



Fragmented Perspectives, Fragmented Finance

A Case Study on Brazil's Adaptation
Challenge

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About this Report

The Center for Sustainability Studies at Fundação Getúlio Vargas (FGVces), in partnership with Morphosis, Instituto Itaúsa, the Paulson Institute, and Basilinna, has collaborated to advance understanding of how climate adaptation finance, particularly from private sources, can be scaled to meet the growing resilience needs of a climate-impacted world.

This technical paper builds on a diverse and expanding body of work from academia, international organizations, consultancies, and financial institutions, reflecting the increasing urgency and complexity of the adaptation finance agenda. It seeks to bridge a critical gap in the literature: the lack of a comprehensive and integrated overview of adaptation finance flows, with a particular emphasis on private sector engagement, investment mechanisms, and definitional challenges.

The report offers a diagnostic exploration of the global landscape of adaptation finance, combining bottom-up tracking of tagged financial flows with top-down macroeconomic modeling of climate-related damages. It also identifies key actors, instruments, and barriers in the ecosystem of private adaptation finance, and proposes initial recommendations for improving tracking, mobilization, and policy alignment.

Although exploratory in nature, this contribution provides a foundation for more structured debates on how to define, measure, and mobilize adaptation finance. It aims to inform policymakers, investors, and researchers about the scale of the challenge, the limitations of current approaches, and the opportunities for innovation and coordination across sectors and regions.

We hope this work will support the development of more effective strategies to unlock private capital for adaptation, enhance resilience, and reduce climate vulnerability, especially in regions most exposed to climate risks. As the adaptation finance field continues to evolve, we offer this paper as a stepping stone toward more inclusive, transparent, and impactful financial frameworks for climate resilience.

About the Partners

Morphosis is an integrated adaptation solutions business for a climate-impacted world beyond 1.5°C. Our purpose is to deliver affordable transformative adaptation solutions to low and middle-income households by catalyzing the adaptation economy through investment, policy engagement, research and advisory work. Morphosis orchestrates a network of private capital investors, market, policy and other stakeholders, and invests in a growing portfolio of adaptation solution businesses.

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The Center for Sustainability Studies at Fundação Getúlio Vargas (FGVces) at FGV's São Paulo School of Business Administration is a dynamic space for learning, innovation and knowledge production, driven by a multidisciplinary team committed to societal transformation. FGVces develops public and corporate strategies, policies and management tools for sustainability across local, national and international contexts.

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List of Abbreviations

BIP	Brazil Climate Investment and Ecological Transformation Platform
BCB	Banco Central do Brasil (Central Bank of Brazil)
CBPS	Comitê Brasileiro de Pronunciamentos de Sustentabilidade
CRA	Cotas de Recebíveis do Agronegócio (Agribusiness Receivables Certificates)
CDP	Carbon Disclosure Project
CVM	Comissão de Valores Mobiliários (Brazilian Securities and Exchange Commission)
DSC	Discurso do Sujeito Coletivo (Collective Subject Discourse)
ENA	Estratégia Nacional de Adaptação (National Adaptation Strategy)
ESG	Environmental, Social and Governance
FNAC	Fundo Nacional da Aviação Civil (National Civil Aviation Fund)
FMM	Fundo da Marinha Mercante (Merchant Marine Fund)
GDP	Gross Domestic Product
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
ISSB	International Sustainability Standards Board
MDBs	Multilateral Development Banks
MF	Ministry of Finance
MSF	Multiple Streams Framework
NDC	Nationally Determined Contribution
PAA	Programa de Aquisição de Alimentos (Food Acquisition Program)
PBRA	Programa Brasileiro de Relato Empresarial em Adaptação Climática
PNA	Plano Nacional de Adaptação (National Adaptation Plan)
PNAE	Programa Nacional de Alimentação Escolar (National School Feeding Program)
PPA	Plano Plurianual (Multi-Year Plan)
PRONAF	Programa Nacional de Fortalecimento da Agricultura Familiar
PSA	Pagamentos por Serviços Ambientais (Payments for Environmental Services)
PSR	Programa de Subvenção ao Prêmio do Seguro Rural (Rural Insurance Premium Subsidy Program)
SAF	Sistemas Agroflorestais (Agroforestry Systems)
SAF	Sustainable aviation fuel
SBCE	Sistema Brasileiro de Comércio de Emissões (Brazilian Emissions Trading System)
SMEs	Small and Medium-sized Enterprises
TSB	Taxonomia Sustentável Brasileira (Brazilian Sustainable Taxonomy)
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change

Key messages

- **Brazil's adaptation finance gap is massive**, public resources alone are insufficient, and private capital must be mobilized under challenging macroeconomic conditions.
- **Large companies are already investing in resilience**, but often without labeling it as “adaptation” or relying on public incentives. Meanwhile, **Small and Medium-sized Enterprises face structural and informational barriers**, and **startups struggle to scale** due to lack of tailored finance and ecosystem support.
- **Financial institutions perceive structural barriers**, including the absence of well-structured adaptation projects, lack of data, and fragmented policy signals, which limit their engagement.
- **Government efforts focus on social vulnerability and financial instruments**, but often lack alignment with private sector logic and timelines.
- **The core challenge is not just financial, it's strategic misalignment**: each actor defines the problem differently, making coordination and scale elusive.

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Introduction

In its latest Nationally Determined Contribution (NDC), from November 2024, Brazil recognizes the need to continue, among other measures:

Expanding financing, reducing the cost of credit and improving guarantee and insurance mechanisms for sustainable sectors, projects and practices, such as strengthening the Climate Fund by offering credit at more attractive rates and creating an exchange protection program for investments in ecological transformation (Federative Republic of Brazil, 2024).

Previous estimates indicate that, to achieve its climate goals (mitigation and adaptation) until 2030, Brazil would require between US\$ 160 and 172 billion¹ in investments (or roughly 1% of its GDP per year) (IADB, 2017). At an even larger amount, and focusing solely on adaptation, Nascimento et al. (2022) suggest that Brazilian cities would require around US\$ 40 billion per year to close the existing gaps in housing supply, water sanitation services and climate proof infrastructure. Such an amount points to a clear need to mobilize resources from private sources to

complement public funds, given the fiscal constraints placed on most municipalities².

Fiscal constraints also affect the federal level. As a result, adaptation investments must navigate a macroeconomic context that is generally unfavorable to long-term capital deployment, since Brazil has one of the lowest savings rates among major economies, hovering around 15% of GDP, compared to an average of over 30% in many East Asian economies (World Bank, n.d.). This structural limitation constrains the availability of domestic capital for long-term investments, including those in climate adaptation.

Moreover, the country's public debt remains high, at more than 87% of GDP in 2024, significantly above the average for emerging markets with similar income levels (of less than 70% of GDP), and projected to reach close to 100% of GDP by 2030. Consequently, Brazil has historically maintained some of the highest real interest rates in the world (IMF, 2025). High real interest rates raise the cost of capital, making long-term infrastructure and climate-related projects less attractive to private investors. Finally, Brazil's financial system is heavily reliant on credit markets rather than equity financing, which tends to be more risk-averse and short-term oriented (BCB, 2025).

¹ All amounts were converted from the original values in Brazilian reais (R\$) to US\$ using the exchange rate of 1 US\$ = 5.54 R\$ (from July 17, 2025).

² All amounts were converted from the original values in Brazilian reais (R\$) to US\$ using the exchange rate of 1 US\$ = 5.54 R\$ (from July 17, 2025).

Cognizant of this challenging scenario, **below we present several themes and ideas for unlocking private finance for adaptation in Brazil, according to the perspectives of: i) Governmental sources; ii) Financial sector representatives; and iii) Businesses engaging in adaptation efforts (i.e. the real economy).**

BOX 1. DEFINITIONS: ADAPTATION AND FINANCE FOR ADAPTATION

Adaptation is a deliberate and dynamic response to the impacts of climate change. It reflects how individuals, communities, ecosystems, and institutions manage stressors by taking specific actions to reduce vulnerability and exposure to climate risks. These efforts can occur at different stages relative to climate events: before impacts, adaptation enhances preparedness and prevention; during events, it strengthens coping and adjustment capacities; and after impacts, it supports recovery and promotes “building forward better”. This temporal dimension highlights the multifaceted nature of adaptation, encompassing proactive, reactive, and restorative strategies.

