Republic of Brazil

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Introduction

The Federative Republic of Brazil (the "Republic of Brazil" or the "Issuer") issued two sustainability bonds, Global 2031 Bond and Global 2032 Bond (collectively the "Sovereign Sustainable Bonds") and raised a total of BRL 20,443.73 million[1] to finance and refinance projects aimed at supporting Brazil's transition to a low-carbon economy, enhancing environmental protection and promoting socioeconomic development. In October 2024, the Republic of Brazil engaged Sustainalytics to review the projects financed with proceeds from the Sovereign Sustainable Bonds (the "Nominated Expenditures") and provide an assessment as to whether they meet the use of proceeds criteria and whether the Republic of Brazil complied with the reporting commitments outlined in the Brazil Sovereign Sustainable Bond Framework (the "Framework").[2] Sustainalytics provided a Second-Party Opinion on the Framework in August 2023.[3]

Evaluation Criteria

Sustainalytics evaluated the Nominated Expenditures and the Republic of Brazil's reporting based on whether they:

1. Meet the use of proceeds and eligibility criteria defined in the Framework; and
2. Reported on at least one key performance indicator (KPI) for each use of proceeds category defined in the Framework.

Table 1: Use of Proceeds Categories, Eligibility Criteria and Associated KPIs

Use of Proceeds Category	Eligibility Criteria	Key Performance Indicators
Pollution Prevention and Control - Control of GHG emissions	Expenses related to: I. Monitoring, Reporting and Verification, as well as disclosure and estimation of Greenhouse Gas (GHG) emissions and their reduction;[4] II. Initiatives to reduce GHG emissions supported by the National Fund on Climate Change,[5] as long as they are aligned with the exclusion criteria defined in the Framework.	I. Number of climate information tools made available II. Protected area with integrated fire management implemented (km^2) III. Percentage of national GHG emissions covered by mitigation plans
Renewable Energy	Expenditures related to: I. Development, construction, installation, expansion, operation,	I. Clean Energy Supply (%)

[1] The Republic of Brazil raised BRL 9,616.65 million in November 2023 from Global 2031 and BRL 10,827.08 million in June 2024 from Global 2032.
[2] Republic of Brazil, "Brazil Sovereign Sustainable Bond Framework", (2023), at: https://sisweb.tesouro.gov.br/apex/f?p=2501:9::::9:P9_ID_PUBLICACAO_ANEXO:21043
[3] Sustainalytics, "Second-Party Opinion, Brazil Sovereign Sustainable Bond Framework", (2023), at: https://mstar-sustops-cdn-mainwebsite-s3.s3.amazonaws.com/docs/default-source/spos/federative-republic-of-brazil-sustainable-bond-second-party-opinion-2023.pdf
[4] Expenses related to Brazil's platform "National Registration System for GHG Emissions – SIRENE" (Sistema de Registro Nacional de Emissões).
[5] Eligible activities under Brazil's National Fund on Climate Change are foreseen by Law No. 12,114/2009, Article 4º. These activities comprise, for instance: education and capacity building on climate related topics; studies on climate science, impacts and vulnerability; greenhouse gas (GHG) emission reduction projects; projects to reduce carbon emissions from deforestation and forest degradation, prioritizing natural areas threatened with destruction and relevant to biodiversity conservation strategies and development of mitigation technologies.

	maintenance, refurbishment, and land related to electricity production and energy storage for the following sources of energy. To be eligible, activities' emissions level must be <100 gCO_2e/kWh, unless otherwise stated; II. Solar energy (photovoltaic); III. Wind power; IV. Solar thermal plants;[6] V. Hydroelectric power from run-of-the-river plants without artificial reservoir or low-storage capacity or plants with a carbon footprint below 50 gCO_2e/kWh or power density above 10 W/m² for projects starting operations in 2020 onwards or plants with a carbon footprint below 100 gCO_2e/kWh or power density above 5 W/m² for projects in operation before 2020;[7] VI. Power from biomass,[8] and municipal solid waste or industrial waste;[9] VII. Production of biofuels[10] with Efficient Biofuel Production Certificate, in line with ANP Resolution No. 758/2018[11] issued by the National Agency of Oil, Natural Gas and Biofuels; VIII. Production of biomethane; IX. Development, construction, installation and expansion of the production of waste-derived fuel.[12] X. Renewable energy storage technologies (including efficient batteries); XI. Low-carbon hydrogen technologies, including production and storage or	

