participation of Brazilian Asset Managers

Asset Manager	IPC	CA100+	UNEP-FI
Bradesco Asset Management	✓		
BTG Pactual	✓		
Itaú Asset Management	✓		
Santander Asset Management	✓		
BB DTVM			✓

¹⁰³ IPC. Accessed on Feb 09th, 2023.

¹⁰⁴ [Climate Action 100+](#). Accessed on Feb. 09th, 2023.



Indie Capital	✓	✓
JGP	✓	✓

Sources: [IPC](#), [CA100+](#) and [UNEP-FI](#).



Key policies and regulations

Recent regulations have been positively affecting climate-related disclosures for certain asset classes, which has consequently impacted asset managers' practices. In December 2022, CVM Resolution 175¹⁰⁵ has established criteria for labelling ESG funds, although it does not approach specific climate aspects. Since 2022, listed companies are requested to disclose (through a “comply or explain structure”) whether climate-related information is available and aligned to TCFD recommendations, as well as its GHG emissions. In January 2023, CVM has published its **Sustainable Finance Policy**¹⁰⁶, in which an action plan is foreseen to develop a sustainable finance taxonomy and prevent greenwashing in the securities market.



Disclosure level

Of the ten largest Brazilian asset managers, six reported climate-related data through CDP Climate Change questionnaire¹⁰⁷ (Table 12). In these cases, all their information is comprised within their holding questionnaire, since most of them are asset managers from banks. In terms of disclosure scoring, most of them are considered “management” level (score B). Two of them (Itaú Unibanco Asset Management and Bradesco Asset Management) are also TCFD official supporters¹⁰⁸.

Table 12 - Key Brazilian asset managers and their climate-related disclosure practices

Commercial name	TCFD supporter	CDP Climate Change questionnaire
BB Asset Management		✓ (Included within Banco do Brasil S/A, which achieved a score B)
Itaú Unibanco Asset Management	✓	✓ (Included within Itaú Unibanco Holding S.A, which achieved a score B)
Bradesco Asset Management	✓	✓ (Included within Banco Bradesco S/A, which achieved a score B)
Caixa Asset		✓ (Included within Caixa Econômica Federal, which achieved a score B)
Santander		
BTG Pactual Asset Management		✓ (Included within Grupo BTG Pactual, which achieved a score C)

¹⁰⁵ CVM (2022). [Resolução 175](#). Accessed on Feb. 10th 2023.

¹⁰⁶ CVM (2023). [Portaria CVM/PTE N° 10/2023](#). Accessed on Feb. 10th 2023.

¹⁰⁷ CDP (2023). [Brazilian responses for the Climate Change questionnaire](#). Accessed on Feb. 7th, 2023.

¹⁰⁸ TCFD (2023). [Supporters](#). Accessed on Feb. 7th, 2023.



BRL DTVM

XP Asset Management

✓
(Included within XP Inc, which achieved a score C)

SAFRA

BW Gestão de Investimento

Source: Author's elaboration based on [CDP](#) and [TCFD](#).

Other eight Brazilian asset managers are officially supporting TCFD¹⁰⁹: Amazon Valley, Banco FICO de Carbono Florestal, Crescera Capital, Fama Investimentos, JGP, Mauá Capital, Neo Investimentos and NW3 Capital. Despite committing to report climate-related information according to TCFD recommendations, Brazilian asset managers still face challenges when it comes to complying to it. Unpublished data from IPC internal monitoring process, which will be released by March 2023, indicates that even within the signatories of IPC Commitment, **asset managers' adherence to TCFD recommendations is relatively low**. Of the 21 asset managers analysed, only 31.6% are fully aligned to all TCFD recommended disclosures. Adherence is significantly better (65.9%) when specifically analysing asset managers with more than R\$ 2 billion in AuM. While asset managers assessed within IPC Commitment presents a higher adherence to TCFD recommendations related to governance (42.86%) and risk management (47.62%), a lower adherence is observed to recommendations related to metrics and targets (28.57%) and strategy (11.11%).



Advocacy

Brazilian asset managers are **relatively well engaged in climate-related advocacy**. At COP26, for instance, twenty Brazilian asset managers that totalled R\$873.57 billion in AuM signed a climate related statement promoted by IPC¹¹⁰. This declaration claimed for:

- A global and regulated carbon market based on Paris Agreement's article 6;
- Strengthening the environmental enforcement structure to eliminate illegal deforestation and seek an immediate reduction in deforestation rates;
- Redesigning economic and fiscal instruments to stimulate sustainable and low-carbon private investment;
- Regulating domestic carbon pricing mechanisms, using the lessons learned from the implementation of RenovaBio;
- Implementing net zero targets by 2050, with clear and ambitious goals and intermediate targets, with proper transparency to improve communication with the national and international markets;
- A post-Covid 19 pandemic recovery plan that supports the transition to a low carbon economy allied to climate resilience ("sustainable recovery").

Several similar statements occurred in the last years. Since 2020, JGP has published annual letters in which the climate agenda is highlighted¹¹¹. In 2019, FAMA Investimentos and SulAmerica Investimentos were two Brazilian asset managers

¹⁰⁹ TCFD (2023). [Supporters](#). Accessed on Feb. 7th, 2023.

¹¹⁰ IPC (2021). [Declaração IPC](#). Accessed on Feb. 7th 2023.

¹¹¹ JGP (2023). [Nosso conteúdo](#). Accessed on Feb. 09th 2023.



that signed the “Investor statement on deforestation and forest fires in the Amazon”¹¹². In 2017, five Brazilian asset managers positioned themselves in favour of fostering the green bond market, including towards climate benefits¹¹³.

Another relevant way Brazilian asset managers are encouraging and stimulating the transition to a net-zero economy is through climate stewardship activities. Unpublished data from IPC internal monitoring process, which will be released by March 2023, indicates that within the signatories of IPC Commitment, asset managers’ engagement activities with investees are significant. Of the 21 asset managers analysed, 71.4% declared that they have promoted climate engagement activities with at least one investee.

On the other hand, some Brazilian asset managers are also engaged in ESG backlash. Atmos, for instance, has R\$ 12 billion in AuM¹¹⁴ and has actively positioned itself against ambition ESG action. In two recent letters, the asset manager relativize the relevance of the climate agenda¹¹⁵, and the importance of urgently addressing coal-fired power stations to achieve climate targets¹¹⁶. However, such movement in the Brazilian context is not currently as strong as in the United States, and should be tracked to observe further trends.



Key challenges

Among the challenges faced by Brazilian asset managements to contribute to a net-zero economy, the following should be highlighted:

- **Methodological aspects for measuring its financed emissions and setting net-zero targets**, including internal capacity to adopt PCAF/SBTi standard and collect qualified GHG data. IPC’s tools¹¹⁷ are positively contributing to change these circumstances, but smaller asset managers are still starting their journey in the climate agenda;
- **Climate-related criteria for funds and securities labelling**, in order to comply with international best practices and CVM’s recent regulation;
- **Transparency and adherence to TCFD recommendations**, despite recent improvements.

¹¹² The joint statement is available [here](#).

¹¹³ PRI, CBI & SITAWI (2017). [Brazil Green Bonds Statement](#). Accessed on Feb. 09th 2023.

¹¹⁴ ANBIMA (2022). [Ranking de Gestores de Fundos de Investimento](#). Accessed on Feb. 7th 2023.

¹¹⁵ Atmos (2022). [Carta Atmos 25](#). Accessed on Feb. 7th 2023.

¹¹⁶ Atmos (2022). [Carta Atmos 26](#). Accessed on Feb. 7th 2023.

