# Brazil's Sovereign Sustainable Bond Framework

2023

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**Sovereign Sustainable Finance Committee**

**Brazilian National Treasury, Ministry of Finance**
(committee chair)



Photo: Brasília - Students from the public school system participate in environmental education activities at Escola da Natureza (Marcelo Camargo/Agência Brasil)

TESOURONACIONAL

MINISTÉRIO DA FAZENDA



Old Brazilian Pine (Multi-Secular Pine) – Nova Petropolis, Rio Grande do Sul

*This document was prepared on behalf of the Federative Republic of Brazil, by the Sovereign Sustainable Finance Committee, which comprises:*

*- Brazilian National Treasury, Ministry of Finance (committee chair)*

*- Ministry of Agriculture and Livestock*

*- Ministry of Science, Technology, and Innovation*

*- Ministry of Integration and Regional Development*

*- Ministry of Mines and Energy*

*- Ministry of Agrarian Development and Family Agriculture*

*- Ministry of Social Development, Assistance, Family and Fight against Hunger*

*- Ministry of Development, Industry, Trade and Services*

*- Office of Economic Policy, Ministry of Finance*

*- Ministry of Environment and Climate Change*

*- Federal Budget Secretariat, Ministry of Planning and Budget*

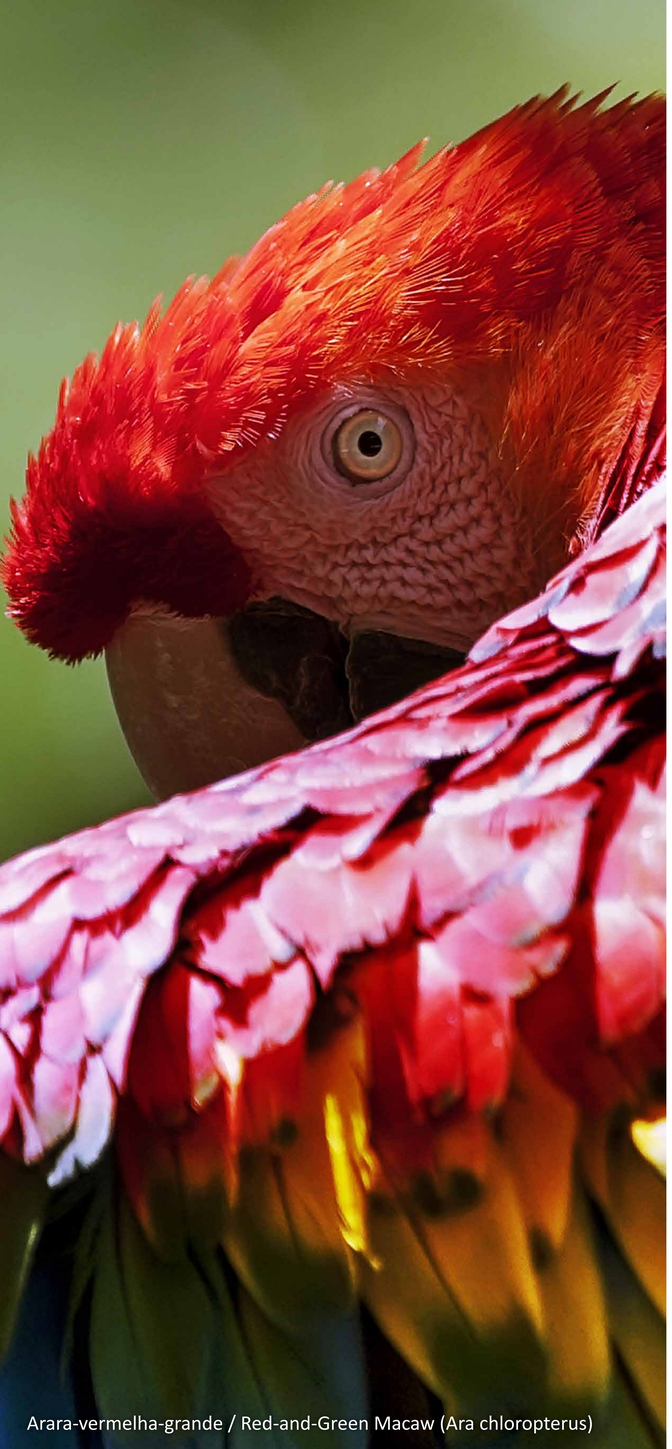
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Arara-vermelha-grande / Red-and-Green Macaw (Ara chloropterus)

# Acronyms and abbreviations

| | |
|---|---|
| ABC+ | Industry Plan for Adaptation to Climate Change and Low Carbon Emissions in Agriculture and Livestock Farming |
| ANA | National Water and Basic Sanitation Agency |
| ANP | National Agency for Petroleum, Natural Gas and Biofuels |
| BCB | Brazilian Central Bank |
| BNDES | Brazilian Development Bank |
| BPC | Continued Provision of Social Work Benefit |
| CAR | Rural Environmental Registers |
| CBI | Climate Bonds Initiative |
| CBIO | Biofuel Production Certification and Decarbonization Credit |
| CBD | Convention on Biological Diversity |
| CRAs | Social Work Reference Center |
| CREAs | Specialized Social Work Reference Center |
| CFSS | Sovereign Sustainable Finance Committee |
| CICC | Inter-ministerial Committee to Combat Corruption |
| CIM | Inter-ministerial Committee on Climate Change |
| CMN | National Monetary Council |
| COP21 | 21st Conference of the Parties to the UNFCCC |
| COP26 | 26th Conference of the Parties to the UNFCCC |
| CONSEA | National Council of Security and Nutritional Alimentary |
| CVM | Brazilian Securities and Exchange Commission |
| ENCCLA | National Anti-Corruption and Anti-Money Laundering Strategy |
| FNDE | National Fund for the Development of Education |
| GBP | Green Bond Principles |
| GHG | Greenhouse Gases |
| ICMA | International Capital Market Association |
| LAI | Access to Information Law |
| LDO | Budget Guidelines Law |
| LOA | Annual Budget Law |
| LOSAN | Organic Law on Food and Nutritional Security |
| LULUCF | Land Use, Land-Use Change and Forestry |
| NDC | Nationally Determined Contribution |
| UN SDGs | UN (United Nations) Sustainable Development Goals |
| PNAE | National School Feeding Program |
| PBF | Bolsa Família Program |
| PNH | National Hydrogen Program |
| PNPSA | National Policy on Payments for Environmental Services |
| PPA | Multi-Year Plan |
| PPCDAm | Action Plan for the Prevention and Control of Deforestation in the Legal Amazon |
| PRSA | Social and Environmental Responsibility Policy |
| PRSAC | Social, Environmental and Climate Responsibility Policy |
| SBG | Sustainability Bond Guidelines |
| SBP | Social Bond Principles |
| SEEG | Greenhouse Gas Emissions and Removals Estimation |
| SIN | National Interconnected System |
| SISAN | National Food and Nutritional Security System |
| SPO | Second Party Opinion |
| SUAS | Unified Social Work System |
| SUS | Unified Health System |
| UNFCCC | United Nations Framework Convention on Climate Change |



Elevated view of Iguazu Falls, Paraná.



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# 1 Presentation



Lençóis Maranhenses, Maranhão

**The Federative Republic of Brazil ("Brazil" or "the Country") is the fifth largest country in the world with 8.5 million km², occupying almost half of South America.** The country encompasses several climatic zones and prioritizes socially inclusive, environmentally balanced, and economically prosperous development. It has an outstanding wealth of natural resources, and its biodiversity, forests, waters, and renewable energies provide a solid basis for sustainable actions. In addition, Brazil has endeavored to ensure not only environmental sustainability, but also social sustainability, implementing policies and initiatives aimed at improving society's quality of life and promoting social inclusion.

**Brazil is committed to the sustainable development agenda and seeks to achieve the Sustainable Development Goals (SDGs) set by the United Nations (UN) 2030 Agenda.** The country has prioritized environmental protection and committed to reducing deforestation and promoting renewable energies. In addition, Brazil also focuses on social inclusion, through programs to combat poverty and foster gender equality. By signing commitments and ratifying international agreements, such as the Paris Agreement,[1] Brazil bolsters its engagement in building a sustainable future for the planet and for future generations.

**In recent decades, a series of initiatives have been implemented to promote and advance the country's sustainable development**, including environmental, social and governance policies, plans and programs described in section 2 of this document. Brazil has undertaken concerted efforts and achieved significant results on such agendas as climate change, biodiversity, renewable energy, poverty and inequality reduction, food and nutritional security, health, education, sanitation, diversity and gender equality, transparency, and anti-corruption, non-exhaustively addressed in this Framework.

**In recent years, Brazil has strengthened its sustainable finance agenda** — including the creation of regulatory frameworks[2] for the management of social and environmental risks by financial institutions and the dissemination of sustainable financial instruments. With a well-developed financial market and an environment that favors innovation, the Federal Government

1 The Paris Agreement is a global treaty adopted in December 2015 by the countries that are signatories to the United Nations Framework Convention on Climate Change (UNFCCC), during the 21st Conference of the Parties (COP21). The Agreement governs measures designed to reduce carbon dioxide emissions and aims to strengthen the response to the threat of climate change and reinforce countries' ability to deal with the impacts generated by this change.

2 Examples include Central Bank Resolutions No. 139/2021, and No. 151/2021, CMN Resolutions No. 4,945/2021 and No. 4,943/2021, and CVM Resolution No. 175.

not only broadly supports this agenda through various Minsters and entities, but also works to position Brazil as a global leader in the transition to a sustainable economy.

**Policies and commitments on climate change, fair transitions to a low-carbon economy, and social and economic equity are reflected in the federal budgets** — and can be driven by public and private investments. It is in this context that we hereby present **Brazil's Sovereign Sustainable Bond Framework** (**"Framework"**), which constitutes a guide for issuances of labeled sovereign bonds instruments backed by budgetary expenses that will directly contribute to advancing sustainable development in Brazil.

**Regarding the Federal Government Debt, advancements as such on this agenda strengthen the financing of policies promoting sustainable development**. As such, the Framework will be a core reference for Brazil's consistent and active presence in the international markets for sustainable bonds in the coming years. This initiative consolidates the country's commitment to sustainable policies, while also converging to the context of growing interest from investors in this type of instrument as well as the expansion of global and local sustainable bond market.

**Considering the intersectionality of Brazil's sustainable development agenda, which mobilizes various players and federal agencies**, the Federal Government established, through Decree No. 11.532, dated May 16, 2023, the **Sovereign Sustainable Finance Committee ("CFSS" or "the Committee")**, under the purview of the Ministry of Finance.[3] The Committee is a permanent panel whose objective is to plan, develop and implement the Framework as well as the allocation and impact reports post-issuance. The above will be addressed in further detail in Section 4 hereof.

**This Framework was prepared in line with the guidelines of the International Capital Market Association (ICMA),** in particular its principles for the issuance of themed bonds: Green Bond Principles, Social Bond Principles, and Sustainability Bond Guidelines. These principles and guidelines lay out best practices for issuing debt securities that serve social and/or environmental purposes through global guidelines and recommendations that foster transparency and disclosure, reinforcing compliance in the capital market.

**The cornerstone of sustainable bonds is the use of proceeds for eligible environmental and/or social projects**, whose impacts must be assessed and, when feasible, quantified. The Federal Government, through the CFSS, will provide public updated information on the use of the net proceeds of any sustainable bonds issued under this Framework through allocation and impact reports as will be further explored below.

**The interest and principal of sustainable bonds issued within this Framework are under the purview of the Brazilian National Treasury.** Bond investors assume no risk associated with any expenses in the underlying portfolio. Likewise, all the sustainable bonds issued rank *pari passu* with other bonds issued by the National Treasury.

**Moreover, this document underwent external review by an independent provider of second-party opinion ("SPO")**, in line with international best practices as further explained in Section 7 below.

**The document is divided into 7 subsections, including to this Presentation.** Section 2 of the Framework, "**Brazil's Public Policies and Commitments to Sustainable Development**", introduces the country's credentials, including Brazil's commitments and status relative to the environmental, social and governance agenda, as well as its sustainable finance agenda. Following Section 3, "**Brazil's Sovereign Sustainable Bond Framework**", further describes the key concepts of this Framework while, Section 4, "**Use of proceeds**", indicates the eligible expenses in connection with the issuance sustainable bonds and the categories of activities associated with environmental, social and/or sustainable benefits, as well as the exclusion criteria that will apply in the context of this Framework. Section 5, "**Eligible Expenses Assessment and Selection Process**", lays out the roles and responsibilities related to the definition of eligible expenses in the context of a given instrument. Section 6, "**Management of Proceeds**", sets out the procedures for managing the funds raised. Finally, Section 7, "**Transparency and Impact**", introduces the parameters used for monitoring, measuring, and publishing of allocation and impact reports on the of funds raised, as well as the possibilities for external verification.

3 BRAZIL. Decree No. 11,532, dated May 16, 2023. 2023. Available on the website . Accessed on 15 Jun. 2023.

# 2 Brazil's Public Policies and Commitments to Sustainable Development



Artisan demonstrates her work at the 15th edition of the Brazilian Roots Craft Salon (Marcelo Camargo/Agência Brasil)

The sustainable development agenda in Brazil is underpinned by intersectional strategies and plans that foster alignment between the commitments made by Brazil and the public policies making them viable, considering economic, institutional, social, and environmental factors.

Among these commitments, stands out the 2030 Agenda,[4] a global action plan signed by Brazil in 2015 that comprises 17 Sustainable Development Goals ("**SDGs**"), including, but not limited to, climate change and its impacts, the eradication of poverty and hunger, the promotion of inclusive education and the promotion of gender equality, among others.

In 2015, at the 21st Conference of the Parties (COP21) from UNFCCC, Brazil ratified the Paris Agreement, which aims to strengthen the global response towards climate change threat and reinforce the countries´ capacity to deal with the impacts arising from such change. According to the document, the signatory nations commit themselves to restrict the increase in the global average temperature to well below 2°C above pre-industrial levels and pursue efforts "to limit the temperature increase to 1.5°C above pre-industrial levels. In order to achieve such goals, the various governments started building their own commitments based on Nationally Determined Contributions ("**NDCs**"). Through the NDCs, each nation presented its own actions to reduce Greenhouse Gas (GHG) emissions following what each government considers feasible based on local social and economic scenarios. The Paris Agreement was ratified by the European Union and other 194 nations part of the UNFCC.

Below we present advancements and initiatives taken by Brazil in relation to environmental, social and governance issues, as well as those concerning to the sustainable finance agenda.

4 More information can be accessed on the website. Accessed on: June 14, 2023.

## Environmental aspects

Brazil encompasses several climatic zones – such as the humid tropics in the North, the semi-arid in the Northeast and temperate zones in the South. Clearly, these climatic differences lead to great ecological variations, forming six main biomes with different types of vegetation and fauna: (1) the Amazon, the largest tropical rainforest in the world; (2) Pantanal[5], the largest perennial floodplain; (3) Cerrado[6], the second most extensive vegetation formation on the South American continent composed of savannas and forests; (4) Caatinga[7], a xeric shrubland and thorn forest; (5) Pampas, a large natural grassland; and (6) Atlantic Forest[8]. In addition, Brazil has a marine coast of 3.5 million km$^2$, which includes ecosystems such as coral reefs, dunes, mangroves, lagoons, estuaries and swamps.