[6] Concentrated solar power (CSP) plants must generate at least 85% of electricity from solar sources.
[7] Mitigation criteria established by the Climate Bonds Initiative (CBI) in version 1.0 of the Hydropower Criteria document available on the Climate Bonds, accessed on: June 14, 2023. All new hydropower projects will be subject to an environmental and social impact assessment to ensure that no significant risks, negative impact or significant controversies related to the projects are identified.
[8] Biomass Eligibility: (a) life cycle GHG emissions intensity is below 100 gCO_2e/kWh; OR (b) there will be 80% life cycle emissions reduction compared to fossil fuel baseline of 183 gCO_2e/MJ for electricity production.
[9] For waste-to-energy projects that utilize municipal solid waste for energy recovery, segregation of recyclable wastes, including plastics, will be done before energy conversion. Projects/activities with waste heat from fossil fuel production are not eligible.
[10] Under RenovaBio, biofuel production routes are planned from sugarcane, corn, soy, palm and agrosilvopastoral residues. The inclusion of other feedstock and technological route for biofuel production can be requested from the regulator through certification, based on a "well-to- -wheel" life cycle analysis of its production.
[11] ANP Resolution No. 758/2018 provides for specific eligibility criteria for receiving the Efficient Biofuel Production Certificate. These criteria include the attribution of an Energy-Environmental Efficiency Score, which covers the intensity of fuel emissions (gCO_2e/MJ), and compliance with parameters such as the non-removal of native vegetation and the existence of a Rural Environmental Registry (CAR). In addition, to be eligible, the biofuel production must follow the CBI thresholds to GHG for biofuels and the DNSH criteria for certifying the production of non-deforested areas.
[12] To be eligible, must follow energy-from-waste criteria established by CBI and waste heat from fossil fuel will be excluded.

	application of hydrogen in different technologies;[13] XII. Development and industrial capacity to produce equipment, component, technologies and materials needed for the energy transition, more directly to wind power, solar energy, storage, electric vehicles, vehicles powered by biofuel, and low carbon hydrogen.	
Clean Transport	Expenditures related to: I. Purchase, design, maintenance, extension, repair, reconditioning, upgrade, operation and/or deployment of zero or low carbon[14] transportation; II. Public transportation programmes and projects with zero or low CO_2 emissions, related to: III. Metro lines: new lines, expansion; i. Light rail transit;[15] ii. Freight rail transit;[16] iii. Electric buses; iv. Tram, trolleybus, bus and rail; IV. Infrastructure related to low and zero-emissions public transport such as electric charging stations, signaling and control systems , intermodal stations, hydrogen fueling stations or electric highways as well as sidewalks, footbridges and underground walkways and pedestrian pathways;[17] V. Construction and modernization of low-impact rail for cargo transport;[18] VI. Electrification of public fleets.[19]	I. Number of Decarbonization Credits (CBIOs) issued in the country in the year (millions) II. Fleet renewal percentage

[13] According to the Brazilian National Hydrogen Programme (PNH2), low-carbon hydrogen means any hydrogen produced with low and/or zero carbon emissions which can include a variety of processes (for carbon reduction and/or removal), technologies (including carbon negative ones) and renewable energy sources. Some examples of renewable energy sources include 100% sustainably sourced biomass and biofuels; fossil fuels with carbon capture, storage or use, including in the form of solid carbon; geological or natural hydrogen; other low-emission technologies and combinations of processes (hybrid processes). Production of hydrogen from fossil fuels is not an eligible expenditure under the Framework.
[14] To be eligible, hybrid passenger vehicles must meet the threshold of 50 gCO_2/km and hybrid freight vehicles (such as heavy trucks) must meet threshold of 25 gCO_2/km. In addition, the tailpipe emissions intensity of the eligible vehicles must not exceed 50 gCO_2/km until 2025, and from 2026 onwards, eligible vehicles must have emissions intensity of 0 gCO_2/km. To be eligible, hybrid freight vehicles (such as locomotives) must meet the threshold of 25 gCO_2/tkm. Transportation of fossil fuels (including blended fuels) is not an eligible activity.
[15] Vehicles and trains (including hybrids) with less than 50 gCO_2 per passenger-km or 25 gCO_2 per tonne-km (freight).
[16] To be eligible, hybrid freight locomotives must meet threshold of 25 gCO_2/tkm. Freight rail where more than 25% of the rolling stock is dedicated to the transport of fossil fuels is not eligible.
[17] Expenditures related to Parking facilities are not eligible.
[18] Low impact rail means that less than 25% of the freight in t-km transported by the line is comprised of fossil fuels.
[19] Electrified vehicles (BEVs and HEVs) in accordance with CBI's Land Transport Criteria: https://www.climatebonds.net/files/files/standards/Land%20transport/Sector%20Criteria%20-%20Land%20Transport%20%28April%202023%29.pdf

Sustainable Management of Living and Natural Resources and Land Use	Expenditures related to: I. Sustainable agriculture practices and climate smart farming that prevent or minimize the degradation of soil, ecosystems or habitat loss, or that promote soil carbon sequestration; II. Recovery of degraded pastures;[20] III. Forestation, reforestation, and forest restoration of degraded areas;[21] IV. Implementation and improvement of crop-livestock-forestry integration systems in all their possible combinations, and of agroforestry systems;[22] V. Implementation and improvement of irrigated and soil management system;[23] VI. Animal waste management;[24] VII. Implementation and improvement of management and planting of commercial forests;[25] VIII. Adequacy and regularization of rural properties to the Forestry Code;[26]	I. Land Regularization Index for Indigenous Lands II. Number of indigenous lands served with protection, full possession and exclusive usufruct actions III. Number of families in the target audience served with agroecological, socio-biodiversity and agro-industry initiatives, with environmental conservation and recovery of degraded areas IV. Total area benefited by watershed revitalization actions

