

# Agriculture Sustainable Finance State of the Market 2023

Brazil briefing paper



# Introduction

Brazilian agriculture, including livestock and agricultural activities, was responsible for 9.8% of the global agricultural sector emissions in 2022.<sup>1</sup> Given that methane is its largest source of greenhouse gas (GHG) emissions, Brazil is the fifth largest emitter globally with 91.6% coming from enteric fermentation of cattle.<sup>2</sup> Consequently, dealing with the environmental impacts of agri-food systems plays a pivotal role in the country's transition to net zero, both in terms of climate change mitigation and adaptation.

The growth of the agriculture sector in Brazil has resulted in deforestation and change of land use, which has also increased domestic GHG emissions.<sup>3</sup> The sector, including production and agribusiness supply chains, now accounts for nearly 25% of the economy. Despite climatic adversities and the global economic impact of the pandemic, the sector has shown resilience accounting for a fifth of GDP growth in the Q1 2023, boosted by delayed harvests.<sup>4,5</sup>

Sustainable finance is playing an increasingly important role in the decarbonisation of the agricultural sector. By the end of H1 2023, the Brazilian sustainable debt market had

reached cumulative volume of USD33.3bn.<sup>6</sup> Brazil was the third largest source of green, social, sustainability, sustainability-linked, and transition (GSS+) debt in the Latin America and the Caribbean (LAC) region following Chile (USD47.7bn) and Mexico (USD42bn).

The green theme dominates the Brazil GSS+ volume (45%) with the more nascent sustainability-linked bond (SLB) market the second largest segment (32%). Agriculture, Forestry and Bioenergy were the most funded use of proceeds (UoP) categories for green bonds from Brazilian corporate issuers, and recent advances in regulation have encouraged the practice of aggregating smaller projects and assets, bringing them to the sustainable debt market through asset-backed securities (ABS).

This briefing provides an update of *Climate Bonds Agriculture Sustainable Finance State of the Market* published in June 2021.<sup>7</sup> It focuses on labelled instruments used to finance projects, assets, and activities in sustainable agriculture originating from Brazil, and includes thematic debt issued between May 2015 and June 2023.

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## Thematic labels

### Green, social, sustainability and transition

Green, social, sustainability, and transition bonds offer climate and social benefits through their UoP. The proceeds from the sale of such bonds are earmarked to support climate or social expenditures in categories specified in the issuer's sustainable financing framework. Green bonds focus on UoP with climate or environmental benefits such as Low-Carbon Energy, Low-Carbon



Building, or Low-Carbon Transport. Bonds bearing the transition label are a subset of green and are often issued by entities operating in hard-to-abate sectors such as steel, chemical, or cement. Social categories include Education, Microfinance, and Support for Marginalised Communities. Sustainability bonds include a combination of green and social categories.



### Sustainability-linked bonds (SLBs)

The UoP of SLBs are general purpose, i.e., not earmarked for any specific social or environmental purpose. However, key performance indicators (KPIs) are selected as areas for improvement over the lifetime of the bond and time-bound sustainability performance targets (SPTs) are set to measure their achievement. The achievement of the SPTs is linked to coupon step-ups or step-downs, or early repayment obligations.



# Brazil's growing sustainable debt market

The Brazil GSS+ debt market reached a cumulative USD33.3bn by the end of H1 2023 and was the third largest GSS+ debt market in LAC (after Chile and Mexico).



After a strong performance in 2021 (USD12.2bn), volumes declined in 2022 (USD7.2bn) with USD2.5bn in deals recorded in the first half of 2023.

Brazil is the largest source of green bonds in the LAC region with cumulative volume of USD15.1bn at the end of H1 2023. Brazil also leads the LAC market in SLBs (USD10.9bn) and is the only country in the LAC region to have recorded transition labelled bonds (USD170m).