¹¹⁷ IPC (2023). [Ferramentas](#). Accessed on Feb. 10th 2023.



4.3 Asset owners



Key organisations

The key asset owners operating in Brazil were selected considering their size and relevance in the Brazilian market and were divided according to its segments: **Family Offices**, **Endowment Funds**, **Sovereign Wealth Funds (SWF)**, **Public Pension** and **Complementary Private Pension Funds (Pension Fund)**. The last category includes **Closed Pension Funds (EFPC - Entidades Fechadas de Previdência Complementar)** and **Open Pension Funds (EAPC - Entidades Abertas de Previdência Complementar)**. Table 13 shows the organizations in each category and its assets. It should be noted that there is a lack of data in terms of Family Offices AuM. Therefore, the selection of those institutions was focused on the most recurrently active ones in the climate agenda.

Table 13 - Key asset owners operating in Brazil

Organization	Category	Subcategory	Assets (BRL)
Turim	Family office	-	9,943,930,000.00
UBS Consenso	Family office	-	11,999,690,000.00
G5 Partners	Family office	-	24,440,000,000.00
Julius Baer	Family office	-	37,618,800,000.00
Fundação Bradesco	Endowment	-	65,511,000,000.00
Fundo Fundação Itaú para Educação e Cultura	Endowment	-	5,638,000,000.00
Umane	Endowment	-	1,900,000,000.00
Previ	Pension fund	EFPC	248,176,608,000.00
PETROS	Pension fund	EFPC	109,367,432,000.00
FUNCEF	Pension fund	EFPC	93,658,524,000.00
VIVEST	Pension fund	EFPC	36,045,989,000.00
Brasilprev Seguros e Previdência S/A	Pension fund	EAPC	318,200,000,000.00
Bradesco Vida e Previdência S.A	Pension fund	EAPC	268,660,000,000.00
Itaú Vida e Previdência S/A	Pension fund	EAPC	213,640,000,000.00
Fundo Soberano do Brasil (FSB)	SWF	-	3,652,394,000,000.00
Instituto Nacional do Seguro Social (INSS)	Public pension	-	8,524,389,869.44

Sources: [ABRAPP](#), [GOV BR](#), [IDIS](#), [Tesouro Nacional Transparente](#) , [INSS](#).



Commitments



To identify whether the key organizations listed above are engaged in climate-related commitments, the major three climate-related international commitments that covers Asset Owners were considered: the **Net-Zero Asset Owner Alliance (NZAO)**, the **Science-Based Targets Initiative (SBTi)**, and the **Principles for Carbon Accounting Financials (PCAF)**. Also, engagement with **IPC Commitment** was analysed. Searching the names of each of the key organizations within their signatories, it was identified that **only Previ is committed to IPC. The other 15 organizations are not signatories of any of the commitments analysed** (Table 14).

Table 14 - Climate-related commitments and Brazilian Asset Owners participation

Institution	NZAO	SBTi	PCAF	IPC Commitment
Turim				
UBS Consenso				
G5 Partners				
Julius Baer				
Fundação Bradesco				
Fundo Fundação Itaú para Educação e Cultura				
Umane				
Previ				✓
PETROS				
FUNCEF				
VIVEST				
Brasilprev Seguros e Previdência S/A				
Bradesco Vida e Previdência S.A				
Itaú Vida e Previdência S/A				
Fundo Soberano do Brasil (FSB)				
Instituto Nacional do Seguro Social (INSS)				

Sources: [NZAO](#), [SBTi](#), [PCAF](#) and [IPC](#).



Initiatives

Regarding the participation of the key Brazilian asset owners in climate-related initiatives, it was identified their engagement as partici-

pants in the **Principles of Responsible Investment (PRI)** and **IPC**¹¹⁸. Table 15 shows that from the sixteen institutions selected, four of them are both participating at PRI and IPC. The other twelve asset owners do not participate at any of the initiatives analyzed.

Table 15 - Key asset owners participating in climate-related initiatives

Institution	PRI	IPC participant
Turim	✓	✓
UBS Consenso		
G5 Partners		
Julius Baer		
Fundação Bradesco		
Fundo Fundação Itaú para Educação e Cultura		
Umane		
Previ	✓	✓
PETROS		
FUNCEF		
VIVEST	✓	✓
Brasilprev Seguros e Previdência S/A	✓	✓
Bradesco Vida e Previdência S.A		
Itaú Vida e Previdência S/A		
Fundo Soberano do Brasil (FSB)		
Instituto Nacional do Seguro Social (INSS)		

Sources: [PRI](#), [IPC](#).



Key policies and regulations

There are **no polices or regulations specifically addressing climate-related practices to the entities here presented, but recent ESG regulation are in place**. Regarding Pension Funds, some provisions have been made about ESG criteria. One of them is CNM 3,792/2009, establishing the possibility of observing environmental and social responsibility principles as minimum criteria to investment policies on EFPC's. The CMN 4,661/2018 (replaced by CMN 4,994/2022) and CNM 4,769/2019 stated that closed and open pension fund managers had to observe aspects related to financial, environmental, and social, when possible, on the risk assessment, before acquiring the issue. Then, Previc's norm 35/2020 established as obligatory the observation of ESG principles in investment policies. It was also launched a guide of best investment practices, including the ones aligned with ESG.^{119 120 121}

¹¹⁸ IPC offers two possibilities for an institution to be a part at the initiative: as a signatory (committing to its terms); and/or as a participant (participates in the meetings and discussions but is not committed to its terms).

¹¹⁹ Ministério do Trabalho e Previdência & Secretaria de Previdência (2022). [Incorporando critérios ASG \(Ambientais, Sociais e de Governança\)](#). Accessed on Feb. 9th, 2023.

¹²⁰ GIZ (2020). [Mainstreaming Sustainability in Brazil's Financial Sector](#). Accessed on Feb. 9th, 2023.





Disclosure level

Regarding disclosure, none of the key Brazilian asset owners are officially supporting the **Task-Force on Financial Disclosure (TCFD)**¹²², and only two reported climate data through **CDP Climate Change questionnaire**¹²³. Brasilprev Seguros e Previdência S/A submitted its response to CDPs questionnaire in 2018 but did not score, and Previ mentions in its website¹²⁴ that it reports to CDP, but when searching in the CDP list of institutions that responded to the questionnaires, Previ is not found.

At a sector level, the Brazilian Pension Fund Association (*Associação Brasileira de Entidades Fechadas de Previdência Complementar, Abrapp*), periodically publishes a Social-Environmental Report that maps Environmental, Social and Governance information from open pension funds and has been fostering the engagement and transparency action of the sector in sustainability, aligned with the best international practices such as the Principles for Responsible Investment (PRI) and the Carbon Disclosure Project (CDP)¹²⁵.



Advocacy

The presented entities do not show any document or letter advocating for actions related to climate change. However, Previ is recently promoting stewardship activities with IPC support.



Key challenges

Asset owners' contribution to a net-zero economy is still limited by the lack of climate-related disclosure, commitments and advocacy. Their governance structure rarely includes sustainability guidelines, being even more difficult to find specific climate-related approaches. However, asset owners that are associated with bigger financial institutions - specially pension funds as Brasilprev (Banco do Brasil), Bradesco Vida e Previdência S.A (Bradesco Seguros parent company) and Itaú Vida e Previdência S/A (Itaú) tend to present more promising results. In these cases, the holding's governance and commitments can act as an umbrella, involving the entities - where in some cases, sustainability and climate change are essential pillars. Some Family offices¹²⁶ - Turim, for instance, are involved with impact investments¹²⁷, which may indicate a potential opportunity for mainstreaming climate change.