[20] The recovery of degraded pastures include activities aiming to: (i) expand production and enable access to fertilizers; (ii) educate and train financial agents, market professionals and/or rural producers in good pasture management practices; (iii) support the adoption of appropriate forage varieties, and the enrichment and diversification of cultivated or native pastures; (iv) enhancement of public and private technical assistance and rural extension; (v) offer of economic incentives to individuals to recover degraded pastures; (vi) identify and map pasture areas with some degree of degradation; (vii) offer up-to-date technical subsidies to financial agents for the analysis of credit operations that recover or renew degraded pastures; (viii) prevent the degradation of new pasture areas; (ix) actions for the development and use of technological innovations; and/or (x) enable technology transfer and technological innovation mechanisms for small rural producers. For the avoidance of doubt, production of fertilizers is eligible based on the following criteria: (i) Manufacture of fertilizers produced from ammonia made from green hydrogen; and (ii) CO_2 can be sourced from heavy industries but not fossil fuel operations. Additionally, expenditures associated with technological innovations will not be carbon intensive.

[21] To be considered eligible under this category, the projects will need to be certified, for example, like the Forest Stewardship Council (FSC) or the Programme for the Endorsement of Forest Coalition (PEFC). An activity foreseen in the ABC+ Plan is to promote the implementation of ILPF (crop-livestock-forestry integration systems) and SAF (agroforestry systems), in the context of family farming. Under this category, FRoB will also finance projects related to the training and capacity building activities, for sustainable forest management.

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[23] To be eligible, the irrigation systems must not be dependent on fossil fuels and must be drip irrigation or whose investment is related to either water or energy efficient.

[24] To be eligible, the waste management must not include confined animal or any industrial livestock.

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[26] The Forestry Code was established by Law nº 12,651/2012 and foresees that rural properties must comply with certain conservation thresholds according to their biome. All properties must maintain a legal reserve corresponding from 20% to 80% (depending on their biome) of its total area, in which native vegetation must be fully conserved and economically exploited only under approved sustainable management practices. All properties must also maintain Permanent Protected Areas (APP, in its Portuguese acronym), established according to its position regarding watercourses, springs, slopes, mangroves and other key areas for conserving water resources, landscapes, geological stability, biodiversity, soil protection, fauna and flora genetic flow and communities' well-being. In this context, adequacy and regularization refers to all related activities necessary to provide such practices and comply with these thresholds through each property Rural Environmental Registry – (CAR, in its Portuguese acronym).

	IX. Implementation or expansion of units for biofertilizers production;[27] X. Implementation or expansion of units for organ mineral fertilizers using biological waste as an input; XI. Projects that use of biological nitrogen fixation of microorganisms that boost the growth of plants and multifunctionals;[28] XII. Projects for the production of organic food; XIII. Implementation of Agricultural Climate Risk Zoning[29] ; XIV. Conservation of natural resources, maintenance of permanent soil cover and improvement of its chemical, physical and biological quality[30] ; XV. Sustainable use of natural resources in production chains based on biodiversity; XVI. Expenditures related to social-biodiversity: i. Conservation of biodiversity in production chains that use natural resources; ii. Integrated and sustainable productive systems in productive chains based on biodiversity. XVII. Valuing rural communities, their products, services and processes related to social-biodiversity, related to: i. Projects to identity and visibility of products and rural communities; ii. Registration, management and dissemination of knowledge, techniques, and traditional and scientific knowledge; XVIII. Projects that enable participation of family farming in renewable energy;	

[27] The original ABC Plan (implemented from 2010 - 2020), considered the implementation or expansion of units for biofertilizers productions through the stimulation of Biological Nitrogen Fixation (BNF). The updated version of the plan, called ABC+ (implemented from 2021 to 2030) maintains the BNF but also includes other microorganisms that promote plant growth (MPCP) and multifunctional organisms that can contribute to improving the fixation and/or availability of nutrients and increasing biological control. Additionally, the plan (i) promotes the use of inoculants and co-inoculants with nitrogen-fixing bacteria and other MPCP by producers and (ii) offers incentivizes to develop new inoculants, including the identification and validation of new microorganisms, microbial molecules, fermentation processes, support vehicles and delivery technologies.
[28] To be eligible, Projects will have a sustainable management plan certified, for example, under FSC or PEFC.
[29] To be eligible, the expenditure must not include devices for short-term meteorological purposes.
[30] Soil remediation activities will not be related to the contamination or negative environmental externalities from the Government's own activities.

	XIX. Projects for areas belonging to indigenous peoples and traditional peoples and communities [31], including demarcation and restoration of areas; XX. Revitalization of Hydrographic Basins - Water production and retention in their natural environments with a focus on Sustainable Development.	
Terrestrial and Aquatic Biodiversity	Expenditures related to: I. Protection, conservation, recovery, restoration and sustainable management of biodiversity, terrestrial and marine ecosystems; II. Creation, operation and maintenance of land and marine Conservation Units; III. Implementation of the Rural Environmental Registry ("CAR")[32] IV. Prevention and fight against forest fires: i. Educational campaigns, training of local communities and firefighters; ii. Employee improvement and updating courses; iii. Selection and hiring of local firefighters; iv. Implementation of short-and long-term fire prevention actions; v. Maintenance and improvements of monitoring and early detection/warning systems; vi. Investments in the firefighting equipment (including specific individual protective equipment, vehicles and others); vii. Expenses with overflight to assess	I. Number of families served by the Bolsa Verde programme and other policies to promote sustainable productive activities II. Percentage of terrestrial and marine territory protected III. Number of endangered species of fauna/flora with action plans or other instruments for conservation IV. Area of native vegetation cover in recovery (hec)

