

Second Party Opinion

FS Bioenergia Green Bond Framework



SITAWI Finance For Good

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 **SITAWI**
FINANÇASdoBEM

About SITAWI

SITAWI Finance for Good is a Brazil-based organization whose mission is to mobilize capital for positive environmental and social impact. We develop financial solutions for social impact and advise the financial sector on how to incorporate environmental and social issues into strategy, risk management and investment analysis. We are one of the 5 best environmental and social research houses for investors according to Exel Independent Research in Responsible Investment - IRRRI 2018 – and a pioneer in the green bond market in Brazil.

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I. Scope

This document aims to provide an independent opinion regarding the adherence of the FS Bioenergia Green Bond Framework to best practices concerning green and climate bonds issuance and of the company's corporate ESG performance.

The proceeds from future issuances based upon the Framework will be used to finance the production of corn-based ethanol and management of planted forest for timber-based biomass production, which is classified, respectively, under the Bioenergy and Forestry criteria within the Climate Bonds Standards.

FS Bioenergia engaged SITAWI to assess the adherence of the Framework to the Green Bond Principles (GBP) and its corporate ESG performance. SITAWI's opinion is based on the following topics:

- Assessment of robustness of the framework and FS Bioenergia's sustainability strategy;
- Adherence of the Framework to the Green Bond Principles, Climate Bonds Standards (CBS), The Coolest Bonds (SITAWI, 2018) and other sustainability and climate standards;
- FS Bioenergia's environmental, social and corporate governance (ESG) performance in accordance with company policies and practices.

This assessment was based on the draft Green Bond Framework, information and documents, all provided by FS Bioenergia (some of them confidential), desk research, as well as other elements acquired in interviews with teams responsible for the company's sustainability and finance areas, carried out remotely. The whole process occurred between March 23rd and May 29th, 2020. SITAWI did not verify the alignment of specific bond issuances to the Framework. Thus, our opinion has a limited level of assurance regarding completeness, preciseness and reliability.

II. Opinion

SITAWI confirms that FS Bioenergia Green Bond Framework is aligned with the Green Bond Principles and best practices for climate bonds issuance. The use of proceeds indicated in the green bond issuances based on the Framework will positively contribute to sustainable development and the transition to a low carbon economy. We also have considered that the use of proceeds indicated are aligned with FS Bioenergia sustainability strategy. This conclusion is based on the following:


- A) Use of proceeds: The project categories defined in the Framework have clear positive climate externalities, in accordance with the Green Bond Principles, Climate Bond Standards and The Coolest Bonds, which include: (i) Bioenergy production; (ii) Forestry. The company has committed to destinate all proceeds from green bond issuances to finance OPEX and CAPEX in these two eligible categories.
- B) Process for project evaluation and selection: The company has created a Sustainability Committee, which will be held responsible for assessing whether the projects are under the categories described in the Use of Proceeds and meet the environmental and social requirements. The committee will also be responsible for assessing whether they are compliant with Brazilian environmental law.
- C) Management of proceeds: The proceeds will be allocated to the eligible projects and assets up to 12 months after each green bond issuance. The issuer has showed a transparent process to ensure the allocation of proceeds to the projects. Temporarily unallocated proceeds will be kept in bank certificate of deposits (CDB).
- D) Reporting: FS Bioenergia has committed to report annually to its investors and other stakeholders. The financial KPIs are: share of proceeds allocated to each category; proceeds allocated to green projects as a share of total proceeds raised from green bond issuances; share of proceeds allocated to OPEX vs CAPEX. The impact KPIs are: carbon intensity of ethanol production; Volume of biofuel produced; Standing forest area; and carbon inventory per hectare of standing forest.

Furthermore, analysis of FS Bioenergia's corporate ESG Performance indicated that it has comfortable ESG practices and technical know-how of its activities. The company has no involvement in controversial cases in its recent history. Therefore, we conclude that the company has the capacity to measure, prevent, mitigate and compensate for risks and sustain the conditions that allow it to receive resources from future Green Bonds issuances.

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Disclaimer

SITAWI is not a shareholder, subsidiary, supplier or client of FS Bioenergia. SITAWI declares to have no conflict of interest to provide an independent opinion regarding FS Bioenergia Green Bond Framework.

The analysis contained in this Second Party Opinion are based on public and confidential documents provided by FS Bioenergia. We cannot attest the completeness, preciseness, or reliability of these sources. Therefore, SITAWI will not be held responsible for any decisions based upon information contained in this report.

THIS IS NOT A RECOMMENDATION

We reinforce that the analysis and opinion in this report shall not be taken as an investment recommendation or a proxy for liquidity or returns.