### Climate change

Brazil's role on the climate change agenda is based on the National Policy on Climate Change, instituted by Law 12.187/2009 and consolidated by Decree 9.578/2018.

Furthermore, seeking to address its vulnerabilities to climate change, Brazil published its National Plan for Adaptation to Climate Change in 2016.[9] The Plan provides a general strategy and eleven industry-specific/theme-based strategies: Agriculture, Biodiversity and Ecosystems, Cities, Risk and Disaster Management, Manufacturing and Mining, Infrastructure (Energy, Transport and Urban Mobility), Vulnerable Peoples and Populations, Water Resources, Health, Food and Nutritional Security, and Coastal Zones.

In this regard, the adaptation agenda has been implemented in an intersectional manner, exploring synergies, and seeking a resilient and integrated development. The review of the national climate change adaptation strategy will start in 2023, aiming to address the challenges posed by the current climate emergency context.

5 https://www.wwf.org.br/?50183/Infographics-show-the-importance-of-the-Pantanal--and-the-main-threats-faced-by-the-biome accessed on: June 18, 2023.
6 https://www.wwf.org.br/natureza_brasileira/areas_prioritarias/cerrado/cerrado_in_english/the_biome/ accessed on: June 18, 2023
7 https://en.unesco.org/biosphere/lac/caatinga accessed on: June 18, 2023
8 https://www.worldwildlife.org/stories/what-is-the-atlantic-forest-and-why-do-we-need-to-save-it accessed on: June 18, 2023
9 National Adaptation Plan. Brazil, 2016. Available on the website. Accessed on: June 14, 2023.

Brazil has a multi-sector, intersectional and integrated structure for issuing guidelines and for negotiating and coordinating policies on climate change in the country. The Inter-ministerial Committee on Climate Change ("CIM")[10] is responsible for coordinating federal action towards achieving the country's goals and targets on this agenda. The CIM's priorities are to review and update Brazil's strategies for mitigating GHG emissions and adapting to the impacts of climate change.

As a signatory to the United Nations Framework Convention on Climate Change and its Paris Agreement, Brazil has been advancing in the implementation of its **NDC**,[11] upon which the pillars for reducing and offsetting its GHG emissions are built. The Brazilian NDC, published in March 2022[12], aims to reduce economy wide absolute GHG emissions by 37% by 2025, and by 50% by 2030, based on 2005 emissions. Progress in the implementation of mitigation actions is summarized in Chapter 3 of the Fourth Biennial Update Report of Brazil to the United Nations Framework Convention on Climate Change[13], including measures in the areas of agriculture, deforestation control, renewable energy and steel.

These quantified mitigation targets are undergoing a process of governmental discussion about updating them introducing a new NDC by 2025. In addition, Brazilian commitment contemplates climate neutrality (balance between GHG emissions and removals) by 2050.[14] The NDC also contemplates the elimination of Illegal deforestation around 2028.

Additionally, during the 26th UNFCCC (COP26) held in November 2021, Brazil adhered to the Global Methane Pledge,[15] whose collective target is to reduce global methane emissions by 2030, based on 2020 levels.[16]

Beyond submitting an ambitious NDC, Brazil has had its climate change tackling action underpinned by respect for the basic principles of the Convention on Climate Change, in particular equity and principle of common but differentiated responsibilities and respective capacities.

10 Brazil. Decree No. 11,550, dated June 5, 2023. 2023. Available on the website. Accessed on: July 3, 2023.
11 NDC stands for "Nationally Determined Contribution" and refers to national commitments made by the signatory to the Paris Agreement, adopted under the UNFCCC.
12 For more information, please visit Brazil NDC. Available on the website. Accessed on: July 18, 2023
13 https://unfccc.int/sites/default/files/resource/BUR4.Brazil.pdf
14 Brazil. Interim NDC Registry, Brazil First NDC -Second update. 2022. Available on the website. Accessed on: June 14, 2023.
15 Voluntary participation initiative launched during the Glasgow Conference (2021), but not legally bound by the UNFCCC.
16 *Global Methane Pledge*. Available on the website. Accessed on: June 14, 2023.

The Convention itself provides that measures to tackle climate change must be coordinated, in an integrated manner, with social and economic development, to avoid negative effects on the latter, taking fully into account the legitimate priority needs of developing countries for achieving sustainable economic growth and eradicating poverty. It also provides that economic and social development and the eradication of poverty are the absolute, foremost priorities of developing countries.

Brazil has a very specific GHG emissions profile when compared to other countries. In 2020, 38% of emissions resulted from *land use, land use change and forestry* ("LULUCF"), 29% from agriculture and livestock farming, and 23% from the energy sector. GHG emissions from industrial processes and waste treatment accounted for only 6% and 4% of all emissions, respectively,[17,18] which tend to be much higher in other countries.

In the agriculture and livestock farming sector, Brazil has implemented the ABC+ Plan (Industry Plan for Adaptation to Climate Change and Low Carbon Emissions in Agriculture and Livestock Farming) aiming to foster low greenhouse gas emission technologies and practices for the sector. The goal of the ABC+ Plan, is to reduce GHG Emissions ($CO_2e$) by 1.1 billion tons in the agriculture and livestock farming sector between 2020 and 2030 by adopting sustainable systems, practices, products, and production processes. Importantly, low greenhouse gas emission technologies are expected to be incorporated into another 72 million hectares during that period.

Phase two of the ABC+ Plan[19] is already underway (Plan ABC+ 2020 – 2030), which focuses on the pressing need for Brazilian agriculture and livestock farmers to implement in their production systems strategies to increase their adaptation skills in the face of climate change.

**To that end, three strategic pillars support ABC+ Plan:**

(i) the Integrated Landscape Approach ("ILA"[20]);

(ii) the mitigation of GHG emissions and adaptation; and

(iii) stimulus for the adoption and maintenance of Sustainable Systems, Practices, Products and Production Processes ("SPSABC").

In addition to encouraging the adoption and maintenance of technologies already consolidated in the previous phase, based on this new approach, the ABC+ Plan will strengthen, with its design focused on the country's current and future challenges, adaptation, and the concept of "Integrated Landscape Approach," aligning Brazil with key territorial governance strategies that are gaining prominence on the international scene.

Although the ABC+ Program (the rural credit arm of the ABC+ Plan) had BRL 5 billion allocated to the 2022/2023 Crop Plan, according to studies conducted by the Ministry of Agriculture and Livestock and ratified by the Climate Bonds Initiative (CBI),[21] in the 2021/2022 crop, approximately BRL 98 billion were allocated to programs that contribute to increasing the sustainability of rural production. This amount is equivalent to 47% of the official funds available for rural credit.

The relevance of that policy for compliance with the NDC is remarkable, given that the agriculture and livestock farming sector was responsible for 29% of all Brazilian GHG emissions in 2020.[22] Additionally, the country has the challenge of reducing emissions associated with changes in land use and forestry, which accounted for 38% of all GHG emissions in 2020, with illegal deforestation as the main cause.

Other governmental actions and programs are the pillars on which stands climate change mitigation in Brazil, such as:

- The **2023/2024 Crop Plan** stimulates the strengthening of environmentally sustainable production systems, with an interest rate cut for financing recovery of degraded pastures and rewards for rural producers whose Rural Environmental Registers ("CAR") have already been

17 Brazil. Annual Estimates of GHG Emissions in Brazil. 2022. Available on the website. Accessed on: July 3, 2023.
18 The estimates are based on the sector's share of emissions, denominated in CO2e and using GWP (Global Warming Potential). When using the metric based on GTP (Global Temperature increase Potential), the emissions profile is as follows: 47% resulting from land use, land use change and forestry; 29% from the energy sector; 15% from the agriculture and livestock farming sector. Emissions from the manufacturing and waste treatment sectors accounted for 8% and 1% of all emissions, respectively.
19 For more information, please visit: ABC+ Plan
20 ILA considers that management of farming areas must consider the different elements of rural landscapes, at their different levels and scales, reflecting their diverse, systemic, and dynamic aspects. Incentives for the adoption and maintenance of Sustainable Systems, Practices, Products and Production Processes induce the integrated use of landscape components. Emphasis is placed on the efficient use of areas suitable for farming, with strong incentives to comply with environmental rules, to recognize the value of native landscapes, and to recover and conserve soils, water and biodiversity. Additionally, local goods and regional cultures will be recognized and empowered, broadening the portfolio of initiatives from the Brazilian Ministry of Agriculture and Livestock that foster sustainable agriculture. https://www.gov.br/agricultura/pt-br/assuntos/sustentabilidade/plano-abc/arquivo-publicacoes-plano-abc/abc-portugues.pdf
21 Climate Bonds Initiative (CBI) is a non-profit organization focused on promoting large-scale investment in the low-carbon economy. Additional information at www.climatebonds.net .
22 Brazil. Annual Estimates of GHG Emissions in Brazil. 2022. Available on the website.

reviewed and those who have agriculture and livestock farming practices in place that are considered more sustainable.

- The **Sustainable Agriculture and Livestock Farming Production Systems Financing Program ("RenovAgro")** comprises financing for investments identified with the goal of encouraging adaptation to climate change and low carbon emissions in agriculture and livestock farming. Through RenovAgro, sustainable practices can be financed, such as recovering degraded areas and pastures, implementing, and expanding integrated agriculture-livestock-forestry systems, adopting conservation practices for the use of natural resources, and managing and protecting natural resources. The implementation of organic agriculture, restoration of permanent preservation areas or legal reserves, production of bio-inputs and biofertilizers, and renewable energy generation systems can be financed, too, and so can other practices that involve sustainable production and culminate in lower GHG emissions.

Other programs, such as **Inovagro**[23], **Proirriga**[24], **Moderfrota**[25] and **Moderagro**[26], also have in their design the incentive for low-carbon agriculture and livestock production.

The non-exhaustive examples of mitigation and adaptation actions mentioned above will contribute together with a series of other activities to meeting Brazil's Nationally Determined Contribution to the Paris Agreement.

## Controlling and Combatting Deforestation

Illegal deforestation is the main cause and challenge in reducing GHG Emissions related to the Land Use, Land-use Change and Forestry ("LULUCF") sector on Brazil. Given that 38% of all GHG emissions in 2020[27] came from LULUCF sector, Brazil is committed to zero illegal deforestation by 2028 which will have material impact in the country´s overall carbon footprint.

To prevent and control deforestation, Brazil adopts a series of interconnected planning and financing instruments. One of them is the Amazon Fund, established in 2008 by Decree No. 6.527. The fund, which raises donations for non-reimbursable investments in actions to prevent, monitor and combat deforestation and to promote the conservation and sustainable use of the Legal Amazon, has already supported more than 100 projects and spent BRL 1.7 billion.[28] Among the impacts of supported projects, we highlight the increase in the economic attractiveness of activities committed to keeping the forest standing, with an increase of 12% in the production of vegetal extraction of products monitored by the Fund between 2009 and 2021, and of 182% in the value of this production; and the 43% increase in the number of patent applications in the States of the Legal Amazon between 2009 and 2022, an index more than three times higher than the national average. This result is directly related to the Amazon Fund's support for structuring research centers in the region.

Among the donors to the Amazon Fund are the governments of Norway, Germany, and the United States, reinforcing the relationship of trust and collaboration between the Brazilian government and international partners.

Governance for combating deforestation was strengthened in 2023 with the reinstatement of the Permanent Inter-ministerial Commission for the Prevention and Control of Deforestation and the reintroduction of the Action Plan for the Prevention and Control of Deforestation in the Legal Amazon ("PPCDAm").[29] The resumption of the rigorous fight against deforestation in the Amazon is already starting to show results: from January to May 2023, deforestation alerts fell by 31% compared to the same period of the previous year.[30] Likewise, there has already been a reduction in illegal activities on indigenous lands, with a consequent drop in deforestation in these areas.[31]

Another initiative by the Brazilian government to combat deforestation is the **Amazon Security and Sovereignty ("AMAS") Plan**[32]**:** The AMAS Plan aims to fight environmental crimes and foster the preservation of the Amazon region by carrying out public security actions that fit the needs and specificities of the states making up the Legal Amazon by adapting programs and actions to

23 Inovagro - Programa de Incentivo à Inovação Tecnológica na Produção Agropecuária. Available on the website. Accessed on: June 17, 2023.
24 Proirriga - Programa de Financiamento à Agricultura Irrigada e ao Cultivo Protegido. Available on the website. Accessed on: June 17, 2023.
25 Moderfrota - Programa de Modernização da Frota de Tratores Agrícolas e Implementos Associados e Colheitadeiras. Available on the website. Accessed on: June 17, 2023.
26 Moderagro - Programa de Modernização da Agricultura e Conservação dos Recursos Naturais. Available on the website. Accessed on: June 17, 2023.
27 Brazil. Annual Estimates of GHG Emissions in Brazil. 2022 Available on the website.

28 Amazon Fund. Project portfolio. 2023. Available on the website. Accessed on: June 14, 2023.
29 Decree No. 11,367/2023. Brazil, 2023. Available on the website. Accessed on: June 14, 2023.
30 Brazil. Data from DETER/Inpe for May 2023 and Federal Government Actions. 2023. Available on the website. Accessed on July 3, 2023.
31 Brazil. Federal Government reinforces the fight against gold mining after new attacks on the Yanomami TI. 2023. Available on the website. Accessed on July 3, 2023.
32 Decree No. 11,614/2023. Brazil, 2023. Available on the website. Accessed on: July 24, 2023.

the specificities of the Region, thus contributing to **reducing the rate of illegal deforestation** and the **number of environmental and related crimes**. The plan represents a milestone for the improvement of federal government capacities, with the aim of ensuring the security and sovereignty of the region, protecting the environmental heritage, and promoting a sustainable and safe future for the region and the planet, seeking to preserve the world's largest tropical forest and the well-being of local populations.

The AMAS Plan uses its own proceeds, as well as those from the Amazon Fund, which are essential for promoting environmental preservation, fighting crime, protecting human and social rights, strengthening cooperation between the stakeholders, and keeping international commitments related to the Amazon.

## Biodiversity, Protection and Conservation

Brazil, is a country with enormous biodiversity, given the variety of biomes, accounting for more than 20% of the total number of species in the world, positioning the country as the main nation among the 17 megadiverse (or most biodiverse) countries[33].

The country reinforced its commitment to Biodiversity Conservation by becoming a signatory to the Aichi Targets, at COP-10 in 2010, with 20 targets by 2020, and to the Kunming-Montreal Global Framework at COP-15, with 23 goals by 2030,[34] within the framework of the Convention on Biological Diversity (CBD). Furthermore, Brazil engaged in the construction of the Post-2020 Global Biodiversity Framework. The commitment to this global agreement is a historic milestone that symbolizes and reinforces the importance of Brazil's sustainable development agenda.

The evaluation of the implementation of the National Biodiversity targets (derived from the Aichi Targets) for the 2014-2018 period showed progress in all targets, with the prospect of achieving ten and surpassing one of them, while for the other nine targets progress was taking place, but at a pace considered insufficient[35].

33 Brazil. Brazilian Biological Diversity. 2023. Available on the website. Accessed on: June 17, 2023.
34 Brazil. Convention on Biological Diversity. 2023. Available on the website. Accessed on: June 14, 2023.
35 6th National Report for the Convention on Biological Diversity. 2023. Available on the website. Accessed on: June 21, 2023.