¹²¹ Ministério da Economia (2020). [Novo Guia Previc Melhores Práticas de Investimentos](#). Accessed on Feb. 9th, 2023.

¹²² TCFD. [Supporters](#). Accessed on 9th Feb, 2023.

¹²³ CDP. [CDP responses](#). Accessed on 9th Feb, 2023.

¹²⁴ Previ. [Compromissos](#). Accessed on 9th Feb, 2023.

¹²⁵ Abrapp (2014). [Relatório de Sustentabilidade dos Fundos de Pensão](#). Accessed on 9th Feb, 2023.

¹²⁶ The Impact (2017). [Investimento de Impacto no Brasil](#). Accessed on Feb. 9th, 2023.

¹²⁷ Reset (2021) [Num dos maiores family offices do Brasil, a fórmula para integrar ESG e impacto](#). Accessed on Feb. 9th, 2023.



4.4 Insurance



Key organisations

Although insurance companies may be considered asset owners, within this report they are specifically approached as a different group. This structure reflects its distinct features, including regulatory aspects and climate-related material issues.

As of 2021, the Brazilian insurance market comprised 161 insurers, 146 reinsurers, 16 capitalization companies and 959 private insurance operators for health care plans, totalling the equivalent of 23.4% of Brazil's public debt in AuM¹²⁸. In this sense, a key organisation in terms of outreach is the National Confederation of Insurance Companies (CNseg - *Confederação Nacional das Seguradoras*), which connects most institutions currently operating in this large and diverse environment.

In 2021, 10 companies accounted for 60.4% of Brazil's insurance market (Table 16). Half of the market share is held by 8 business groups (Bradesco, BB Seguros, Caixa Seguros, Sulamérica, Zurich, Amil, Porto Seguro and Itaú)¹²⁹.

Table 16 - Key insurance companies based on revenue and market share (2021)

Insurance company	Revenue (R\$ billion)	Market share
Porto Seguro Companhia de Seguros Gerais	R\$ 9.56	10.60%
Mapfre Seguros Gerais S.A.	R\$ 7.28	8.10%
Tokio Marine Seguradora S.A.	R\$ 6.83	7.60%
Allianz Seguros S.A.	R\$ 6.51	7.30%
Bradesco Auto/Re Companhia de Seguros	R\$ 6.25	7.00%
Brasilseg Companhia de Seguros	R\$ 5.53	6.20%
Liberty Seguros S.A.	R\$ 3.93	4.40%
Azul Companhia de Seguros Gerais	R\$ 3.70	4.10%
Hdi Seguros S.A.	R\$ 3.69	4.10%
Zurich Minas Brasil Seguros S.A.	R\$ 3.66	4.10%

Source: Adapted from [CNseg's 2021 Insurance Ranking](#).

¹²⁸ CNseg (2022). [Relatório Anual 2021 - Confederação Nacional das Seguradoras](#). Accessed on Feb. 7th, 2023.

¹²⁹ CNseg (2022). [Insurance Ranking 2021](#). Accessed on Feb. 7th, 2023.





Commitments

In terms of climate commitments, Brazilian insurance companies are **significantly behind the level of ambition expected to effectively contribute to a low-carbon economy**. None of the Brazilian insurance companies have submitted or committed to climate targets through the **Science Based Target Initiative (SBTi)**¹³⁰ or committed to measure and disclose their financed GHG emissions through **PCAF - Partnership for Carbon Accounting Financials**¹³¹. When it comes to PCAF, a relevant barrier is the fact that the standard to calculate insurance associated emissions was published only recently, in November 2022. Four holdings (Mapfre, Sompo holdings, Tokyo Marine holdings and Zurich) related to Brazilian insurance companies are members of the **Net-zero Insurance Alliance (NZIA)**¹³², but this does not imply direct commitment from their Brazilian subsidiaries.

Due to its business model, **insurance companies are especially interested in tackling climate change from a resilience perspective**, quantifying its exposure to climate risks through Catastrophe Models. On the other hand, the mitigation perspective (including quantifying GHG financed emissions through their insurance portfolios and establishing net-zero targets), is still in its early stages within the Brazilian insurance context, with few companies prioritizing net-zero targets within its climate agenda.



Initiatives

Although the level of climate commitments falls short of what is needed, it is noted that insurers are relatively engaged in climate-related initiatives. For instance, twelve Brazilian insurance companies are currently members of the **Principles for Sustainable Insurance (PSI)**¹³³. Five of them are within the 10 largest companies (Table 17). The other seven members are Sompo Seguros S.A., Caixa Seguradora S.A. Itaú Seguros S.A., Sulamérica, Brasil Cap Capitalização S.A., Mongeral Aegon Seguros e Previdência S.A. and Seguradora Líder Dpvat. Additionally, CNseg and one insurance company (Zurich) is also engaged as a participant in the Brazilian initiative **Investors for Climate (IPC - Investidores pelo Clima)**¹³⁴.

Table 17 - Key insurance companies based on revenue and market share (2021) and its engagement in climate-related initiatives

Insurance company	Market share	PSI member	IPC participant
Porto Seguro Companhia de Seguros Gerais	10.60%	✓	
Mapfre Seguros Gerais S.A.	8.10%		

¹³⁰ SBTi (2023). [Companies taking action](#). Accessed on Feb. 7th, 2023.

¹³¹ PCAF (2023). [Financial institutions taking action](#). Accessed on Feb. 7th, 2023.

¹³² NZIA (2022). [Members](#). Accessed on Feb. 7th, 2023.

¹³³ Principles for Sustainable Insurance (2023). [Our members](#).

¹³⁴ IPC (2023). [Participantes](#). Accessed on Feb. 7th, 2023.



Tokyo Marine Seguradora S.A.	7.60%		
Allianz Seguros S.A.	7.30%		
Bradesco Auto/Re Companhia de Seguros	7.00%	✓	
Brasilseg Companhia de Seguros	6.20%	✓	
Liberty Seguros S.A.	4.40%	✓	
Azul Companhia de Seguros Gerais	4.10%		
Hdi Seguros S.A.	4.10%		
Zurich Minas Brasil Seguros S.A.	4.10%	✓	✓

Source: Adapted from [CNseg's 2021 Insurance Ranking](#); [PRI](#) and [IPC](#).

CNseg is also engaged in the **Financial Innovation Lab** (LAB - *Laboratório para Inovação Financeira*), which, as mentioned in the previous sections, is a cross-cutting initiative between the various types of financial institutions that has been offering relevant climate-related support. Finally, it is worth mentioning that **CNseg has also approached UNEP-FI to develop a joint project focused on capacity building on TCFD recommendations and structuring a tool for physical climate risk assessment**. NINT was hired to provide technical and strategic support within this process, which started in 2022.



Key policies and regulations

In the last few months, Brazilian insurance companies have experienced a turning point in relation to climate change sectoral regulations. In June 2022, SUSEP published its **Instruction 666/22**, which established sustainability requests to insurers, reinsurers, capitalization companies and open pension funds. This instruction provides mandatory guidance on materiality assessment, quantitative risk measurement, policies and disclosure. More importantly for the purpose of this report, this instruction defines climate risks and foresees its integration within the established guidance, laying the groundwork for effective climate integration in insurance decision making.

However, it should be noted that this key regulatory improvement focuses on climate change from a resilience perspective and proposes a risk centred view. **There is still room for legal guidance on net-zero targets** for the insurance sector, supporting regulatory criteria to mandatory finance emissions disclosure and reduction/neutralization targets.