[31] Defined by Decree nº 6.040/2007 as "culturally differentiated groups that recognize themselves as such, that have their own forms of social organization, that occupy and use territories and natural resources as a condition for their cultural, social, religious, ancestral and economic reproduction, using knowledge, innovations and practices generated and transmitted by tradition".
[32] Rural Environmental Registry ("CAR") – Created by Law No. 12. 651/2012, within the scope of the National Environmental Information System – SINIMA, and regulated by MMA Normative Instruction No. 2, of May 5, 2014, the CAR is a nationwide electronic public registry, mandatory for all rural properties, with the purpose of integrating the environmental information of rural properties and possessions regarding Permanent Preservation Areas – APP, restricted use, Legal Reserve, remaining forests and other forms of native vegetation, and consolidated areas, composing a database for control, monitoring, environmental and economic planning and combating deforestation. https://www.car.gov.br/#/sobre

	wildfires and define firefighting strategies. V. Improvement of the inspection process for compliance with environmental legislation, including remote monitoring technologies; VI. Combating deforestation, related to: i. Promotion of sustainable productive activities ii. Environmental monitoring and control; iii. Land and territorial organization; iv. Normative and economic instruments; VII. Monitoring and recording of the fauna of Brazilian biomes;[33] VIII. Development and implementation of Marine Spatial Planning; IX. Research and development of conservation technologies and strategies; X. Implementation of the "Bolsa Verde"[34]	
Adaptation to Climate Change	Expenditures related[35] to: I. Surveys, studies, and mechanisms for prevention and alerts of extreme weather events, focusing on the construction of the adaptive capacity of vulnerable communities; II. Strengthening of the National Civil Protection and Defense System – SINPDEC (in its Portuguese acronym); III. Reduced vulnerability and increased resilience of agricultural production systems;	I. Annual evolution of the provision of R&D infrastructure II. Proportion of municipalities in the "High" and "Advanced Intermediate" bands of the Municipal Capacity Index in Risk and Disaster Management (%) III. Adjusted average time between resource request and transfer of resources for humanitarian assistance

[33] "Biome: an area of uniform environment, belonging to a zonobiome, which is defined according to the climatic zone in which it is found. This concept also considers other ecologically important environmental factors, such as altitude and soil, thus distinguishing orobiomes and pedobiomes. Another factor to be considered would be natural fire (pyrobiomes)" Coutinho, L. M. (2006). O conceito de bioma. Acta Bot. Bras. 20(1): 13-23 https://www.scielo.br/j/abb/a/RhxPXykYPBPbCQCxz8hGtSn/?lang=pt

[34] The Bolsa Verde Programme (Programme of Support to Environmental Conservation – Decree n. 7.572/2011) combines cash transfer with the provision of technical assistance, productive structure and access to basic public services. The beneficiaries are indigenous peoples and other traditional peoples and communities living in conservation units, environmental rural settlements and other traditional territories, whose participation is conditioned to the conservation and sustainable use of forests and biodiversity.

[35] All adaptation measures and activities are designed and implemented according to Brazil's National Adaptation Plan and available data on climate vulnerability through platforms such as "AdaptaBrasil" (https://adaptabrasil.mcti.gov.br/), "ClimaAdapt" (https://climaadapt.com.br/) and "Projeções Climáticas no Brasil" (http://pclima.inpe.br/analise/).

	IV. Development and improvement of methods for assessing the efficiency of resilience, adaptive capacity and productivity of sustainable systems, practices, products and production processes; V. Integration of information and systems for analysis of resilience, adaptive capacity and risk monitoring of sustainable systems, practices, products and production processes; VI. Reduction of erosion (including reduced loss of soil, water and nutrients) and increase in the adaptive capacity to droughts; VII. Reduction of the negative impacts of extreme rainfall events on soil and water conservation; VIII. Reduction of productivity losses and vulnerability of grains to pests due to reduced water availability; IX. Reduction of the effects of water deficit, increase in thermal comfort and animal wellbeing, improved productivity and use of natural resources, especially the soil and the water, and minimization of pasture losses in regions subject to sudden temperature inversions;[36] X. Reduction of the vulnerability of production systems in periods of drought, and the risk of crop loss due to extreme weather events; XI. Adaptation, reducing vulnerability and increasing resilience of urban infrastructure.	
Socioeconomic Development and Empowerment - Combating poverty	Expenditures related to Combating Poverty: I. Financial assistance through direct cash transfers for families living in situation of poverty or extreme poverty linked to the Single Registry of the Federal Government,[37] as defined in the section of target population;	I. Percentage of families with an income of up to 1/2 minimum wage enrolled in the Unified Registry, covered by Social Work Reference Center (CRAS) units II. Average Concession Time (in days) for the BPC (PCD and Elderly) III. Percentage of municipalities with completion of the registration and monitoring

[36] To be eligible, expenditures related to reducing the effects of water deficit must not support industrial-scale livestock production.
[37] The eligible population will be characterized based on monthly income per person.