## The green theme dominates

### Green



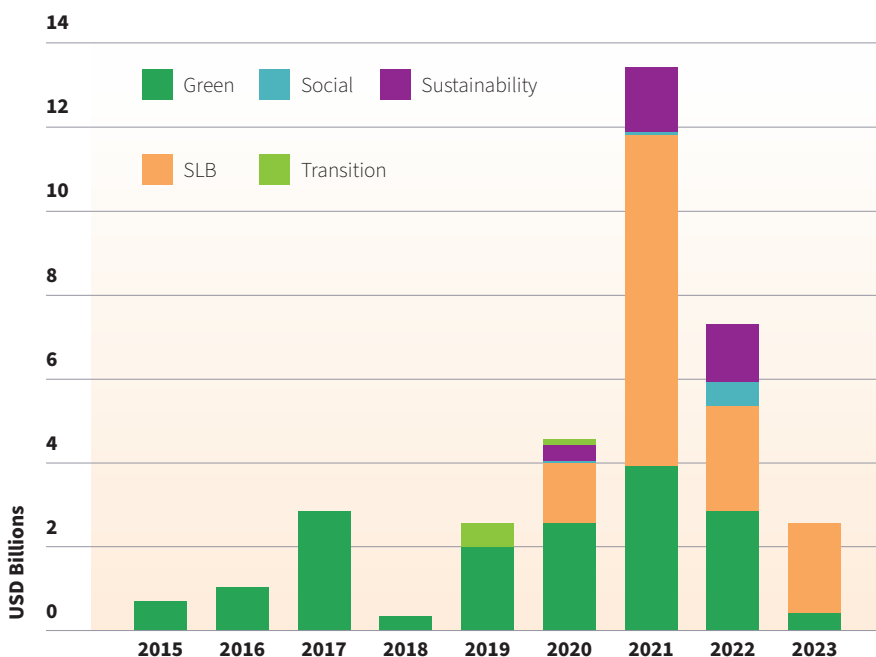
The green theme leads Brazilian GSS+ issuance with 45.2% of the cumulative total (USD15.1bn). Renewable Energy and Land Use are the two most funded UoP with 56% and 20% of the volume respectively. The market is dominated by the private sector with the majority (76.6%) coming from non-financial corporate issuers and financial corporates (13.8%). Development banks (7.8%), and government-backed entities (1.8%) contributed smaller shares.

### Sustainability-linked bonds



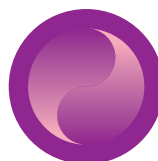
Brazil is the largest source of SLBs in the LAC region with cumulative volume of USD12bn, representing 36% of the Brazilian GSS+ market and 40.6% of the LAC SLB market. Non-financial corporate issuers dominate the market with 94.2% of the volume, followed by financial corporates (5.8%). SLBs are the second-largest segment in Brazil's labelled debt market, with most of issuers operating in the materials (31.2%) and financial (14%) economic sectors. GHG emissions were the target for half of the KPIs while Corporate Social Responsibility (CSR) was chosen for 16%, Circular Economy 7.7%, and Renewable Energy 4.3%.

## Sustainable debt issuances by label



Source: Climate Bonds Initiative

### Sustainability



Sustainability bonds represent 16.2% of the Brazilian labelled market, with cumulative volumes of USD5.4bn.

Renewable Energy is the largest green UoP category (26%), followed by ICT (16%), Water Management (13%), Low Carbon Buildings (12%), and Land Use (11%). Social UoP frequently reference Affordable Infrastructure (34%), Social Adaptation & Resilience (22%), Equality (11%) and Employment & Training (11%). Sustainability deals are predominantly issued by non-financial corporates (50.7%), financial entities (35.2%), and government-backed entities (13.2%). The recent commitment from the Brazilian government to price a USD2bn sustainability bond should boost this theme in terms of both profile and volume.

### Social



The social label represents just 2% of GSS+ bonds originating from Brazil, with cumulative volume of USD699m. A

USD500m 2029 deal from Banco do Brasil issued at the end of 2022 was the largest social bond to date. UoP from the deal were earmarked for Healthcare, Employment Generation, Microfinance, Affordable Infrastructure, and Socioeconomic Advancement and Empowerment. Overall, Microfinance and Employment & Training each received 21% of social UoP, followed by Healthcare (19%) and Affordable infrastructure (17%). Financial institutions are the sole issuer type, and included two Receivables Certificate (CRI) ABS deals from real estate issuers.

### Transition



Transition bonds account for 2% of the GSS+ debt originating from Brazil. Utility company Eneva S.A. priced two deals with cumulative volume of USD670.4m in 2020. Transition deals originating from Brazil mentioned in prior reports have been excluded from this brief because they are pending screening against Climate Bonds Green Bond Database methodology.

