

BRAZIL

FOUR STEPS TO SUSTAINABLE SOVEREIGN BONDS

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Why read this report?

Nature underpins Brazil's economic strength. This report sets out **the priority actions that investors can take to promote Brazil's sovereign health**¹ and reduce systemic risk to their portfolios across asset classes and the opportunities for sovereign investors to benefit from this green recovery.

We discuss Brazil's sovereign health and the increasing market and policy pressures on Brazil in our recently published report **Brazil: roadmap to sustainable sovereign bonds**, jointly written by Planet Tracker and the Grantham Research Institute.² This report summarises the four-step roadmap we recommend in that report.

Executive Summary

A four-step roadmap to boosting Brazil's sovereign health

Brazil has an opportunity to avoid these sustainability pressures and invest to increase its sovereign health in four steps:

- 1 Strengthen government policies relating to climate and nature
- 2 Reform public spending to end perverse subsidies and incentivise sustainable agribusiness practices
- 3 Invest in a green recovery from the COVID 19 pandemic (e.g., natural-capital³ enhancing infrastructure; green technologies and productivity improvements; sustainable and more efficient agriculture)
- 4 Issue a Sovereign Bond linked to ending illegal deforestation⁴



Investors holding Brazilian bonds (particularly those expiring after 2030) have a strong incentive to support the rapid adoption of such a roadmap by Brazil because they will:

- 1** Benefit from an improvement in its sovereign health;
- 2** Avoid any selling pressure they might otherwise experience in relation to Brazilian bonds as they align their portfolios with net zero commitments.

Investor call to action

There are a number of actions investors can take to support Brazil's four-step roadmap.

Engage with the Brazilian government, policy makers and regulators (bilaterally or collaboratively with other stakeholders), to:

- 1 Promote a green and just recovery from the COVID-19 pandemic**, which aligns Brazil with a 1.5° Paris aligned climate change target and embeds a transition from nature-negative outcomes to nature-positive outcomes into this action plan.
- 2 Push for the elimination of illegal deforestation** by advocating for:
 - a** Reversal of cuts to the Ministry of Environment (and related enforcement agencies), and pressuring for more government investment in people and technology to prevent illegal deforestation;
 - b** Strengthening of current domestic policies, laws and multistakeholder initiatives focused on preventing illegal deforestation;
 - c** Ratification of the Escazu Agreement which Brazil signed in September 2018 (strengthening environmental democracy and protection for Indigenous peoples and those protecting the environment) but has yet to adopt.
- 3 Promote significant reduction of legal deforestation** and actions to reduce the risk of fires in or near forest areas.
- 4 Establish a credible framework for the issuance of Deforestation-Linked Sovereign Bonds.**

¹ We define 'sovereign health' as the capacity of countries to issue debt and repay it in alignment with the UN's 2030 Sustainable Development Goals (SDGs).

² The London School of Economics Grantham Research Institute on Climate Change and the Environment (<https://www.lse.ac.uk/granthaminstitute/about/about-the-institute/>).