Disclosure level

In terms of transparency, Brazilian insurance companies **are relatively poorly engaged with reporting frameworks** such as CDP Climate Change questionnaire and TCFD recommendations. Of the 10 largest insurance companies in terms of market share, only one (Porto Seguro) reported climate information through CDP Climate Change question-

naire¹³⁵, attaining a C score in 2022 (which indicates an “awareness-level engagement”). Additionally, only one (Bradesco Seguros) of the 10 largest insurance companies is officially a TCFD supporter¹³⁶, which would indicate willingness to provide climate-related financial information (Table 18).

Table 18 - Key insurance companies based on revenue and market share (2021) and its alignment to climate-related disclosure frameworks

Insurance company	Market share	CDP Climate Change questionnaire	TCFD supporter
Porto Seguro Companhia de Seguros Gerais	10.60%	✓	
Mapfre Seguros Gerais S.A.	8.10%		
Tokyo Marine Seguradora S.A.	7.60%		
Allianz Seguros S.A.	7.30%		
Bradesco Auto/Re Companhia de Seguros	7.00%		✓
Brasilseg Companhia de Seguros	6.20%		
Liberty Seguros S.A.	4.40%		
Azul Companhia de Seguros Gerais	4.10%		
Hdi Seguros S.A.	4.10%		
Zurich Minas Brasil Seguros S.A.	4.10%		

Source: Adapted from [CNseg’s 2021 Insurance Ranking](#); [CDP](#) and [TCFD](#).

Although insurance companies are not individually engaged in climate transparency, CNseg has an important role in aggregating climate-related data from the sector through its annual sustainability report. CNseg’s Sustainability Report 2021¹³⁷ consulted 35 insurance companies, accounting for 85.7% of the federation participants, and presented an integrated view on the sector’s performance regarding TCFD recommendations. In this sense, it should be noted that insurance companies are willing to disclose climate-related data, provided that in aggregate form.



Advocacy

Brazilian insurance companies’ engagement with climate-related advocacy activities is occasional and discrete. In 2018, CNseg President and SUSEP Superintendent signed the “**Rio declaration on climate risk**”

¹³⁵ CDP (2023). [Brazilian responses for the Climate Change questionnaire](#). Accessed on Feb. 7th, 2023.

¹³⁶ TCFD (2023). [Supporters](#). Accessed on Feb. 7th, 2023.

¹³⁷ CNseg (2022). [Sustainability Report 2021](#). Accessed on Feb. 7th 2023.

transparency by the Brazilian insurance industry”¹³⁸, supporting a dialogue on practical and effective ways to meet TCFD recommendations. It is unusual for Brazilian insurance companies to publicly position themselves individually or to sign specific statements related to climate policies.



Key challenges

The following challenges should be highlighted when it comes to insurance companies’ contribution to climate finance:

- Brazilian insurance companies most commonly adopt a **risk centred perspective**. While the international insurance sector is further discussing net-zero targets and engaging in NZIA, the Brazilian insurance sector is mainly focused on integrating climate risks in the decision-making process to avoid financial losses. This approach reflects Susep’s current regulatory framework, which request climate risks disclosure (but not specific action plans or targets), as well as methodological gaps (PCAF’s standard for measuring insured GHG emissions was published only a few months ago). In this sense, Brazilian insurance companies are usually able to recognize how they should build resilience to tackle climate change impacts, but not how they can contribute to actively reduce insured GHG emissions.
- Even when it comes to a risk centred perspective, only approximately one third (33.3%) of the 35 insurance companies consulted by CNseg in 2021¹³⁹ declared to integrate climate aspects in corporate risks management or to assess their portfolio exposure. Despite recent regulatory requests, insurers are still challenged by **climate data limitations and internal modelling capacity**. From the insurance companies supported by CNseg, UNEP-FI and NINT, most did not adopt Catastrophe Models to quantify environmental risks, and from those that were implementing such models, climate scenarios were not comprised among the settings.
- In terms of governance, **high-level involvement is relatively weak**. Only 19% of the 35 insurance companies consulted by CNseg in 2021¹⁴⁰ declared to engage their boards or advisory committees in climate-related decision making.
- Climate action within the insurance sector might improve slower than what would be necessary to fully implement Brazil’s NDC. Most (76.2%) of the 35 insurance companies consulted by CNseg in 2021¹⁴¹ visualises that the climate agenda will be fully integrated into its governance structure, strategy, risk management, targets and indicators in the next 5 years.

¹³⁸ CNseg & SUSEP (2018). [Rio declaration on climate risk transparency by the Brazilian in-surance industry](#). Accessed on Feb. 8th, 2023.

¹³⁹ CNseg (2022). HYPERLINK "<https://www.cnseg.org.br/publicacoes/relatorio-de-sustentabilidade.html>" [Sustainability Report 2021](#). Accessed on Feb. 7th 2023.

¹⁴⁰ CNseg (2022). [Sustainability Report 2021](#). Accessed on Feb. 7th 2023.

¹⁴¹ CNseg (2022). [Sustainability Report 2021](#). Accessed on Feb. 7th 2023.



4.5 Service providers

This section analyses three types of service providers: Stock exchange, ESG rating agencies and Investment consultant and auditors. Given the differences in function and purpose, the items analysed in each group are approached qualitatively.

Stock exchange

B3 (*Brasil, Bolsa, Balcão*), is a market infrastructure providing an environment to buy and sell financial assets. Besides its action as a service provider, B3 is also a listed publicly traded joint-stock company, with its own internal practices and products portfolio. The main segments of operation are listed products, OTC (Over the Counter), financing infrastructure technology and data services¹⁴².

B3 as a service provider

It acts as a central counterparty, offering depository and registration services, with more than 99% of shares traded on its stock exchange in the listing segment known as “Novo Mercado” (where participating Companies spontaneously adhere to the best Corporate Governance practices) and a domestic market capitalization of US\$ 935,583 million.^{143 144}

The organization, function, and operation of stock exchanges in Brazil are inspected by the Commission of Securities (CVM, in Portuguese acronym), established by the laws 6,385/1976 and 10,303/2001. CVM is an autonomous entity under a special regime, linked to the Ministry of Finance, responsible for developing, regulating and supervising the Securities Market.¹⁴⁵ In that sense, CVM’s resolutions related to climate are directed to issuers and not to B3 as an institution.

B3 is a member of the Sustainable Stock Exchanges Initiative (SSE), a UN Partnership Programme that explore how exchanges can enhance performance on ESG issues and encourage sustainable investment.¹⁴⁶ In the climate action theme, SSE acts as the secretariat for exchanges within the Glasgow Financial Alliance for Net Zero (GFANZ) Net Zero Financial Service Providers Alliance and has many tools publications such as “Action Plan to Make Markets Climate Resilient” and “SSE Model Guidance on Climate Disclosure”. Also, they were the first signatory stock exchange to the UN Global Compact, in 2005¹⁴⁷.

In terms of potential challenges addressing climate change, stock exchanges can act leading by example, by changing the internal operations, disclosure, and governance, or influencing the market’s practices in the same areas. In either way, disclosure plays an important role by bringing a perspective to their markets on climate-resiliency and contribute to a more transparent and climate-resilient market globally.¹⁴⁸

Even though each market has a unique regulation and codes, and sometimes identifying a suitable approach to analyse risks and disclose climate-related information for investors and issuers can be a challenge, stock exchanges have the tools and infrastructure necessary

¹⁴² B3 (2022). [2021 Annual Report](#). Accessed on Feb. 8th 2023.

¹⁴³ B3 (2022). [2021 Annual Report](#). Accessed on Feb. 8th 2023.

