



Climate ^{INITIATIVE} Bonds

Bioenergy

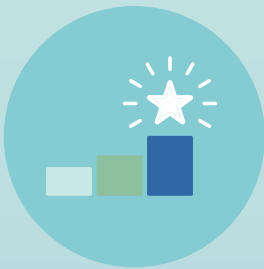
BEST PRACTICE FOR ISSUING GREEN BONDS

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 Bioenergy Bonds

Brazil has developed one of the world's most successful bioenergy programmes. It recently launched the RenovaBio Programme to support the expansion of biofuels.

Several labelled operations aligned with the Climate Bonds Initiative's Bioenergy Criteria have come to market in the last two years. This signals the opportunity for new issuances from the sector, both labelled and Certified.

FS Bioenergia was the first Certified programmatic issuer for corn ethanol, another growing market in Brazil.

Issuance process for Certified Bioenergy 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 [Bioenergy 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 Bioenergy Project and Assets

Facilities producing biomass/biofuel

Heating/cooling, and co-generation facilities using biofuel/biomass

Bio-refinery facilities

Supporting infrastructure

The Bioenergy Criteria use a feedstock-neutral approach and do not express a preference for certain feedstocks. This means that the Criteria cover bioenergy generated from different types of feedstock, including residues, energy crops and lignocellulosic biomass such as straw, with three exceptions: Wood (and all woody biomass); Third generation biofuels (algae); Biodegradable Municipal Solid Waste (MSW), including sewage sludge and food waste.

Bioenergy Criteria **Screening Indicators**

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

Check the Bioenergy Criteria screening indicators for project evaluation and selection. Eligibility is conditional to mitigation and adaptation & resilience (A&R) requirements.

Mitigation: GHG emission threshold, maintenance or expansion of carbon timber stock and Reducing the risk of iLUC (indirect land use).

A&R: Climate risk assessment & adaptation and resilience plan, Certified raw material, Food safety and risk mitigation plan.

HOW TO EVIDENCE

HOW TO EVIDENCE

GHG emission threshold: life cycle assessment of GHG emissions (only specific GHG tools are accepted to conduct the lifecycle analysis). In Brazil, issuers can use the RenovaCalc.

A&R checklist: matrix of risk and impact with a strategy to mitigate risk.

iLUC: RSB optional Module. Demonstrate yield increase, unused/degraded land and use of waste/ residues.

Feedstock: RSB, RTRS, FSC, ISCC Plus & CBI Agriculture Criteria or equivalent certification.

Food safety: low ranking in the Global Hunger Index. Brazil is ranked (5.4 Score).

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:



Bioenergy 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 bioenergy:

- Annual avoided GHG emissions in tons of CO2 equivalent.
- Annual renewable energy generation in MWh/GWh (electricity) and GJ/TJ (energy).
- Renewable energy capacity built-in MW.
- Total avoided GHG reduction.

Certified Bond Case Study

Verification of eligibility of the framework of the company FS Agrisolutions Indústria de Biocombustíveis Ltda, with the aim of installing projects related to the production of biofuels (hydrated alcohol and anhydrous alcohol) from corn.

1



Use of proceeds

Cost of development, installation, operation and maintenance of bio-refineries for biomass-based products for energy purposes.

2



Scope

Facilities that produce biofuel using feedstock in the scope.

Production of hydrated alcohol and anhydrous alcohol from corn.

3



Requirements to be met by the asset/project

REQUIREMENTS
(Mitigation M and Resilience R)

Met and demonstrated
in the certification?

M - The projects and assets for biofuel generation for transportation must meet the emission limit of 18.8gCO₂e/MJ (Limit per biofuel/biomass produced/used - primary energy).



M - Reducing the risk of indirect land use impact (iLUC).



A - Climate risk assessment and adaptation plan.



A - Identify food security risks and have a plan to address the risk, where applicable.



With regards to the analysis of environmental compliance, the certifiers use requirements based on the Forestry Code and any specific requirements associated with the impacts of the projects and/or assets (eg. CAR, PRA, environmental licensing, etc).



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

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

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