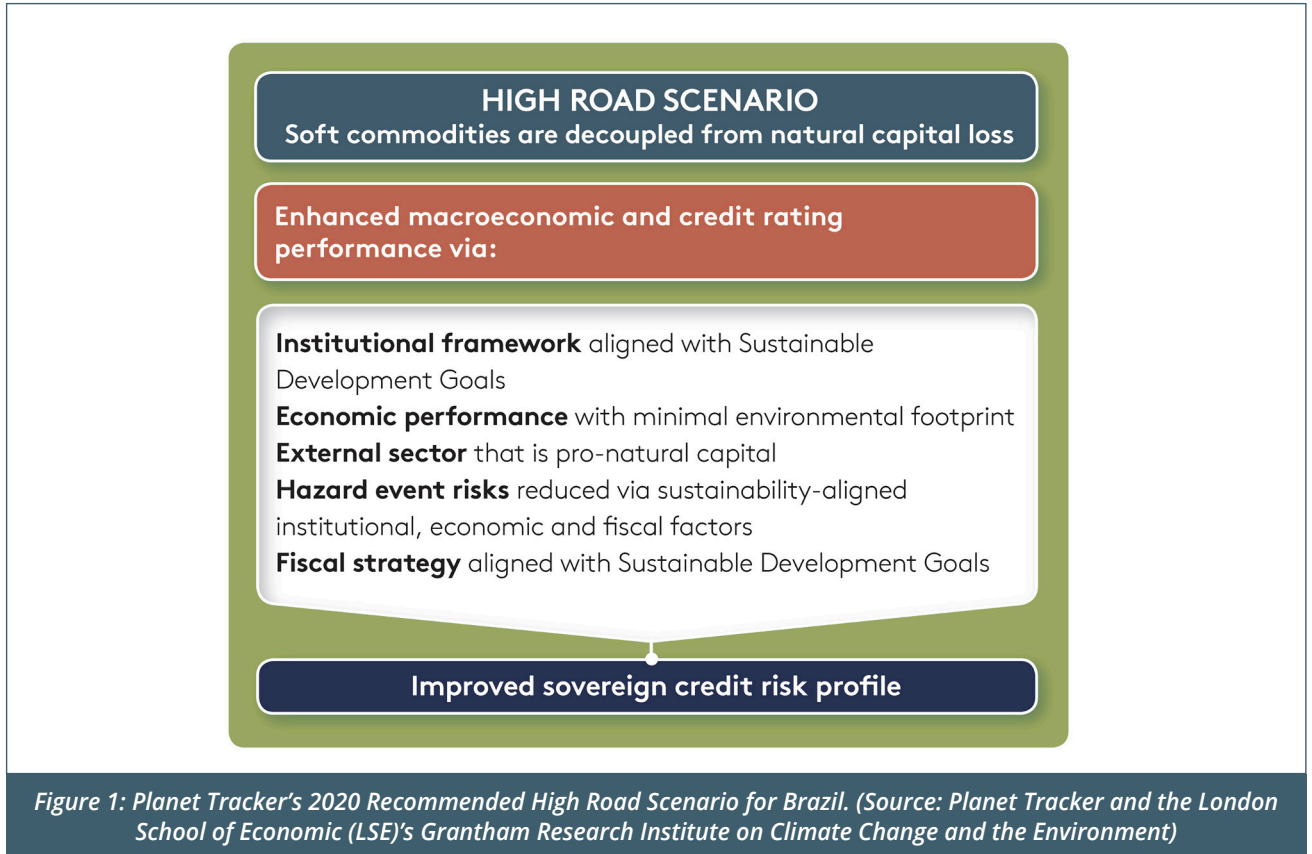
³ The stock of renewable and non-renewable resources (e.g. plants, animals, air, water, soils, minerals) that combine to yield a flow of benefits to people.

⁴ We discuss Deforestation-Linked Sovereign Bonds in a separate report.



A four-step roadmap to boosting Brazil's sovereign health

In our previous (2020) report we set out a 'High Road' pathway for Brazil to strengthen its sovereign health - see Figure 1.



We have summarised this into a four-step roadmap to 2030 for Brazil in our latest report (**Brazil: roadmap to sustainable sovereign bonds**):

- 1 Strengthen core climate and nature policies with a clear pathway to net zero by 2050
- 2 Reform public spending to end perverse subsidies and incentivise sustainable agribusiness practices
- 3 Invest in a green recovery from the COVID 19 pandemic (e.g., natural-capital enhancing infrastructure; green technologies and productivity improvements; sustainable and more efficient agriculture)
- 4 Issue a Sovereign Bond linked to eliminating illegal deforestation to help fund the investment required.



1 Strengthen core climate and nature policies

Brazil should strengthen its policies and its institutional framework, particularly with respect to deforestation, and build upon existing and emerging initiatives including:

- The Brazilian Central Bank sustainability agenda (and the proposed sustainability regulations for the financial sector)
- Initiatives by Brazilian organisations such as the LAB
- Strengthen existing forest initiatives.