Adaptation finance, thus, refers to the financial resources, instruments, and mechanisms aimed at supporting these adaptation efforts. It enables countries, communities, and sectors to adjust to actual or expected climate impacts through investments in resilient infrastructure, climate-smart agriculture, ecosystem protection, and others. Still, proper definitions and measurements of finance for adaptation are often made difficult because of the lack of a universally accepted definition, compounded by context dependency, fragmented methodologies, and limited reporting standards, especially among private actors.

Obs.: For a comprehensive discussion on the difficulties surrounding the definition and measurement of financial flows for climate adaptation, refer to the accompanying paper on those topics (Climate Change Adaptation Financing: From Tracked Flows to Untapped Potential)

Sources: (Bueno Rubial et al., 2024; GARI, 2024; Schipper et al., 2022; Wong-Parodi et al., 2015)

Data, Methods, and Theoretical Framework

This case study follows an exploratory and inductive approach. Our findings are best understood as hypotheses and we chose to generate a vast number of hypotheses from a limited pool of qualitative data: seven semi-structured interviews with representatives from financial institutions and Brazilian businesses, as well as document analysis of governmental documents and relevant technical reports. This strategy is grounded in the understanding that, in early-stage investigations of complex and poorly structured phenomena, hypotheses formulation is not only warranted, but necessary.

Indeed, theoretical developments often begin with the deliberate inclusion of multiple drivers and untested relations, laying the groundwork for posterior and progressive refinement of ideas (Whetten, 1989). Thus, our goal is to bring greater coherence to the hypotheses postulated, integrating fragmented data into a plausible narrative, and provide useful insights for the development of public policies (Hiebert et al., 2023).

Part of the hypotheses development and comparative analysis was supported by the use of an AI language model (Microsoft Copilot, based on OpenAI's GPT-4 architecture), which assisted in structuring initial ideas, translating content, and refining terminology. All final interpretations and decisions were made by the authors.

Also, given the small sample of interviewees, rather than quoting participants directly we have employed the Collective Subject Discourse technique (DSC, in Portuguese), which seeks to process individual statements and offer the reader the effect of a collective opinion, written in the first-person singular (Lefèvre & Lefèvre, 2003, 2006). This technique combines fragments of similar statements to create a single text, cohesively

representing the interviewees' thoughts while ensuring their anonymity.

Lastly, to guide the interpretation of the results, we employ Kingdon's Multiple Streams Framework (MSF), commonly used to analyze public policy processes in democratic settings, particularly at the early stages (agenda-setting). According to Kingdon (2014), policy change occurs when three streams (problem, policy, and politics) converge in a window of opportunity (policy window)³ (**Table 1**). **Put simply, the initial stages of a public policy process require: i) a compelling problem; ii) a feasible solution; and iii) a favorable environment.**

Some authors, such as Flores (2017), also suggest that the stronger the elements and forces leading up to the opening of a policy window, the more likely the policy will be successfully implemented. In this sense, even if approved, policies that aim at poorly defined problems or are supported by weak or fragmented coalitions are less likely to remain in place.

³ For a detailed description of the MSF, refer to the original (Kingdon, 2014). For applications to public policies in Brazil, see (Breviglieri & Yamahaki, 2024; Yamahaki et al., 2024).

TABLE 1. THE MULTIPLE STREAMS FRAMEWORK

Stream	Problem Stream (How the issue is defined)	Policy Stream (What solutions are proposed)	Political Stream (What coalitions are being built)
Definition	Explains how some issues begin to be seen as worthy of attention.	Where several policy proposals are presented, revised, and combined until a group of feasible solutions rise for serious consideration.	Where factors, such as campaigns carried out by interest groups and coalition forming, create an environment conducive to policy change.
Elements	Indicators; Crises and disasters; Focusing events; Feedback from current programs.	Technical feasibility; Acceptance by the community; Budgetary workability.	National mood; Organized political forces; Administration or legislative turnover.

Source: the authors based on Kingdon (2014).



The governmental perspective

Brazil’s NDC highlights the country’s desire to keep “reviewing the National Plan for Adaptation to Climate Change (PNA)”, a process that was still ongoing by 2025. Such effort relies on several engagement activities with different stakeholders, with

more than 63 events being held by the end of 2024, including technical discussions and workshops, attended by over 4,000 participants (and 15,000 online viewers).

Here, we look specifically at the documents

made available for public consultation⁴ regarding the National Adaptation Strategy (ENA, in Portuguese) and the finance-related measures in each of the Sectoral Adaptation Plans⁵ to generate broad hypotheses on the necessary levers to unlock private finance for adaptation according to a governmental perspective.

Although not sufficient, a clear policy framework concerning adaptation seems necessary for greater private sector engagement on the topic (Box 2).

BOX 2. THE NEED FOR CLEAR POLICY FRAMEWORKS IN BRAZIL

Throughout the review process for Brazil's Climate Plan, both regarding mitigation and adaptation, FGVces' team interviewed 17 representatives from civil society, academia, and businesses associations, on what an "ideal" plan should look like. Based on those interviews, a recurring pattern emerges: the private sector in Brazil often adopts a reactive stance toward climate-related investments, typically waiting for the government to establish public policies or provide financial incentives before taking action. Put differently, in the absence of clear, consistent, and credible policy signals, Brazil's private sector tends to adopt a wait-and-see approach, delaying investments and innovation across a wide range of sectors. Whether in infrastructure, energy, biofuels, or climate adaptation, uncertainty around regulatory frameworks, enforcement, and long-term government commitment often discourages proactive engagement. This inertia is not necessarily due to a lack of interest or capacity, but rather a rational response to policy ambiguity and perceived risk. As a result, opportunities for economic transformation, competitiveness, and resilience are frequently missed or underexploited.

Source: the authors based on raw data from FGVces (2025).

...in the absence of clear, consistent, and credible policy signals, Brazil's private sector tends to adopt a wait-and-see approach, delaying investments and innovation across a wide range of sectors.

4 At the Participatory Climate Plan digital platform. Available at: <https://brasilparticipativo.presidencia.gov.br/processes/planoclima>.

5 There are 16 sectoral plans, namely: (i) agriculture and livestock; (ii) family farming; (iii) biodiversity; (iv) cities; (v) risk and disaster management; (vi) industry; (vii) energy; (viii) transportation; (ix) racial equality and combating racism; (x) traditional peoples and communities; (xi) indigenous peoples; (xii) water resources; (xiii) health; (xiv) food and nutritional security; (xv) ocean and coastal zone; and (xvi) tourism.

The National Adaptation Strategy to Climate Change, as outlined in the PNA, acknowledges that financing is one of the main bottlenecks for implementing adaptation measures in Brazil. The public sector perspective expressed in the PNA documents emphasizes the need to mobilize both public and private resources, with a focus on creating innovative financial instruments, expanding access to credit, and strengthening insurance and guarantee mechanisms.

The PNA proposes a cross-cutting and sectoral approach, in which financing is treated as a foundational pillar to enable actions in areas such as agriculture, water resources, urban infrastructure, tourism, and disaster risk management.

The strategy highlights the importance of integrating adaptation financing into public planning and budgeting instruments, such as the Multi-Year Plan (PPA), and of coordinating with public and private financial institutions to develop specific credit lines, dedicated funds, and economic incentives.

Furthermore, the PNA recognizes the relevance of partnerships with the private sector, international organizations, and development banks to scale up and enhance the effectiveness of adaptation investments. The role of the state is seen as catalytic, through regulation and resource provision, as well as by fostering new markets and business models focused on climate resilience.

More specifically regarding indicated actions in the Sectoral Adaptation Plans, the authors have identified a total of 44 actions loosely⁶ related to financing and investment, grouped in seven broad thematic categories (**Table 2**). These

categories reflect the diversity of financial instruments and policy approaches currently under consideration or implementation, ranging from traditional rural credit and public funds to more complex mechanisms such as insurance, innovation financing, and economic instruments. The distribution of actions across these categories suggests a strong reliance on existing credit and subsidy frameworks, while highlighting important gaps in areas such as risk-sharing instruments, tax incentives, and public-private partnerships.

⁶ That is, mentioning either of the two terms, regardless of any specificity or distinction, for instance, by source of finance. While our focus on explicit references to finance and investment may overlook instruments indirectly linked to private adaptation finance, such as risk zoning plans, the breadth of sectoral proposals and the scope of this study necessitate selective prioritization.