Since 2015, Brazil has had enhanced legislation such as: the Biodiversity Law, which provides for access to genetic heritage, protection of and access to associated traditional knowledge, and the sharing of benefits for the conservation and sustainable use of biodiversity (Law 13.123 of 2015).[36]

In addition, Brazil has been carrying out economic incentive initiatives for conservation, including the National Policy on Payment for Environmental Services ("PNPSA", 2021),[37] which aims to promote initiatives for the conservation of water resources and for the maintenance, recovery, or improvement of vegetation cover in priority areas, as well as the formation of biodiversity corridors and the fight against habitat fragmentation.

## Renewable energy

The Brazilian energy matrix is one of the cleanest in the world, with 88%[38] of the electricity coming from renewable sources,[39] in line with the country's NDC. The energy sector has a well-established National Energy Plan (2050),[40] which aim to expand the supply and use of energy in a sustainable manner, with a view to ensuring energy security, an adequate return on investments, availability of access to the population and alignment with social and environmental safeguards.

Brazil's energy transition strategy comprises a reformulation of our development model and our global insertion. This occurs through a gradual process of economic migration towards reducing GHG emissions, in a manner consistent with the limitation of global warming and the achievement of carbon neutrality.

These changes revolve around two main axes: (a) Industry Transformation, through the decarbonization of sectors where reduction is difficult; and (b) Favorable Environment, through the improvement of the legal and regulatory framework, with the availability of low-cost financing sources, supply chains, and actions on the social front, such as training people, talking local communities, and expanding diversity, among others.

36 Brazil. Law No. 13,123. 2015. Available on the website. Accessed on: June 14. 2023.
37 Brazil. National Policy on Payments for Environmental Services. 2021. Available on the website. Accessed on: June 14, 2023.
38 Brazil. 2023 National Energetic Balance. 2022. Available on the website. Accessed on: July 23, 2023.
39 Brazil. 2023 Electricity Yearbook. 2023. Available on the website. Accessed on: June 17, 2023.
40 Brazil. National Energy Plan. 2020 Available on the website. Accessed on: June 14, 2023.

On the industry transformation axis, the prioritized sectors were manufacturing, electric, mineral, transportation, and oil and gas. The measures should include the expansion of low-carbon energies, with emphasis on biofuels, hydrogen, solar and wind, among other possibilities, including those associated with storage systems.

These solutions will also support the program to decarbonize isolated systems in the Amazon. Due to geographical features, the region is supplied by around 200 isolated systems, whose electric energy is 80% generated from diesel. This program will promote the decarbonization of these systems through both the adoption of renewable sources and the expansion of electrical grids to connect these communities to the National Interconnected System ("SIN") whenever technically, economically, and environmentally warranted.

The next two years are expected to see a strong expansion of transmission networks in Brazil, which will allow greater integration of renewable sources with the country's consumer regions, with investments estimated at BRL 56[41] billion. Moreover, this integration will contribute to improving energy security, optimizing the country's electricity matrix.

In the mineral sector, production is intended to be ensured in a sustainable manner and with a focus on local communities, to support the demand for energy storage systems and other technologies required by the energy transition. These solutions will be important not only to increase the system's reliability, but also to decarbonize the transportation sector and to play the role of ensuring stability in hybrid systems with intermittent renewable sources. The mineral sector produces some of the main inputs in the production of equipment necessary to operate renewable energy sources such as wind, solar and batteries.

In line with the energy transition objectives, in 2022[42], Brazil also set up the National Hydrogen Program ("PNH"),[43] which was developed jointly with public and private organizations, and highly important in the country's energy strategies. The program is based on three pillars: public policies, technological conditions and market conditions that drive the development of the hydrogen economy in Brazil.

In addition, the country seeks to increase the share of biofuels in its energy matrix through RenovaBio,[44] which has three strategic axes:

(i) Decarbonization Targets;

(ii) Biofuel Production Certification; and

(iii) Decarbonization Credit ("CBIO").

The National Agency for Petroleum, Natural Gas and Biofuels ("ANP") plays a fundamental role in RenovaBio, being responsible for the production certification process and the Decarbonization Credit Platform—a computer system to ensure backing for the CBIO.[45]

## Social aspects

### Poverty and inequality reduction

In Brazil, the agenda to combat social inequality is handled as a policy for both social justice and economic development. This is because Brazil is one of the most unequal countries in the world in which 10% of the population concentrates 59% of national earnings, above other countries such as the United States and China, for example[46]. In the last 20 years, important public policies have been implemented in the country, with emphasis on the fight against high levels of poverty and inequality.

Social Work is the right of every citizen who needs it, regardless of any other conditions or contributions. Social Work is organized through the Unified Social Work System ("SUAS"), which is present throughout Brazil. The goal of the SUAS is to ensure social protection for families and individuals in situations of social vulnerability, personal and social risk, violence, and other violations of rights, through services, benefits, programs and projects. With a participatory management model, the SUAS coordinates the efforts and resources contributed by municipalities, states, the Federal District, and the Federal Government towards implementing and funding the National Social Work Policy.

Considering the complexity of the situations experienced by people served, the SUAS organizes

41 Brazil. *Electric Power Transmission Grant Plan (POTEE)*. Available on the website. Accessed on: July 22, 2023.
42 Federal Government Official Journal, dated on August 4, 2022. Available on the website. Accessed on: June 14, 2023.
43 Brazil. CNPE Resolution No. 6, dated June 23, 2022. 2022. Available on the website. Accessed on: June 14, 2023.
44 Brazil. RenovaBio. 2023. Available on the website. Accessed on: June 14, 2023.
45 The CBIO is an asset—regulated by MME Ordinance No. 122, dated March 23, 2020 and traded by B3 S.A. since June 2020—that supports the decarbonization of the Brazilian economy.
46 WIL (World Inequality Lab). 2022. Available on the website. Accessed on July 17, 2023.

its actions into two levels of social protection:

(i) Basic Social Protection ("PSB") applies to situations of social vulnerability, contributing to strengthening the protective role of the family, strengthening family, community, and social ties, preventing situations from worsening; and

(ii) Special Social Protection ("PSE"), which works on the protection of individuals and families experiencing situations of risk, violence and other violations of rights, and the provision of shelter services to individuals or families temporarily away from their nuclear families or communities.

Social Work relies on an extensive network of public units that help vulnerable individuals or groups of children, adolescents, elderly people and people with disabilities, pregnant and lactating women, traditional peoples and communities, migrants, and refugees, the homeless, victims of sexual abuse or exploitation, and victims of discrimination (based on race, color, origin, religion, culture, and sexual orientation), among others. The service network is composed of the following units: Social Work Reference Center ("CRAS"); Specialized Social Work Reference Center ("CREAS"); Specialized Reference Centers for the Homeless Population (Pop Center); Reference Day Center for People with Disabilities and their Families; and Shelter Units — *Casa Lar*, Institutional Shelter, Dorms, Inclusive Residence, and *Casa de Passagem* [Welcoming House].

Two other major programs key to combating inequalities are the *Bolsa Família* Program ("PBF") (established by Law No. 10.836 of 2004),[47] and the Continued Provision of Social Work Benefit ("BPC").[48]

The PBF is the largest income transfer program in Brazil and is internationally recognized for having already lifted millions of families out of hunger. The Federal Government has relaunched the program (since June 2023) with increased protection for families, with a benefit model that considers the size and characteristics families served, in a proportional manner, with those with three or more people starting to receive more benefit than one person living alone, for example.

47 Brazil. *Bolsa Familia* Program. 2023. Available on the website. Accessed on: June 14, 2023.
48 The BPC is instituted by the Social Work Organic Law (LOAS, or Law No. 8,742, dated December 7, 1993) and Decree No. 6,214, dated September 26, 2007 . Accessed on: June 14, 2023.

In addition to ensuring basic income for families in poverty, the PBF seeks to integrate public policies, strengthening the access of families to basic rights like health, education, and social work. The Program also aims to rescue the dignity and citizenship of families also by also working on complementary actions involving coordination with other policies for overcoming poverty and for social transformation, such as social work, sports, science, and employment.

In July 2023, the program, which is designed to raise the income of the most vulnerable population (considered as those living below the poverty line), reached 18.5 million families, helping 43.5 million[49] people to escape this condition.

For families belonging to the family with an average income of less than a quarter of the minimum wage[50], the BPC ensures a monthly minimum wage is paid to the elderly (65 years or older) and people with disabilities, the latter regardless of age.

## Food and nutritional security

Brazil has achieved in the past 20 years promising results in building and implementing institutional policies and mechanisms for the expansion Food and Nutritional security for Brazilians. Major advancements and achievements include the Food and Nutritional Security Organic Law ("LOSAN") from 2006, which created the National Food and Nutritional Security System ("SISAN") with the aim of ensuring and protecting the human right to proper nutrition. Additionally, the National School Feeding Program ("PNAE"),[51] is directly responsible for ensuring school meals for all federal students enrolled in the public school system and indirectly responsible for all students from the state, district and municipal networks through the National Fund for the Development of Education ("FNDE"), it is a wide-ranging program that ensures quality meals for children across the country. Additionally, and demonstrating the intersectionality of Brazil's national public policies, its provisions require at least 30% of the program's resources to be allocated to family farming food purchases, thus fostering sustainable agriculture and stimulating local producers.

In addition, is the National Council on Food and Nutritional Security ("CONSEA"), an immediate advisory body to the Presidency of the Republic that was recreated in 2023, which is an important

49 Brazil. *Bolsa Família* Program. 2023. Available on the website. Accessed on: July 23, 2023.
50 Brazil. BPC. 2023. Available on the website. Accessed on: July 23, 2023.
51 FNDE. *PNAE* . 2022. Available on the website. Accessed on: June 14, 2023.

institutional space for participation and social control, the formulation of policies and the definition of guidelines for ensuring the human right to food, while integrating government actions with a view to serving the part of the population that does not have the means to provide for their basic needs, in particular the fight against hunger.[52]

In recent decades, innovative programs and actions have been created and implemented with a view to promoting food and nutritional security, such as the **Food Purchase Program ("PAA")**[53], which buys food from family farms and donates it to public food facilities, and the **Rural Production Fostering Program**[54], which combines family assistance services for social and productive inclusion with the provision of non-reimbursable financial resources for investment in productive projects.

Also supported was the implementation of a network of public facilities consisting of low-budget restaurants and community kitchens, which seek to expand the supply of nutritionally adequate meals at affordable prices to the low-income population, the socially vulnerable and those experiencing food and nutritional insecurity, and foster proper and healthy eating and the appreciation of regional eating habits. Food banks have also been supported by the federal government with the aim of reducing losses and waste along the production chain. Programs already consolidated, such as the **Family Farming Strengthening Program ("Pronaf")**[55], were improved and now have greater resources, as well as the National School Feeding Program ("PNAE"), which, while having an increased budget, also began to purchase part of the food from family farming producers, promoting healthy eating.

In matters of food and nutritional security, Brazil works towards contributing to the Convention on Climate Change consistent with its own stated objective of ensuring that food production is not threatened and that it allows economic development to occur in a sustainable way. It also works in line with the Paris Agreement, which acknowledges the fundamental priority of safeguarding food security and eradicating hunger, as well as the vulnerabilities of food production systems to the negative impacts of climate change.

In this context, we note that the ABC+ Plan also seeks to prioritize customized actions at the territorial level and encourage technological innovation as a driver of food production in volumes consistent with food and nutritional security, addressing three aspects sustainability (economic, social and environmental).

The implementation of this coordinated set of public policies accounted for significant reduction of hunger and food insecurity indicators in Brazil, although in recent years, due to decrease in investments, the discontinuation of certain policies, the economic crisis and the Covid-19 pandemic, those same indicators have shown relative deterioration[56]. We should note that, in addition to fighting hunger, the National Food Security Policy also includes actions aimed at taking on the causes and results of the malnutrition observed especially due to the rapid growth of overweight and obesity in all life cycles and their impacts on people's well-being and health.

## Health

Brazil has one of the world's largest, most complex, free and universal public health systems. The guiding principles underpinning the Unified Health System ("SUS"), instituted by Law No. 8.080/90[57] and guaranteed by article 196 of the Federal Constitution of 1988, are universalization, equity and completeness, serving 190 million people, 80% of whom depend exclusively on public services for health care.[58] One of the key elements of the health policy is its focus on primary care, which was set up in the 1990s by the Ministry of Health and is currently known as the Family Health Strategy.

52 Available on the website. Accessed on: June 14, 2023.
53 The Food Acquisition Program (PAA), created by Article 19 of Law No. 10,696 of July 2, 2003, has two basic purposes: to promote access to food and to encourage family farming. https://www.gov.br/mds/pt-br/acoes-e-programas/inclusao-produtiva-rural/paa
54 The Rural Development Program combines two actions: social and productive monitoring and the direct transfer of non-refundable financial resources to families for investment in a productive project, in the amount of BRL 2,400 or BRL 3,000. The program was created by Law No. 12,512 of October 14, 2011, and is regulated by Decree No. 9,221 of December 6, 2017. https://www.gov.br/mds/pt-br/acesso-a-informacao/carta-de-servicos/desenvolvimento-social/inclusao-social-e-produtiva-rural/programa-de-fomento-as-atividades-produtivas-rurais
55 PRONAF is intended to stimulate income generation and improve the use of family labor by financing rural agricultural and non-agricultural activities and services developed in rural establishments or in nearby community areas. Available on the website

56 In Brazil, the main nutritional security indicator is the Brazilian Food and Nutrition Insecurity Scale ("EBIA"), used by the National Statistics Department ("IBGE"). The Ministry of Social Development, Assistance, Family and Fight against Hunger is making an effort for the return of the IBGE's regular EBIA monitoring.
57 Brazil. *Law No 8,080/1990*. 1990. Available on the website. Accessed on: June 14, 2023.
58 Brazil. The world's largest public health system, the SUS completes 31 years. 2021. Available on the website. Accessed on: June 29, 2023.

## Education

The basic education provided by the Brazilian public school system is broad and covers the nation's entire territory. The municipal system serves the majority (49.6%) of students, followed by the state school system (32.2%), private schools (17.4%), and the federal school system (0.8%).[59] The development agenda associated with the provision of quality education is directly coordinated by the Ministry of Education, which addresses, through an extensive set of departments and programs, the core issues and challenges of Brazil on the agenda—such as literacy and elementary, college and specialized education, as well as trade schools and technological education. It is also incumbent upon the Ministry of Education to conduct educational research and information gathering, to conduct university research and to provide extension courses and teacher education. In addition, it is the agency responsible for providing financial aid for the schooling of children and dependents of vulnerable families.[60]

Regarding higher education, the number of enrollments has been growing since 2011.[61] Among the world's best universities listed in an international ranking, 62 are Brazilian, 51 of which being public (federal or state), putting Brazil in the top position among Latin American countries.[62]

## Sanitation

The provision of drinking water and sanitation for the entire Brazilian population is one of the central commitments made by Brazil. In 2020, Brazil took an important step towards the universalization of sanitation with the passing of the New Legal Framework for Sanitation ("Sanitation Framework"),[63] which expanded the powers of the National Water and Sanitation Agency ("ANA") with respect to benchmark standards, such as quality and efficiency standards in the supply, maintenance and operation of sanitation systems, reuse of treated sanitary effluents according to environmental and public health standards, and solid waste management. The Sanitation Framework aims to set up a legal certainty, competitiveness, and sustainability environment to attract private investments to universalize and qualify the provision of services in the sector, contemplating mandatory adherence to performance targets in contracts, regionalization of sanitation services, and competition in the sector. The Sanitation Framework is fundamental due to the government's goal to expand drinking water service supply to 99% of the population and to 90% of the population with access to sewage collection and treatment by the end of 2033, which can be extended to 2040[64].