	II. Financial assistance for the elderly (65 years old or older) and people with disabilities; III. Basic Social Protection Actions of the Unified Social Work System ("SUAS").[38]	systems of the requirements of Article 30 of the LOAS (Council, Fund and Social Assistance Plan) IV. Percentage of attendance of families with a PBF profile (ratio between the number of families benefiting from the PBF and the estimate of families with a PBF permanence profile, calculated based on the PNADC)
Food Security and Sustainable Food Systems	Expenditures related to:[39] I. Healthy and nutritious food service programmes including the purchase and distribution of food as well as food subsidies to target population: i. Population experiencing food or nutrition insecurity; ii. Students of public schools; iii. Traditional communities, including quilombolas, people living from extractivism and indigenous people. II. Finance activities of the National Food and Nutrition Security System (SISAN) to increase food security; III. Encouragement of agro-ecological food production in urban and semi-urban areas; IV. Regional and articulated measures to strengthen production chains, cooperativism and increase the potential for success of family farmers, [40]mainly located in semi-arid zones.	I. Percentage of family farmers registered in the Unified Registry (CAD Único) as suppliers to the Food Purchase Program (PAA).
Access to Basic Infrastructure	Expenditures related to: I. Preparation and implementation of the National Urban Development Policy;	I. Percentage of urban households supplied with water by distribution network or by well or spring.

[38] SUAS is foreseen by Law nº 8,742/1993, which frames "social assistance" as a right and as a non-contributory social security policy. In this sense, it is available to all, regardless of ability to pay.
[39] Expenditures under this category will only go to regions in Brazil with deficiencies in food production, distribution and food security.
[40] Family farmers are defined by the Law nº 11,326/2006. A family farmer and rural family entrepreneur is considered to be one who practices activities in the rural environment, simultaneously meeting the following requirements: (i) does not own, in any capacity, an area larger than 4 fiscal modules; (ii) predominantly uses labor from his own family in the economic activities of his establishment or enterprise; (iv) has a minimum percentage of family income originating from economic activities of his establishment or enterprise, as defined by the Executive Power and (v) has a minimum percentage of family income originating from economic activities of his establishment or enterprise, as defined by the Executive Power. A fiscal module is an unit of measurement established for each Brazilian municipality by the National Institute of Colonization and Agrarian Reform, which may vary between 5 and 110 hectares.

	II. Planning and implementation of public transport, including buses, subways and support infrastructure, focusing on the promotion of accessible mobility and connection between urban centers and peripheral areas, as well as between urban centers and rural areas;[41] III. Access to affordable electricity, including subsidy programs, and transmission and distribution projects within remote or underserved areas with either no or inadequate access to electricity;[42] IV. Concessions and public-private Partnerships with a focus on sustainable development; V. Incentive to intermodal transport in underserved or remote regions VI. Expansion of access and efficacy of water supply, sewage, urban cleaning and solid waste management services for families living in situation of poverty or extreme poverty, informal settlements or households not yet connected to the service network; VII. Projects/interventions that will guarantee the supply of water with sufficient and appropriate quality and quantity for human supply and multiple uses; VIII. Research and development of technologies that provide greater energy efficiency to water collection, treatment and supply processes; IX. Sustainable urban drainage and rainwater management systems in critical municipalities[43] subject to recurring events of floods and overflows; X. Containment of slopes in urban areas;	II. Percentage of rural households supplied with water by distribution network or by well or spring. III. Percentage of urban households served by a collection network or septic tank for excreta or sanitary sewage. IV. Percentage of rural households served by a collection network or septic tank for excreta or sanitary sewage. V. Number of municipalities with a low or critical Water Security Index (ISH) in the human dimension benefited from the expansion of water supply. VI. Total area benefited by watershed revitalization actions. VII. Indigenous health VIII. Number of rural families in the Unified Registry without access to water

[41] In order to be considered as Eligible Projects, they must be related to: (i) Electric vehicles and trains; and/ or (ii) Vehicles and trains (including hybrids) with less than 50 gCO_2 per passenger-km or 25 gCO_2 per tonne-km (freight); and/or (iii) green hydrogen-powered vehicles, and/or (iv) Development or improvement of railway transport to spur a shift from road to rail.
[42] In order to be considered an Eligible Project, >80% of the electricity in the relevant grid should have to be generated from renewable sources.
[43] Critical municipalities are defined according to the National Register of Municipalities with Areas Susceptible to the occurrence of high impact landslides, flash floods or related geological or hydrological processes. The National Register is foreseen by Decree nº 10,692/2021, which establishes the criteria and processes for such definition. Additionally, critical municipalities might also be indicated by the Brazilian Geological Service based on its technical analysis.

	XI. Provision of temporary housing for people displaced by extreme weather events; XII. Support for the implementation, expansion or improvement of water supply systems in municipalities in the semi-arid region; XIII. Promotion of access to water for human consumption and for food production through the implementation of simple and low-cost social technologies (such as cisterns) for low-income rural families affected by drought or regular lack of water, with priority given to traditional peoples and communities; XIV. Investments in design and implementation of efficient and clean water supply to municipalities in the semi-arid region and target population.	

Issuer's Responsibility

The Republic of Brazil is responsible for providing accurate information and documentation relating to the details of the projects, including descriptions, amounts allocated and impact.