TABLE 2. ACTIONS RELATED TO FINANCE AND INVESTMENT IN THE SECTORAL ADAPTATION PLANS

Thematic Group	Examples of Actions
Rural Credit	Expansion of credit for actions that promote the resilience of agricultural systems; access to Pronaf; financing of agroforestry systems (SAFs) and water infrastructure
Insurance	Increased funding for the Rural Insurance Premium Subsidy Program (PSR)
Public Funds	Allocation of resources for agricultural research and innovation; use of FNAC and FMM for adaptive infrastructure
Tax Incentives	<i>Mentioned in the industry plan, but not explicitly classified in action titles</i>
Research and Innovation	Fundraising for agricultural research; development of drought-resistant cultivars; partnerships with innovation ecosystems
Public-Private Partnerships	<i>Mentioned in the industry and tourism plans, but not explicitly classified in action titles</i>
Economic Instruments	<i>Broad category that may include mechanisms such as CRA, PSA, etc., but not explicitly named in the analyzed actions</i>

Obs.: Pronaf = Programa Nacional de Fortalecimento da Agricultura Familiar; FNAC = Fundo Nacional da Aviação Civil; FMM = Fundo da Marinha Mercante; CRA = Cotas de Recebíveis do Agronegócio; PSA = Pagamentos por Serviços Ambientais.

Source: the authors, based on draft versions of each Sectoral Plan.

In addition to the measures listed within the context of the PNA, the boxes below bring other examples of public policy and regulatory instruments that, though not explicitly or exclusively oriented towards adaptation, could help in unlocking private capital towards that goal.

BOX 3. ECO INVEST BRASIL AND BRAZIL CLIMATE & ECOLOGICAL TRANSFORMATION INVESTMENT PLATFORM

Program created by the federal government to boost private investment and attract foreign capital for long-term sustainable projects, such as biofuel production, restoration of degraded pastures, and sustainable agricultural and livestock production.

In the first auction, in October 2024, the government made US\$ 1.26 billion in public capital available and raised US\$ 8.12 billion from the financial institutions that won the auction, a leverage of seven and a half times, with nine banks selected. The funds were used for projects such as sustainable aviation fuel (SAF) and biofuels. In the second auction, in 2025, the government anticipated to raise close to US\$ 2 billion to restore degraded lands in the Atlantic Forest, Cerrado, Caatinga, Pampa, and Pantanal biomes (later expanded to the Amazon biome as well).

The winning financial institutions are expected to raise funds in the market, especially from international sources, fully assume the operational risks, and provide credit to final beneficiaries such as rural producers, cooperatives, and companies linked to agribusiness value chains. While the federal government offers credit lines to mitigate exchange rate risks and support project maturation, ensuring predictability and risk reduction for long-term investments.

Similarly, The Brazil Climate Investment and Ecological Transformation Platform (BIP) is a government initiative launched with the ambition of scaling up investments in ecological transformation toward economic decarbonization, sustainable resource use, and improved quality of life for the population. Led by the Ministry of Finance (MF), in coordination with other sectoral ministries, the platform aims to connect Brazilian projects in the fields of Nature Based Solutions & Bioeconomy, Industry & Mobility, and Energy, with a network of financial institutions, such as commercial and Multilateral Development Banks (MDBs).

Sources: (Brasil, 2025a, 2025b; Neto, 2025; Reuters, 2025).

BOX 4. BRAZILIAN SUSTAINABLE TAXONOMY (TSB)

The Brazilian Sustainable Taxonomy (TSB), developed by the Ministry of Finance, is a classification system designed to guide investments toward environmentally and socially sustainable activities. It aims to improve transparency, reduce greenwashing, and align financial flows with Brazil's climate and development goals. The taxonomy sets technical criteria for identifying activities that contribute to five priority objectives, including climate adaptation, and introduces safeguards, monitoring systems, and a Gender and Racial Equity Index tailored to Brazil's context.

Still under development, the TSB is expected to serve as a reference for public and private actors, helping to classify and report sustainable investments. By aligning with international standards while addressing national priorities, it aims to support the ecological transition, attract foreign capital, and provide clarity including for adaptation-related finance, especially in sectors like agriculture, infrastructure, and biodiversity.

Source: (Ministério da Fazenda, 2025)

BOX 5. RESOLUTION CVM NO. 193 ON SUSTAINABILITY- AND CLIMATE-RELATED FINANCIAL INFORMATION

CVM Resolution 193, issued in October 2023, establishes mandatory climate and sustainability-related financial disclosures for publicly traded companies in Brazil. It aligns national reporting requirements with international standards by adopting the ISSB's IFRS S1 and IFRS S2. The resolution requires companies to report on climate-related risks and opportunities that could materially affect their cash flows, access to financing, and cost of capital, thus integrating sustainability into core financial decision-making and investor transparency.

More than a technical accounting rule, Resolution 193 is a strategic regulatory instrument that supports Brazil's ecological transformation agenda and the CVM's sustainable finance strategy. It aims to harmonize Brazilian practices with global disclosure frameworks, enhance market interoperability, and facilitate access to international capital.

Source: (CVM, 2023)



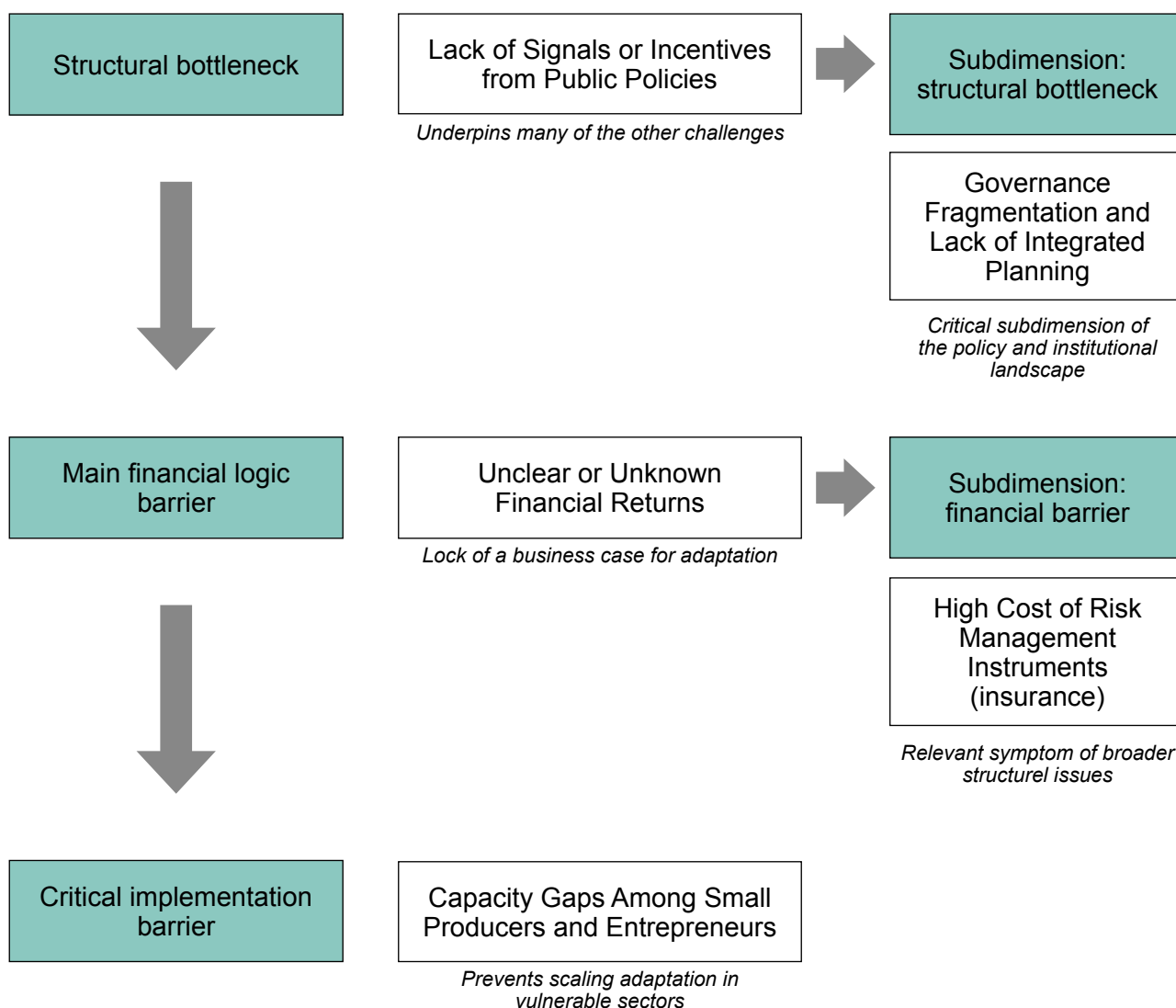
The financial sector perspective

The financial sector plays a pivotal role in scaling up investments in climate adaptation, yet it faces unique barriers that limit its engagement. In Brazil, the sector is characterized by a high concentration of credit-based instruments, limited long-term financing options, and a relatively

shallow capital market (BCB, 2025). These structural features, combined with the inherent complexity and long-term nature of adaptation investments, create a challenging environment for private financial actors.