According to Brazil's National Policy on Solid Waste Management (Law nº 12,3015/2010), municipalities are responsible for the integrated management of solid waste generated in its respective territories, while federal and state agencies are responsible for providing general guidelines, control and inspection. In this sense, Brazil adopts a multi-level governance for waste management, with several integrated layers of action.

All, the Cisterns Program - National Rainwater Harvesting Support Program, [65] funded by the Ministry of Social Development, Assistance, Family and Fight against Hunger since 2003, provides access to water for human and animal consumption and for food production through the implementation of simple and low-cost social technologies intended for low-income rural families affected by drought or consistent lack of water. Under the Program, more than 1 million cisterns were built in the 1,262 municipalities of the Brazilian Semi-Arid region[66] in this period up to 2020, serving an estimate of 4.5 million people.

## Diversity and gender equality

Brazil faces various challenges concerning the gender equality agenda. According to a report by the World Economic Forum, in 2021 the country reached a gender parity rate of 69.5%, holding it back in the 93rd position out of 156 countries in the ranking of the Global Gender Gap Report,[67] with 59.1% of Brazilian women participating in the labor market. However, the government is committed to improving these numbers, engaging in efforts that benefit women and include public policies for combating violence, for economic autonomy, for health and other areas

59 Ministry of Education. 2022. Available on the website. Accessed on: June 14, 2023.
60 MEC. 2021. Available on the website. Accessed on: June 14, 2023.
61 INEP . Higher Education Census. 2021. Available on the website. Accessed on : June 14, 2023.
62 Times Higher Education, 2022. World University Rankings 2023. Available on the website. Accessed on: June 14, 2023.
63 ANA. New Legal Framework for Sanitation. 2020. Available on the website. Accessed on: June 14, 2023.
64 Brazil. Law No 14,026/2020. 2020. Available on the website. Accessed on: July 25, 2023.
65 Ministry of Social Development and Social Work, Family and Anti-Hunger Action. Cisterns Program. 2023. Available on the website. Accessed on: June 14, 2023.
66 Ipea. 2022. Available on the website. Accessed on: June 14, 2023.
67 World Economic Forum. Global Gender Gap Report. 2021. Available on the website. Accessed on: June 14, 2023.

announced in March 2023[68] by the Ministry of Women[69]. Also noteworthy is the publication of the annual report "Women in the 2022 Budget" by the federal government. Seeking to qualify information on budgeted public policies for women, this report has been published since the 2021.[70]

In the fields of health and education, Brazil boasts exceptional performance, ensuring it the first place in the women's health and survival category of health and survival of women and the 37th place in education level[71]. In Brazil, women have a higher share of high school graduates and represent the majority of the college-educated in all age groups. Additionally, the rate of female professors in higher education has been growing and reached 46.8% in 2019.[72]

The Brazilian legal and institutional apparatus in the fight against gender violence involves instruments such as the Maria da Penha Law,[73] which creates mechanisms to curb and prevent domestic and family violence against women and helps and protects women in situations of domestic and family physical, psychological, moral, sexual and/or property violence. In addition to its legal frameworks, Brazil has a specialized social work system and approximately 400 police stations or centers dedicated exclusively to combating violence against women,[74] more than 2,800 CREAS, which serve families and individuals in situations of personal and social risk, violence and violation of rights. In this regard, it is worth noting the relevance of governmental and civil society initiatives, such as the *Mulher Viver Sem Violência Program*,[75] which aims to integrate and expand existing public services for women in situations of violence through coordination of specialized services in the fields of health, public security and justice, the social work system, and the promotion of financial autonomy.

68 Available on the website. Accessed on: June 14, 2023.
69 The federal government created the Ministry of Women in January 2023. The Ministry of Women is responsible for a multi-agency effort to promote and protect women's right, including confrontation of gender violence, economic and political autonomy, and access to fair and appropriate health-care services.
70 Brazil. The woman in the budget. 2022. Available on the website. Accessed on: June 14, 2023.
71 World Economic Forum. Global Gender Gap Report, pages 18-19, 2021. Available on the website. Accessed on: June 14, 2023.
72 IBGE. Gender statistics. 2021. Available on the website. Accessed on: June 14, 2023.
73 Brazil. Law No. 11,340/2006. 2006. Available on the website. Accessed on: June 14, 2023.
74 Azmina Institute. Map of Women's Police Stations. 2023. Available on the website. Accessed on: June 14, 2023.
75 Brazil. Instituted by Decree No. 11,431, dated March 8, 2023. 2023. Available on the website. Accessed on: June 14, 2023.

## Governance aspects

In the governance sphere, Brazil plays a leading role in adopting transparency and anti-corruption initiatives. In this regard, the **Access to Information Law[76] ("LAI")** stands out for helping to increase the efficiency of the government, reduce corruption and increase society's participation.

Still in the anticorruption context, we should highlight the National Anticorruption and Anti-Money Laundering Strategy ("ENCCLA"), an interconnection network for discussions of public anticorruption policies, with 95 institutions participating, including agencies of the three branches of government and the public prosecutors' offices, which prepared the Anticorruption Guidelines Program with the aiming of guiding the actions of government institutions and civil society in the fight against corruption.

Along the same lines, the Inter-ministerial Committee to Combat Corruption ("CICC") plays an important role in proposing guidelines for the development of anticorruption public policies, including the prioritization of related programs and projects.

The main initiative of the CICC is the Anticorruption Plan, which sets forth actions within the scope of the Federal Executive branch to improve the prevention and detection of, and accountability for, illegal acts, especially those related to corruption and money laundering. Out of 145 targets to be met by 2025, of which more than 40% have already been achieved, including the construction of a web portal with public information on leniency agreements and the issuance of an ordinance with guidelines for non-prosecution agreements in situations of administrative misconduct.

76 Law No. 12,527, sanctioned on November 18, 2011, regulates the constitutional right of citizens to access public information and is applicable to the three powers of the Union, the states, the Federal District and the municipalities. Available on the website

## Sustainable finance

Brazil has made structural advancements on its sustainable finance agenda in the last decade. The Brazilian Central Bank ("BCB"), for example, has been pioneering the integration of sustainability aspects into its regulatory activities. In 2014, BCB instituted[77] the requirement for financial institutions to prepare a Social and Environmental Responsibility Policy ("PRSA"), and it has since then deepened its efforts to address the issue.

In 2020, the BC# Agenda[78] named sustainability as one of its pillars, seeking to promote sustainable finance and contribute to proper management of environmental, social and climate risks in the economy and the National Financial System. Since December 2022, all institutions authorized to operate by the Brazilian Central Bank have been required to submit a Social, Environmental and Climate Responsibility Policy ("PRSAC") and implement actions with a view to its effectiveness, reinforcing the relevance of the climate agenda in the related institutional frameworks[79] as well as BCB's own policies.

As a result of public inquiries, in 2021 the National Monetary Council ("CMN") deepened[80,81] its guidelines for integrating environmental, social and climate risks into the instruments and policies of BCB and the institutions under its supervision. These guidelines were reflected in specific resolutions of the Central Bank[82,83] to set reporting parameters for these risks.

The Brazilian Securities and Exchange Commission ("CVM") has also been promoting measures in this regard. In January 2021, the CVM published its Sustainable Finance Policy,[84] which sets forth an action plan for the development of a sustainable finance taxonomy. Furthermore, listed companies have been required since 2022 to disclose information on their sustainability practices, including GHG emissions and climate risk management. In November 2022, the CVM set labeling criteria[85] for ESG funds (with ESG standing for Environmental, Social and Governance criteria).

These advancements are deepened and consolidated in the governance structure and in the measures recently announced by the Federal Government. In the context of sovereign government bonds, the Sovereign Sustainable Finance Committee (CFSS) has been created and tasked with preparing this Framework for issuance of sustainable bonds, including the identification budget schedules that meet the issuance eligibility criteria by the monitoring its implementation and by post-issuance allocation and impact reports.

Similar advancements can also be seen in the private debt issuance market. The volume of climate-aligned debt instruments certified by the Climate Bonds Initiative (CBI) in the Brazilian market exceeded USD 2.1 billion between 2016 and 2023, and are issued by private companies, securitization companies and banks. The sector leading these issues in financial volume (in US dollars, or USD) is solar energy (28%), followed by bioenergy (25%), low-carbon transport (23%), wind (14%), water infrastructure (8%), agriculture (2%) and forestry (less than 0.1%).[86]

In the context of domestic financial institutions, there has been a rapid advancement in actions towards adapting to new challenges and the allocation of resources considering sustainability factors. The Brazilian Development Bank ("BNDES") is the largest development bank in Brazil and the main instrument for executing the Federal Government´s investment policy with the primary goal of supporting programs, projects, works and services that relate to the economic and social development of the country, accounting for a considerable portion of the long-term financing of sustainability projects in Brazil. The bank is committed to contributing through its activities to the achievement of the Brazilian NDC, as well as to the Sustainable Development Goals of the UN 2030 Agenda. The bank has a series of sustainability-driven lines of credit, with emphasis on Low Carbon Finame, Finem - Recovery and Conservation of Ecosystems and Biodiversity, Pronaf ABC + Bioeconomy, among others.

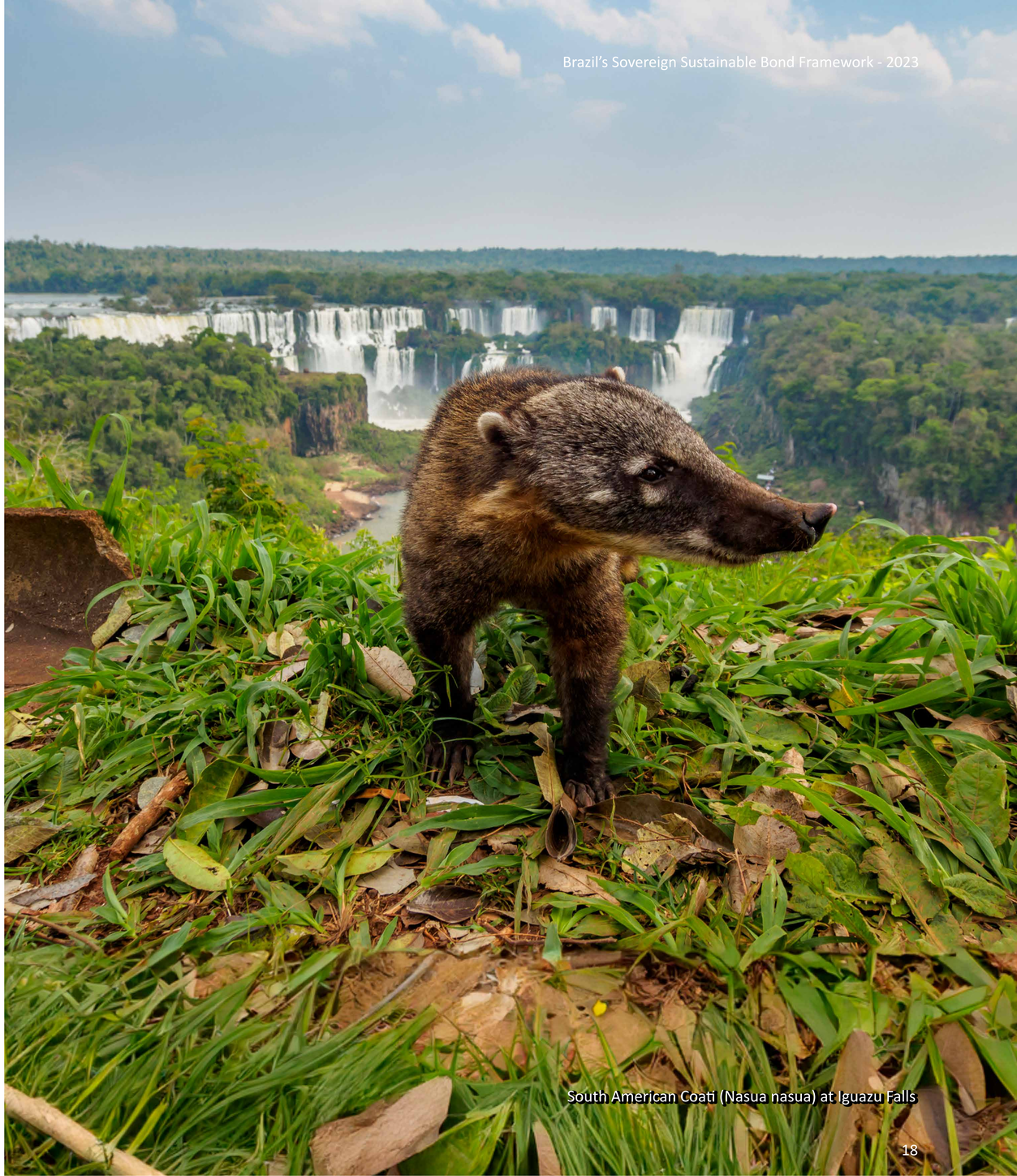
77 BCB. Resolution No. 4,327/2014. 2014. Available on the website. Accessed on: June 14, 2023.
78 BCB. BC# Agenda. 2020. Available on the website. Accessed on: June 14, 2023.
79 CMN. Resolution No. 4,945/2021. 2021. Available on the website. Accessed on: June 14, 2023.
80 CMN. Resolution No. 4,945/2021. 2021. Available on the website. Accessed on: June 14, 2023.
81 CMN. Resolution No. 4,943/2021. 2021. Available on the website. Accessed on: June 14, 2023.
82 BCB. *Resolution No. 139/2021*. 2021. Available on the website. Accessed on: June 14, 2023.
83 BCB. *Resolution No. 151/2021*. 2021. Available on the website. Accessed on: June 14, 2023.
84 CVM. *CVM/PTE Ordinance No. 10/2023*. 2023. Available on the website. Accessed on: June 14, 2023.
85 CVM. *Resolution 175*. 2022. Available on the website. Accessed on: June 14, 2023.
86 CBI. Certified Bonds. 2023. Available on the website. Accessed on: June 14, 2023.

The BNDES is also the operator of the reimbursable version of the National Fund on Climate Change ("Fundo Clima"),[87] which finances projects in priority areas of the Brazilian climate policy.[88] The Climate Fund's portfolio had totaled 1,603 transactions by April 2023, with BRL 2.48 billion in value, comprising renewable energy, efficient machinery and equipment, sustainable cities, urban mobility, and sustainable forest management projects, among others. Operations financed between 2019 and 2021 resulted in the reduction of around 5.7 million tons of carbon dioxide equivalent (tCO2eq), with a reduction proportional to the portion financed by Climate Fund of approximately 1.52 million tCO2eq.

In addition, the BNDES has made several public climate-related commitments, in alignment with the Paris Agreement, and the ongoing incorporation, of carbon accounting into the credit approval processes to support new projects. In 2022, the bank signed a cooperation agreement with the CBI to promote mechanisms for raising funds and attracting investments that support sustainable projects in Brazil.

In this regard, there is a robust environment for the promotion of sustainable finance in Brazil, including a regulatory framework for the National Financial System to contribute to the transition to a sustainable economy.

87 Brazil. Law No. 12,114, dated December 9, 2009. 2009. Available on the website.
88 BNDES. Climate Fund. 2023. Available on the website. Accessed on July 3, 2023.