# Use of Proceeds categories

The **Land Use** UoP category (encompassing agriculture, livestock production, and forestry) accounts for 19% of Brazil GSS+ UoP volumes, second only to Energy (57%). As Bioenergy is a subset of Renewable Energy, **Renewable Energy** is within the scope of this brief. Several entities operating in the Bioenergy sector have also priced SLBs. Feedstocks for bioenergy are a common source of Land Use in Brazil. UoP earmarked for Bioenergy in green and sustainability bonds represents 17.5% of the cumulative Renewable Energy UoP category.

| Land Use: Forestry        |                     |
|---------------------------|---------------------|
| <b>Total Amount (USD)</b> | 5.7bn               |
| <b>Number of issuers</b>  | 9                   |
| <b>Number of deals</b>    | 22                  |
| <b>Largest issuer</b>     | Suzano Austria GmbH |

**Forestry** represents the largest segment of the Land Use UoP specified for GSS+ bonds originating from Brazil, with cumulative volume of USD5.6bn. Proceeds were mostly allocated for refinancing of paper and pulp production operations and sustainable forest management.



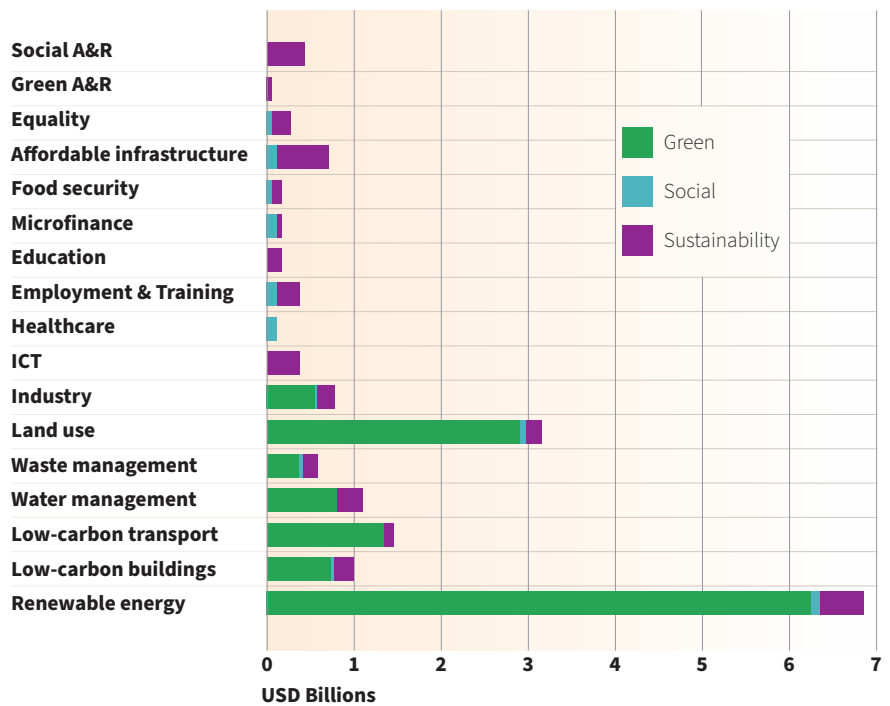
Just over half of the 22 bonds issued to date had tenors of 5-10 years (53.4%), followed 10-20 years (34.6%), with shorter-dated deals of up to 5 years representing a smaller segment (11.8%).

Hard currencies tend to dominate. Most deals were issued in USD (82%), followed by BRL (9.3%) and EUR (8.7%). All Forestry deals received a second-party opinion (SPO) by either ISS ESG (48.5%), Sustainalytics (25.8%), NINT (25%) or Bureau Veritas (0.7%).

Bullet UoP bonds account for 92.1% of cumulative forestry deals, while ABS instruments represent 7.9%. Two green ABS deals from EcoAgro were added in 2022, totaling BRL680m (USD136.3m), with maturities in 2027 and 2029 and UoP earmarked for sustainable forestry and biodiversity management projects.

Under the green label, volume reached USD2.8bn by H1 2023 with 50.8% of proceeds allocated to forestry projects. Entities operating in the forestry sector have issued SLBs worth USD2.7bn, with Suzano Austria GmbH pricing three SLBs with a cumulative volume of USD2.25bn. The KPIs of those deals target GHG emission reductions, industrial water use, and the inclusion of women at board level and in positions of senior leadership. Climate Bonds encourages issuers to develop KPIs that target all three scopes of emissions and are material to their business.