To better understand the specific barriers and opportunities from the perspective of financial institutions operating in Brazil, we conducted a series of semi-structured interviews with representatives from financial institutions operating in Brazil. The insights gathered are summarized, in thematic categories. Below, we provide a complete discourse around each theme, written in first person according to the DSC technique.

FIGURE 1. BARRIERS FOR PRIVATE ADAPTATION FINANCE, FROM THE FINANCIAL SECTOR'S PERSPECTIVE



Source: the authors, based on the interviews.

Structural barrier - Lack of signals or incentives from public policies

Definition: refers to the absence or insufficiency of clear, consistent, and coordinated public policy frameworks that could guide and stimulate private investment in climate adaptation in Brazil. Interviewees emphasized that the current policy landscape lacks financial incentives, regulatory signals, and strategic direction to make adaptation a viable and attractive investment. The absence of taxonomies, risk-sharing mechanisms, and long-term planning tools (such as spatial zoning or adaptation targets) creates uncertainty and limits the scalability of private sector engagement. Moreover, fragmented governance and misaligned priorities between federal and subnational levels further weaken the effectiveness of public signals.

Collective Subject Discourse:

“I feel that the current public policy environment does not provide the clarity or incentives needed to mobilize private investment. There are no strong signals from the government, no taxonomies, no clear targets, no financial instruments that would make adaptation a strategic priority. Without these signals, it’s difficult for me to justify or structure investments in adaptation, especially when the returns are already uncertain.

I often see promising initiatives that could scale, but they remain niche because the policy framework is fragmented or misaligned and many of the tools we would need, like spatial planning or risk zoning, are either underdeveloped or completely absent.”

Subdimension - Governance Fragmentation and Lack of Integrated Planning

Definition: captures the institutional and structural disconnects that hinder the effective implementation of climate adaptation strategies in Brazil. Interviewees highlighted a lack of coordination between federal, state, and municipal governments, as well as between public and private actors. These misalignments result in fragmented policies, inconsistent regulatory frameworks, and limited integration of adaptation into broader development and spatial planning agendas. The absence of clear zoning, long-term resilience strategies, and shared data systems undermines the ability of financial institutions to assess risks and identify investment opportunities. As a result, adaptation remains reactive and localized, rather than systemic and scalable.

Collective Subject Discourse:

“I often feel like we’re trying to build adaptation strategies on top of a fragmented and disjointed governance structure. There’s no alignment between federal, state, and municipal levels, and that makes it incredibly difficult to plan or invest with any confidence. Everyone is working in silos, and the private sector is left trying to make sense of it all.

This lack of integration also affects data quality and access. We don’t have reliable, granular information to support decision-making. And when we do try to engage with public institutions, we often find outdated systems, limited capacity, or conflicting priorities.”

Main financial logic barrier: Unclear or unknown financial returns (and lack of a business case for adaptation)

Definition: In the context of climate adaptation finance in Brazil, unclear or unknown financial returns refer to the perceived or actual difficulty in quantifying the economic benefits of adaptation investments. Interviewees from financial institutions emphasized that adaptation measures often lack direct, short-term profitability, making them less attractive compared to other projects, including for climate mitigation. Moreover, interviewees highlighted that many businesses in Brazil still perceive climate change as a distant or non-material issue, and do not recognize, comprehend, or prioritize climate-related risks, both physical and transitional. Many adaptation actions are also not explicitly labeled as such, and their returns are typically framed in terms of avoided losses rather than revenue generation. This ambiguity complicates risk assessment, investment planning, and the development of financial products tailored to adaptation.

Collective Subject Discourse:

“I often find it difficult to justify investments in climate adaptation because the financial returns are not clearly defined. Unlike mitigation, which can be more easily linked to measurable outcomes like emissions reductions or energy savings, adaptation tends to be framed around avoided losses, something that is harder to quantify. Many of the actions that could be considered adaptation are not even labeled as such, which makes it even more challenging to track or evaluate their effectiveness from a financial standpoint.

When I look at a potential adaptation project, I struggle to see a clear revenue stream or a return on investment. The benefits are long-

term, uncertain, and often indirect. These projects are seen as cost centers rather than value generators. Even when there is a clear risk, like flooding or drought, the response is reactive, not strategic. I need to see how adaptation contributes to cash flow, reduces volatility, or enhances long-term resilience in a way that is tangible and defensible, but the tools and data to make that case within the structures and constraints of the financial system are still lacking”.

Subdimension - High cost of risk management instruments (insurance)

Definition: refers to the financial and operational barriers associated with the use of insurance and other risk management instruments in the context of climate adaptation finance in Brazil. Interviewees highlighted that while insurance could play a critical role in de-risking adaptation investments, its current cost structure and limited accessibility make it unviable for many projects, especially those led by small or emerging actors. The lack of tailored products, limited data for risk modeling, and concentration of risk on the issuer side contribute to high premiums and low uptake. Moreover, the absence of public co-participation or risk-sharing mechanisms further discourages the development of scalable insurance solutions. As a result, insurance remains underutilized as a financial tool for adaptation, despite its potential to enhance resilience and attract private capital.

Collective Subject Discourse:

“I see insurance as a potentially powerful tool to support climate adaptation, but in practice, it’s prohibitively expensive and poorly suited to the kinds of projects we are dealing with. The cost of premiums is high, especially for small or early-stage initiatives.

I often find that the insurance industry is not prepared to underwrite these risks in a way that makes sense for us financially. Even when we want to use insurance to de-risk a project, the structure of the market makes it nearly impossible. There's no public co-participation, no risk-sharing mechanisms, and no incentives to develop tailored products. The entire burden of risk falls on the issuer or the investor, and that makes it unviable. I don't want to carry all that risk alone, especially when the returns are already uncertain."

Critical implementation barrier: Capacity gaps among small producers and entrepreneurs

Definition: refers to the structural and operational limitations that hinder small-scale producers and entrepreneurs from accessing and benefiting from climate adaptation finance in Brazil. Interviewees emphasized that these actors often lack the technical knowledge, financial literacy, and institutional support needed to design, implement, or report on adaptation-related projects. Many are unfamiliar with climate risk concepts, adaptation strategies, or the requirements of financial institutions, which limits their ability to access credit, insurance, or public funding. Additionally, the absence of tailored financial products and advisory services exacerbates these gaps, leaving small producers particularly vulnerable to climate impacts. As a result, despite being on the frontlines of climate risk, these groups remain largely excluded from adaptation finance mechanisms.

Collective Subject Discourse:

"I see that small producers and entrepreneurs are among the most exposed to climate risks, yet they are the least equipped to respond. Many of them don't have access to the technical knowledge or financial tools

needed to adapt. They often don't understand what adaptation means in practice, and even when they do, they lack the resources or support to implement meaningful changes. It's not just about money, it's about information, training, and institutional support.

When I try to finance adaptation projects in these segments, I run into serious barriers. The proposals are often underdeveloped, the data is weak, and the business models are fragile. These producers cannot provide guarantees, they do not have credit histories, and they struggle to comply with reporting standards. As a result, they're excluded from most financing mechanisms."

The absence of taxonomies, risk-sharing mechanisms, and long-term planning tools (such as spatial zoning or adaptation targets) creates uncertainty and limits the scalability of private sector engagement.



The business sector perspective (real economy)

Climate change adaptation is not a challenge faced in isolation by individual firms; it is a systemic issue that reverberates across entire value chains. In Brazil, the interdependence between large companies, SMEs, and occasionally startups, is particularly pronounced in sectors such as agribusiness, bioeconomy, and infrastructure. **Large firms often act as anchors in these ecosystems, setting standards, creating demand for adaptive technologies, and influencing the resilience of smaller actors through procurement practices, technical assistance, and financing arrangements.** Even highly capitalized and vertically integrated companies are increasingly dependent on the adaptive capacity of their suppliers and service providers to maintain operational continuity and competitiveness.