South American Coati (Nasua nasua) at Iguazu Falls

# 3 Brazil's Sovereign Sustainable Bond Framework



Coremas III Photovoltaic Plant, of the solar energy complex located in Coremas, Paraíba (Alan Santos/PR)

The Federative Republic of Brazil ("the Republic") has developed this document with the objective of establishing a framework for the issuance of green, social and/or sustainability government bonds in the global market, as per its sustainability strategy.

Sustainable bonds are instruments that will allow the country to mobilize funds to finance budget programs and projects that generate positive environmental and/or social impacts. By issuing these bonds, we seek to foster the transition to a greener, more inclusive, and equitable economy.

This document establishes the obligations that the Republic must comply with as an issuer or borrower of sovereign sustainable bonds. The issuance of sustainable government bonds will follow the "use of proceeds" principle. The Federal Government commits to transparently and responsibly allocate the amount equivalent to the net proceeds of the bonds to eligible categories of expenses, which promote sustainability and contribute to the mitigation of climate change, the conservation of natural resources and/or social development. This Framework allows the Republic to issue three types of bonds:

- **Green bonds**: bonds whose net proceeds are used exclusively to finance, in whole or in part, expenses with a **positive environmental impact**;
- **Social bonds:** bonds whose net proceeds are used exclusively to finance, in whole or in part, expenses with a **positive social impact**;
- **Sustainability bonds**: Sustainability Bonds are any type of bond instrument where the proceeds or an equivalent amount will be exclusively applied to finance or re-finance a combination of both Green and Social Projects.

## Alignment with Market Principles

This Framework is in fulfillment of the internationally accepted voluntary process guidelines that recommend transparency, disclosure and promote integrity for best practices:

- International Capital Markets Association (ICMA) Green Bond Principles, 2021 ("GBP")

- International Capital Markets Association (ICMA) Social Bond Principles, 2023 ("SBP")
- International Capital Markets Association (ICMA) Sustainability Bond Guidelines, 2021 ("SBG")

These principles provide a framework for issuers and investors to guide the issuance and the assessment of green, social and sustainability bonds, and ensure that these instruments are used to finance projects and programs that contribute to environmental and/or social sustainability. The principles cover four main dimensions:

**Use of proceeds**: The net proceeds from the issuance of these instruments (or equivalent) must be used to finance or refinance, expenses previously identified, which provide clear environmental and/or social benefits. Use of net proceeds must be identified and described in the instrument´s documentation.

**Process for project evaluation and selection**: Issuers must establish a transparent process to assess and select expenses to be financed with net proceeds from the issuance, identifying its sustainability objectives while considering the environmental and/or social impact, eligibility criteria and the potential risks linked to them.

**Management of proceeds**: Issuers should establish mechanisms to appropriately track and manage the use of net proceeds from the issuance, including providing regular reporting about their allocation, ensuring that there will be no multiple allocation of net proceeds permitting the same project to be accounted twice.

**Reporting**: Issuers are encouraged to publish regular reports on the use of net proceeds and their eligibility and selection criteria until the maturity of the instrument or the full allocation of net proceeds. Moreover, qualitative indicators should be reported, and when possible, quantitative indicators, measuring environmental and/or social impacts.

These principles serve as good practice guidelines to promote consistency and transparency in the market of green, social and sustainability bonds. They help investors identify investments in line with the sustainability objectives underlying the instruments and ensure that the funds raised are used in expenses with environmental and/or social benefits.

**The amount of the net proceeds from the sustainable sovereign government bonds issued under this Framework will be** allocated, in equivalent amount (virtual allocation)[89], to federal expenses linked to activities that result in:

- **Environmental benefits**, in line with the Green Bond Principles;[90]
- **Social benefits**, in line with the *Social Bond Principles;*[91]
- **Social and environmental benefits,**[92] in line with the *Sustainability Bond Guidelines.*[93]

## Eligible Expenses

In this section, we will discuss the Eligible Expenses in the scope of this **Sustainable Bond** Framework. These are categories of expenses that are considered appropriate and aligned with the established sustainability objectives. A clear definition of these expenses plays a crucial role in allocating the funds raised to budget programs that generate a positive environmental and/or social impact. By establishing transparent, standardized criteria in line with international best practices, the integrity, transparency, and accountability are guaranteed, strengthening the confidence of investors and the credibility of securities.

Eligible Expenses **must be associated with Budget Units of the Executive Branch and provided for in the Annual Budget Law ("LOA")**.

89 The virtual allocation is carried out based on evidence that net proceeds in an amount equivalent to the bond issued have been/will be allocated to eligible expenses, without direct connection and not constituting a new budget source. Further information on the allocation of proceeds is available in section "5. Management of Proceeds".
90 ICMA. Green Bond Principles. 2021. Available on the website . Accessed on: Jun. 14, 2023.
91 ICMA. Social Bond Principles. 2021. Available on the website . Accessed on: Jun 14, 2023.
92 Within the scope of this Framework, "sustainable benefits" are those that combine environmental and social benefits simultaneously.
93 ICMA, 2021. Sustainability Bond Guidelines. Available on the website . Accessed on: Jun 14, 2023.

### The federal budgets

The LOA is part of the **federal budgets framework**, as provided for by the Federal Constitution of 1988.[94] This framework contains three key elements:

**Multiannual Plan (PPA)**, which establishes the guidelines, objectives, and targets of the federal government administration for capital expenses and other expenses resulting therefrom, and for expenses related to continued duration programs. The PPA is prepared every four years, always in the first term of office;

**Budget Guidelines Law (LDO)**, which comprises the goals and priorities of the federal public administration, establishes the fiscal policy guidelines and respective goals, in line with the sustainable trajectory of the public debt, and guides the preparation of the annual budget law. The LDO is prepared annually;

**Annual Budget Law (LOA)**, which covers:

Fiscal budget referring to the Federal Branches, their funds, bodies and entities of direct and indirect administration, including foundations established and maintained by the Government;

Investment budget of companies in which the Government directly or indirectly holds the majority of shares with voting rights;

Social security budget, covering all entities and bodies of direct or indirect administration linked to social security, as well as funds and foundations established and maintained by the Government.

With regards to the nature of the expenses, **current expenses, and capital expenses (investments and financial investments)**[95] will be eligible**.** In terms of primary income accounts, **both discretionary and mandatory primary expenses will be eligible. Financial Expenses may also be considered eligible.**

**Eligible Expenses include:**

- Operating expenditures
- Investments in tangible assets, such as land, buildings, infrastructure, energy efficiency and public works
- Subsidies, tax credits and tax exemptions
- Maintenance costs for Public Infrastructure
- Investments in intangible assets, such as research, innovation, human capital and organi zation

With regards to the time frame, the following will be eligible:

- **Recent expenses** (refinancing), incurred within the scope of LOA up to 12 months prior to the issue date — reimbursement of expenses incurred starting in January 2023;
- **Current expenses**, provided for within the scope of the relevant LOA in effect on the date of issue;
- **Future expenses**, to be incurred within 24 months after issuance.

**It should be noted that the eligible expenses back the issuance of sovereign government bonds provided for in this Framework, but they do not represent a source of funds linked to specific budget programs — given that the allocation is made in an equivalent amount.** Further information about the allocation procedure is presented in section 6 "Management of Proceeds."

Finally, regarding the benefits generated, the expenses linked to at least one of the categories presented in Tables 1 and 2 of this document will be eligible.

94 Brazil. Federal Constitution. 1988. Available on the website . Accessed on: Jun 14, 2023.
95 Exceptionally, personnel expenses may occasionally be considered, provided they relate to the expenses with environmental, social or sustainable benefits listed in Table 1.

# 4 Use of Proceeds



Wind turbines, Rio Grande do Norte

This section lists the categories[96] (and subcategories, when applicable) of expenses related to environmental and/or social benefits, as well as their Eligibility Criteria related to the relevant Sustainable Development Goals (SDGs), eligible for net proceeds of the issuance of sovereign government bonds. This also includes expenses related to research and/or development of those expenses. Expense categories have been structured in line with the Green Bond Principles, Social Bond Principles and Sustainability Bond Guidelines from ICMA.

## Environmental benefits

**Table 1** - Expense categories related to environmental benefits

| Category | Eligible expenses | SDG |
|---|---|---|
| 1. Pollution prevention and control<br><br>1.1 Control of GHG emissions | Expenses related to:<br>• Monitoring, Reporting and Verification, as well as disclosure and estimation of Greenhouse Gas (GHG) emissions and their reduction[97];<br>• Initiatives to reduce GHG emissions supported by the National Fund on Climate Change[98], as long as they are aligned with the exclusion criteria defined in this framework. | 13 CLIMATE ACTION |

96 It should be noted that, within the scope of this Framework, the term "expense category" should be understood broadly as a general grouping of expenses based on their environmental and/or social benefits, and should not be confused with the "economic category of the expense" – which, in turn, is a specific and different classification within the Federal Budgets.
97 Expenses related to Brazil's country-level platform "National Registration System for GHG Emissions – SIRENE" ("*Sistema de Registro Nacional de Emissões*"). SIRENE's main objective is to register and disclosure data on Brazil's National Inventory of anthropogenic GHG emissions and removals. It also provides Annual Estimates of Greenhouse Gas Emissions. More information is available at SIRENE's website.
98 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. The full list of eligible activities under this Fund is available at the website.

| | | |
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| 1. Pollution prevention and control<br><br>1.2. Solid waste management | Expenses related to:<br>• Subsidies to states and municipalities for proper management of urban solid waste in line with the National Solid Waste Policy (Law No. 12,305/10), including collection[99], separation, processing, and recycling[100][101];<br>• Installation and maintenance of biogas capture systems in sanitary landfills[102]. |  |
| 2. Renewable energy | Expenditures related to:<br>• Development, construction, installation, expansion, operation, 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 <100gCO2e/kWh, unless otherwise stated;<br>• Solar energy (Photovoltaic);<br>• Wind power;<br>• Solar thermal plants[103];<br>• Hydroelectric power from run-of-the-river plants without artificial reservoir or low-storage capacity or plants with a carbon footprint below 50g $CO_2e$/kWh or power density above 10 W/$m^2$ for projects starting operations in 2020 onwards or plants with a carbon footprint below 100g $CO_2e$/kWh or power density above 5 W/$m^2$ for projects in operation before 2020[104];<br>• Power from biomass[105], and municipal solid waste or industrial waste[106]; |  |

99 To be eligible, waste collection vehicles must meet emissions threshold of 25 gCO2/tkm or below.
100 Chemical recycling of plastics is not eligible.
101 Segregation of waste at the source will be ensured for all waste collection activities. For waste recovery and processing, segregation of recyclables will be ensured prior to processing. Additionally, eligible projects related to e-waste recycling will have a robust waste management plan to ensure mitigation of any risks associated with such activities.
102 Flaring of Biogas is not an eligible activity.
103 To be eligible, Concentrated Solar Power (CSP) plants must generate at least 85% of electricity from solar sources.
104 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.
105 Biomass Eligibility: (a) life-cycle GHG emissions intensity is below 100 gCO2e/kWh; OR (b) there will be 80% life cycle emissions reduction compared to fossil fuel baseline of 183 gCO2e/MJ for electricity production.
106 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.

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| ( cont.)<br>2. Renewable energy | • Production of biofuels[107] with Efficient Biofuel Production Certificate, in line with ANP Resolution No. 758/2018[108] issued by the National Agency of Oil, Natural Gas and Biofuels;<br>• Production of biomethane:<br>◊ Development, construction, installation and expansion of the production of waste-derived fuel[109].<br>• Renewable energy storage technologies (including efficient batteries);<br>• Low-carbon hydrogen technologies, including production and storage or application of hydrogen in different technologies[110];<br>• 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. |  |

107 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.
108 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 (gCO2eq/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 bioful production must follow the CBI thresholds to GHG for biofuels and the DNSH critieria for certifying the production of non-deforested areas.
109 To be eligible, must follow Energy from Waste criteria established by CBI and waste heat from fossil fuel will be excluded.
110 According to the Brazilian National Hydrogen Program (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 this Framework.

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| 3. Energy efficiency | Expenditures[111] related to:<br>• Modernization of public buildings (for example, using retrofit techniques, thermal insulation or replacement of air conditioning systems), that results in savings of at least 20% in energy consumption only in cases where there is no PBE Edifica application, at level A;<br>• Investments in public lighting with replacement of light bulbs with others with higher efficiency;<br>• Investments in public lighting associated with replacing conventional light bulbs with LEDs;<br>• Substitution of industrial infrastructure to obtain higher levels of energy efficiency, resulting in an improvement of at least 20% when compared to the pre-investment conditions[112]. |  |
| 4. Clean transport | Expenditures related to:<br>• Purchase, design, maintenance, extension, repair, reconditioning, upgrade, operation and/or deployment of zero or low carbon[113] transportation;<br>• Public transportation programs and projects with zero or low CO2 emissions, related to:<br>◊ Metro lines: new lines, expansion;<br>◊ Light rail transit[114];<br>◊ Freight rail transit[115];<br>◊ Electric buses;<br>◊ Tram, trolleybus, bus and rail.<br>• 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[116];<br>• Construction and modernization of low-impact rail for cargo transport[117];<br>• Electrification of public fleets[118]. |  |

111 For the avoidance of doubt, expenditures related to fossil fuel operated equipment or any activity/technology that is inherently designed for carbon intensive activities are not eligible. Additionally, heat pumps will not be financed.
112 Energy-efficient mechanical cooling systems might be considered.
113 To be eligible, hybrid passenger vehicles must meet the threshold of 50gCO2/km and hybrid freight vehicles (such as heavy trucks) must meet threshold of 25gCO2/km. In addition, the tailpipe emissions intensity of the eligible vehicles must not exceed 50g CO2/km until 2025, and from 2026 onwards, eligible vehicles must have emissions intensity of 0g CO2/km. To be eligible, hybrid freight vehicles (such as locomotives) must meet threshold of 25gCO2/tkm. Transportation of fossil fuels (including blended fuels) is not an eligible activity https://www.climatebonds.net/standard/transport.
114 Vehicles and trains (including hybrids) with less than 50g CO2 per passenger-km or 25g CO2 per tonne-km (freight).
115 To be eligible, hybrid freight locomotives must meet threshold of 25gCO2/tkm. Freight rail where more than 25% of the rolling stock is dedicated to the transport of fossil fuels is not eligible.
116 Expenditures related to Parking facilities are not eligible.
117 Low impact rail means that less than 25% of the freight in t-km transported by the line is comprised of fossil fuels.
118 Electrified vehicles (BEVs and HEVs) in accordance to CBI's Land Transport Criteria: https://www.climatebonds.net/files/files/standards/Land%20transport/Sector%20Criteria%20-%20Land%20Transport%20%28April%202023%29.pdf

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| 5. Sustainable management of living and natural resources and land use | Expenditures related to:<br>• 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;<br>• Recovery of degraded pastures[119];<br>• Forestation, reforestation, and forest restoration of degraded areas[120];<br>• Implementation and improvement of crop-livestock-forestry integration systems in all their possible combinations, and of agroforestry systems[120];<br>• Implementation and improvement of irrigated and soil management systems[121];<br>• Animal waste management[122];<br>• Implementation and improvement of management and planting of commercial forests[120;]<br>• Adequacy and regularization of rural properties to the Forestry Code[123];<br>• Implementation or expansion of units for biofertilizers production[124];<br>• Implementation or expansion of units for organomineral fertilizers using biological waste as an input; | W |

119 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) CO2 can be sourced from heavy industries but not fossil fuel operations. Additionally, expenditures associated with technological innovations will not be carbon intensive.
120 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.
121 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.
122 To be eligible, the waste management must not include confined animal or any industrial livestock.
123 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).
124 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.