## Use of proceeds by theme



Source: Climate Bonds Initiative

A USD37.3m sustainability bond from Tanac was the only one in that theme with green UoP earmarked for forestry. Tanac is one of the world's largest vegetable extract producers.

| Land Use: Agriculture     |                  |
|---------------------------|------------------|
| <b>Total Amount (USD)</b> | 2.4bn            |
| <b>Number of issuers</b>  | 11               |
| <b>Number of deals</b>    | 15               |
| <b>Largest issuer</b>     | Arcos Dorados BV |

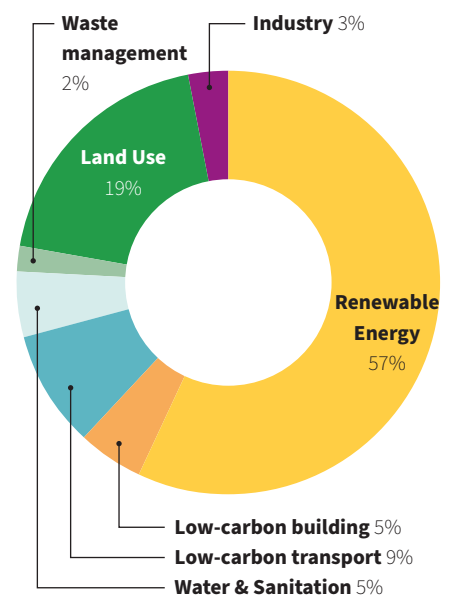
**Agriculture** is the second most financed category in the Land Use UoP with cumulative volume reaching USD2.3bn. Among the 15 deals priced to date, five were added in 2022 and one in 2023. Green UoP were predominantly earmarked for efficient machinery, equipment, and intelligent management systems within crop production. These were mostly found in sustainability bonds (76%) with green bonds accounting for only 7%, and the remaining resources from SLB deals by entities operating in the sector (17%).



Most (93%) of deals received an SPO from Sustainalytics (84.6%), Resultante (6.4%), NINT (2.1%), with Bureau Veritas and WayCarbon accounting for less than 1% each.

Bonds were issued in USD (90.7%) and local currency BRL (9.3%). Three-quarters had tenors

## Use of proceeds (H1 2023)



Source: Climate Bonds Initiative

of 5-10 years, with the remainder shorter-dated deals of up to five years (25%).

Climate Bonds Certified three ABS deals under its Agriculture Criteria with cumulative volume of BRL218.3m (USD40.8m). In 2021, Gaia Securitizadora issued two Agribusiness Receivables Certificates (CRA) to finance the operations of supply chain verifier Produzindo Certo, and Ag-tech company Solinftec.<sup>8,9</sup> In 2020, Ecoagro Securitizadora priced a CRA to finance the expenditures of organic farm operator Rizoma Agricultura.<sup>10</sup>

**Banco Bradesco SA's** USD500m January 2022 sustainability bond had a five-year maturity with UoP earmarked for Renewable Energy, Low Carbon Building, Water and Sanitation, Waste Management, Land Use, and Industry sectors. The deal was the only one to address food security through its Land Use UoP.

**True Securitizadora** is a Brazilian entity which specialises in structuring, fundraising, and investment. In 2022, it structured a 5-year, BRL50m (USD9.3m) sustainability CRA for Oakberry Açaí, a fast-food franchise. The green UoP were earmarked for sustainable agriculture and production to support the small holdings of riverside communities in the Amazon region, where the company sources açai. The social UoP were earmarked for social adaptation and resilience (A&R) with projects focused on educational infrastructure and access to basic services to guarantee the human rights of the local population such as healthcare, access to clean water, access to financial services, and the inclusion of women in health programmes, training, and decision making.

| Land Use: Livestock       |        |
|---------------------------|--------|
| <b>Total Amount (USD)</b> | 778m   |
| <b>Number of issuers</b>  | 3      |
| <b>Number of deals</b>    | 4      |
| <b>Largest issuer</b>     | BRF SA |

**Cumulative volumes of GSS+ debt supporting livestock UoP reached USD525m in H1 2023** from two green bonds and USD1.1bn in SLBs from entities operating in the sector.



The livestock deals all had tenors of 5-10 years. SPOs were obtained from Sustainalytics, ISS ESG, and NINT.