This interdependence is not only operational but also financial. The financing needs and strategies of companies vary significantly depending on their size, maturity, and risk profile. Drawing on Damodaran's (2015) corporate life cycle framework, we observe that:

- **Startups:** often the source of innovative adaptation solutions, face high uncertainty and limited cash flow, making them, ideally, more reliant on

equity financing, grants, and catalytic capital. Traditional debt instruments are often ill-suited for these actors, who require patient capital and capacity-building support.

- **SMEs:** which form the backbone of many supply chains, struggle with limited access to credit, lack of guarantees, and low financial literacy. Their adaptation efforts are frequently constrained by short-term survival concerns, despite being on the frontlines of climate risk.
- **Large companies:** in contrast, have greater access to capital markets, commercial banks and a host of financial instruments, such as concessional loans, international finance, and blended instruments. They are also more likely to internalize climate risk into strategic planning (see **Box 6**).

Climate change adaptation is not a challenge faced in isolation by individual firms; it is a systemic issue that reverberates across entire value chains.

Given these dynamics, an initial focus on large companies as entry points for private adaptation finance is both pragmatic and strategic. These firms are better positioned to absorb the upfront costs of adaptation, structure bankable projects, and engage with complex financial instruments. More importantly, their actions generate ripple effects: by investing in resilient infrastructure, demanding sustainable practices from suppliers, and supporting innovation ecosystems, large companies can catalyze adaptation across entire sectors.

Drawing from interviews with leading firms, we identify emerging strategies, barriers, and opportunities for scaling private investment in climate resilience. We structure the discussion based on the central role portrayed by large companies and the ecosystems surrounding them (**Table 3**). Insofar as the “requests” are not met, private sector investment in adaptation will likely remain underexplored. Below, we provide a complete discourse around each theme, written in first person according to the DSC technique.

...by investing in resilient infrastructure, demanding sustainable practices from suppliers, and supporting innovation ecosystems, large companies can catalyze adaptation across entire sectors.

TABLE 3. SUMMARY OF LARGER COMPANIES' INTERACTIONS WITH ADAPTATION "ECOSYSTEM"

Large companies		
Others	Receive	Request
SMEs	- Inputs, raw materials, and services key to operations; - Localized knowledge and presence in vulnerable territories; - Informal adaptation practices (e.g., crop diversification, water-saving techniques).	- Adoption of sustainable and climate-resilient practices; - Compliance with ESG standards and traceability requirements; - Participation in supplier development programs and technical assistance initiatives.
(Climate) startups	- Innovative adaptation solutions (e.g., data platforms, resilient seeds); - Pilot technologies (e.g., water management, fire prevention); - Digital tools for monitoring and early warning.	- Scalability and operational maturity; - Integration into supply chains and procurement systems; - Co-development of solutions tailored to sectoral needs (e.g., logistics, agriculture).
Financial institutions (private)	- Access to loans, blended finance (when available); - Customized financial products through bilateral relationships; - Risk-sharing instruments (when available).	- Faster, more integrated engagement across departments (e.g., loans, guarantees, equity); - Metrics and frameworks that reflect long-term resilience value;
Public sector	- Access to public infrastructure (e.g., roads, water systems); - Climate and environmental data (when available); - Participation in public programs (e.g., Eco Invest Brasil, PSA schemes).	- Clear, stable regulatory environment and long-term planning tools (e.g., zoning, adaptation targets); - Taxonomies and eligibility criteria for adaptation finance; - Incentives for systemic resilience (e.g., procurement rules, fiscal benefits).

Source: the authors, based on the interviews.

BOX 6. BRAZILIAN CORPORATE PROGRAM FOR ADAPTATION TO CLIMATE CHANGE (PBRA)

One of the key barriers to scaling up adaptation finance in the private sector is the absence of standardized frameworks for identifying and labelling investments as adaptation-related. Without clear criteria and reporting structures, companies struggle to identify and demonstrate how their actions contribute to climate resilience, hindering strategic planning. This gap affects not only financial flows but also the visibility of corporate efforts in adaptation, making it difficult to track progress and align with national and international climate goals.

The Brazilian Corporate Program for Adaptation to Climate Change (PBRA), developed by FGVces, contributes to address this challenge by offering a structured approach for companies to report climate risks and adaptation actions. Through a set of guidelines, a digital platform, and capacity-building tools, PBRA enables consistent, transparent, and traceable adaptation reporting. It also provides a support tool for the key phases of diagnosis, planning, implementation, and engagement. By fostering a culture of strategic governance and multi-sectoral collaboration, the program helps build a robust evidence base for adaptation finance and supports the transition from planning to implementation in Brazil's corporate sector.

Source: the authors, based on FGVces (2025b)

i) Large Companies**Issue 1: Long-Term Strategic Planning Requires Tailored Financial Instruments**

Definition: Large companies are increasingly integrating climate risk into strategic decisions, such as land use and water management. However, their adaptation investments (like irrigation systems, biometane plants, or relocation of productive areas) require long payback periods and large upfront capital. Conventional financing structures, especially short-term credit, are misaligned with these needs. Companies often rely on bilateral relationships with banks or concessional instruments, but these are not always scalable or replicable.

Collective Subject Discourse:

“Honestly, we’ve stopped trying to label our investments as ‘adaptation.’ It’s not that we don’t

care about climate risks, we do. But the frameworks and incentives around adaptation are so vague or underdeveloped that it’s just easier to treat these investments like any other business decision. If a project improves our resilience and also makes financial sense, we go ahead and fund it using the tools we already know, commercial credit lines, internal capital, or partnerships with banks we trust. We’re not waiting around for a perfect adaptation label or a new financial instrument to appear.

What we’ve learned is that the best way to move forward is to embed adaptation into our existing risk management strategies. Whether it’s relocating operations, investing in water security, or upgrading infrastructure, we evaluate the risks, estimate the returns, and act accordingly. If it fits our long-term strategy and helps us stay

competitive, we do it. The challenge isn't the willingness to invest, it's the lack of a clear, operational framework that connects these actions to broader adaptation goals. Until that exists, we'll keep doing what we've always done: manage risk, protect value, and invest where it makes sense."

Issue 2: Supply Chain Vulnerability Limits Systemic Resilience

Definition: Despite their internal capacity, large firms are exposed to climate risks through their suppliers, many of whom lack the resources or knowledge to adapt. Indeed, many suppliers even lack basic ESG practices. This creates systemic risk and limits the effectiveness of adaptation finance unless large firms can channel resources or incentives downstream.

Collective Subject Discourse:

"We've invested heavily in making our operations more resilient, but we're only as strong as the weakest link in our supply chain. And that's where the cracks show. Many of our suppliers, especially the smaller ones, are struggling just to stay afloat, let alone adapt to climate risks. We try to support them, but we can't do it alone. If we want real resilience, we need mechanisms that help us lift the whole ecosystem. Otherwise, one drought, one flood, and the whole chain is at risk."

ii) Small and Medium Sized Enterprises (SMEs)

Although in the definitions and discourses below we focused specifically on adaptation, the barriers and difficulties faced by SMEs (as well as startups in the topic below) are broader and could be

similarly applied for these enterprises in general.

Issue 1: Limited Access to Tailored Financial Instruments and Incentives

Definition: SMEs, particularly in agriculture and food systems, face significant barriers in accessing finance for adaptation due to their size, informality, and lack of collateral. Many SMEs are not formally organized or lack the documentation required to access even public credit lines like PRONAF or institutional markets like PAA and PNAE. This structural mismatch between available financial products and SME realities limits their ability to invest in adaptation, even when they are highly exposed to climate risks.

Collective Subject Discourse:

"Every time I try to access financing for my business, I hit a wall. The requirements are made for big companies with accountants and legal teams, not for people like me. I know what needs to be done to protect my crops or improve my infrastructure, but I can't get the credit to do it. The banks ask for guarantees I don't have, and the public programs are full of red tape. It feels like the system wasn't built with us in mind."

Issue 2: Low Technical and Institutional Capacity to Plan and Implement Adaptation

Definition: SMEs often lack the internal capacity, technical assistance, and strategic framing needed to identify, plan, and implement adaptation measures. The scenario for those companies is often categorized as one with: i) A general lack of climate literacy and understanding of adaptation as a strategic business issue; ii) Limited access to localized climate data and tools to assess risks and plan responses; and iii) Weak integration into

support ecosystems, since many SMEs are not part of cooperatives or networks that could facilitate access to knowledge, finance, or markets. Without targeted support and capacity-building, SMEs remain reactive rather than proactive, and their adaptation efforts are fragmented, underfunded, and often informal.