Independence and Quality Control

Sustainalytics, a leading provider of ESG research and ratings, conducted the verification of the use of proceeds from the Republic of Brazil's Sovereign Sustainable Bonds. The work undertaken as part of this engagement included collection of documentation from the Republic of Brazil and review of said documentation to assess conformance with the Framework.

Sustainalytics relied on the information and the facts presented by the Republic of Brazil. Sustainalytics is not responsible nor shall it be held liable for any inaccuracies in the opinions, findings or conclusions herein due to incorrect or incomplete data provided by the Republic of Brazil.

Sustainalytics made all efforts to ensure the highest quality and rigor during its assessment process and enlisted its Sustainability Bonds Review Committee to provide oversight of the review.

Conclusion

Based on the limited assurance procedures conducted,[44] nothing has come to Sustainalytics' attention that causes us to believe that, in all material respects, the Nominated Expenditures do not conform with the use of proceeds criteria and reporting commitments in the Framework. The Republic of Brazil disclosed to Sustainalytics that 60.12% of the proceeds from the Global 2031 Bond and 40% of the proceeds from the Global 2032 Bond were allocated as of November 2023 and June 2024, respectively. The Republic of Brazil intends to allocate the remaining 39.88% of the proceeds from the Global 2031 Bond and 60% of the proceeds from the Global 2032 Bond by the end of November 2025 and June 2026, respectively.

[44] Sustainalytics' limited assurance process includes reviewing documentation relating to details of projects, as provided by the issuing entity, which is responsible for providing accurate information. These may include descriptions of projects, estimated and realized costs, and reported impact. Sustainalytics has not conducted on-site visits to projects.

Detailed Findings

Table 2: Detailed Findings

Framework Requirements	Procedure Performed	Factual Findings	Error or Exceptions Identified
Use of Proceeds Criteria	Verification of projects to determine alignment with the use of proceeds criteria outlined in the Framework.	The Nominated Expenditures comply with the use of proceeds criteria.	None
Reporting Criteria	Verification of projects or assets to determine if impact was reported in line with the KPIs outlined in the Framework.	The Republic of Brazil reported on at least one KPI per use of proceeds category.	None

Appendices

Appendix 1: Allocation Reporting[45]

Table 3: Allocation for the 2031 Global Bond

Use of Proceeds Category[46]	Project Description	Amount Allocated (BRL million)
Pollution Prevention and Control - Control of GHG Emissions	Monitoring of land cover and wildfire and forest fire risk	6.14
	Support for studies and research and development projects related to climate change	1.63
Renewable Energy	Financial support to Alsol Energias Renováveis S.A. for 49 photovoltaic mini-generation plants in Mato Grosso, Mato Grosso do Sul, Minas Gerais, and Rio de Janeiro, with a total capacity of 144 MWAC	68.57
	Construction of a biomass waste processing plant in Triunfo to produce biogas, biomethane, CO_2, and fertilizers, featuring a purification system with a capacity of 36,000 nm³/day for biomethane and 40 tons/day for CO_2	36.41
	Construction of a landfill biogas purification plant in Minas do Leão, Rio Grande do Sul, with a capacity of 66,000 m³/day for biomethane production	28.50
	Landfill biogas purification plant in Caieiras, São Paulo, with a capacity of 68,000 m³/day for biomethane production	39.39
	Other Efficient Machinery and Equipment for the Climate Fund	94.02
	Implementation of 17 photovoltaic plants across Loanda-PR, Cidade Gaúcha-PR, Alto Paraná-PR, Paranaíba-MS, and Rolim de Moura-RO, organized into 5 SPEs, with a total capacity of approximately 19 MWAC	45.00
	Implementation of 26 photovoltaic solar plants in Goiás, Rio de Janeiro, and São Paulo for distributed mini-generation, totaling approximately 26 MWAC	62.50
	Implementation of 9 photovoltaic solar plants in Paraná, São Paulo, and Mato Grosso for distributed mini-generation, with a total capacity of approximately 32.3 MWAC	11.00
	Implementation of two photovoltaic solar plants for distributed generation in Redentora and Maçambara, Rio Grande do Sul, with a total capacity of approximately 5 MWAC	5.70
	Implementation of a biogas production line from vinasse to boost energy generation at the Goianésia/GO unit	0.57
	Implementation of eleven photovoltaic plants for distributed generation, totaling approximately 19 MW capacity	31.50
	Implementation of four photovoltaic solar plants in the distributed generation (DG) modality, located in the municipalities of Pongai, Cafelândia, and Mata Romã, with a total installed capacity of approximately 7.6 MW.	12.50
	Implementation of six photovoltaic plants in the distributed generation modality, in the state of Minas Gerais, with an installed capacity of 18 MW.	12.50
	Implementation of three photovoltaic solar plants in the distributed generation modality, located in the municipality of Limeira, with a total installed capacity of approximately 3 MWAC.	5.40

[45] The Republic of Brazil has evaluated projects within the budgetary programme associated with the PPA (multi-year plan), which is Brazil's Federal Government main medium-term instrument defining government programmes for a four-year cycle.
[46] The Republic of Brazil confirmed that all projects listed under the use of proceeds categories meet the eligibility criteria in the Framework.