Brazilian Central Bank Sustainability Agenda

In 2020 the Brazilian Central Bank (BCB)

- Joined the Network of Central Banks and Supervisors for Greening the Financial System;
- Launched a 'new sustainable agenda'
- Signed an agreement with the Climate Bonds Initiative to develop a sustainable finance agenda.

In April this year the BCB launched two consultation processes aligned with its sustainability agenda to embed climate change into the Brazilian financial system.

BCB Public Consultation 82 - greening rural finance

The proposal would apply sustainability criteria to rural credit programmes that provide subsidised loans to Brazil's agriculture and livestock producers and give the BCB greater control over lending by Brazilian banks.¹

Potential projects seeking funding would be classified as:

- **Illegal** - projects that may not be financed with rural credit
- **High risk** - projects that the BCB regards as carrying social or environmental risks for the financial institution must be checked by the financial institution
- **Sustainable** - projects that comply with social and environmental sustainability parameters.

This proposal would add weight to the pressure being exerted to prevent illegal deforestation⁵. It would also help to alleviate the problem for small and medium producers who adopt sustainable practices but who face challenges to access affordable credit. However, the Brazilian government has proposed legislation (Provisional Legislation 510/2021) which would 'regularise land tenure' by granting legal occupation rights to settlers who had occupied public lands in the Amazon (and elsewhere), including lands that had been illegally deforested⁶. If passed, this law would legalise historic deforestation, significantly reducing the impact of the proposed rural finance changes.

⁵ It is worth noting that the Brazilian Forest Code allows farmers outside the Amazon region (e.g. in the Cerrado) to deforest up to 80% of their land so preventing illegal deforestation will not stop deforestation entirely.

⁶ European retailers wrote to the members of the Brazilian National Congress in May 2021 urging them not to pass this legislation https://www.retailsoygroup.org/wp-content/uploads/2021/05/Letter-from-Business-on-Amazon_2021.pdf.



BCB Public Consultation 85 - embedding climate risk into financial institutions' risk management systems and policies

The BCB is proposing to explicitly include 'issues related to climate change' in the Brazilian regulatory framework for financial institutions.ⁱⁱ

The proposal takes the TCFD approach to risk management and seeks to integrate climate and other social and environmental risks into the risk management framework alongside other traditional risks (credit, market, liquidity and operational). It establishes minimum criteria for identification, measurement, evaluation, monitoring, reporting, control and mitigation of adverse effects arising from the interaction of these risks.

These risks will be included in the stress testing programmes of financial institutions. More complex institutions will be required to perform scenario analyses considering hypotheses of climate change and the transition to a low-carbon economy.

However, these proposals will depend upon the active support and engagement of the local Brazilian banks to be effective.

Existing structures should be used to accelerate change

The Financial Innovation Laboratory (LAB) is an example of the structures already existing in Brazil which the government could leverage to accelerate improvements in the country's sovereign health.

The LAB is currently working in Brazil with four thematic working groups focused on Green Finance, Impact Investment, Fintech and Environmental, Social and Governance factors.ⁱⁱⁱ

Strengthen existing forest restoration initiatives

The Brazilian government should work to support and strengthen existing forest restoration initiatives such as the Atlantic Forest Restoration Pact and the Alliance for Restoration in the Amazon and invest in the Ministry of Environment (MMA) and other government agencies⁷ to enhance monitoring and enforcement activities relating to deforestation. The MMA has been subject to stringent cuts in recent years – reversing these would be an obvious first step.

⁷ Such as the Environmental agencies (IBAMA and ICMBIO) and the Public Prosecutors office.



2

Reform agribusiness subsidies to encourage nature-positive investment

In 2015 the Overseas Development Institute reported that the total value of Brazilian subsidies supporting the production and consumption of beef and soy was USD 25 billion^{iv} (roughly a fifth of this goes to farmers)⁸. In contrast, the Brazilian government was reported to be budgeting USD 0.38 billion for the Ministry of Environment for 2021 (50% less than 2020).^v

We recommend subsidies are redirected to incentivise investment in the following areas:

- a Encourage more efficient use of land by increasing cattle per hectare and converting pasture to cropland^{vi}
- b Expand the availability of rural credit to enable farmers to invest in machinery and support the education of farmers and the wider community about sustainable agricultural and forestry practices⁹
- c Cut bureaucracy associated with land transactions and access to public services.^{vii}

3

Invest in a green recovery

There is broad consensus regarding the areas where Brazil should focus its investment to enhance its sovereign health and ensure a green recovery.