Collective Subject Discourse:

“I hear a lot about climate adaptation, but no one ever explains what that means for someone like me. I don’t have access to climate data or experts. I’m not part of any network that could help me figure this out. Most of the time, I’m just reacting, fixing what breaks, dealing with losses. I want to plan ahead, but I don’t know where to start, and I don’t have the support to get there.”

iii) Startups

Issue 1: Structural Incompatibility with Traditional Finance

Definition: Startups developing adaptation solutions (e.g., agroforestry systems, climate data platforms) face high risk and low initial revenue. They often lack balance sheets, credit history, or collateral, making them incompatible with standard debt instruments. Equity financing is more appropriate, but public finance mechanisms rarely offer it. Accelerators and blended finance models are emerging but remain underdeveloped and fragmented.

Collective Subject Discourse:

“We’re building solutions that could really move the needle on climate resilience, but the financial system treats us like we don’t belong. We’re too risky, too new, too different. Traditional loans don’t work for us, we

need equity, grants, and partners who understand that innovation takes time. But those options are rare, and public programs don’t speak our language.”

Issue 2: Lack of Ecosystem Support for Scaling Innovation

Definition: Even when startups are selected for acceleration programs, they often cycle through multiple rounds without achieving scale. Many promising climate-tech startups fail to transition from pilot to commercial deployment due to lack of technical assistance, market access, or integration with large buyers. This limits their ability to attract private capital and deliver adaptation impact at scale.

Collective Subject Discourse:

“We’ve got the ideas, we’ve got the prototypes, but scaling is where everything stalls. We go through accelerators, pitch to investors, but we don’t get the technical help or market access we need to grow. It’s frustrating to see good ideas stuck in pilot mode because the ecosystem isn’t there to support the next step. We need bridges to the market, to big buyers, to real deployment, not just another round of mentoring.”

iv) Institutional and Legal Context

Issue 1: Absence of Clear Taxonomy and Eligibility Criteria for Adaptation

Definition: Companies struggle to classify their projects as “adaptation,” especially when benefits are indirect or overlap with mitigation. This ambiguity affects access to targeted finance, such as concessional loans or climate funds. There seems to be a need for a well-defined taxonomy in order to avoid misclassification and ensure that incentives reach the intended projects.

Collective Subject Discourse:

“Sometimes I don’t even know if what we’re doing counts as adaptation. We’re investing in resilience, but there’s no clear label, no checklist that says ‘yes, this qualifies.’ That makes it hard to apply for funding or incentives. We’re left guessing, and that uncertainty costs us time and opportunities. A clear taxonomy would help us, and the financiers, speak the same language.”

Issue 2: Regulatory Delays Undermine Investment Planning

Definition: Uncertainty around the implementation of key regulatory frameworks, such as the regulated carbon market (SBCE) and the Payment for Ecosystem Services law (PSA, in Portuguese), creates hesitation among investors and companies. The lack of standardized metrics and regulatory clarity are often cited as barriers to structuring adaptation-linked investments, especially those involving other environmental aspects, such as ecosystem services or generation of carbon credits.

Collective Subject Discourse:

“We want to invest, we want to move forward, but the rules keep changing, or worse, they don’t exist yet. We’re waiting on regulations that have been promised for years. Without clear guidelines, we can’t plan, we can’t commit capital, and we can’t convince partners to come on board. It’s like trying to build a house while the building code is still being written.”

v) Interaction with Financial InstitutionsIssue 1: Fragmented Dialogue and Instrument Design

Definition: Companies report that

engagement with financial institutions is often siloed and slow. Even within a single bank, different departments handle concessional loans, guarantees, and equity instruments separately, creating operational complexity. This fragmentation delays the structuring of blended finance and limits the scalability of successful pilots.

Collective Subject Discourse:

“Talking to financial institutions feels like navigating a maze. One department handles loans, another does guarantees, and they don’t talk to each other. We spend months explaining the same project to different teams, and by the time we get an answer, the opportunity has passed. We need a more integrated approach, something that sees the whole picture, not just the parts.”

Issue 2: Misalignment of Risk Perception and Investment Criteria

Definition: Financial institutions often require quantifiable returns and standardized metrics, which adaptation projects struggle to provide. Even projects with clear climate benefits (e.g., irrigation, fire prevention) face challenges in being recognized as “climate finance” due to methodological gaps. This misalignment discourages private capital and limits the development of tailored financial products.

Collective Subject Discourse:

“We’re doing projects that clearly reduce climate risk, but when we go to the bank, they don’t see it. They want numbers, metrics, returns; and adaptation doesn’t always fit neatly into those boxes. Even when the benefits are obvious, like preventing crop loss or reducing fire risk, it’s hard to prove in a spreadsheet.”



Comparing the different perspectives

Rather than isolating the insights above into standalone hypotheses, we now turn to a comparative analysis of the three perspectives, public sector, financial institutions, and the real economy, to better understand their differing assumptions, priorities, and expectations. This comparison helps clarify the misalignments that currently hinder the mobilization of private finance for adaptation in Brazil and sets the stage for the concluding reflections on how to bridge these gaps. In particular, it is possible to say that:

- **The governmental perspective**, reflected in the PNA, starts from a normative view and assumes that the (main) problem lies in the lack of financial instruments and political coordination;
- **Financial institutions**, on the other hand; have a more pragmatic and operational point of view, highlighting that the (main) problem lies in the absence of well-structured adaptation projects, reliable data and in the risk perception from the demand-side of the credit markets (i.e. the organizations in the real economy); and
- **The business sector perspective** (real economy), particularly from large companies, is grounded in a pragmatic and risk-oriented approach. These firms do not wait

for adaptation-specific frameworks or incentives; instead, they integrate climate resilience into existing risk management and investment strategies, often bypassing the adaptation label altogether. The main challenge, from their view, is not the lack of willingness to invest, but the absence of clear taxonomies, scalable financial instruments aligned with long-term planning, and mechanisms to support systemic resilience across supply chains. Adaptation is treated as a business continuity issue, not a separate agenda.

- SMEs, on the other hand, face structural and informational barriers that prevent them from accessing adaptation finance. Their limited technical capacity, informality, and lack of tailored financial products leave them highly exposed to climate risks, with adaptation efforts often reactive, fragmented, and underfunded.

On this point, **Table 4** further compares the three perspectives regarding some key topics.

Adaptation is treated as a business continuity issue, not a separate agenda.

TABLE 4. COMPARING THE DIFFERENT PERSPECTIVES

Topic	Public Sector	Financial Institutions	Businesses (Real Economy)
Cause of low mobilization of resources	Lack of financial tools and coordination across sectors and levels of government.	No pipeline of viable, structured projects; low demand due to unclear returns.	Adaptation not framed as such; firms invest when aligned with risk or business strategy.
Role of the private sector	Should be mobilized through incentives, credit, and public-private partnerships.	Still unaware or unconvinced of adaptation as a strategic or financial priority.	Large firms act when it fits strategy; SMEs and startups face access and capacity barriers.
Focus of public actions	Emphasis on social protection, climate justice, and vulnerable populations.	Need for planning, infrastructure, and long-term investment predictability.	Focus on operational continuity, supply chain resilience, and competitiveness.
Priority financial instruments	Create new tools like insurance, guarantees, and blended finance mechanisms.	Improve and scale existing tools like Eco Invest and concessional credit.	Use familiar tools (e.g., commercial credit); need long-term, flexible financing.
Main barriers	Budget constraints and lack of financial innovation for adaptation.	Lack of data, taxonomy, and metrics to assess and price adaptation risk.	No taxonomy; weak support for suppliers and SMEs limits systemic resilience.
Role of climate information	Expand access to localized, high-resolution data for planning and finance.	Data is too coarse or outdated to support credit and risk analysis.	Often unavailable or not localized; large firms rely on internal or external sources.
Responsibility for action	Government should lead, fund, and coordinate adaptation implementation.	Government must create enabling conditions and reduce investment risk.	Firms act when strategic; expect enabling rules but don't wait for public action.
Perception of adaptation	A strategic, cross-cutting issue tied to justice and long-term resilience.	Still vague and not integrated into business or financial logic.	Seen as part of risk management; not always labeled or tracked as adaptation.

Source: the authors.

Diverging Definitions and the Closed Policy Window

This divergence in problem definition and policy expectations can be analyzed through the lens of Kingdon's Multiple Streams Framework (2014).

