

## **Energy transition and sustainability in Brazil: tackling the climate finance challenge**

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Climate finance in Brazil cannot be discussed from scratch as the country has a very peculiar profile regarding the financial sector and capital markets. Brazil is well known for its low savings rate and high cost of capital, which has, over the years, limited investments not only in low-carbon projects but in general infrastructure. Increasing the country's political stability and improving the legal and judicial systems will help reduce risks such as high volatile exchange rates and high-interest rates and benefit the capital market, fostering all kinds of investments in the country.

Unprecedented financial resources and an environmentally concerned public and private finance sector are needed to achieve the objectives of the Paris Agreement and the Sustainable Development Goals (SDGs). Public resources alone will not be sufficient. The financial sector is important for mobilizing and channeling the financial resources to low-carbon, resilient and sustainable investments. Increasingly, asset owners, investment managers and banks see this transition as a business opportunity and align their strategies to this end.

Despite the growing volume of green and sustainable investments, total amounts are still far from necessary for a sustainable and low-carbon economy. The resolution of climate change and sustainable growth issues is complex and requires coordinated actions among many actors. In developing countries, overcoming structural barriers is key to the development of a sustainable finance sector. These issues are particularly relevant for Brazil.

An analysis of the Brazilian financial sector points out three main sets of barriers that jeopardize the healthy development of climate finance in the country:

- i. The first one is related to the high level of subsidies to fossil fuels in the country: almost BRL 100 billion, corresponding to approximately 1.4% of the country's GDP, in 2019. Most of these subsidies are due to tax incentives and tax rebates.
- ii. The second main barrier is the lack of financial and economic instruments to foster low carbon investments, such as green bonds and the implementation of a carbon pricing policy in Brazil. The barriers to that, according to the literature review and interviews with stakeholders are: perception of higher risks, lack of supply and demand for green bonds, low financial attractiveness, unstable macro-environment, deficiencies in the legal and judicial systems, unstable political environment, conservative investment culture and crowding-out due to subsidized credit.
- iii. Last but not least, it is also important to adjust and propose new financial policies and regulations to facilitate investments in low-carbon projects.

For the finance sector, based upon literature review and stakeholders' consultation, four types of policy instruments are key for unleashing low-carbon investments in Brazil (La Rovere et al, 2023):

- i. **Reducing progressively and eliminating fossil fuels subsidies:** in Brazil the subsidies to fossil fuels totalled almost BRL 100 billion in 2019, corresponding to approximately 1.4% of the country's GDP. The total amount of subsidies was equal to 3 times the "Bolsa Familia" program, which transfers resources to extremely poor families in Brazil, and to about 29 times the total resources of the Ministry of Environment of Brazil in 2019. However, from a national and geopolitical point of view, dealing with incentives and subsidies is a huge challenge. In addition to the methodological difficulties, the technical content, and the lack of transparency by governments, it requires indeed a political debate about the direction of development.
- ii. **Financial Instruments:** Green debentures or green bonds and incentivized debentures are fixed-income securities used to raise funds to implement or refinance long-term projects and purchase environmentally concerned assets. They end up attracting institutional investors, such as

pension funds and insurance companies. Developing countries face challenges in advancing their green bond markets, largely because these nations have less developed economies and capital markets. These challenges can be related to structural barriers that jeopardize the development of the bond market, and to specific obstacles to increasing financial flows into low-carbon sectors. Concerning structural barriers, overall, the study concludes that the conditions that foster the development of a conventional bond market also contribute to the development of a green bond market and thus, should be pursued by the country. Concessional loans and risk-sharing financial instruments are also very promising initiatives to accelerate low-carbon investments in developing countries.

iii. **Carbon Pricing:** With carbon pricing, whether a tax or a market, the decision to reduce emissions or pay the price of CO<sub>2</sub>e emitted is made by the economic agent, who compares the price of the pollutant being priced with its marginal mitigation cost. What is expected is that economic agents with a lower cost of control reduce more because it is cheaper to control than to pay the price. In Brazil, the World Bank's Partnership for Market Readiness discussed, simulated and analysed many carbon pricing options together with the Ministry of Economy. CentroClima/COPPE/UFRJ was the research centre responsible for the modelling component and simulated eight different economic and GHG emission scenarios up to 2030, 6 of them with carbon pricing (Wills et al., 2021). According to the results obtained from the simulations, an ideal pricing scenario in Brazil should have the following characteristics: a) gradual price increase to allow agents to adapt; b) wide scope to reduce the equilibrium price; c) Border tax adjustments appeared to be more efficient than grandfathering options; d) native forest reforestation offsets are crucial for controlling the price of carbon; e) carbon pricing revenues are very important to reduce labour charges and to improve income distribution and reduce poverty. These complementary public policies are crucial for the successful implementation of carbon pricing in a developing country like Brazil.

iv. **Financial Policies and Regulations:** Financial policies and regulations are key to unleashing sustainable investments and fostering climate finance in Brazil. The National Bank for Economic and Social Development (BNDES) is the main source of reimbursable resources for climate finance in Brazil. It operates through important funds linked to sustainability, such as the Climate Fund (National Fund on Climate Change) and the Environment Credit Line. Through the resources of the Climate Fund, BNDES supports the implementation of projects, the acquisition of machinery and equipment and technological development for mitigation and adaptation to climate change. The composition of the interest rates varies according to the form of support. It can include the financial cost, the BNDES remuneration, the financial intermediation rate, the rate of the financial agent, and the credit risk rate. Other development banks such as regional development banks and multilateral development banks are also key to promoting the acceleration needed in the financial sector in order to allow the achievement of the ambitious and challenging Paris Agreement goals. The role of the Brazilian Central Bank is also relevant, and it has already started to issue regulations on the exposure of financial institutions to climate risks. The extension of these regulations to cover transition risks of financial products and institutions as well and the setting-up of a Brazilian taxonomy of green and climate investments will certainly be an important contribution to channel financial resources to low-carbon investments.

References: La Rovere et al, 2023. A Decarbonization Strategy for a 2050 Net-Zero carbon Brazilian Economy: Enablers and Sectoral Mitigation Plans. Report of the DECARBOOST Project, SSN/IKI/BMVU, February 2023.

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