Most of the green UoP was allocated to energy efficiency in livestock feed, GHG emissions reduction in production plants, and reforestation projects.

Since the last report, a review of Climate Bonds livestock Criteria and methodology led to a reclassification of the UoP of two green bonds from Agriculture to Livestock: BRF SA (USD563.7m) and Fazenda da Toca (USD4.7m).

| Land Use: Bioenergy       |               |
|---------------------------|---------------|
| <b>Total Amount (USD)</b> | 2.4bn         |
| <b>Number of issuers</b>  | 11            |
| <b>Number of deals</b>    | 26            |
| <b>Largest issuer</b>     | FS Bioenergia |

**UoP earmarked for Bioenergy reached a cumulative volume of USD2.2bn** split between USD2.1bn under the green label and USD150m under the sustainability label, which represents a total increase of 288% since the 2021 briefing.



SLBs amounting to USD255m were issued by entities operating in the bioenergy sector.

Green UoP were mostly earmarked for opex and capex for corn and sugarcane ethanol plants, while KPIs from the SLBs focused on circular economy and CSR activities.

Approximately half the proceeds allocated to Bioenergy projects had tenors of 5-10 years (55%) with the remainder up to five years (44.9%). All 16 deals obtained an SPO from Sustainalytics and NINT or were Climate Bonds Certified. USD was the main currency (49%) followed by BRL (28%) and EUR (24%). The majority were financed by bonds (79.9%), followed by loans (10.4%) and ABS (9.7%).

Since the last agriculture briefing, ten deals were priced including bonds with UoP earmarked for bioenergy, and SLBs from bioenergy entities: six green bonds, two sustainability bonds, and two SLBs.

In March 2022, Brazilian bioenergy company **Raízen** issued its first SLB with KPIs pertaining to land certification and gender diversity.<sup>11</sup> The first KPI increases the number of Bonsucro certified units from 74% to 94%, which establishes globally acceptable environmental and social practices in sugarcane plantations.<sup>12</sup> The second KPI increases the participation of women in leadership positions in the company from 19% to 30%. Two tranches with maturities in 2029 and 2032 were issued with a total size of BRL1.2bn (USD256m), and obtained an SPO from Sustainalytics.

In May 2022 **FS Bioenergia**, a corn ethanol producer, priced a two-tranche Climate Bonds Certified ABS maturing in 2026 and 2029. Each tranche was BRL371.3m (USD74.4m) and the issuer obtained an SPO from Sustainalytics as well as certification under the Climate Bonds Bioenergy Criteria.

**Sicredi**, one of the largest cooperative financial institutions in Brazil priced two sustainability bonds in 2022. The two-tranche deal comprised one USD110m piece maturing in 2024 and one USD40m piece maturing in 2025 with both obtaining an SPO from Sustainalytics. Under the verifier's Renewable Energy category, Sicredi's UoP will finance wind, solar and biomass generation and distribution systems for rural landowners using biomass energy from agriculture and animal waste through the bio-digestion and composting of animal waste.<sup>13</sup>

# Across the agriculture themes

## The sustainable finance market and agriculture

Recent data from System Gas Emissions Estimation (SEEG) and Observatório do Clima indicated that in 2021, about half (49%) of GHG emissions in Brazil originated from land use change sectors and 25% from agriculture and livestock production.<sup>14</sup> This is as a result of deforestation and forest degradation of large areas in the Cerrado and Amazonia region, 80% of them being in illegal areas.



The financial market has been pressuring entities operating in the agriculture sector to deliver deforestation-free plans, climate targets, and support to biodiversity protection and food security. Investors have pledged to eliminate investment in activities linked to deforestation and provide finance only to companies already committed to cutting emissions from deforestation activities in their supply chains.<sup>15</sup> Ongoing due diligence and traceability activities from investors should encourage entities to prepare for new trading regulations that strengthen measures to halt deforestation worldwide. In June 2023, The European Union, as one of the main markets for agricultural exports from Brazil, introduced the EU Regulation on deforestation-free supply chains, to ensure that a category of key goods exported or placed on the EU market must be deforestation free, and thus will no longer contribute to deforestation and forest degradation in the EU and elsewhere in the world.<sup>16</sup>

## Local policy developments

Key local policy developments have also provided a positive signal to the market on the role of finance to support sustainable agriculture, given its strong reliance on the banking sector.