In line with our High Road framework (Figure 1) a report¹⁰ published by WRI Brasil and New Climate Economy in 2020 sets out a low carbon growth strategy for Brazil, including ending illegal deforestation.^{viii}

- **Quality infrastructure** - promoting integrated planning of projects consistent with the maintenance of natural capital, thus enabling the mobilization of private investments and improving economic and societal resilience to increasingly common extreme climate events.
- **Industrial innovation** - adopting green technologies and approaches to drive innovation and productivity improvements for the industrial sector based on Brazilian knowledge.
- **Sustainable agriculture** - implementing measures to increase efficiency in agricultural production. This will bring several benefits: more efficient land use, increased production and productivity, reduced pressure to deforest and renewed confidence of consumers and national and international markets increasingly concerned with environmental and climate issues.

⁸ The OECD estimated that Brazil's 'Total Budgetary Support Estimate' for farmers in 2019 was equivalent to 0.3% of GDP (USD 5.5 billion), noting that 'Brazil provides a relatively low level of support to its farmers, despite maintaining an extensive range of price and credit policies'. (<https://www.oecd.org/brazil/brazil-agriculturalpolicymonitoringandevaluation.htm>).

⁹ The World Bank estimated that agriculture labor productivity in the most productive country is 21.7 times higher than in Brazil. (<http://documents1.worldbank.org/curated/en/268351520343354377/pdf/123948-WP-6-3-2018-8-39-22-AriasetalAgriculturalgrowthinBrazil.pdf>).

¹⁰ A New Economy for a New Era: Elements for Building a More Efficient and Resilient Economy in Brazil.



The financial sector will need to support this investment. *'Mainstreaming Sustainability'*¹¹ makes similar recommendations with respect to the financial sector:^{ix}

- **Foster sustainable infrastructure development** by building a pipeline of sustainable infrastructure projects and encouraging private investment to support this (potentially with state support as well) using ESG-linked finance
- **Foster sustainable agriculture investments** by (among other things) raising investor awareness, encouraging the provision of green¹² and sustainability-linked finance, and enforcing the Forest Code.

The WRI Brasil analysis shows that sustainable and low-carbon practices can lead to significant GDP growth, with a total accumulated gain of BRL 2.8 trillion (USD 553 billion) and a net increase of 2 million jobs by 2030 compared to Business as Usual (BAU).

In addition these measures could lead to a reduction in GhG emissions exceeding Brazil's current commitment for 2025 under the Paris Agreement¹³ - see Figure 2.

In line with our framework, these recommendations would create jobs, strengthen Brazil's economy, and enhance its sovereign health, improving its sovereign credit risk profile (and reducing its cost of capital).