III. Framework Assessment

SITAWI used its proprietary method, which is aligned to the Green Bond Principles (GBP), in order to assess this framework. The principles are an important tool to assess and label financial products as Green.

Although the alignment to the GBP is voluntary, it shows investors, underwriters and other players that the Framework is adherent to proper sustainability and transparency standards. In order to complement this analysis, we also assessed the use of proceeds against the Climate Bond Standards Bioenergy and Forestry Criteria.

Use of Proceeds

The proceeds to be raised through green bond issuances will be used to finance projects in the following categories:

Table 1 – Use of proceeds indicated in the Green Bond Framework

Category	Description
Bioenergy	CAPEX to improve its capacity to produce corn-based ethanol
	OPEX to acquire feedstock to produce corn-based ethanol
Forestry	CAPEX for acquisition of standing forest
	OPEX to support small producers of timber derived feedstocks via forward contracts to acquire biomass and funding for their initial
	CAPEX

Bioenergy

The production of ethanol in Brazil can contribute in the transition to a low carbon economy through the following mechanisms: i) its combustion generates less greenhouse gas emissions than fossil fuels; ii) during the agricultural phase, the corn production can potentially capture carbon dioxide from the atmosphere. According to The Coolest Bonds (SITAWI, 2018), the use of corn-ethanol reduces in 19% the life cycle GHG emissions in comparison to gasoline, thus contributing to Brazilian NDC. The potential life cycle reduction may be even greater in Brazil, depending on location, agricultural practices and source of power used in the ethanol mills.

The Brazilian Nationally Determined Contribution (NDC) has established the following targets:

- Expand the share of bioenergy in the energy mix to 18%, increasing the use of ethanol;
- Expand the share of renewable energy sourced to 45% of the total energy mix;
- Expand the share of non-conventional renewable energy sources (wind, solar and biomass) in the power grid to 23%.

The ethanol that FS Bioenergia produces is certified by the National Biofuel Policy (Renovabio), which aims to promote best practices at production and distribution of biofuels in Brazil. At national level, the Renovabio program has the following targets:

- Promote the increasing use of biofuels in the Brazilian energy grid;
- Improve predictability in fuel markets, promoting energy efficiency gains, reduction of greenhouse gas emissions during the production, trading and use of biofuels.

In that sense, it can be said that the green bonds aligned to the Framework will help the achievement of both Brazilian NDC (Paris Agreement) and the National Biofuels Policy.

Forestry

The company has a forestry program in which FS Bioenergia signs forward contracts to acquire planted forest from small producers in the Brazilian midwestern region. The company also provides technical advisory and funding to its suppliers in order to promote best sustainability practices in forest management.

Currently, the company has signed this kind of agreements with 4 producers, totaling 4 thousand hectares. The company aims to expand to 30 thousand hectares by 2023.

On the other hand, the company also purchase standing forest to be cut. The company uses timber-based biomass to generate power for ethanol production. The proceeds will be used for both aforementioned forestry activities. We describe below the reasons why these forestry activities can contribute in the transition to a low carbon economy.

Forests have a high potential for carbon sequestration.

The amount of carbon sequestration in standing forest of eucalyptus is high. Carbon sequestration occur through the forest life cycle. According to Gatto et al (2011)¹, the average sequestration is 47 tonCO₂eq/hectare. According to IBÁ (2018), Brazil has about 7.84 million hectares of planted forests, with potential for carbon sequestration of 1.7 billion tonCO₂eq. The amount of carbon sequestration varies according to species, age, composition of soil, cutting, among other elements.

Forestry sector is strategic to prevent illegal deforestation and promote biodiversity

The forestry sector is important to strengthen the Brazilian Forest Code, by implementing sustainable management, renewable growing and harvesting cycles and reforesting areas. This type of forestry activity also contributes to preserve biodiversity and prevents that activities that would potentially deforest native vegetation take place. For each hectare of planted forest for commercial purposes, the forestry sector destines 0.7 hectare to conservation in protected areas, such as permanent preservation areas (APP), legal reserves (RL) and natural heritage reserve (RPPN).

The Brazilian NDC presents clear targets regarding land use and forest activities, such as:

- Enforcement of the Brazilian Forest Code;
- Achieve zero illegal deforesting in the Amazon and compensate emissions from this source;
- Restore and reforest 12 million hectares of land by 2030;
- Increase the scale of sustainable forest management systems through georeferencing and tracking systems, in order to discourage illegal and unsustainable practices;

¹ <http://www.scielo.br/pdf/rarv/v35n4/a15v35n4.pdf>

Therefore, we believe that the green bonds aligned to the Framework will help in the transition to a low carbon economy as well as the achievement of Brazilian NDC regarding changes in land use.