The Ministry of Agriculture, Livestock and Food Supply (MAPA) published a report on Guidelines for the Sustainable Development of Brazilian Agriculture that established a strategy for making the Brazilian agriculture and livestock sectors more sustainable.<sup>17</sup> These are supported by initiatives including The Agricultural Plan (Plano Safra) and low interest, government-subsidised credit lines (ABC Plan and ABC+ Plan) for borrowers operating in the agriculture sector.

## Brazilian Sustainable Taxonomy

Brazil started its national taxonomy discussions in 2022, which were led by the Ministry of Finance. In September 2023, the government launched an action plan for its development, and then published a document that is out for public consultation until the end of October 2023.<sup>22,23</sup> The final version of the taxonomy is expected in 2024 with mandatory use from January 2026.



A national taxonomy is a crucial reference guide to ensure that labelled financial instruments are standardised. This extends to specific criteria and indicators that can be used to assess the positive contribution from activities, so that capital can be effectively disbursed to support the transition to a sustainable economy aligned with the goals of the Paris Agreement.

The precedent was set by the EU and China, and Brazil aims to follow the example of peers such as Colombia, Peru, and Mexico, that have launched sustainable finance taxonomies, and ensure interoperability.

The Brazilian Sustainable Finance Taxonomy will focus on sectors and environmental objectives that are material and relevant in the local context. For example, key sectors to address climate change mitigation and adaptation include: agribusiness; extractive industries; manufacturing; electricity and gas; water, sanitation & waste management; construction; transport; and social services. Specific criteria for each sector will be recommended by the technical groups, based on a range of factors.

The Plano Safra programme, which has been Brazil's primary agriculture policy since 2003, receives funding from the Federal Government for registered farmers to make investments in the industrialisation and commercialisation of agricultural products. The programme reached BRL364bn (USD70.7bn) in 2023, its highest yet.<sup>18</sup> The programme encompasses public policies, credit lines and technical assistance to producers focused on climate and financial risk-supporting, climate-aligned production systems; awarding lower interest rates for pasture recovery, and awards for producers demonstrating sustainable practices.

ABC Plan was created in 2010 to support the reduction of GHG emissions in agriculture and adapt to climate change through a public policy framework.<sup>19</sup> It provides subsidised loans to foster the implementation of technology and the use of low-carbon agricultural practices.

The first phase of the plan ended in 2020 having reached 115% of its voluntary GHG emissions reduction target through ongoing restoration of degraded forest areas, management of natural forests, and the development of integrated crop-livestock-forest farming systems. These activities support the Brazilian commitment to achieve its Nationally Determined Contributions (NDCs) under the Paris Agreement.

ABC+ Plan was launched as an extension of the ABC plan, and will run until 2030. The aim is to build a more resilient agricultural production system based on technological and integrated landscape management.<sup>20,21</sup>

## Securitisation

Securitisation is well established in Brazil and includes Real Estate Receivables Certificates (CRI) and Agribusiness Receivables Certificates (CRA). Climate Bonds Brazil sustainable securitisation state of the market Q3 2022 report highlighted ABS deals at 3.5% of the Brazilian GSS+ market.<sup>24</sup>

Securitisation companies have advanced in the last two years and the thematic ABS market has gained traction with CRAs for low-carbon agriculture, forestry, and bioenergy.

Securitisation could increase the volume of GSS+ instruments originating from the Brazilian market through the aggregation of loans given to support the agribusiness transition and deforestation-free supply chains. For this to happen at scale, lenders must reference internationally recognised taxonomies and sector criteria in their lending, encourage borrowers to prioritise green development, and ensure that they have effective green tagging set up.

## Climate Bonds Agri-Food Transition Programme

In 2021, Climate Bonds launched the Agri-food Systems Transition Programme (ASTP), under its wider Transition Programme.