TABLE 5. KINGDON'S MULTIPLE STREAMS FRAMEWORK APPLIED TO PRIVATE FINANCE FOR ADAPTATION IN BRAZIL

Stream	Problem Stream (How the issue is defined)	Policy Stream (Which solutions are proposed)	Political Stream (What coalitions are being built)
Public sector	- Social justice issue: focused on vulnerable populations and minorities); - Instrumental gap: lack of financial tools and coordination).	- Creation of new financial instruments; - Integration of adaptation into public planning and procurement; - Development of a national taxonomy.	- Inter-ministerial coordination; - Engagement with subnational governments; - Alignment with international donors and development banks.
Financial institutions	- Structural barrier: lack of viable, structured projects; unclear returns; and insufficient data and metrics to assess risk.	- Optimization and scaling of existing tools; - Development of blended finance, insurance, guarantees, and risk-sharing mechanisms; - Better data, taxonomies.	- Coalitions with multilateral banks, ESG investor networks, and internal sustainability teams; - Advocacy for regulatory clarity and standardized frameworks.
Real economy (businesses)	- Strategic and operational risk: embedded in competitiveness and supply chain continuity (not treated as a separate issue).	- Integration of adaptation into corporate risk management; - Demand for long-term finance, supplier support, and enabling regulation.	- Coalitions with suppliers, startups, and sectoral associations; - Participation in business-led adaptation forums; - Partnerships with banks and accelerators for innovation.

Source: the authors, concepts in the first two rows extracted from Kingdon (2014).

Using the elements from the Multiple Streams Framework, we can better understand why consistent public policies to support private finance for adaptation in Brazil have struggled to emerge in the past (and are unlikely to do so in the future). In the **problem stream**, the government frames the issue as a social issue, as well as a lack of financial instruments and coordination, while financial institutions and large companies see the problem as the absence of an enabling environment, unclear returns, lack of data, and regulatory uncertainty. Large firms, in particular, do not perceive adaptation as a separate agenda; instead, they embed it into broader risk management strategies, bypassing the need for adaptation-specific labels.

In the **policy stream**, the government proposes state-led solutions: new funds, concessional credit, and public planning integration. These align well with the needs of SMEs, which require direct support and tailored instruments to overcome structural and informational barriers. However, these proposals are often disconnected from the preferences of financial institutions and large companies, who favor reforms that improve the investment climate, such as standardized taxonomies, better metrics, and blended finance mechanisms. These actors are not asking for new tools, but for the optimization and scaling of existing ones.

The **politics stream** adds another layer of complexity. While there is growing political support for climate action, the institutional landscape remains fragmented, and the government's worldview, centered on direct intervention, does not resonate with the private sector's expectations of a more facilitative role. This misalignment reduces the likelihood of convergence across streams and delays the emergence of a coherent policy window.

Because these streams are not aligned, the window of opportunity for effective public policy remains closed. Without a shared understanding of what the problem is, and without convergence on feasible and acceptable solutions, actors struggle to build coalitions or advance reforms. Instead, there is a proliferation of disconnected initiatives, some focused on social vulnerability, others on financial innovation, that fail to address the systemic nature of the challenge.

Without a shared understanding of what the problem is, and without convergence on feasible and acceptable solutions, actors struggle to build coalitions or advance reforms. Instead, there is a proliferation of disconnected initiatives, some focused on social vulnerability, others on financial innovation, that fail to address the systemic nature of the challenge.



Concluding remarks

The findings of this paper reveal a fundamental misalignment between the different actors involved in climate adaptation finance in Brazil. **While all acknowledge the urgency of adaptation, they diverge significantly in how they define the problem, which solutions they prioritize, and what role they expect the government to play.** This divergence has profound implications for the design and implementation of public policies aimed at unlocking private finance for adaptation.

From the perspective of the federal government, as reflected in the National Adaptation Plan (PNA) and related instruments, the problem is framed primarily as a lack of financial instruments and institutional coordination. The proposed solutions are largely normative and state-led: create new funds, expand credit lines, and integrate adaptation into public planning. This worldview assumes that the government should be the main driver of adaptation, mobilizing the private sector through incentives and regulation. This approach aligns most closely with the needs of SMEs, which often lack the capacity to act independently and require direct support to access finance and build resilience.

In contrast, financial institutions and large companies operate under a different logic. For them, the core issue is not

the absence of public instruments, but the lack of an enabling environment that allows adaptation investments to emerge organically from within existing business and financial structures. These actors are not waiting for adaptation to be defined or labeled, they are already investing in resilience when it aligns with their strategic interests. What they need is clarity: clear taxonomies, stable regulations, better data, and financial instruments that reduce risk and increase predictability. In this view, the government's role is not to lead implementation, but to enable markets to function more effectively.

To move beyond this impasse and lay the groundwork for a more coherent adaptation finance ecosystem, Brazil could prioritize the establishment of a structured public–private dialogue platform. Such a platform could serve as an ongoing forum for coordination between government, financial institutions, and the real economy, enabling actors to align expectations, co-design financial instruments (if needed), and share data and insights. By fostering trust and reducing fragmentation, this foundational step would help translate adaptation from a diffuse concept into a shared agenda, paving the way for more effective and scalable solutions.

Lastly, regarding limitations, this case

study is based on a limited number of semi-structured interviews and document analysis, which, while rich in insight, may not capture the full diversity of perspectives across Brazil's vast and heterogeneous landscape. The use of the Collective Subject Discourse technique helps synthesize viewpoints, but it may also obscure individual nuances. Future research could expand the sample size, include subnational actors and international investors, and explore sector-specific dynamics in greater depth. Quantitative studies on the financial performance of adaptation investments and longitudinal analyses of policy implementation would also complement and strengthen the findings presented here.

References

- BCB. (2025). *Relatório de estabilidade financeira – Abril 2025 [Financial Stability Report – April 2025]*. <https://www.bcb.gov.br/content/publications/financialstabilityreport/202504/fsrFullRep.pdf>
- Brasil. (2025a). *Agricultura e pecuária*.
- Brasil. (2025b). *Plataforma Brasil de Investimentos Climáticos e para a Transformação Ecológica - BIP*. Novo Brasil - Plano de Transformação Ecológica; Ministério da Fazenda. <https://www.gov.br/fazenda/pt-br/aceso-a-informacao/acoes-e-programas/transformacao-ecologica/bip>
- Breviglieri, G. V., & Yamahaki, C. (2024). Climate integration into sectoral policies: The case of the Brazilian biofuel policy RenovaBio. *Review of Policy Research*. <https://doi.org/10.1111/ropr.12593>
- Bueno Rubial, M. del P., Magnan, A., Christiansen, L., Neufeldt, H., Hammill, A., Niles, K., Dale, T., Leiter, T., Njuguna, L., Singh, C., Bours, D., Butera, B., Canales, N., Chapagain, D., England, K., Pauw, P., Watkiss, P., Harvey, B., Charlery, L., ... Sankam, J. (2024). *Adaptation Gap Report 2024: Come hell and high water - As fires and floods hit the poor hardest, it is time for the world to step up adaptation actions*. United Nations Environment Programme. <https://doi.org/10.59117/20.500.11822/46497>
- CDP. (2024). *The State of Play: 2023 Climate Transition Plan Disclosure*.
- CVM. (2023). *Resolução CVM Nº 193, de 20 de Outubro de 2023*. Comissão de Valores Mobiliários. <https://conteudo.cvm.gov.br/export/sites/cvm/legislacao/resolucoes/anexos/100/resol193consolid.pdf>
- Damodaran, A. (2015). *The corporate life cycle: Growing up is hard to do*. The Stern School of Business at New York University.
- Federative Republic of Brazil. (2024). *Brazil's second Nationally Determined Contribution (NDC)*. United Nations Framework Convention on Climate Change (UNFCCC). https://unfccc.int/sites/default/files/2024-11/Brazil_Second_Nationally_Determined_Contribution_%28NDC%29_November2024.pdf
- FGVces. (2022). *Projeto Cinturão+Verde: Adaptação às mudanças climáticas pela agricultura familiar do cinturão verde de São Paulo*.
- FGVces. (2024). *Fórum Empresarial de Adaptação à Mudança do Clima: Relatório de sistematização de informações*.
- FGVces. (2025a). *Contribuições para a Ação Climática no Brasil*. Centro de Estudos em Sustentabilidade da Fundação Getulio Vargas. <https://eaesp.fgv.br/centros/centro-estudos-sustentabilidade/projetos/plano-clima-mitigacao>
- FGVces. (2025b). *Programa Brasileiro de Relato Empresarial em Adaptação Climática*. <https://eaesp.fgv.br/centros/centro-estudos-sustentabilidade/projetos/programa-brasileiro-adaptacao>