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| (cont)<br>5. Sustainable management of living and natural resources and land use | • Projects that use of biological nitrogen fixation of microorganisms that boost the growth of plants and multifunctionals[125];<br>• Projects for the production of organic food;<br>• Implementation of Agricultural Climate Risk Zoning[126];<br>• Conservation of natural resources, maintenance of permanent soil cover and improvement of its chemical, physical and biological quality[127];<br>• Sustainable use of natural resources in production chains based on biodiversity;<br>• Expenditures related to social-biodiversity:<br>◊ Conservation of biodiversity in production chains that use natural resources;<br>◊ Integrated and sustainable productive systems in productive chains based on biodiversity.<br>• Valuing rural communities, their products, services and processes related to social-biodiversity, related to:<br>◊ Projects to identity and visibility of products and rural communities;<br>◊ Registration, management and dissemination of knowledge, techniques, and traditional and scientific knowledge;<br>• Projects that enable participation of family farming in renewable energy;<br>• Projects for areas belonging to indigenous peoples and traditional peoples and communities[128], including demarcation and restoration of areas;<br>• Revitalization of Hydrographic Basins - Water production and retention in their natural environments with a focus on Sustainable Development. |  |

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| 6. Terrestrial and aquatic biodiversity | Expenditures related to:<br>• Protection, conservation, recovery, restoration and sustainable management of biodiversity, terrestrial and marine ecosystems;<br>• Creation, operation and maintenance of land and marine Conservation Units;<br>• Implementation of the Rural Environmental Registry ("CAR")[129];<br>• Prevention and fight against forest fires:<br>◊ Educational campaigns, training of local communities and firefighters;<br>◊ Employee improvement and updating courses;<br>◊ Selection and hiring of local firefighters;<br>◊ Implementation of short-and long-term fire prevention actions;<br>◊ Maintenance and improvements of monitoring and early detection/warning systems;<br>◊ Investments in the firefighting equipment (including specific individual protective equipment, vehicles and others);<br>◊ Expenses with overflight to assess wildfires and define firefighting strategies.<br>• Improvement of the inspection process for compliance with environmental legislation, including remote monitoring technologies;<br>• Combating deforestation, related to:<br>◊ Promotion of sustainable productive activities;<br>◊ Environmental monitoring and control;<br>◊ Land and territorial organization;<br>◊ Normative and economic instruments.<br>• Monitoring and recording of the fauna of Brazilian biomes[130];<br>• Development and implementation of Marine Spatial Planning;<br>• Research and development of conservation technologies and strategies;<br>• Implementation of the "Bolsa Verde[131]". |  |

125 To be eligible Projects, will with a sustainable management plan certified, for example, under FSC or PEFC.
126 To be eligible, the expenditure must not include devices for short-term meteorological purposes.
127 Soil remediation activities will not be related to the contamination or negative environmental externalities from the Government's own activities.
128 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".

129 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
130 "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
131 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.

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| 7. Sustainable management of water and effluents | Expenditures[132] related to:<br>• Design, construction, operation, maintenance, improvement, enlargement and adaptation for efficient and sustainable management of water and wastewater;<br>• Implementation and improvement of the management instruments provided for in the National Water Resources Policy (Law No. 9,433/97)[133];<br>• Revitalization of river basins;<br>• Implementation of monitoring mechanisms and granting controls;<br>• Control of water pollution and compatibility of water quality for different uses;<br>• Conservation of water resources, protection of river basins and prevention of pollution affecting water supply;<br>• Network systems for monitoring water resources, flood control, weather, and atmospheric conditions;<br>• Technical and financial assistance for implementation of decentralized and low environmental impact technologies, for management of domestic effluents for families in rural areas and/or situation of poverty, including biodigestive tanks, wetlands, root zones and evapotranspiration tanks[134]. |  |

132 Systems and measures that provide water for fossil fuel operations, fracking, and nuclear and mining industries and operations are not eligible.

133 The Brazilian Government plans to support the sustainable management of water and effluents by implementing the mechanisms provided by Law No. 9,433/97. For that, the government will promote financing related to the implementation of systems to improve the management of water resources, such as the Grant Management System in the State of Minas Gerais, which was implemented with funds transferred by the Ministry of Integration and Regional Development.

134 To be eligible, the energy consumption must not be dependent on fossil fuels.

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| 8. Adaptation to climate change | Expenditures related[135] to:<br>• Surveys, studies, and mechanisms for prevention and alerts of extreme weather events, focusing on the construction of the adaptive capacity of vulnerable communities;<br>• Strengthening of the National Civil Protection and Defense System – SINPDEC (in its Portuguese acronym);<br>• Reduced vulnerability and increased resilience of agricultural production systems;<br>• Development and improvement of methods for assessing the efficiency of resilience, adaptive capacity and productivity of sustainable systems, practices, products and production processes;<br>• Integration of information and systems for analysis of resilience, adaptive capacity and risk monitoring of sustainable systems, practices, products and production processes;<br>• Reduction of erosion (including reduced loss of soil, water and nutrients) and increase in the adaptive capacity to droughts;<br>• Reduction of the negative impacts of extreme rainfall events on soil and water conservation;<br>• Reduction of productivity losses and vulnerability of grains to pests due to reduced water availability;<br>• 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[136];<br>• Reduction of the vulnerability of production systems in periods of drought, and the risk of crop loss due to extreme weather events;<br>• Adaptation, reducing vulnerability and increasing resilience of urban infrastructure. |  |
| 9.Circular economy adapted products, production technologies and processes | Expenditures related to:<br>• Industrial plants that process waste to generate new products or to restore them to a previous state that enables new processing;<br>• Bio-based products that use renewable materials in substitution to fossil inputs;<br>• Encouragement of reverse logistics[137] actions and negotiation of sector agreements[138]. |  |

135 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/).

136 To be eligible, expenditures related to reducing the effects of water deficit must not support industrial-scale livestock production.

137 The National Information System on Solid Waste Management (SINIR+) defines "Reverse Logistics" as: "An instrument of economic and social development characterized by a set of actions, procedures and means aimed at enabling the collection and return of solid waste to the business sector, for reuse, in its cycle or in other productive cycles, or other environmentally appropriate final destination." https://sinir.gov.br/perfis/logistica-reversa/logistica-reversa/ ; SINIR has been established by law 12.305 http://www.planalto.gov.br/ccivil_03/_ato2007-2010/2010/lei/l12305.htm. To be eligible, procurement of bio-based raw materials (excluding bio-plastics) will be done by sustainable sourcing. Additionally, production of aluminium-based products must have i) at least 90% of inputs being scrap or recycled aluminium, or ii) at least 75% of input being scrap or recycled aluminium and the remaining (primary) aluminium having a carbon intensity below 2.5 tCO2e/t.

138 This category will not include (i) commercial-scale manufacturing /production of resource-efficient/low-carbon of products without details on manufacturing process, assurance of sustainable sourcing, and/or reasonable basis for substantial reduction of life-cycle emissions and/or (ii) procurement of recycled/waste inputs intended for (non-medical) plastic packaging for single-use consumer products.

## Social benefits

**Table 2** - Expense categories related to social benefits

| Category | Eligible expenses | SGD |
|---|---|---|
| 1. Social-economic development and empowerment<br><br>1.1 Combating poverty | Expenditures related to Combating Poverty:<br>• 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[139], as defined in the section of target population;<br>• Financial assistance for the elderly (65 years old or older) and people with disabilities;<br>• Basic Social Protection Actions of the Unified Social Work System ("SUAS")[140]. |  |
| 1. Social-economic development and empowerment<br><br>1.2. Combating discrimination | Expenditures related to Combating Discrimination:<br>• Affirmative actions, promotion of equality and implementation or modernization of equipment and spaces, whether temporary or permanent, to serve target population:<br>◊ Women, including victims of domestic violence and sexual abuse;<br>◊ Black people, including measures to counter institutional racism;<br>◊ Traditional communities;<br>◊ Lesbian, gay, bisexual, queer and transgender persons;<br>◊ Immigrants and refugees in vulnerable situation;<br>◊ People living in the street.<br>• Projects aimed at prevention of violence and abuse against women, and promotion of opportunities for women to participate in social, political and economic spheres, including supporting female employment through provision of institutional childcare services or childcare allowances. |  |
| 2. Food security and sustainable food systems | Expenditures related to[141]:<br>• Healthy and nutritious food service programs including the purchase and distribution of food as well as food subsidies to target population:<br>◊ Population experiencing food or nutrition insecurity;<br>◊ Students of public schools;<br>◊ Traditional communities, including quilombolas, people living from extractivism and indigenous people.<br>• Finance activities of the National Food and Nutrition Security System ("SISAN") to increase food security;<br>• Encouragement of agro-ecological food production in urban and semi-urban areas;<br>• Regional and articulated measures to strengthen production chains, cooperativism and increase the potential for success of family farmers[142], mainly located in semi-arid zones. |  |
| 3. Employment Generation | Expenditures related to Employment Generation:<br>• Vocational qualification aimed at inserting and reintegrating people enrolled in the Single Registry into the labor market;<br>• Promotion of solidary economy enterprises[143], including associations and cooperatives;<br>• Productive structuring of rural families in situation of poverty or extreme poverty, as defined in the section of target population, including through technical and financial assistance;<br>• Technical and financial support to micro and small business[144];<br>• Projects that diversify production and directly increase the level employment and the income of rural producers through sustainable agriculture practices foreseen under this framework;<br>• Support to non-agricultural goods and services related to social-biodiversity;<br>• Support to community-based rural tourism, sustainable leisure activities in rural areas and promotion of long-distance trails that foster the connectivity between conservation units. |  |

139 The eligible population will be characterized based on monthly income per person.
140 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.

141 Expenditures under this category will only go to regions in Brazil with deficiencies in food production, distribution and food security.
142 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 (INCRA), which may vary between 5 and 110 hectares.
143 These enterprises associations and cooperatives will be owned by members of historically and systemically marginalized and disadvantaged groups.
144 Micro and small business are characterized based on the criteria provided for in Supplementary Law No. 123/2006. The criteria include thresholds associated with annual gross revenues, based on which micro and small business should have, respectively, annual revenues of up to BRL360,000 and BRL4.8 million.

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| 4. Access to Affordable Housing | Expenditures related to expanding access to Affordable Housing:<br>• Construction and financing of affordable social housing, for families in urban areas with monthly gross family income of up to BRL 8,000 and families in rural areas with annual gross income of up to BRL 96,000[145]. Property titles are prioritized to also benefit, in addition to the income criteria, families in situation of risk and vulnerability, led by women or including people with disabilities, the elderly, children and/or adolescents;<br>• Housing financing at reduced interest rates, and customized according to the location and income of target population families;<br>• Renewal or expansion of deteriorated social housing properties, lack of structure (such as bathroom, roof or floor), inappropriate electrical or hydraulic installations and excessive concentration of dwellers;<br>• Support and subsidies for social leasing for families in a situation of "excessive burden with rent," where more than 30% of income goes to the payment of house rental. |  |
| 5. Access to basic infrastructure<br><br>5.1. Urban development and mobility | Expenditures related to:<br>• Preparation and implementation of the National Urban Development Policy;<br>• 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[146];<br>• 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[147];<br>• Concessions and Public-Private Partnerships with a focus on Sustainable Development;<br>• Incentive to intermodal transport in underserved or remote regions. |  |

145 This figure does not take into account temporary benefits.
146 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 50g CO2 per passenger-km or 25g CO2 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.
147 In order to be considered as Eligible Project, >80% of the electricity in the relevant grid should have to be generated from renewable sources.

| | | |
|---|---|---|
| 5. Access to basic infrastructure<br><br>5.2. Universalization of basic sanitation | Expenditures related to:<br>• 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;<br>• Projects/interventions that will guarantee the supply of water with sufficient and appropriate quality and quantity for human supply and multiple uses;<br>• Research and development of technologies that provide greater energy efficiency to water collection, treatment and supply processes;<br>• Sustainable urban drainage and rainwater management systems in critical municipalities[148] subject to recurring events of floods and overflows;<br>• Containment of slopes in urban areas;<br>• Provision of temporary housing for people displaced by extreme weather events;<br>• Support for the implementation, expansion or improvement of water supply systems in municipalities in the semi-arid region;<br>• 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;<br>• Investments in design and implementation of efficient and clean water supply to municipalities in the semi-arid region and target population. |  |

## Definition of Target Population for Eligible Social Project Categories

Within the scope of the social benefits addressed in this Framework, it is worth mentioning the definition of "vulnerable populations" adopted in this document, as provided for in ICMA's Social Bond Principles.

Brazil has a unified instrument, known as the Single Registration ("Cadastro Único[149]"), to identify the most vulnerable individuals and families in the country and develop public policies targeted for this population.

This Single Registration allows several federal, state, and municipal programs to take place in a structured way. To name some, we have, Bolsa Família Program, Water for All (Cisterns),

148 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 (SGB) based on its technical analysis.
149 For more information, please visit: Cadastro Unico

"Auxílio Gás", "Criança Feliz" and Continued Provision of Social Work Benefit – "BPC" and others ("social programs"), that use the Single Registration as a common database to identify the population that can benefit from social policies and campaigns and get access to the social programs. It is important to mention that each of the social programs establishes its own eligibility criteria, which combine parameters extracted from the Single Registration such as income, sex and age to determine eligibility for the program's benefits.

This registration is a comprehensive map of low-income families in Brazil to help policy makers understand where they live and what they need to improve in their lives. Low-income families are eligible to many social benefits, but the conditions vary according to the specific situation considered.

Families living on a monthly income of up to half the minimum wage per person can be registered in the Single Registration. Families with income above this amount can be registered to participate in specific programs or services. The registration considers whether the families are part of traditional communities, specific groups or considered traditional people, among them are indigenous communities, "quilombolas[150]" and people living in the streets. In January 2023 there were 41.5 million families registered throughout Brazil, which represented a total of 94 million people.

The registration is done in person, at a service center located across the country in several municipalities. The family representative at the registry is required to present a valid identification for all the family members of the household as well as their social security number and proof of residence.

Regarding the Bolsa Família Program, for example, families with a monthly per capita income of up to BRL 218.00[151] are eligible to receive the benefit. Within the scope of the Continued Provision of Social Work Benefit – "BPC" program, elderly people aged 65 or over and disabled people of any age, belonging to families whose monthly family income is up to ¼ of the minimum wage per person are eligible.[152] In the context of the "Criança Feliz" Program, pregnant women and children who meet certain age and income criteria are eligible.