¹⁴⁴ Sustainable Stock Exchanges Initiative (SSE) (2022). [B3](#). Accessed on Feb. 8th 2023.

¹⁴⁵ Governo Federal. [O que é a CVM?](#) Accessed on Feb. 8th 2023.

¹⁴⁶ Sustainable Stock Exchanges Initiative (SSE) (2022). [About](#). Accessed on Feb. 8th 2023.

¹⁴⁷ Sustainable Stock Exchanges Initiative (SSE) (2022). [Climate Action](#). Accessed on Feb. 8th 2023.

¹⁴⁸ Sustainable Stock Exchanges Initiative (SSE) (2021). [Action Plan to Make Markets Climate Resilient](#). Accessed on Feb. 8th 2023.



to address the theme and an act as educators and information gateway for the market, guiding them to potential opportunities and helping to identify high risk scenarios.^{149 150}

B3 as a listed company

The company seems conscious about the relation between climate change and the risks and opportunities for its business. In this topic, B3 monitors the environmental impacts; implement management, mitigation and transparency initiatives and are signatories to voluntary commitments that aim to promote the climate agenda at the national and international levels¹⁵¹.

Some of their commitments include the alignment on the **Principles for Responsible Investment (PRI)**; the membership on the **Advisory Board of CDP Latin America**; the **Working Groups of CVM's Financial Innovation Lab** and the participation on the **Climate Commitment Program**, a platform that connects companies that wish to offset their emissions through projects throughout Brazil that generate positive environmental and social actions.^{152 153} The company also supports **TCFD**, since 2017, following its voluntary recommendations and reporting their practices related to climate change in their annual report¹⁵⁴. They are also B score on **CDP Climate Change**, being a respondent since 2009¹⁵⁵.

Their **Social Environmental and Climate Responsibility Policy** - revised in a minimum period of two years or shorter period if new legal or regulatory milestones are added - set out as guidelines that social, environmental and climate risks are included in the company's strategic objectives and risk management. Also, there is an exclusive topic called "Climate Change", where the company recognizes the exposition of its operations and activities facing climate change. They elaborate their GHG inventory, since 2010, promotes the neutralization of GHG emissions (being carbon neutral since 2013), are commitment to reduce, by 2026, 25% of their scope 2 emissions and established corporate ESG targets in 2021, with impact on CEO compensation, including 5 targets related to climate out of the 31 actions proposed, achieving 100% of the objective by the end of the year.¹⁵⁶

Their governance body includes the climate theme, in what is called "**Climate Governance**". Issues related to climate change are responded by the **Internal Sustainability Committee**, responsible for guiding the strategy of sustainability themes and the approval of initiatives related to the theme. It is formed by the President; Financial, Corporate and Investor Relations Vice-President; Vice-President for Products and Customers; Executive Director of People, Marketing, Communication and Sustainability; and two members of the Board of Directors.¹⁵⁷

¹⁴⁹ Sustainable Stock Exchanges Initiative (SSE) (2021). [Action Plan to Make Markets Climate Resilient](#). Accessed on Feb. 8th 2023.

¹⁵⁰ Sustainable Stock Exchanges Initiative (SSE) (2021). [Model Guidance on Climate Disclosure](#). Accessed on Feb. 8th 2023.

¹⁵¹ B3 (2023). [2021 Annual Report](#). Accessed on Feb. 8th 2023.

¹⁵² B3. At B3. [Commitments](#). Accessed on Feb. 8th 2023.

¹⁵³ B3. At B3. [Transparency](#). Accessed on Feb. 8th 2023.

¹⁵⁴ TCFD. [Supporters](#).

¹⁵⁵ CDP. [Responses](#). Accessed on Feb. 8th 2023.

¹⁵⁶ B3 (2022). [2021 Annual Report](#). Accessed on Feb. 8th 2023.

¹⁵⁷ B3 (2022). [2021 Annual Report](#). Accessed on Feb. 8th 2023.



B3 support on the climate agenda comes down to company measurements, as governance and portfolio, fostering good practices. They seek to stimulate the market to adopt good practices by providing products aligned with a low-carbon economy. In the context of its products portfolio, B3 have sustainability indexes, such as Corporate Sustainability Index (ISE B3) and Carbon Efficient Index (ICO2 B3), helping to promote ESG best practices. In their 2021 Annual Report, the correlation between material themes and the UN SDGs, quote climate action on two material points: “Customer centricity” and “Corporate Governance and Fostering ESG good practices in the Market”. According to other sections of the document, getting closer to individual investors and making operation efficient, from an environmental point of view, are some of the challenges faced by the company. These themes are related to the ESG approach, which can include the climate change thematic. In this sense, it seems like B3 is developing ways to keep monitoring trends and regulations related to the sustainability scenario, working to be capable of impacting the operations and stakeholders and on the education of its clients in addition to adapting products to their client’s reality.¹⁵⁸

In the case of B3, besides their demure actions regarding their disclosure, some movements are being made, such as the development of a new climate roadmap in which they mapped medium and long-term actions aimed at maintaining adherence to the TCFD recommendations on their 2021 Annual Report.¹⁵⁹

ESG rating agencies



Key organisations

As relevant ESG rating agencies operating in Brazil, it is worth noting **Fitch Ratings, Moodys, MSCI, RobecoSAM, S&P Global and Verisk Maplecroft.**



Climate-related activities

The agencies adopt different approaches in the climate scenario, where some explore the vulnerability of sectors, while others seek for the identification of risks in the portfolio. The Table 19 summarizes the main services found.

In terms of commitments, some highlights related to climate are the roadmap to achieve net-zero emissions by 2040, from S&P Global¹⁶⁰, MSCI¹⁶¹ and Moody’s, validated by the SBTi¹⁶². Also, MSCI is a member of the Net Zero Financial Service Providers Alliance, that seeks to align products and services from leading index providers, credit rating agencies, accounting firms and others, with the goal of global net-zero emissions by 2050.¹⁶³

Table 19 - Agencies and climate services

¹⁵⁸ B3 (2022). [2021 Annual Report](#). Accessed on Feb. 8th 2023.

¹⁵⁹ B3 (2022). [2021 Annual Report](#). Accessed on Feb. 8th 2023.

¹⁶⁰ S&P Global. [2021 Impact Report](#). Accessed on Feb. 8th 2023.

¹⁶¹ MSCI. [About Us](#). Accessed on Feb. 8th 2023.

¹⁶² Moody’s. [Sustainability](#). Accessed on Feb. 8th 2023.

¹⁶³ MSCI. [Environmental Sustainability](#). Accessed on Feb. 8th 2023.



Agency	Climate related services and tools
Fitch Ratings	Inside its ESG approach, the agency developed Climate Vulnerability Scores (Climate.VS) for different industry sectors, consisting in a risk framework that can be used in portfolio-level and transition portfolio by investors. ¹⁶⁴
Moody's	Identification and quantification of climate risk and readiness (physical and transition risk data), impact on credit ratings and integrate climate factors into credit worthiness assessments (as portfolio concentration, ESG credit impact scores, ESG issuer profile scores and others). ¹⁶⁵
MSCI	Climate investing, such as climate and net-zero solutions, climate indexes, carbon foot printing for private equity and debt and real state climate solutions. ¹⁶⁶
Robeco	Sustainable and climate investment strategies, developed an Environmental Impact Monitoring Tool that helps investors quantify the impact of their portfolios on GHG emissions, energy consumption, water and waste management. ¹⁶⁷
S&P Global	Climate risk and net zero, TCFD alignment and carbon markets. In this perspective, they offer climate analytic (using Trucost Paris Alignment database), climate-focused indexes, foot printing analyses and others. ¹⁶⁸
Verisk Maplecroft	Climate Change Vulnerability Index for investor relations, resilience officers and portfolio managers, understanding the exposure of operations, comparing countries and regions, and aligning with the TCFD recommendations. ¹⁶⁹

Sources: Fitch Ratings, Moody's, MSCI, Robeco, S&P Global and Verisk Maplecroft.