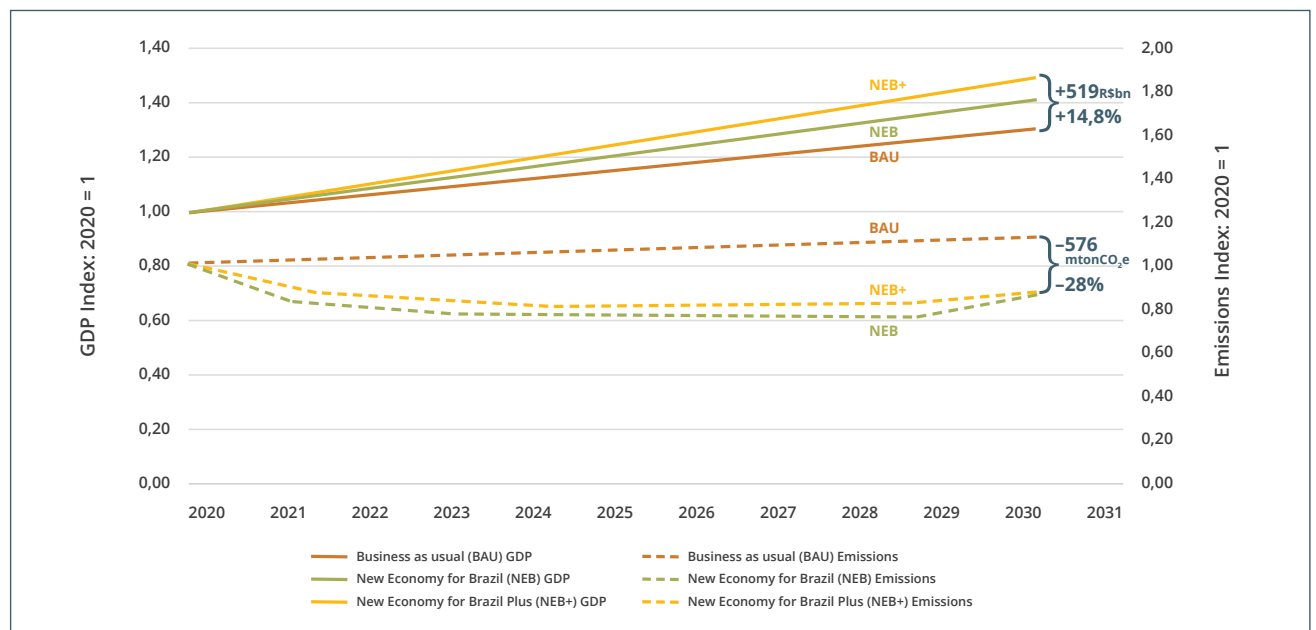


Figure 2: GDP Growth and CO₂e Reduction under NEB Scenarios^x Romeiro, V. et al. 2020. "A New Economy for a New Era: Elements for Building a More Efficient and Resilient Economy in Brazil. Working Paper. São Paulo, Brasil: WRI Brasil.

1. New Economy for Brazil (NEB) - encompassing a series of low carbon measures including increased use of hybrid and electric vehicles, increased use of charcoal in the iron and steel industry and reducing food loss while maintaining the same level of agricultural production. These measures result in a decrease in cropland area and an increase in natural vegetation, through restoring degraded lands and they also reduce the pace of deforestation.

2. NEB+, similar to NEB, but half of the land that would return to native vegetation in the NEB scenario is instead used for high productivity agriculture, increasing agricultural production over BAU. This scenario also leads to reduced pressure for deforestation compared with BAU.

¹¹ Published in 2021 by the LAB and the GIZ Brazilian Sustainable Finance project (Fibras)

¹² i.e. funding which restricts the use-of-proceeds to specific sustainable projects.

¹³ The WRI sets out two 'High Road' scenarios that could play out, depending on the extent to which Brazil implements the WRI's recommendations.



4

A Deforestation-Linked Sovereign Bond

Given the nature of the proposals contained in this report, the fourth step on Planet Tracker's recommended roadmap to sovereign health for Brazil is to issue a Deforestation-Linked Sovereign Bond (i.e. a sovereign bond with coupons linked to eliminating illegal deforestation).

We recommend a Sustainability Performance Target based on its original Nationally Determined Contribution (NDC) Paris target of zero illegal deforestation in the Brazilian Amazonia by 2030.

We believe a DLSB will allow Brazil to take advantage of the growing market demand for sustainable investments while also benefitting from their efforts to reduce deforestation (and indirectly aligning the interests of their citizens and businesses with these efforts).

Investors will have an attractive investment with sustainable characteristics and cash flows that offer some diversification benefits compared to more traditional government bonds.

More broadly, the process of setting up the required framework to support the issuance of a DLSB will enable Brazil to build out an ESG-labelled sovereign bond benchmark curve, thereby facilitating further acceleration in growth in their local ESG-labelled non-government debt markets, encouraging significant investments into their economies.