As a general rule, Social Programs that use the Single Registration as a source to determine eligibility and prioritize vulnerable population will be able to use this Framework to raise funds, provided that its beneficiaries are:

(a) an active participant in the Single Registration; and / or

(b) members of at least one of the following target populations, as defined below.

| Target Population | Definition |
|---|---|
| **Low-Income** | • Families with per capita income of up to BRL 100 (considered as extremely poor according to Decree 10.851 from November 5, 2021);<br>• Families with per capita income of up to BRL 200, considered poor according to Decree 10.851 from November 5, 2021);<br>• Families that benefit from the *Bolsa Família* Program, that have a per capita income below a quarter of the minimum wage currently at BRL 1,320. |
| **Women** | • Focus on women as vulnerable population to reduce the "gender gap" and the inequalities that persist between women and men. |
| **Afro-Descendant** | • Focus on Afro-Descendant as vulnerable population to combat racism and to promote racial justice and equality. |
| **Minoritized Groups** | • Traditional communities that are defined as culturally differentiated groups who recognize themselves as such, which have their own forms of social organization, occupying and using territories and natural resources as a condition for replicating their cultural, social, religious, ancestral and/or economic practices, through knowledge, innovations and practices generated and transmitted by tradition, as defined by Decree n. 6.040 from February 7, 2007;<br>• Individuals who identify as lesbian, gay, bisexual, transgender, queer, intersex and/or asexual. |
| **Rural Population** | • Those who (a) live outside the areas defined as urban, in what is called urban periphery, concentrated rural and scattered rural and (b) have monthly per capita family income of up to a quarter of the minimum wage. |
| **Micro and Small-sized Enterprises (MSEs)** | • Micro and small enterprises as defined by Complementary Law No. 123/2006 that have a certain annual gross revenue thresholds, as follows:<br>◇ **Micro Enterprises:** Up to BRL 360 thousand; and<br>◇ **Small Enterprises:** From BRL 360 thousand to BRL 4.8 million. |
| **People with Disabilities** | • Individuals with any physical, mental, intellectual, or sensory impairment that substantially limits one or more of the main activities of an individual. |
| **Elderly People** | • People with 65 years old or more. |

150 The Decree nº 4.887/2003 which establishes the procedure of titulation of the ethnic quilombolas territories in Brazil. "*Quilombola*" refers to members of a Brazilian community, person of Afro-Descendant, related to resistance to historical oppression suffered.
151 Equivalent to a monthly *per capita* family income of up to US$43.80, considering the BRL/US$ exchange rate of May 1, 2023.
152 Considering the value of the minimum wage of US$ 264, and the exchange rate of May 1, 2023, ¼ of the minimum wage represents US$ 66.

| | |
|---|---|
| **Vulnerable Children and Youth** | • Children and people under 18 years old who are currently or are likely to be in adverse conditions, thereby subject to significant physical, emotional, or mental stress resulting in inhibited development. |
| **Vulnerable People as a Result of the impact caused by natural events** | • People affected by hazardous events that cause large numbers of victims, fatalities and/or overwhelming property damage, including but not limited to floods, volcanic eruptions, earthquakes, landslides, droughts, heat waves, tsunamis, tidal waves, cyclones, hurricanes, storms, tornadoes, tropical storms, typhoons, wildfires, insect infestations and epidemics. |
| **Indigenous Peoples**[153] | • The identification of a person as indigenous is self-declaratory, following the principles of ILO Convention No. 169 (C169 - Indigenous and Tribal Peoples Convention, 1989). As a result, self-identification as indigenous or tribal will be regarded as a fundamental criterion for determining these groups;<br>• Indigenous peoples are those who, having historical continuity with pre-Columbian groups, consider themselves distinct from national society. Indigenous people are those who recognize themselves as belonging to one of these communities and who are recognized by them as one of their members. |
| **Underserved** | • Population lacking quality access to essential goods and services, including sanitation, water/waste treatment, electricity, food, health, and education. |
| **Migrants and/or displaced persons** | • Migrants and/or displaced persons (e.g. refugees and displaced persons fleeing the conflict)<br>• Population living on the streets, as defined by Decree 7.053 from December 23, 2009[154]; |
| **Population with Excessive Rent Burden** | • People enrolled in social leasing housing programs and/or those that have more than 30% of their income committed to rental expenses. |

## Exclusion criteria

Expenses that relate to the following activities, before or during the allocation of net proceeds, will not be eligible for net proceeds from the issuance of sustainable government bonds.

- Government assistance and subsidies given to civil and military servants (housing assistance, pensions, retirement, medical and health plans, indemnity benefits);
- Public utility advertising;
- Indemnities or penalties linked to compliance with court decisions;
- Alcohol for consumption, Arms, tobacco or gambling industry
- Weapons industry;
- Planning or construction of airport infrastructure;
- Planning or construction of maritime port infrastructure and maritime transport;
- Highway planning or construction;
- Mining;
- Inorganic or synthetic fertilizers, pesticides, or herbicides;
- Extraction, transport, trade or generation of energy from mineral coal
- Extraction, transport, trade, generation of energy or production of fuels from oil, natural gas and derivatives;
- Construction, or generation of energy, from nuclear power plants;
- Any project or activity that directly or indirectly violates the rights of indigenous peoples, and traditional peoples and communities;
- Any project or activity that is directly or indirectly linked to human rights violations, child labour and forced labour;
- Direct Waste incineration;
- Production or commercialization of any product or activity considered illegal under national or international laws or regulations, conventions and agreements signed by Brazil.

Environmental and social risks associated with expenses that were made possible due to the net proceeds from sustainable bonds, will be monitored by CFSS. The relevant Ministries responsible for implementing these activities will identify and manage such risks within the scope of the current public policies.

153 Based on data compiled from the 2022 Census, conducted by the Instituto Brasileiro de Geografia e Estatística (IBGE) in collaboration with the Fundação Nacional dos Povos Indígenas (Funai), the indigenous population of the country has reached 1,693,535 individuals. This figure accounts for approximately 0.83% of the total population, with slightly over half (51.2%) of this indigenous population residing in the Legal Amazon region.

154 Decree available at: https://www.planalto.gov.br/ccivil_03/_ato2007-2010/2009/decreto/d7053.htm

# 5 Eligible expenses assessment and selection process



Berimbaus Orchestra, from the Grupo Nzinga de Capoeira Angola, performing at the Latinidades Festival (Marcello Casal Jr/Agência Brasil)

In this section, we will address the assessment and selection of eligible expenses in the context of this Framework, with focus on the participation of the Sovereign Sustainable Finance Committee (CFSS).

The assessment and selection process plays a crucial role in ensuring that the funds raised are allocated to eligible green, social and/or sustainable and high-impact expenses. The creation of an inter-ministerial group, such as the CFSS, which is made of representatives from different government areas, brings strategic alignment besides diversified expertise and promotes impartiality, transparency and robustness to the decisions made. The Committee’s role in building the Framework is essential to strengthen the engagement of various federal administration players, contributing to the credibility and confidence in the process, as well as ensuring that the eligible expenses are in line with the country’s sustainability agenda.

**The CFSS is a permanent collegiate body, established in 2023, whose main objective is to plan, implement and monitor this Framework, as well as any related sustainable bond issue**. The CFSS is made up of members of the Ministry of Finance, through the Brazilian National Treasury, which chairs it, and the Office of Economic Policy, Ministry of Planning and Budget, represented by the Federal Budget Secretariat, Ministry of Environment and Climate Change, Ministry of Science, Technology and Innovation, Ministry of Agriculture and Livestock, Ministry of Mines and Energy, Ministry of Integration and Regional Development, Ministry of Social Development, Assistance, Family and Fight against Hunger, Ministry of Development, Industry, Trade and Services, and Ministry of Agrarian Development and Family Agriculture.

**The CFSS has the following responsibilities:**

I - Prepare the framework for issuance of themed sovereign government bonds of the Federal Public Debt;

II - Identify expenses that meet the eligibility criteria established in the Framework

III - Identify the exclusion criteria as well as other processes implemented to determine and manage environmental and/or social risks associated with the expenses;

IV - Monitor the implementation of the Framework; and

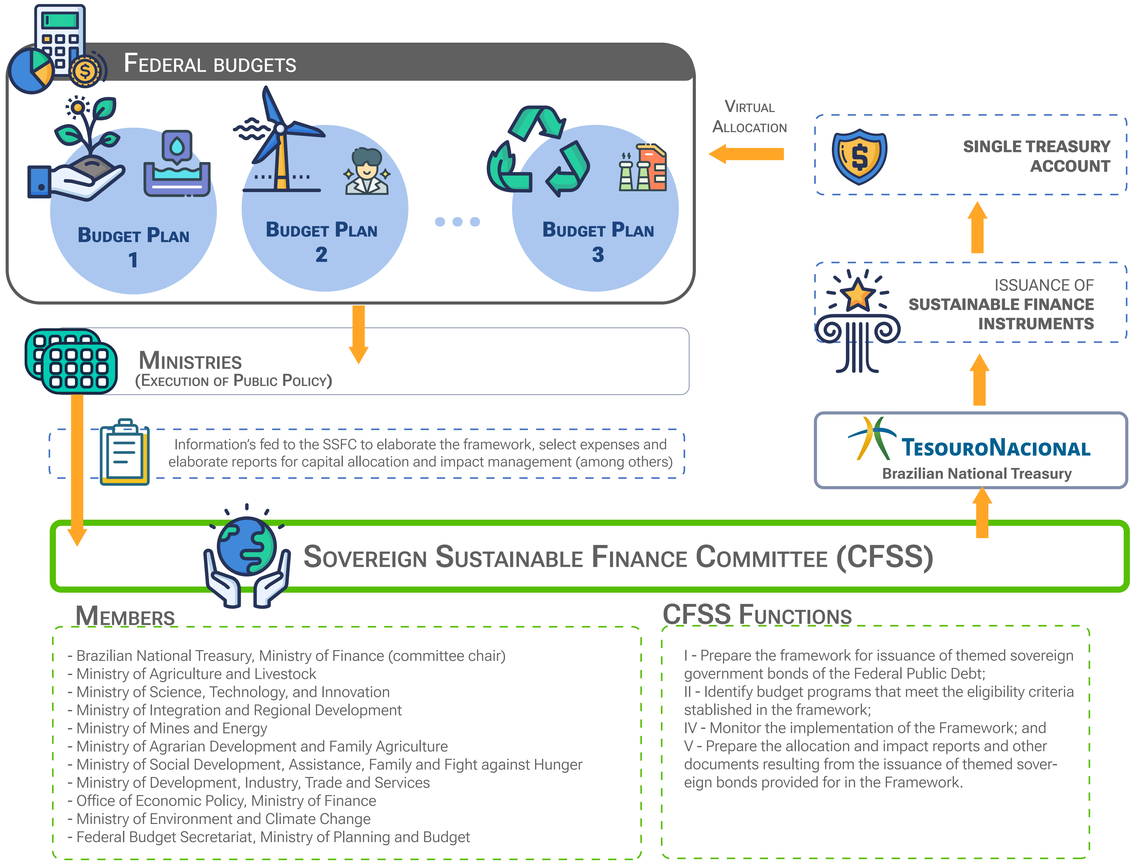
V - Prepare the allocation and impact reports and other documents resulting from the issuance of themed sovereign bonds provided for in the Framework.

Prior to the allocation of net proceeds, CFSS member Ministries will provide the information requited to support the alignment and eligibility of expenses in the respective Annual Budget Law ("LOA"), related to the criteria and categories established in the "Use of Proceeds" chapter of this document. In addition, the Ministries will provide data that demonstrate the feasibility of monitoring the environmental and/or social benefits of the expenses, in line with the "Transparency and Impact" chapter of this document. Based on these inputs, the CFSS will determine the final list of selected expenses – that is, the portfolio associated with the sustainable bond in question.

During the allocation of net proceeds, the CFSS will monitor the selected expenses to supervise the continued alignment with the eligibility and exclusion criteria. Expenses that violate these criteria during allocation will be excluded from the portfolio associated with the sustainable sovereign bond upon CFSS resolution. If this occurs, the CFSS will replace such expenses with others that meet the respective criteria indicated in this Framework, consulting the members of the Committee to identify the alternatives. The Committee will publish the minutes of meetings on the National Treasury website.

This process is shown in **Figure 1**.

**Figure 1** - Roles of the Ministries and the Brazilian National Treasury, within the scope of the CFSS, during the assessment and selection process



# 6 Management of Proceeds



Colheteiro bird in the Environmental Protection Area (APA) of Guapi-Mirim and Guanabara Ecological Station, hydrographic region of Guanabara Bay (Tânia Rego / Agencia Brasil)

This Framework is a comprehensive document applicable to **one or more future sustainable bond issued by the National Treasury**. Each bond issued under this Framework will be associated with a set of selected eligible expenses, in line with the "Use of Proceeds" and "Assessment and Selection Process" sections of this document.

Prior to each issuance, the National Treasury Secretariat ("STN" or "National Treasury") will publish a notice with the estimated percentage of recent expenses (refinancing) current and/or future associated with each bond and the estimated disbursement period, as well as the green, social and/or sustainable allocations when viable. This notice will be published on the STN website.

The management of net proceeds, while they are not yet fully allocated (virtual allocation) to the selected eligible expenses, will be carried out in accordance with the legislation applicable to government debt management and the National Treasury's cash availability.

Eligible expense management will ensure that **an amount at least equivalent to the net proceeds of sustainable sovereign bonds will be used to identify and allocate the eligible expenses**. The CFSS will be responsible for:

- Verify if the amount of the Federal Government Budget allocated or projected to selected eligible expenses is equal or higher than the issuance's amount;
- Check if, in the case of expenses co-financed by other sources (such as loans from multilateral agencies or international cooperation contracts), there is no double counting.

During allocation, the net proceeds intended for expenses that either (i) violate the eligibility or the exclusion criteria (as provided for in section 5 of this document); and/or (ii) have their amounts contingent, shall not be considered for allocation and will be reallocated to other expenses that meet eligibility and exclusion criteria.

The CFSS will seek to allocate, on a best-efforts basis, the net proceeds of any SFI to eligible expenses within the 24 months following the issuance.

# 7 Transparency and Impact



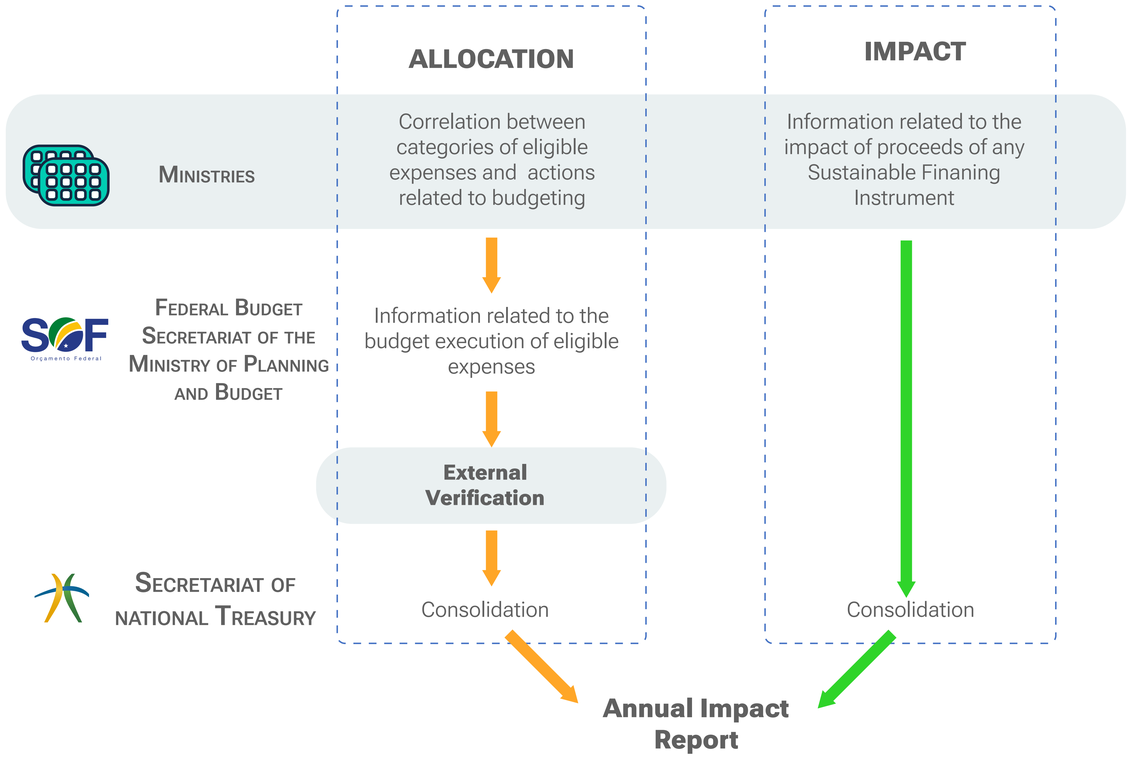
Waterfall in Porteirinha, Minas Gerais

Transparency in the allocation of net proceeds and the social and/or environmental impact generated are fundamental aspects of the issuance of sustainable bonds.