Therefore, we confirm that FS Bioenergia's practices and commitments, described in the Green Bond Framework, are aligned to the sustainability corporate strategy. The project categories indicated in the Framework will contribute to its climate goals such as reduction of greenhouse gas emissions.

Process for project evaluation and selection

The Framework proposed by FS Bioenergia aims to identify projects that will improve the company's environmental performance, as well as contribute to a transition to a low carbon economy. These objectives are aligned with the company's strategy to increase bioenergy production through best sustainability practices, considering the whole production chain.

The proceeds from green bond issuances will be used for both CAPEX and OPEX. According to the company's CAPEX plan, it expects to invest BRL 351 million to increase its ethanol production to 1,229 million liters by 2021. Besides that, the company also expects to invest BRL 103 million in forestry promotion. We believe that the OPEX spend will contribute for the transition to a low carbon economy for the following reasons:

- OPEX in the forestry category will be used to foster small producers of biomass, strengthening their sustainable management of forestry assets, contributing to local development and increasing availability of biomass for FS Bioenergia facilities in the future;
- OPEX in the bioenergy category will be used to increase the production of corn-based ethanol. That will mitigate the greenhouse gas emissions in the transport sector, replacing gasoline.

The company has created an internal Sustainability Committee, composed by the CEO, Sustainability Officer, Commercial Officer, operational managers and environmental experts. This committee will be held responsible for assessing whether the projects are eligible according to the categories described in the Use of Proceeds and the social and environmental externalities described below.

According to the Bioenergy Criteria from the Climate Bonds Standards, the financing and refinancing of biofuels and biomass-based power are eligible to Green Bond issuance, if they meet requirements in the following topics:

- 1) Limits of greenhouse gas emissions in a life cycle assessment;
- 2) Impacts on food security;
- 3) Climate change adaptation and resilience strategy;
- 4) Indirect impact on land use;
- 5) Practices in the feedstock production.

- 1) *Limits of greenhouse gas emissions:*

Carbon intensity of liquid biofuels for the transport industry shall not be greater than 18.8CO₂eq/MJ

This threshold shall include emissions from the agriculture, manufacturing, distribution and use of biofuels.

FS Bioenergia applied the RenovaCalc² tool, in order to estimate the intensity of greenhouse gases emissions. This assessment showed that FS Bioenergia carbon intensity meets the threshold established in the Climate Bonds Standards Bioenergy Criteria:

Production phase	gCO ₂ eq/MJ
Agricultural	12.2
Manufacturing	1.9
Distribution	1.8
Use	0.4
Total	16.3

2) Impacts on food security

Biofuel producers shall assess whether the feedstock used comes from countries or regions with high food security risks. If so, it must conduct an assessment of the impacts on food production and establish an action plan to mitigate potential risks.

According to the International Food Policy and Research Institute's Global Hunger Index, Brazil has a **low food security risk**.

Since all feedstock that FS Bioenergia uses to produce ethanol are produced in Brazil, the company meets this requirement.

3) Climate change adaptation and resilience strategy

The biofuel producer must put in practice a plan to mitigate the impacts of climate change on its production, including the following elements:

- Identification of climate related risks and vulnerabilities in the assets;
- Assessment of climate risks impacts on other stakeholders and supply chain;
- Implementation of strategy to mitigate and adapt to climate risks.

Currently, FS Bioenergia does not have a climate change adaptation and resilience strategy in place neither for its biofuel nor forest activities. However, the company has committed to develop and implement this strategy over the next year.

4) Indirect impact on land use

According to the issuer, the corn used for ethanol production is from second crop. This type of production has the following environmental and climate benefits:

- It improves the soil productivity and availability of nutrients, contributing to the production of corn (second crop) and soy (first-crop) in the region;

² RenovaCalc is a tool developed in the context of Brazil's National Biofuel Policy (RenovaBio) and has been endorsed by Climate Bonds Bioenergy Criteria.

- There is no need to expand new areas for its cultivation, which mitigate the risk of indirect impact on land use.

From 2020, the issuer has committed to monitor the annual productivity of feedstock suppliers. However, according to the Mato Grosso Institute for Agricultural Economics the average productivity (tons/hectare) of corn in the region has been increasing over the last years³.

Therefore, there is low risk of indirect impacts on land use and conversion of additional land.

