

Climate Bonds ^{INITIATIVE}

Livestock

BEST PRACTICE FOR ISSUING GREEN BONDS

SPOTLIGHT ON BRAZIL



Our Standard

Gold-standard labelling that aims to drive the global financial markets towards investments that are consistent with the goal of limiting global temperature rise to 1.5°C above pre-industrial levels.



Ambitious

Ambition is defined from a sectoral perspective by the Climate Bonds Eligibility criteria. Performance should be 1.5 degree aligned, or on a pathway to alignment.



Science-based

Future targets are benchmarked against science-based, technologically feasible pathways, and not against peers.



Assured

External verification before Certification and annually during period of Certification.



Transparent

Requirements on disclosure of Certified instruments/entities.

Show your Credibility

The Climate Bonds Standard and Certification Scheme is a voluntary labelling scheme for debt instruments, investments and entities that address the challenge of climate change, and are aligned with the goals of the Paris Climate Agreement, limiting global warming to 1.5 degrees celsius.

Launched in 2012, our Certification Scheme has been applied to hundreds of debt instruments, amounting to USD 260 billion equivalent as of January 2023.

Globally recognised as best practice, we are now expanding our Certification coverage to general purpose instruments, such as Sustainability-Linked Bonds, as well as Entities and Assets.

Benefits of Certification

1

Our Certified brand increases visibility to investors.

4

An endorsement of the green credentials of the assets/projects.

2

A globally recognised symbol of best practice in green finance.

5

A demonstration to the market that Certified instruments meet highest standards for climate.

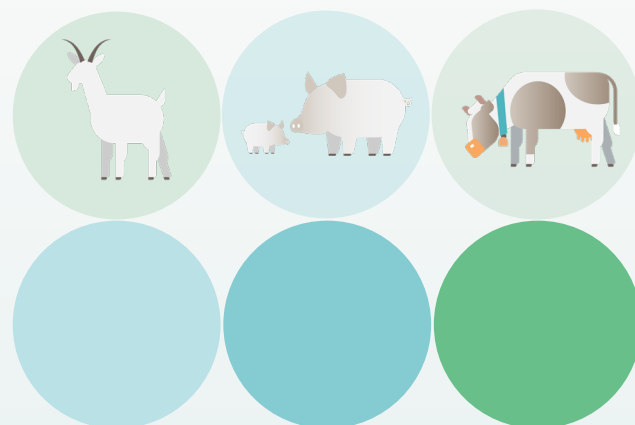
3

Higher demand for Certified issuances compared to similar issuances.

6

Enhanced reputational benefits for issuers, companies, or asset owners.

Ensuring best practice for green bond issuance



The increased global focus on labelled debt has highlighted the need for definitions, guidelines, taxonomies, and scientific criteria to establish standards and give investors greater confidence in the integrity of their investments.

The Brazilian green bond market is expanding and the application of international best practices in the issuance of green and thematic bonds is critical to further grow the market. The Climate Bonds Standard and Certification Scheme, launched in 2012, pioneered the world's first quantitative and qualitative scientific standards for the selection of projects and assets financed by green deals. [The Climate Bonds Sector Criteria](#) are applied worldwide, and provide the market, especially investors, greater transparency and comparability.

Potential for Livestock Bonds

Brazil is one of the world's largest livestock producers. In 2020, the country was the third-largest beef producer, with the largest herd in the world. It is also the third-largest pork producer and the fourth-largest chicken producer.

Meat production is a major source of Brazil's Greenhouse Gas (GHG) emissions because of methane, derived from enteric fermentation in ruminants, which corresponds to almost 65% of the agricultural sector's emissions.

Implementing sustainable animal husbandry practices is crucial for global decarbonisation and reducing GHG emissions. There is great potential to support transformation via Certified Climate Bonds.

Issuance process for Certified Livestock Bonds

For Certification, the issuer must follow the requirements included in the Climate Bonds Standards, which are as follows:

Step 1: Pre-Issuance

Prepare the Certification documents

- A.** Identify eligible uses of proceeds against the [Agriculture Criteria](#) and prepare the debt.
- B.** Create a green bond framework.
- C.** Engage an approved verifier to write a verification report.