Trends

Some trends on sustainability and climate may open opportunities for rating agencies action. The pressure on companies and investors to adhere to the disclosure standards and to meet climate commitments, for example,¹⁷⁰ can open up space for agencies to act in support and guidance of these actors, proposing new strategies. Also, the rising of credit risk caused by environmental, social and governance risks, were already pointed out by Moody's as a possibility in the current year of 2023, which could also request strategies to orient their business towards a low carbon scenario.¹⁷¹

Investment consultant and auditors

¹⁶⁴ Fitch Ratings (2022). [Fitch Ratings Publishes Climate Vulnerability Scores for Corporate Sectors](#). Accessed on Feb. 8th 2023.

¹⁶⁵ Moody's ESG. [Climate](#). Accessed on Feb. 8th 2023.

¹⁶⁶ MSCI. [Why Climate Investing?](#) Accessed on Feb. 8th 2023.

¹⁶⁷ Robeco. [Environmental Impact Monitoring Tool](#). Accessed on Feb. 8th 2023.

¹⁶⁸ S&P Global. [Climate risk and Net zero](#). Accessed on Feb. 8th 2023.

¹⁶⁹ Verisk Maplecroft. [Climate Change Vulnerability Index](#). Accessed on Feb. 8th 2023.

¹⁷⁰ S&P Global (2023). [Key sustainability trends that will drive decision-making in 2023](#). Accessed on Feb. 8th 2023.

¹⁷¹ Reser (2023). [ESG vai aumentar risco do crédito em 2023, diz Moody's](#). Accessed on Feb. 8th 2023.





Key organisations

As relevant organizations working with analytical research for financial institutions in Brazil, some stand out: **Bureau Veritas**, **CICERO** (acquired by S&P), **ISS**, **NINT**, **Resultant** (recently acquired by KPMG), **Sustainalytics** and **WayCarbon**.



Climate-related activities

Climate seems to be a consistent theme in all of the organizations. Most of the work seems to be related to alignment on reporting, as TCFD recommendations, or to GHG emissions (being publications or specific services). Table 20 summarizes the main services found.

In the case of Sustainalytics and ISS, the existence of private tools helps them provide exclusive approaches for climate risks (XDI's tool; ISS's tool, respectively, all used for physical risks).

Except from two organizations, the ones researched do not show filiation or partnership with initiatives related to climate. Way Carbon is filiated in the Coalizão Brasil, a movement composed by representatives from the private sector, financial sector, academia, and civil society, in favour of Brazil's leadership in a new low-carbon economy. Also, ISS ESG is in partnership with CDP for their climate rating solution service.

Table 20 - Agencies and climate services

Agency	Climate related services
Bureau Veritas	Carbon solution in metrics, compensation, reductions, strategies and repots. ¹⁷²
CICERO	Research-based external opinions of green, sustainability and sustainability-linked financing frameworks and climate risk assessments of companies. Their climate science is based on parent organisation CICERO Center for International Climate Research. ¹⁷³
ISS	Advise institution investors in the areas of net zero solutions, climate analytics, carbon risk rating, energy and extractive screening and climate ratings. ¹⁷⁴
NINT	Assessment, consulting and programs focused on esg best practices, for investors and companies, working on the climate agenda through products as alignment of voluntary

¹⁷² Bureau Veritas. [Carbono](#). Accessed on Feb. 8th 2023.

¹⁷³ CICERO (2022). [Best practices 2022](#). Accessed on Feb. 8th 2023.

¹⁷⁴ ISS. [Climate Solutions](#). Accessed on Feb. 8th 2023.



	agreements and questionnaires and development of specific projects in the theme by demand. ¹⁷⁵ NINT is also responsible for the Executive Secretary of IPC. ¹⁷⁶
Sustainalytics	Identifying, assessing, and managing climate related risks and opportunities offering physical climate risk metrics; carbon emissions data and carbon rating & research. ¹⁷⁷
Resultant	ESG research and environmental and social risks, consulting and education for the finance sector, companies and third sector. in the climate area they propose support on the adherence to voluntary agreements, questionnaires, and development of specific projects in the theme by demand. ¹⁷⁸
WayCarbon	Consulting and development of technology in ESG and GHG management, climate risk and carbon offset. ¹⁷⁹

Sources: Bureau Veritas, CICERO, ISS, NINT, Sustainalytics, Resultant and WayCarbon.



Trends

Some of the challenges faced by these companies are difficulties in recruiting talents - which is important to deliver projects on strategic areas such as carbon pricing and green finance¹⁸⁰ - and the quality and availability of climate-related data.

The lack of regionalised tools regarding climate risks makes difficult to evaluate the impacts and potential solutions regarding the problem. Some open access tools offer data for disaster risk management (IBGE MUNIC 2020), exposure to extreme events (INPE - Projeções Climáticas para o Brasil; Global Risk Data Platform) and climate adaptation and resilience (Partnership for Resilience & Preparedness and ThinkHazard!). Others are focused on water resources (AdaptaBrasil, Aqueduct Floods and Aqueduct Water Risk Atlas) with variations between scope (flood, inundation, and drought), scenarios (historic approach and future projections - short, medium and long term) and granularity (states or counties). IPC has disclosed two tools regarding GHG emissions, focused on the estimative of CO2 emissions (scopes 1 and 2), and the other for calculating portfolio emissions.¹⁸¹

The use of AI tools is also a trend to help manage climate-related issues. According to BCG survey, in 2022, 87% of global public- and private-sector leaders, responsible for climate or AI topics, believe that AI is a useful in the climate change scenario, and 43% of them understands that AI can help them achieve their climate goals. This approach can be useful to gather complex data sets on emissions, impact, future projec-

¹⁷⁵ NINT. [Nossos serviços](#). Accessed on Feb. 8th 2023.

¹⁷⁶ [IPC](#) is an initiative created in 2019, promoted by NINT with the support of Instituto Clima e Sociedade (iCS), through its Zero Emissions Economy Program. The main goal is to engage and train local professional investors to advance the portfolio decarbonization agenda, while seeking better risk-adjusted returns. It has 41 professional Brazilian investors, including asset managers, pension funds, insurance companies and family offices, with assets under management in excess of BRL 2 trillion (Feb/2022).

¹⁷⁷ Sustainalytics. [Climate Solutions](#). Accessed on Feb. 8th 2023.

¹⁷⁸ Resultante. [Atuação](#). Accessed on Feb. 8th 2023.

¹⁷⁹ WayCarbon. [Soluções](#). Accessed on Feb. 8th 2023.

¹⁸⁰ Environment Analyst (2022). [Global consulting market: all change at the top as climate & ESG drivers dominate](#). Accessed on Feb. 8th 2023.

¹⁸¹ IPC. [Ferramentas](#). Accessed on Feb. 8th 2023.



tions, optimization of processes and decision making. In the case of GHG emissions mitigation, especially, AI tools can help in the measurement, reduction, and removal of emission. Unfortunately, most existing AI-related climate change solutions are scattered, difficult to access, and lack the resources to scale.¹⁸² This can be observed in the number of agencies reported in this section that have disclosed the usage of private tools in the manner.