“Sound transparency practice” means providing clear and reliable information about the use of net proceeds and allocation criteria. In addition, it is important to communicate the environmental, social or governance (ESG) impact of budget programs through the definition and monitoring of performance indicators and the continued transparent disclosure of the results achieved. This enables the assessment of the efficiency of the initiatives against the established objectives, in addition to, once again, strengthening investor confidence and the country’s commitment to sustainable development.

The CFSS will be responsible for **consolidating and publishing the allocation and impact reports for sustainable bond issuances by the National Treasury**. The report(s) are/will be published **annually** until the full allocation of the net proceeds of the applicable sustainable bond or its maturity, with the first publication within one year after the issuance of the respective bond and the others every 12 months. The reports will be **made publicly available** on the website of the National Treasury Secretariat. This process is represented in **Figure 2** and described below.

**Figure 2 -** Roles and responsibilities of CFSS members during the allocation and impact assessment process.




## Allocation Report

The CFSS is responsible for preparing the allocation and impact report(s) and other documents resulting from the issuance of sustainable sovereign bonds provided for in the Framework, among other responsibilities. The CFSS member Ministries will be responsible for providing the necessary information to the aforementioned documents, mainly in view of the need to verify in detail the correlation between the categories of eligible expenses and the budget programs.

This information will include:[155]

- Amount disbursed **by expense category**, in accordance with the "Use of Proceeds" section of this Framework, both in absolute (BRL) and relative terms (% in relation to the total of the bond);
- Amount disbursed **by type of expense** (current expenses, investments and financial investments), both in absolute (BRL) and relative terms (% in relation to the total of the bond);
- Amount disbursed **for recent expenses[156] (reimbursement) and for current expenses[157]**, both in absolute (BRL) and relative terms (% in relation to the total of the bond);
- Amount disbursed by expense category against total expenses associated with other funding sources (%), identifying the **proportion of co-financing;**
- **Remaining balance of unallocated net proceeds**, both in absolute (BRL) and relative terms (% in relation to the total of the bond).

Information related to allocation of net proceeds and its compliance with this Framework must be externally verified by an independent third party. That is, a specialized institution that shall have knowledge on environmental and/or social themes and will be engaged to verify that the use of proceeds complies with the categories specified in the "use of proceeds" and "management of proceeds" sections of this Framework.

## Impact Report

The CFSS is also responsible for monitoring the implementation of the Framework, including the collection of information, through its members, regarding the impacts and results associated with the environmental and/or social benefits of the activities financed by the sustainable bond. This information will include the assumptions and methods adopted to prepare the information and:

155 If confidentiality agreements limit the level of detail that can be published, the information will be presented in aggregate form.
156 As defined in the "Use of Proceeds" section of this Framework, recent expenses (refinancing) carried out under the LOA up to 12 months prior to the issue date — reimbursement of expenses incurred as from January 2023. Tracking the execution of recent expenses can be done using the Integrated System of Financial Administration - SIAFI.
157 As defined in the "Use of Proceeds" section of this Framework, current expenses are those foreseen within the scope of the respective LOA in effect on the date of issuance. Tracking the execution of current expenses can be done using the Integrated Planning and Budget System - ("SIOP").

- **qualitative** information **regarding the impacts and results** associated with the amount disbursed for each expense category, according to the "use of proceeds" section of this Framework;
- **quantitative** information **regarding the impacts and results** associated with the amount disbursed for each expense category. At least one quantitative indicator will be reported per activity category. Examples of indicators that will be used in this report can be found in **Table 3**.

In addition, the report(s) should also cover information regarding the **compliance of expenses with the eligibility criteria** set out in the "use of proceeds" section of this Framework. The CFSS will be responsible for gathering and consolidating this information, through the bodies that comprise it.

**Table 3 - Examples of** result indicators by type of benefit and category

## Environmental benefits

| Category | Subcategory | Examples of Indicators |
|---|---|---|
| 1. Pollution prevention and control | 1.1 Control of GHG Emissions | • Volume of CO2 removed from the atmosphere (in mass units)<br>• Volume of reduced CO2e (in mass units)<br>• Number of experimental sites in operation<br>• Number of sector policies and plans applied<br>• Mitigation technologies/actions/initiatives (expressed in area, volume or units) |
| 1. Pollution prevention and control | 1.2. Solid waste management | • Tons of urban solid waste collected and handled properly<br>• Number of directly funded waste management research projects<br>• Reduction of the % of waste disposed in landfills<br>• Increase in the % of recycling;<br>• National Waste Recovery Index<br>• % Coverage of selective waste collection<br>• Treated animal waste in tons |
| 2. Renewable energy | - | • Energy (in KWh) produced and stored under a clean energy source (solar, wind and hydroelectric power within the specifications)<br>• Number of directly funded clean energy research projects<br>• Estimated annual GHG emissions reduced/avoided (in tons of CO2 equivalent)<br>• Participation of biofuels in the vehicle fuel matrix<br>• Increase in Installed capacity of electricity generation from renewable sources (in MW) vs non-renewable sources<br>• Annual energy generation from renewable sources (in MWh) vs non-renewable sources |
| 3. Energy efficiency | - | • Number of conventional lamps replaced by LED lamps annually<br>• Number of modernization works carried out in public assets, which are related to energy efficiency<br>• Estimated annual GHG emissions reduced/avoided (in tons of CO2 equivalent)<br>• Total energy saved (KWh) compared to baseline |
| 4. Clean transport | - | • Number of vessels (passenger or cargo) using rail and river facilities per year<br>• Volume of transported cargo that is no longer carried by other more polluting transport modals<br>• Estimated annual GHG emissions reduced/avoided (in tons of CO2 equivalent)<br>• Total KMs of built sidewalks, and other pedestrian pathways<br>• KMs of cycle lanes built |

| | | |
|---|---|---|
| 5. Sustainable management of living and natural resources, and land use | - | • Number of environmental inspection actions carried out annually<br>• Number of validated CARs[158]<br>• Area of recovered degraded pastures<br>• Area under natural regeneration<br>• Number of rural properties compliant with the forestry code<br>• Reforested area (ha)<br>• Area of adoption of the direct planting system (grains and vegetables)<br>• Area of adoption of Crop-Livestock-Forest Integration (iLPF)<br>• Area of adoption of agroforestry systems (SAFs)<br>• Area of planted forests<br>• Area of adoption of irrigated systems<br>• Waste sustainably handled in tons<br>• Number of projects/initiatives supported by the Program "ABC" that guarantee the preservation, management and sustainable use of natural resources<br>• Number of projects/initiatives supported by the Program "ABC" that promote the conservation and recovery of endemic species<br>• Number of projects supported by the Program that use production systems that contribute to the increase of natural capital<br>• Number of producers or agro-industries with environmental certifications<br>• Number of farmers who supply companies with products with the biofuel certification<br>• Number of producers using sustainable production technologies<br>• Number of rural properties compliant with the forestry code<br>• Kilometers of trails adhered to the national network of long-distance trails and connectivity<br>• Economic circularity indicators in productive chains based on biodiversity |
| 6. Terrestrial and aquatic biodiversity | | • Number of financed bio-inputs and biofertilizer production units<br>• Area under sustainable management practices (ha)<br>• Number of species monitored<br>• Number of events for prevention and fight against forest fires<br>• Number of hired fire brigade members, regardless of residing inside the conservation units and immediate surroundings |
| 7. Sustainable management of water and effluents | - | • Volume of effluents treated annually and proportion relative to total<br>• Number of sponsored projects related to waterbodies protection<br>• Number of revitalized hectares close to waterbodies<br>• Number of springs protected annually |
| 8. Climate Change Adaptation | - | • Number of families in risk areas benefiting from prevention actions<br>• Indicator of municipal capacity in disaster risk management<br>• Proportion of water tanks for access to water for human consumption, delivered in municipalities in situation of poverty, extreme poverty, and food and nutrition insecurity<br>• Increase in the adaptive capacity of agricultural production systems<br>• Actions to raise roads or other infrastructure works to reduce the risk of flooding caused by climate change<br>• Reduction in land-loss from inundation and/or coastal erosion in km2 |
| 9. Social-biodiversity conservation | - | • Demarcated indigenous areas (ha)<br>• Tract of land regularized |
| 10. Circular economy adapted products, production technologies and processes | - | • Proportion of recoverable waste in kilograms and percentages recycled<br>• Waste that is prevented, minimized or reused before and after the project in % of total waste and/or in absolute amount in tons p.a<br>• Annual absolute (gross) amount of waste that is separated and/or collected, and treated (including composted) or disposed of (in tons p.a. and in % of total waste)<br>• Tons of waste reduced |

## Social benefits

| Category | Subcategory | Examples of Indicators |
|---|---|---|
| 1. Social-economic development and empowerment | 1.1 Combating poverty; | • Number of eligible families benefiting from social programs<br>• Families registration update rate<br>• Number of people directly benefited (direct beneficiaries of financial resources or other form of assistance) within the target population<br>• Number of people indirectly benefited (relatives and dependents of direct beneficiaries) within the target population<br>• Percentage of municipalities that receive federal funds to offer SUAS Basic and Special Social Protection Actions<br>• Coverage rate of families benefiting from the Crop Guarantee[159] |

158 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

159 Crop Guarantee (GS) is an action of the National Program for the Strengthening of Family Agriculture (PRONAF), which aims to ensure minimum survival conditions for family farmers in municipalities systematically subject to severe crop loss due to the phenomenon of drought or water excess.

| | | |
|---|---|---|
| 1. Social-economic development and empowerment | 1.2. Combating discrimination | • Number of implemented stations specialized in combating discrimination against minority groups<br>• Number of implemented support and reception houses<br>• Number of support actions by the agrarian ombudsman to related cases |
| 2. Food security and sustainable food systems | - | • Municipalities in situation of poverty, extreme poverty and food and nutrition insecurity that adhered to the programs (% or total)<br>• Number of beneficiary families<br>• Rate of family farmers benefiting from programs and located in priority municipalities (in situation of poverty and extreme poverty, and food and nutrition insecurity)<br>• Percentage of municipalities that adhered to the Crop-Guarantee<br>• Number of family farmers who supply to the PAA[160] and PNAE[161] |
| 3. Employment Generation | - | • Number of projects supported<br>• Number of young adults (up to 25 years old) formally involved in programs<br>• Number of representative entities served<br>• Number of families served by regional development routes<br>• Number of integrated and sustainable productive systems in productive chains based on biodiversity<br>• Segregation of indicators for female heads of household, native people and traditional communities |
| 4. Access to affordable housing | - | • Number of families benefiting from social housing<br>• Total volume allocated to housing finance<br>• Total area subject to land regularization<br>• Number of social housing properties renewed or expanded.<br>• Number of families benefiting from housing through the PNCF162 and Pronaf163<br>• Percentage of reduction of the population in households at risk zones |
| 5. Access to basic infrastructure | 5.1. Urban development and mobility | • Volume of CO2eq emissions reduced by urban mobility projects<br>• Number of completed urban mobility projects<br>• Number of jobs generated by development and urban mobility programs<br>• Number of people served daily by low-carbon collective public transport<br>• Total KMs of built sidewalks, walkways and other pedestrian pathways<br>• KMs of cycle lanes built |
| 5. Access to basic infrastructure | 5.2. Universalization of basic sanitation | • Expansion of water treatment and distribution coverage<br>• Expansion of wastewater collection and treatment coverage<br>• Expansion of treatment and correct disposal of solid waste<br>• Expansion of the urban drainage system<br>• Families in need of post-disaster housing served<br>• Number of families displaced due to extreme weather events<br>• Number of families removed from areas at risk of slope containment actions for mitigation<br>• Number of studies, guidelines, policies or programs completed focused on the identification, analysis and prevention of the risk of the impact caused by natural events associated with climate change<br>• Number of households served<br>• Number of projects executed<br>• Number of water desalination systems implemented in priority locations in terms of access to water<br>• Total volume of treated water |

160 The Food Acquisition Program (PAA), created by article 19 of Law No. 10,696, of July 2, 2003, has two basic purposes: to promote access to food and to encourage family farming. https://www.gov.br/mds/pt-br/acoes-e-programas/inclusao-produtiva-rural/paa

161 The National School Feeding Program (PNAE) consists of the supplementary transfer of federal financial resources for the care of students enrolled in all stages and modalities of basic education in the municipal, district, state and federal networks and in the entities qualified as philanthropic or maintained by them, in the confessional schools maintained by a non-profit entity and in the community schools agreed with the States, the Federal District and the Municipalities, with the objective of contributing to the growth and biopsychosocial development, learning, school performance and the formation of healthy eating habits of students, through food and nutrition education actions and the provision of meals that cover their nutritional needs during the school period. https://www.gov.br/fnde/pt-br/acesso-a-informacao/acoes-e-programas/programas/pnae

162 Terra Brasil - PNCF is a complementary program to the agrarian reform that, through financing lines, promotes access to land and resources for basic and productive investments, allowing the structuring of the properties acquired. It is based on the principles of participation, social control, autonomy and transparency. https://www.gov.br/agricultura/pt-br/assuntos/mda/credito/como-funciona-o-pncf

163 The National Program for the Strengthening of Family Agriculture (Pronaf) was created in 1995, initially as a rural credit line. Today it involves a set of actions aimed at increasing the productive capacity, generating employment and raising the income of family farmers, in order to promote development in rural areas. https://www.gov.br/pt-br/servicos/acessar-o-programa-nacional-de-fortalecimento-da-agricultura-familiar-pronaf

## Framework Updates

The Federative Republic of Brazil reserves the right to make any changes to this Framework in accordance with the best international market practices. If this occurs, the updates will be duly published on the STN website for wide access by all its capital providers, maintaining or expanding the levels of transparency and reporting.

## External Review

In line with international market standards for issuances of sustainable bonds, the Federal Government submitted this Framework, prior to the issuance of its first sustainable bond, to external review by Morningstar *Sustainalytics ("Sustainalytics")* to provide an opinion on the environmental and social benefits of this Framework as well as to confirm its alignment with ICMA principles and guidelines in order to provide investors with greater certainty regarding transparency and alignment of the use of net proceeds, considering best market practices. Sustainalytics is a company specializing in providing second-party opinion ("*SPO*") for issue of green, social and/or sustainable bonds.

The second-party opinion on this Framework is available on the website of the National Treasury Secretariat.

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