Step 2: Issuance

- A.** Obtain verification report.
- B.** Work with underwriter and/or advisor to engage green + thematic bond investors.
- C.** Engage media.
- D.** List bonds on green bonds platforms (IADB, Nasdaq).
- E.** Issue debt.



Step 3: Post-Issuance

Follow-up with post-issuance reporting

- A.** Submit a post-issuance verification report from an approved verifier within 12-24 months following the issuance.
- B.** Submit an update report 12 months following the post-issuance verification report, and annually thereafter during the term of the debt. Note that the update report does not require an approved verifier.





Identifying Eligible Livestock Project and Assets

PRODUCTION UNIT

Establishment, expansion, or ongoing operation of the production unit as a whole.

Examples:

- Land acquisition and/or conversion costs;
- Acquisition of inputs;
- Planting and management costs;
- Acquisition or operation of facilities;
- Acquisition or operation of machinery on the production unit;
- Training on climate-friendly practices;
- Costs of advisory services;
- Performance monitoring costs, such as those related to monitoring GHG emissions or developing farm management plans.

INTERVENTION IN THE PRODUCTION UNIT

Specific interventions to implement GHG emissions reductions or carbon storage activities.

Examples:

- Agroforestry practices;
- New fertilizer application systems;
- New low-till agricultural systems;
- Land acquisition and/or conversion costs;
- Acquisition of inputs;
- Planting and management costs;
- Acquisition or operation of facilities;
- Acquisition or operation of machinery on the production unit;
- Training on climate-friendly practices;
- Costs of advisory services;
- Performance monitoring costs, such as those related to monitoring GHG emissions or developing farm management plans.

MITIGATION

INTERVENTION IN THE PRODUCTION UNIT

Specific interventions to enhance adaptation or resilience.

Examples:

- Use of micro-organisms to substitute for or to reduce the use of mineral N fertilizers or pesticides;
- Precision Agriculture (PA);
- Satellite Farming or Site-Specific Crop Management (SSCM),
- Use of species and breeds adapted to changes in CO² and climate, e.g. temperature, water regimes, extreme events;
- Ecological buffering of climate impacts, such as water or microclimate management, and increased soil water holding capacity;
- Agroforestry to buffer extreme temperatures or increase soil organic carbon;
- Ecological diversification, riparian buffer strips;
- Soil and water conservation;
- Mangrove management;
- Habitat restoration;
- Physical relocation of vulnerable assets or activities.

ADAPTATION

SUPPORTING ACTIVITIES

- Activities to measure, monitor, report and verify emissions reductions and activities that enable adaptation and build resilience.
- Research and development of ruminant feed that reduces methane emissions;
- Research into alternative meat and dairy products that can replace meat consumption;
- Provision of capacity building or education services related to low carbon agricultural practices;
- Training on any of the approved best practices for GHG reduction.
- Development and distribution of public-release seeds for crops more resilient to the impacts of climate change, using conventional or CRISPR breeding technologies;
- Information technologies and services, e.g. climate information services, monitoring and evaluation (M&E) imaging systems, soil analysis tools and weather monitoring services;
- Training in climate adaptive and resilient agricultural techniques.

MITIGATION AND ADAPTATION

Livestock Criteria **Screening Indicators**



Check the definition of projects and assets under the **Agricultural Criteria to determine eligibility (Use of Proceeds)**.

Check the Agricultural Criteria screening indicators for livestock production.

ROUTE 1: WHOLE PRODUCTION UNIT

ROUTE 2: INTERVENTIONS IN THE UNIT

ROUTE 3: ACTIVITIES OUTSIDE THE FARM

ROUTE 1 & 2

- M1:** No land conversion (10/01/2010)
- M2:** Land Use Status
- M3:** Animal Management
- Option M3.1:** GHG Reduction
- Option M3.2:** Best Practices for animal production

Compliance with the adaptation & resilience checklist:

- Identifying clear limits of the production unit.
- Identifying climate risk and Mitigation measures for these risks.
- Continuous monitoring and assessment of these measures.