¹⁸² BCG (2022). [How can AI be a powerful tool in the fight against climate change](#). Accessed on Feb. 8th 2023.



5. Blended Finance

This chapter presents a brief overview of existing blended finance initiatives in Brazil and identifies potential gaps and entry points for increasing climate finance through such mechanism.

Firstly, it is relevant to note that there are still few Brazilian blended finance operations in compliance with OECD's principles¹⁸³. Challenges for improving this scenario, especially when it comes to applying blended finance mechanisms to tackle deforestation (Brazil's main GHG emission source) include¹⁸⁴ high transactional costs; difficulties for scaling up; investors' low risk appetite; lack of project pipeline aligned to the funding criteria of large fund providers and impact monitoring.

An important step towards increasing blended finance operations and its volume is to establish a regulatory framework to provide a shared understanding of blended finance concepts, as well as tax implications. Such framework should clarify, for instance, the risk of loss of tax immunity by non-profits investing in impact businesses¹⁸⁵, as well as special conditions for its adoption within securities distribution. In 2021, during a public consultation, the LAB - Laboratório para Inovação Financeira ("Financial Innovation Lab") presented CVM a proposal of such framework¹⁸⁶, which was not integrated to the final regulation (CVM Resolutions 160, 161 and 162). Relevant organisations for advancing on this gap, including BACEN, CVM and Susep, currently implement regulatory sandboxes that could serve as experimental entry points^{187 188 189}.

Still, significant improvements are noted within Brazil's blended finance ecosystem in the past few years. The LAB's outreach, for instance, illustrates a relevant interest of Brazilian players in Blended Finance. At least 50 organisations from both public and private sectors are engaged in its Blended Finance workgroup, actively discussing and promoting the agenda by gathering main players, identifying pilot projects and monitoring improvements¹⁹⁰. Also, several blended finance mechanisms towards conversion-free agriculture were recently identified¹⁹¹.

When it comes specifically to the climate change agenda, Brazil is one of the most frequently targeted countries by blended finance transactions. From 2019 and

¹⁸³ Laboratório de Inovação Financeira (2022). [Financiamento para o alcance dos ODS: A agenda de blended finance no Brasil](#). Accessed on Jan. 27th, 2023.

¹⁸⁴ SITAWI & WWF (2021). [Blended finance para conversão zero: Discussão sobre oportunidades de financiamento para produção agrícola sem desmatamento](#). Accessed on Jan. 27th, 2023.

¹⁸⁵ Laboratório de Inovação Financeira (2022). [Financiamento para o alcance dos ODS: A agenda de blended finance no Brasil](#). Accessed on Jan. 27th, 2023.

¹⁸⁶ Laboratório de Inovação Financeira (2021). [Contribuições do GT Instrumentos Financeiros e Investimento de Impacto e do GT Fintech para a Audiência Pública SDM 02/21](#). Accessed on Jan. 27th, 2023.

¹⁸⁷ SUSEP (2022). [Sandbox regulatório](#). Accessed on Jan. 27th, 2023.

¹⁸⁸ CVM (2022). [Sandbox regulatório](#). Accessed on Jan. 27th, 2023.

¹⁸⁹ BACEN (2021). [Sandbox regulatório](#). Accessed on Jan. 27th, 2023.

¹⁹⁰ Laboratório de Inovação Financeira (2022). [Financiamento para o alcance dos ODS: A agenda de blended finance no Brasil](#). Accessed on Jan. 27th, 2023.

¹⁹¹ SITAWI & WWF (2021). [Blended finance para conversão zero: Discussão sobre oportunidades de financiamento para produção agrícola sem desmatamento](#). Accessed on Jan. 27th, 2023.



2021, at least 8 climate blended finance transactions targeting Brazil were identified, giving the country the 2nd position in this aspect, only behind Kenya (which had 13 transactions).¹⁹² In terms of volume, Brazil is the country that was targeted with the largest climate blended finance flows within the period, totaling \$2.5 billion¹⁹³. The Global Innovation Lab for Climate Finance, a key player within this context, has established a Brazilian Program and supported several climate-related initiatives through blended finance mechanisms¹⁹⁴.

5.1 Brazilian DFIs' role in blended finance

Globally, development finance providers are recognized as a key component to maximise blended finance impact, as noted by OCDE¹⁹⁵. In Brazil, however, DFI's role in blended finance mechanisms is still at what could be considered an early stage. In 2020, OECD conducted a survey with ABDE members to identify the main issues faced by Brazilian DFIs within the blended finance agenda. As a result, only a quarter of the respondents (3 out of 12) declared being engaged in blended finance mechanisms, while almost half (5 out of 12) were not even aware of blended finance examples in Brazil¹⁹⁶.

Among the barriers for engaging in blended finance mechanisms, respondents highlighted a lack of expertise on the concept (75%), and mentioned that information on lessons learned and challenges could be useful in promoting such mechanisms¹⁹⁷. In this sense, the OECD survey's results indicated that actions related to capacity building and knowledge exchange would be the first step to bridge the gap between DFIs and blended finance.

Still, important improvements are noted in the past few years. ABDE itself has been advocating and supporting blended finance mechanisms as one of the founding partners of the LAB, as well as a member of its blended finance working group¹⁹⁸. Recent Brazilian DFIs' contribution for blended finance mechanisms and instruments include:

- **Project preparation facilities:** BNDES, BDMG and BRDE are among the Brazilian DFIs that offer technical assistance to prepare and structure concession and PPP - Public-Private Partnerships projects in key sectors for environmental and social development. PPPs are not necessarily, by definition, blended finance mechanisms, but can be characterised as such if concessional capital

¹⁹² Convergence (2022). [State of Blended Finance 2022: Climate edition](#). Accessed on Jan. 27th, 2023.

¹⁹³ Convergence (2022). [State of Blended Finance 2022: Climate edition](#). Accessed on Jan. 27th, 2023.

¹⁹⁴ More information is available at [the Global Innovation Lab for Climate Finance's website](#). Accessed on Jan. 27th, 2023.

¹⁹⁵ OCDE (2020). [Blended Finance Principles Guidance](#). Accessed on Jan. 27th, 2023.

¹⁹⁶ OCDE (2020). [The role of domestic DFIs in using blended finance for sustainable development and climate action: The case of Brazil](#). Accessed on Jan. 27th, 2023.

¹⁹⁷ OCDE (2020). [The role of domestic DFIs in using blended finance for sustainable development and climate action: The case of Brazil](#). Accessed on Jan. 27th, 2023.

¹⁹⁸ More information on ABDE's role is available at [the Lab's website](#).



is involved to leverage commercial capital within the selected projects. By offering technical assistance to prepare these projects, DFIs contribute to reducing future private investment risks.

- **Equity and Venture Capital:** BNDES, for instance, provides public resources through several Private Equity and Venture Capital funds¹⁹⁹, benefiting small and medium enterprises, startups and impact business. Badesul and BDMG are among other Brazilian DFIs that also provides such investments.
- **Crowdfunding platforms:** With support from the Financial Innovation Lab, Badesul provided public resources through a crowdfunding platform, covering up to 50% of the selected startups’ needs – while the rest was covered by commercial capital²⁰⁰.
- **Grants:** In 2022, BNDES has launched a specific grant towards blended finance structures. This initiative is further detailed in the next sub-section of this chapter.

It is also worth mentioning that relevant blended finance instruments and mechanisms have been promoted by Brazilian DFIs for quite a long time, but are not necessarily recognized or labelled by them as “blended finance”. This is the case, for instance, of BNDES’ Investment Guarantor Fund (*FGI - Fundo Garantidor para Investimentos*), which operates since 2009²⁰¹.