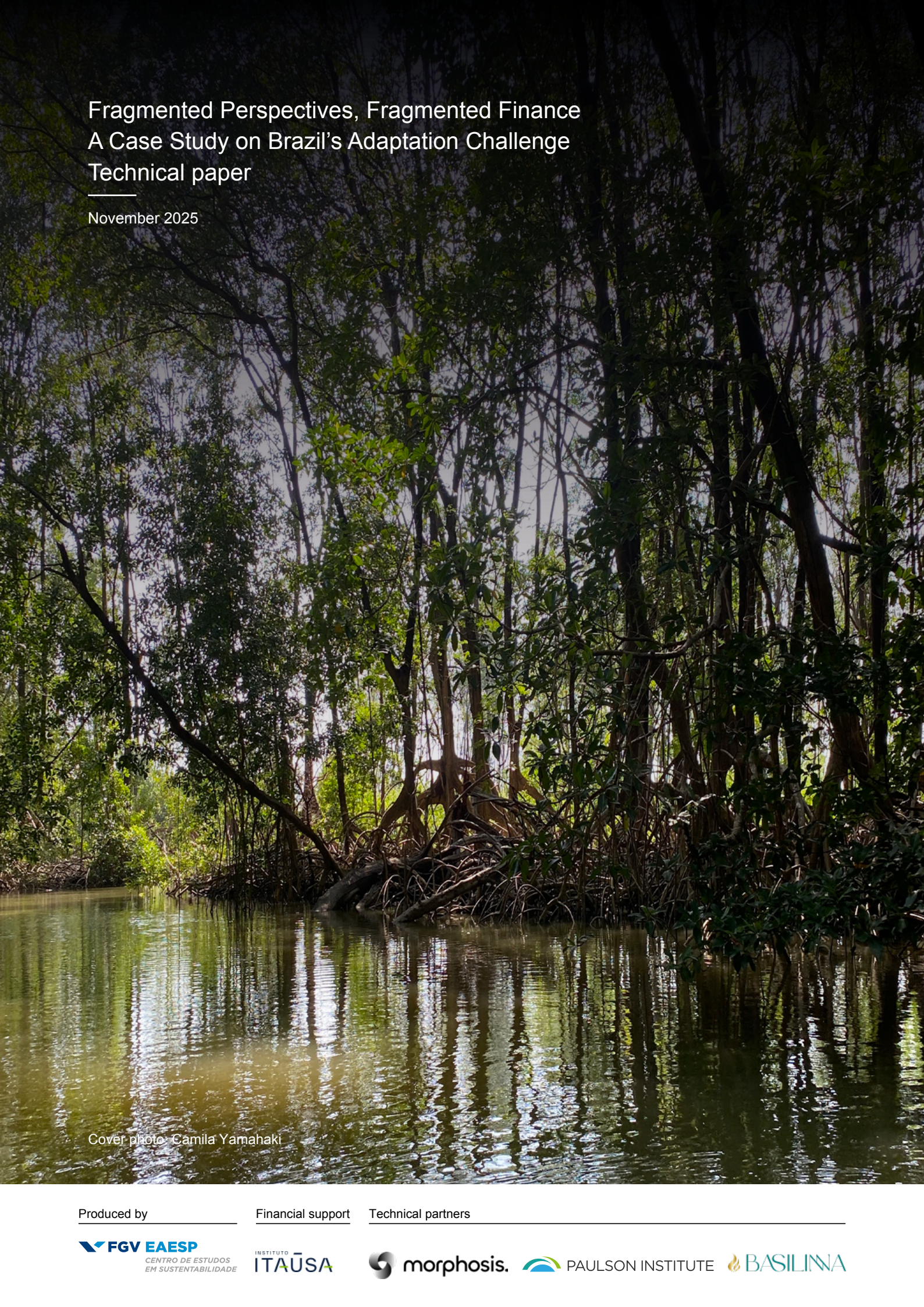
- Flores, I. (2017). Proposing a methodology for the operationalisation of Multiple Streams Approach, using the Inner-City Technology Colleges as an empirical example. *SocArXiv*.
- GARI. (2024). *The Unavoidable Opportunity: Investing in the Growing Market for Climate Resilience Solutions*. <https://garigroup.com/>
- Hiebert, J., Cai, J., Hwang, S., Morris, A. K., & Hohensee, C. (2023). Building and Using Theoretical Frameworks. In J. Hiebert, J. Cai, S. Hwang, A. K. Morris, & C. Hohensee (Eds.), *Doing Research: A New Researcher's Guide. Research in Mathematics Education* (pp. 51–75). Springer, Cham. https://doi.org/10.1007/978-3-031-19078-0_3
- IADB. (2017). *Fortalecimento do Financiamento para a mitigação no Brasil orientado para a gestão de resultados*. https://antigo.mma.gov.br/images/arquivo/80051/NDC/documento_base_ndc_2_2017.pdf
- IMF. (2025). *Fiscal Monitor: Fiscal Policy under Uncertainty*.
- Kingdon, J. W. (2014). *Agendas, Alternatives, and Public Policies* (2nd, Pears ed.). Pearson Education Limited.
- Lefèvre, F., & Lefèvre, A. M. C. (2003). *O discurso do sujeito coletivo: um novo enfoque em pesquisa qualitativa*. Educus.
- Lefèvre, F., & Lefèvre, A. M. C. (2006). O sujeito coletivo que fala. *Interface - Comunicação, Saúde, Educação*, 10(20), 517–524. <https://doi.org/10.1590/S1414-32832006000200017>
- Ministério da Fazenda. (2025). *Taxonomia Sustentável Brasileira*. Secretaria de Política Econômica - SPE. <https://www.gov.br/fazenda/pt-br/orgaos/spe/taxonomia-sustentavel-brasileira>
- Nascimento, A., Grangeia, C., Oliveira, I. F. de, & Santos, L. (2022). Investimentos em Infraestrutura Sustentável como Medida de Adaptação e seus Efeitos na Justiça Climática Brasileira. *XLII ENCONTRO NACIONAL DE ENGENHARIA DE PRODUÇÃO*.
- Neto, J. S. (2025, April). *Governo lança segundo leilão do Eco Invest para recuperar 1 milhão de hectares em pastagens degradadas*.
- Reuters. (2025, April). *Eco Invest: governo mira US\$ 2 bi em financiamentos verdes com novo leilão*.
- Schipper, E. L. F., Revi, A., Preston, B. L., Carr, E. R., Eriksen, S. H., Fernandez-Carril, L. R., Glavovic, B. C., Hilmi, N. J. M., Ley, D., Mukerji, R., Araujo, M. S. M. de, Perez, R., Rose, S. K., & Singh, P. K. (2022). Climate Resilient Development Pathways. In H.-O. Pörtner, D. C. Roberts, M. Tignor, E. S. Poloczanska, K. Mintenbeck, A. Alegria, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, & B. Rama (Eds.), *Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (pp. 2655–2807). Cambridge University Press. <https://www.ipcc.ch/report/ar6/wg2/chapter/chapter-18/>
- Whetten, D. A. (1989). What Constitutes a Theoretical Contribution? *The Academy of Management Review*, 14(4), 490. <https://doi.org/10.2307/258554>
- Wong-Parodi, G., Fischhoff, B., & Strauss, B. (2015). Resilience vs. Adaptation: Framing and action. *Climate Risk Management*, 10, 1–7. <https://doi.org/10.1016/j.crm.2015.07.002>

World Bank. (n.d.). *Gross savings (% of GDP)*. World Bank Data. Retrieved June 25, 2025, from https://data.worldbank.org/indicator/NY.GNS.ICTR.ZS?name_desc=false

Yamahaki, C., Velloso Breviglieri, G., & von Lüpke, H. (2024). Explaining the absence of climate change integration in low-carbon sectoral policies: An analysis of Brazil's maritime cabotage policy. *Case Studies on Transport Policy*, 16, 101183. <https://doi.org/10.1016/j.cstp.2024.101183>

Appendix 1 – List of interviewees

N	Institution	Date
1	Asset manager	14/05/2025
2	Financial group (asset manager and bank's representatives)	16/05/2025
3	Multilateral bank	13/06/2025
4	Financial group	02/06/2025
5	Orange producing company	17/06/2025
6	Biofuel producing company	07/07/2025
7	Development bank	10/07/2025



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