Animal welfare & feed certifications considering the following pre-approved certification schemes:

Animal welfare: Humane Farm Animal Care Certified Humane, RSPCA Assured, Animal Welfare Approved by A Greener World, Beter Leven levels 2 & 3 G.A.P levels 4 & 5, or FARM if the issuer does not have any of the aforementioned certifications.

ROUTE 3

While there is no mitigation criteria, activities are limited to:

Development and distribution of public-release seeds for more climate-resistant crops; information technology and services; and training in climate-adapted and resilient agricultural techniques.

Feed: RSB, RTRS, ISCC Plus, Proterra

HOW TO EVIDENCE:

M1. No land conversion and land use status

How to evidence it:

- Submission of maps (see [Global Forest Watch maps](#)), georeferenced images or satellite imagery of land use change and burning, for example: Forest inventory surveys or other formal government data may also be used.
- Next, it must be demonstrated that animal management is low carbon. There are two ways of demonstrating this requirement.

M3.1: Inventory of GHG emissions, where management practices meet a gradual reduction over the investment period compared to emissions at the start of that period.

How to evidence it:

It is necessary to demonstrate the existence of a GHG inventory with independent verification (audit) by a qualified entity.

M3.2: Low carbon livestock production practices relating to:

- i) Manure management,
- ii) Animal management,
- iii) Soil management for net carbon sequestration,
- iv) Biomass management for net carbon sequestration,
- v) Energy and fuel management.

Acceptable calculators for estimating emissions include the Carbon Benefits Tool, Ex-Act Tool, the Cool Farm Tool and the GHG Protocol Agricultural Guidance Tools. For supply chains, the AtSource Eco-Calculator is also acceptable. Standard accounting methodologies such as the Sustainable Agriculture and Land Management methodology of Verra may also be used. This is not an exhaustive list. Country-level or regional calculators can be better calibrated to conditions and values for that region.

Create a Green Bond Framework

The development of a Green Bond Framework is mandatory for the Climate Bonds Certification. It is a public document, produced by the issuer, that aims to inform the market and investors about the key environmental credentials of the Green Bond.

1
Introduction to Issuer, Strategy and Target

2
Use of Proceeds

3
Project Evaluation & Selection

4
Management of Proceeds

5
Annual Report

6
External Review

Engage an approved verifier

The issuer should engage with an approved verifier to verify compliance with the Climate Bonds Criteria and prepare the report, which will be submitted to the Climate Bonds Initiative. In Brazil, these are:



Livestock Bond Issuance

The process of taking the bond to the capital market

Structuring the security, preparing the offering document, and registering the offering. The issuer must use the Climate Bonds Certified logo until the maturity of the bond.

Post Issuance Reporting

Annual reporting: once the post-issuance requirements are met, the issuer shall prepare an update report at least annually during the life of the bond. The annual report must confirm that the resources are being allocated to the appropriate projects/ assets and that they continue to meet the eligibility criteria.

Examples of impact reporting metrics for animal production:

Reduction of greenhouse gas emissions, conservation of biodiversity and ecosystems, reduction of degradation and deforestation of green areas for pasture creation, reduction of soil erosion and soil maintenance.

Labelled Issuances in the Animal Production Sector

WITHIN THE AGRICULTURE CRITERIA

1



The livestock sector's sustainable debt issuance is still small compared to other more established sectors such as energy and forestry, but some issuances linked to KPI have entered the market since 2019, when Marfrig issued a transition bond, signalling to other players that although challenging, a low-carbon transition in the sector is already taking its first steps.

2



Since, then other deals have come to market, such as Fazenda da Toca's (organic egg production) and JBS's Green CRAs. There is an opportunity and need to scale issuance in the livestock sector, to fund sustainable livestock production, mixed farming and projects, products and services supporting climate adaptation and resilience. There is still work to be done to ensure credible projects and assets are coming to market.

Interested in the Climate Bonds Standard & Certification Scheme? Get in touch!



Begin the Certification process

[Fast-track Certification](#)
[Certification how-to videos](#)
[List of Approved verifiers](#)



Online resources

[Livestock criteria overview](#)
[Livestock Criteria](#)
[Certified Bond Database](#)

Contact: Latin America Team: latam.team@climatebonds.net

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