Finally, it should be noted that Brazilian DFIs’ current involvement with blended finance is not specifically oriented towards the climate agenda, and that the existing DFIs’ initiatives do not provide a planning or monitoring approach for tackling emissions reduction and neutralization. In this sense, there are opportunities not only to foster the development and expansion of such blended finance mechanisms, but also to further detail its climate-related contribution.

5.2 BNDES’ Blended Finance Grant

As the most prominent Brazilian DFI, BNDES has an important role in setting the scene for blended finance mechanisms – not only for its national outreach, but also for its impact in sub-national DFIs. In the past few years, the bank has been building internal capacity and engaging with local initiatives to foster hybrid financial solutions. Within this process, in 2021, the ‘Brazil Green Finance Programme’, supported by the UK, offered BNDES a direct assistance to identify existing blended finance mechanisms. NINT, as part of the implementing consortium, developed a background paper on blended finance concepts, mechanisms and instruments, which served as an initial preparation for the bank’s approach and was later made publicly available²⁰².

¹⁹⁹ See BNDES’ [call for Impact Investment Funds](#), [Angel Investor Fund \(FIP Anjo\)](#), and [other Private Equity and Venture Capital Funds](#). Accessed on Jan. 27th, 2023.

²⁰⁰ More information on the investments is available at [Badesul’s website](#). Accessed on Jan. 27th, 2023.

²⁰¹ More information is available at [FGI’s website](#). Accessed on Jan. 27th, 2023.

²⁰² Brazil Green Finance Programme (2021). [Blended Finance Benchmark](#). Accessed on Jan. 27th, 2023.



In July 2021, BNDES published a whitepaper on Blended Finance²⁰³ and pointed out its intention to launch a public call for financial intermediaries. This call was launched in May 2022, when BNDES announced a blended finance solution to foster environmental and social initiatives. Through this solution, BNDES would select financial structures that could boost investments in projects or companies in three thematic areas: bioeconomy, circular economy and urban development. BNDES would provide R\$ 90 million as non-reimbursable public resources to the selected structures, which in turn would commit to quadruple that figure with additional resources²⁰⁴. Although this was not a call with a climate-specific focus, the bioeconomy thematic area comprised priority topics related to emissions reduction and neutralization (including, for instance, carbon capture).

As a result, 50 proposals were received, which together demanded R\$ 905 million (10 times the foreseen budget for the call). The most demanded thematic area was bioeconomy (R\$ 461.3 million), followed by urban development (R\$ 248.4 million) and circular economy (195.8 million). From that total, 11 proposals were selected by BNDES, as presented in Table 21.

Table 21 - Selected proposals within BNDES Blended Finance call

Thematic Area	Proposal	Financial instrument	Organisations
Bioeconomy	Support with credit sustainable cocoa producers in Pará and Bahia	Agribusiness Receivables Certificate (CRA - <i>Certificado de Recebíveis do Agronegócio</i>)	Taboa Fortalecimento Comunitário
	Support with credit businesses that aim to convert part of rural properties into Agroforestry Systems	Credit Receivables Investment Funds (FIDC - <i>Fundo de Investimento em Direitos Creditórios</i>)	JGP Gestão de Crédito Ltda
	Support business to prepare towards climate change and a regenerative economy	Equity Investment Fund (FIP - <i>Fundo de Investimento em Participações</i>)	KPTL Investimentos Ltda
	Expand support to its supply chain	Agribusiness Receivables Certificate (CRA - <i>Certificado de Recebíveis do Agronegócio</i>)	Natura Cosméticos S.A.; Vert Consultoria e Assessoria Financeira Ltda. and the Brazilian Fund for Biodiversity (FUNBIO - <i>Fundo Brasileiro para a Biodiversidade</i>)
Urban development	Support the construction and renovation of low-	Real Estate Receivables Certifi-	Consórcio Associação BlendLab and Grupo Gaia

²⁰³ BNDES (2021). [Blended Finance](#). Accessed on Jan. 27th, 2023.

²⁰⁴ More information on this call is available at [BNDES' Blended Finance website](#). Accessed on Jan. 27th, 2023.



	income housing	cate (CRI - <i>Certificado de Recebíveis Imobiliários</i>)	
	Support housing solutions, urban improvements and income generation in slums	Real Estate Fund (FII - <i>Fundo de Investimento Imobiliário</i>)	Instituto Gerando Falcões
	Support the upgrading of buildings for low and middle income residents	Real Estate Fund (FII - <i>Fundo de Investimento Imobiliário</i>)	IRR Capital and Díada Projetos Consortium
	Support reurbanization and land regularization of areas with low-income residents	Real Estate Receivables Certificate (CRI - <i>Certificado de Recebíveis Imobiliários</i>), crowdfunding and debentures	Consórcio Terra Nova Regularização Fundiária, Cavalcanti de Albuquerque e Chaves Ltda. and Sitawi Finanças do Bem
Circular economy	Support impact businesses that foster Circular Economy	Credit Receivables Investment Funds (FIDC - <i>Fundo de Investimento em Direitos Creditórios</i>)	Artemisia Consultoria de Projetos de Impacto Socio-ambiental
	Provide technical support, customized financing and management support to 10 companies with impact businesses in the agri-food system	Venture Philanthropy program	Associação TRE Investindo com Causa and Quintessa Aceleradora de Negócios de Impacto Ltda
	Guarantee funding for SMEs for 24 months	Biogas Guarantee Fund	FG/A Gestora de Recursos Ltda

Source: Author's elaboration based on [BNDES](#).

The great demand for a blended finance structure within BNDES' call illustrates the potential of future similar initiatives in Brazil, indicating the significant volume of public non-reimbursable resources needed to implement hybrid financial solutions.

5.3 Crowd investing initiatives

When it comes to regulatory issues, Brazil has presented advances for fostering collaborative investment platforms. In 2022, CVM's Resolution n° 88 was approved, offering legal definitions for such initiative, and facilitating its adoption for securities distribution purposes²⁰⁵.

One of such initiatives currently operating in Brazil is SITAWI's Crowdlending Platform²⁰⁶. This platform combines philanthropic capital from national and interna-

²⁰⁵ CVM (2022). [Resolução CVM 88](#). Accessed on Jan. 27th, 2023.

²⁰⁶ More information is available at [the platform's website](#). Accessed on Jan. 27th, 2023.



tional institutes and foundations to leverage private capital from individual investors. SITAWI’s Crowdlending Platform stands out due to its outreach with individual investors and has won the Environmental Finance IMPACT Awards 2020 as the “Impact initiative of the year - Latin America and Caribbean”²⁰⁷. Since 2008, more than R\$ 27 million²⁰⁸ was channelled to organisations with social and environmental impact through the platform. Although it does not present a climate-specific approach, several organisations that benefited from the platform contribute to reducing deforestation and neutralizing GHG emissions.

A similar approach is adopted by Trê SDG Credit (“*Trê Crédito ODS*”), another crowdlending initiative operating in Brazil. According to its website, Trê’s platform has channelled more than R\$ 11 million on investments to sustainable business²⁰⁹. It also does not present a climate-specific approach in its investment thesis, but has supported several organisations that contribute to sustainable agriculture and waste management – which can indirectly contribute to emissions reduction and neutralization.

²⁰⁷ More information is available at [the award’s website](#). Accessed on Jan. 27th, 2023.

²⁰⁸ More information is available at [the platform’s website](#). Accessed on Jan. 27th, 2023.

²⁰⁹ More information is available at [the platform’s website](#). Accessed on Jan. 27th, 2023.





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