Further details of the DLSB are detailed in our report: **A Deforestation-Linked Sovereign Bond**.

Conclusion

We believe that Brazil can enhance its sovereign health by following the 4-step roadmap we recommend:

- 1** Strengthen core climate and nature policies with a clear pathway to net zero by 2050
- 2** Reform public spending to end perverse subsidies and incentivise sustainable agribusiness practices
- 3** Invest in a green recovery from the COVID 19 pandemic (e.g., natural-capital enhancing infrastructure; green technologies and productivity improvements; sustainable and more efficient agriculture)
- 4** Issue a Sovereign Bond linked to eliminating illegal deforestation to help fund the investment required.

Taking these steps will begin to restore Brazil's natural capital resources, leading to financial, environmental, and social benefits for the country, and positive investment returns for holders of its sovereign bonds.



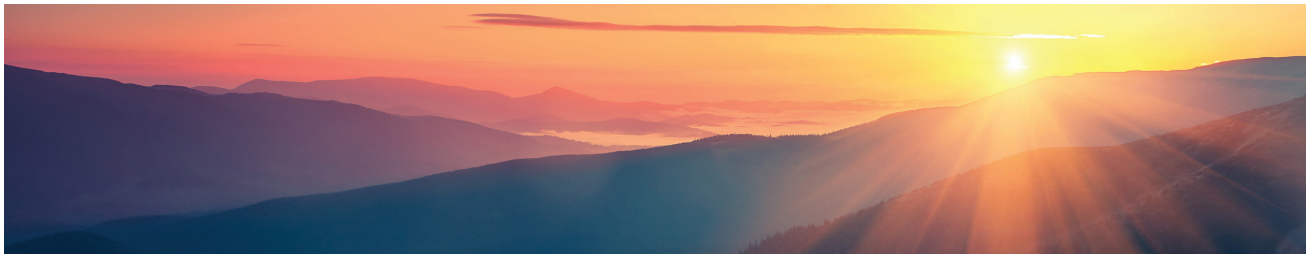
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ABOUT PLANET TRACKER

Planet Tracker is a non-profit financial think tank aligning capital markets with planetary boundaries. It was created primarily for the investor community to analyse the risk of market failure related to environmental limits which, other than climate change, are often not aligned with investor capital. Planet Tracker generates breakthrough analytics to redefine how financial and environmental data interact with the aim of changing the practices of financial decision makers to help avoid both environmental and financial failure.

ABOUT THE GRANTHAM RESEARCH INSTITUTE

The Grantham Research Institute on Climate Change and the Environment was established in 2008 at the London School of Economics and Political Science. The Institute brings together international expertise on economics, as well as finance, geography, the environment, international development and political economy to establish a world-leading centre for policy-relevant research, teaching and training in climate change and the environment. It is funded by the Grantham Foundation for the Protection of the Environment, which also funds the Grantham Institute on Climate Change and the Environment at Imperial College London. www.lse.ac.uk/grantham

PLANET TRACKER SOVEREIGN BONDS PROGRAMME

The Planet Tracker Sovereign Bonds programme provides insights and thought leadership for sovereign bond investors and others who want to explore the relationship between sovereign bonds and sovereign health – the intersection of natural capital and sovereign bond risk. We evaluate sovereign health through the combined assessment of the state of a country's natural capital (including environmental risks and potential rewards), its macroeconomic situation, and the interaction between the two (including the human capital dimension). This is particularly important for countries that are heavily dependent upon nature for their economic and social wellbeing (often indicated by a high level of soft commodity exports). Our current focus is on key Latin American countries, including Brazil and Argentina but our methodology is universally applicable. Our research focuses on how changes in environmental health, such as soil degradation, deforestation and variability in extreme weather impact the underlying public treasury balances of these countries and their subsequent ability to service sovereign bond liabilities. We also explore potential funding solutions designed to enhance a country's natural capital and increase its resilience to climate and nature-based risks.

The Planet Tracker Sovereign Bonds Programme is part of our Food and Land Use Tracker Programme.

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