	Implementation of a plant in Elias Fausto, with two biodigesters that will be fed with biodegradable waste for biogas production and electricity generation.	22.97
	Installation of 2.76 thousand photovoltaic panels, with an installed capacity of 1.1 MWp2, to meet the energy consumption used in the industrial unit located in Pedra Preta/MT, with financing through the Climate Fund programme.	0.92
	Installation of 4 (four) photovoltaic plants on the roof of commercial stores located in João Pessoa-PB, Caruaru-PE, Aracaju-SE and Natal-RN, with a total installed capacity of at least 5MWp.	8.22
	Supplementation of resources for the implementation of a biogas production line from vinasse with an increase in energy generation at the Goianésia/GO unit with associated working capital.	5.90
Clean Transport	Support for the business plan of Tembici Participações S.A. from 2021 to 2023.	11.00
	Support for the business plan of Tembici Participações S.A. from 2021 to 2023.	32.00
	Other Efficient Machinery and Equipment under the Climate Fund	3.13
Sustainable Management of Living and Natural Resources and Land Use	Land regularization, protection and management of indigenous territories	167.91
	Risk reduction in agricultural activity	0.84
	Productive structuring, promotion and strengthening of family farming and agroecology	80.64
	Support for economic organization and promotion of citizenship and welfare of rural women	0.18
	Sustainable development of the bioeconomy	4.34
	Multiethnic-cultural and social rights of indigenous peoples	68.64
	Hydro-environmental recovery in the hydrographic basins in the area of operation of Development Company of the São Francisco and Parnaíba Valleys (CODEVASF)	22.60
	Policy management for indigenous peoples	31.57
	Supporting the development of sustainable agricultural production	0.80
Terrestrial and Aquatic Biodiversity	Promotion of research and development in science and technology of the sea, oceans and climate	1.06
	Monitoring and risk of burnings and forest fires	1.00
	Support for environmental conservation and the eradication of extreme poverty - Bolsa Verde	86.64
	Support for the creation, management and implementation of federal conservation units	308.21
	Wildfire prevention and control in federal priority areas	100.62
	Environmental control and monitoring	264.88
	Environmental inspection and prevention and fighting of forest fires	196.83
	Promotion of scientific and technological research and development	2.16
	Science, technology and innovation at the National Institute of the Atlantic Forest – National Institute of Atlantic Forest (INMA)	0.28
Adaptation to Climate Change[47]	Expansion and modernization of infrastructure for the study of biodiversity, technological innovation and sustainability of Amazonian ecosystems in the face of global changes	5.44

[47] The Republic of Brazil confirmed that the projects in this category were selected based on climate change vulnerability assessments.

	Natural disaster monitoring and warning – National Center for Monitoring and Alerts of Natural Disasters (CEMADEN)	30.72
	Science, technology and innovation at the national institute of the semi-arid region – National Institute of the Semi-Arid (INSA)	0.38
	Science, technology and innovation at the National Institute for Research in the Amazon – National Institute for Research in the Amazon (INPA)	1.90
	Support for studies and research and development projects related to climate change	2.88
	Support for emergency mitigation works for disaster reduction	8.75
Socioeconomic Development and Empowerment -Combating poverty	Continuous provision benefits (BPC) for the elderly and lifetime monthly income (RMV) by age	592.54
	Continuous cash benefits for people with disabilities and monthly lifetime income for disability	752.11
	Basic social protection actions	17.96
	Direct and conditional transfer of income to families benefiting from the Bolsa Família programme	1,522.39
Food security and Sustainable Food Systems	Distribution of food to traditional and specific population groups	152.94
	Acquisition and distribution of food from family farming	808.72
Net Proceeds Allocated		**5,781.41**
Total Unallocated Proceeds		**3,835.24**
Net Proceeds Raised		**9,616.65**

Table 4: Allocation for the 2032 Global Bond

Use of Proceeds Category	Project Description	Amount Allocated (BRL million)
Socioeconomic Development and Empowerment -Combating poverty	Continuous Provision Benefits for the elderly and Lifetime Monthly Income by age	616.88
	Continuous Cash Benefits for people with disabilities and monthly lifetime income for disability	782.99
	Basic social protection actions	18.70
	Direct and conditional transfer of income to families benefiting from the Bolsa Família program	2,479.1
Access to Basic Infrastructure	Support for sustainable urban drainage and rainwater management systems in municipalities critical to recurrent flooding, flash flooding and flooding events	26.14
	Support for the implementation, expansion or improvements in water supply systems in municipalities with a population of more than 50 thousand inhabitants or municipalities that are part of metropolitan regions or integrated development regions	32.19
	Support for the implementation, expansion or improvement of sanitary sewage systems in municipalities with a population of more than 50 thousand inhabitants or municipalities that are part of metropolitan regions or integrated development regions	98.02
	Support for the implementation, expansion, improvements or adaptation of water supply systems in areas where CODEVASF operates	0.28
	Construction of the border dam	27.48
	Implementation of infrastructures for water security	25.78
	Implementation of water supply supply systems	7.43
	Construction of an integrated water supply system	5.95
	Implementation of the Serido project	4.04
	Implementation of the Sertão Baiano channel	0.02
	Acquisition of equipment and/or implementation of water infrastructure works	11.84
	Implementation of the Pajeú pipeline in the states of Pernambuco and Paraíba	3.26
	Support for the management of basic sanitation systems in municipalities of up to 50 thousand inhabitants	2.89
	Basic sanitation in indigenous villages for the prevention of diseases and injuries	39.10
	Rehabilitation of dams and other water infrastructure	14.03
	Implementation of the Baixio de Irecê public irrigation project	1.72
	Implementation of the Xingo Channel	1.14
	Support for the execution of slope containment projects and works in urban areas	18.35
	Implementation of social technologies for access to water for human consumption and food production	113.41
Net Proceeds Allocated		4,330.83
Total Unallocated Proceeds		6,496.25
Net Proceeds Raised		10,827.08