The overarching goal was to mobilise global capital for financing the transition of key sectors of the economy to align with a net-zero, resilient, and sustainable future as well as ensure deforestation and conversion free agri-food production.<sup>25</sup> The programme had two key outcomes that contribute to this goal:

**Outcome 1:** to build a common shared understanding, that is rooted in climate science, of 1.5-degree and climate resilient transition pathways (and associated standards) that are consistent with other food system transition outcomes.<sup>26</sup>

**Outcome 2:** to facilitate financial instruments, including SLBs and loans, transition bonds, and green bonds to be issued for demonstration purposes by public and private sectors, using common definitions and standards, to finance

### The Climate Bonds Certification Scheme

is the first and only international science-based Certified labelling scheme for debt Instruments, entities and assets. The Climate Bonds Standard v4 offers non-financial corporate entities the opportunity to obtain Climate Bonds Certification for SLBs. It sets market best practice in terms of ambitious climate action, reporting, and disclosure. Developed together with stakeholders across the market, it incorporates independent verification and assurance against an open standard, and evidence-based eligibility Criteria which screen for the types of infrastructure



investments aligned with the Paris Agreement. This scheme is underpinned by rigorous scientific Sector Criteria to ensure that Certified bonds and issuers are consistent with the well-below 2°C target of the Paris Agreement. Obtaining and maintaining Certification requires initial and ongoing third-party verification to ensure the assets meet the metrics of Sector Criteria.

The Scheme has provided Certification to hundreds of debt instruments, which amount to over USD270bn as of H1 2023. The integrity of the Standard and Certification Scheme reassures investors of the ambition and coherence of the performance targets, together with the delivery capability of the issuer.

credible transition assets, activities, and strategies in agri-food systems.<sup>27</sup>

Relevant Sector Criteria development started in early 2023. Crop Production, Livestock Production, and Commodity Supply Chains will

be the first under development and available for Certification under the Climate Bonds Standard. The new Criteria will build upon Climate Bonds existing Agriculture Criteria, which can already be used to Certify assets and activities.

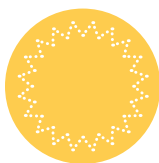
## Outlook

Brazil relies on agribusiness for approximately 25% of the country's GDP.<sup>28</sup> Its economic importance is combined with geopolitical priorities because the sector provides soft commodities that offer both domestic and international food security. At the same time, Food and Land Use (FOLU) (46%) and Agriculture (27%) are the largest sources of Brazilian GHG emissions accounting for almost three-quarters of the country's gross CO<sub>2</sub> emissions. Therefore, Brazil must decarbonise the sector to remove the threat that climate change poses to its food and fibre production. Green finance will make a pivotal contribution to the achievement of this goal.

Climate Bonds makes five recommendations to scale up GSS+ financing for the Brazilian agribusiness industry.

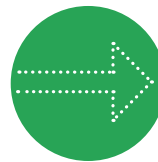
### 1. GSS+ bond guarantee

Government guarantees, such as partial-risk or liquidity guarantees, can de-risk GSS+ debt issues and increase investor confidence in repayment. This lowers the cost of capital for the project and can enable participation by long-term institutional investors. Guarantees therefore directly increase sustainable finance as they widen the investible green bond universe.



### 2. Fast-track approval for green

Slow approval processes can limit development of projects such as renewable energy installations. Easing approval for taxonomy-aligned projects is a low-cost way to increase the pipeline of GSS+ deals, and increase investor confidence in projects.



### 3. Sovereign debt

Brazil has recently committed to pricing a USD2bn sovereign sustainability bond which will accelerate the growth of its green finance market. By the end of H1 2023, nine countries in the LAC region had priced GSS+ debt, including Chile (USD37.9bn), Mexico (USD11.6bn), and Peru (USD6.9bn). A sovereign GSS+ deal signals to key stakeholders that a government is committed to supporting environmental and social transformation. This can hasten the development of market infrastructure and attract crowding in from the private sector.



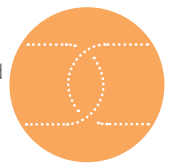
### 4. Securitisation

Local banks must prioritise lending according to an internationally recognised, credible green taxonomy and sector criteria. This would enable them to preference green lending and encourage borrowers in the real economy to evolve their activities through a green lens. The resultant lending should be clearly identifiable so that banks can aggregate green loans into larger instruments and recycle the capital in the debt markets. This may well achieve cheaper funding costs which could be passed onto borrowers thus perpetuating the cycle.



### 5. Sustainability-linked bonds (SLBs)

SLBs represent one of the largest thematic debt market segments in Brazil, well suited for the hard-to-abate sectors including agriculture. Issuers must ensure that instruments reference robust transition plans, and that KPI's and SPTs are material and ambitious to establish credibility.



## Endnotes

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