Appendix 2: Reported Impact[48]

Table 5: Reported Impact for the Eligible Projects

Use of Proceeds	Impact Indicator	2024	2025	2026	2027
Control of GHG	Number of climate information tools made available	2,602	5,200	7,788	10,374
	Protected area with integrated fire management implemented (km^2)	200,000	200,000	200,000	200,000
	Percentage of national GHG emissions covered by mitigation plans	81.7	92.5	100	100
Renewable Energy	Clean energy supply (%)	47.70	47.70	47.80	47.80
Clean Transport	Number of Decarbonization Credits (CBIOs) issued in the country in the year (millions)	42.31	50,41	57.99	64.43
	Fleet renewal percentage	6.30	14.10	21.90	31.30
Sustainable Management of Living and Natural Resources and Land Use	Land Regularization Index for Indigenous Lands	68.46	69.58	70.72	71.42
	Number of indigenous lands served with protection, full possession and exclusive usufruct actions	101	109	116	123
	Number of families in the target audience served with agroecological, socio-biodiversity and agro-industry initiatives, with environmental conservation and recovery of degraded areas	2,000	4,000	6,000	8,000
	Total area benefited by watershed revitalization actions	45,821	173,568	426,315	666,915
Terrestrial and Aquatic Biodiversity	Number of families served by the Bolsa Verde programme and other policies to promote sustainable productive activities	50,000	70,000	100,000	120,000
	Percentage of terrestrial and marine territory protected	22	24	26	28
	Number of endangered species of fauna/flora with action plans or other instruments for conservation	1,860	1,870	1,880	1,890
	Area of native vegetation cover in recovery (ha)	187,500	375,000	750,000	1,500,000
Adaptation to Climate Change	Annual evolution of the provision of R&D infrastructure	4,500	5,400	6,480	7,776
	Proportion of municipalities in the "High" and "Advanced Intermediate" bands of the Municipal Capacity Index in Risk and Disaster Management (%)	41.35	42.00	43.00	44.00
	Adjusted average time between resource request and transfer of resources for humanitarian assistance	22.75	22.6	22.18	21.27
Socioeconomic Development and Empowerment - Combating poverty	Percentage of families with an income of up to 1/2 minimum wage enrolled in the Unified Registry, covered by CRAS units	69	71	72	73
	Average concession time (in days) for the BPC (PCD and Elderly)	133	101	70	70

[48] The Republic of Brazil uses targets as impact indicators for the years 2024 to 2027, as outlined in its PPA. In addition, the issuances took place November 2023 and June 2024, and the PPA is from the year 2024. The Republic of Brazil was not able to report on the impact for 2024. However, the Republic of Brazil has committed to reporting on the impact in the subsequent report.

	Percentage of municipalities with completion of the registration and monitoring systems of the requirements of Article 30 of the LOAS (Council, Fund and Social Assistance Plan)	50	75	85	95
	Percentage of attendance of families with a PBF profile (ratio between the number of families benefiting from the PBF and the estimate of families with a PBF permanence profile, calculated based on the PNADC)	100	100	100	100
Food Security and Sustainable Food Systems	Percentage of family farmers registered in the Unified Registry (CAD Único) as suppliers to the PAA	45	50	55	60
Access to Basic Infrastructure	Percentage of urban households supplied with water by distribution network or by well or spring	97.4	97.7	98	98.3
	Percentage of rural households supplied with water by distribution network or by well or spring	74.6	76	77.4	78.7
	Percentage of urban households served by a collection network or septic tank for excreta or sanitary sewage	85.1	85.9	86.8	87.7
	Percentage of rural households served by a collection network or septic tank for excreta or sanitary sewage	40.7	43.8	47	50.1
	Number of municipalities with a low or critical Water Security Index in the human dimension benefited from the expansion of water supply	100	135	205	405
	Number of Indigenous villages benefited from drinking water supply infrastructure works.	60	130	205	286
	Number of rural families in the unified registry without access to water	945,000	890,000	832,000	774,000

Table 6: Impact related to projects supported by the Climate Fund

Use of Proceeds	Impact Indicator	Expected Impact
Renewable Energy	Installed solar generation capacity	300 MW
	Solar generation physical guarantee	75 average MW
	Equivalent households served based on the physical guarantee	80,000 households
	Annual avoided greenhouse gas emissions from solar generation	562,000 tCO_2e
Clean Transport	Avoided greenhouse gas emissions – urban mobility	168,570 tCO_2e by Dec, 2026
	Cities served	18
	Electric bicycles made available	8,884
	Mechanical bicycles made available	19,114

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