5) *Practices in the feedstock production*

The issuer assesses the following criteria to ensure that its ethanol and timber feedstock is produced in an environmentally sustainable way and promotes climate resilience:

- Negative screening of suppliers that are included in the slave labor list;
- Not purchasing corn and biomass produced in protected areas nor originated in deforested areas in the Cerrado biome since 2018 and the Amazon biome since 2008 (georeferenced information);
- Assessment whether the production area is free of embargoes and recent deforestation;
- General socio-environmental assessment through satellite monitoring using Agrotools SAFE tool, which also prevents the risk of illegal logging;
- Negative screening of suppliers whose planted forests have invaded protected or indigenous land;

As the issuer does not require specific certification (eg. RSB, FSC) from its feedstock suppliers, additional issues that should be assessed are listed below. These items are applicable for both feedstock suppliers and standing forests belonging to the company:

- Soil health: Soil management plan focusing on increasing productivity;
- Water management: Plan to reduce and address relevant risks including protection of groundwater and local water bodies;
- Fire management: Plan to prevent forest fire;
- Chemical use: prohibition of hazardous substances listed in the Stockholm Convention and Rotterdam Convention;
- Pest and nutrient management plan.

Based on the practices for suppliers above, we can conclude that FS Bioenergia has a reasonable level of management of environmental and climate issues in its supply chain.

Therefore, we can conclude that the company's internal processes and commitments for project evaluation and selection are transparent and based on robust eligibility criteria. The projects are aligned with FS Bioenergia's strategy, contribute to the transition to a low carbon economy and have process and procedure to partially mitigate environmental and social risks.

³ <https://www.noticiasagricolas.com.br/noticias/milho/238528-imea-aponta-maior-productividade-para-o-milho-safrinha-do-mato-grosso.html#.XoM-kIhKg2w>; <https://www.canalrural.com.br/sites-e-especiais/mais-milho/productividade-milho-safrinha-cresce-79756/>

Management of proceeds

The proceeds raised via green bond issuances will be allocated to the eligible projects up to 12 months after each issuance. Whenever the proceeds are allocated to OPEX, it will only fund future expenses. In case of CAPEX, the proceeds may be used to either fund future expenses or reimbursements in the eligible categories.

The company has committed to maintain the temporarily unallocated proceeds in bank certificates of deposit (CDB) or repay outstanding debt. Therefore, there is no risk of temporary allocation of proceeds to projects that have a negative effect on climate change. The allocation of proceeds will be disclosed publicly until full allocation.

The payment to the bondholders is not associated with the environmental performance of the eligible projects and assets.

In case some projects no longer meet the eligibility criteria described in the Use of Proceeds, the Sustainability Committee will immediately replace it for a new project.

Reporting

FS Bioenergia has committed to monitor and report financial and climate information regarding the eligible projects and assets, as listed below. These results will ensure that the proceeds to be raised through green bond issuances keep aligned to the GBP and CBS.

Financial KPIs:

- a) Share of proceeds allocated in each eligible category;
- b) Share of proceeds allocated to OPEX vs CAPEX
- c) Proceeds allocated to eligible projects as a share of total proceeds raised via green bond issuances.

Impact KPIs:

- a) Carbon intensity of ethanol production, considering all phases of the production process, based on the RenovaCalc tool;
- b) Volume of biofuel produced;
- c) Standing forest area;
- d) Carbon inventory per hectare of standing forest.

The aforementioned indicators will be publicly disclosed by the company on a yearly basis. Such indicators will also be audited by an independent party.

We concluded that the company has clearly defined the reporting metrics that will be disclosed to investors and other stakeholders. The selected KPIs are aligned with best international practices.

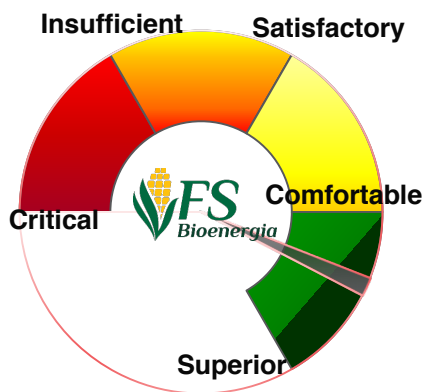
IV. FS Bioenergia Corporate ESG Performance

Founded as a joint venture between Summit Agricultural Group and Tapajós Participações S/A, FS Bioenergia is a company focused on the production of ethanol, corn oil, animal feedstock and bioenergy cogeneration, being the first Brazilian 100% based on corn feedstock.

According to its 2018/2019 Sustainability Report, FS Bioenergia processed 625.4 thousand tons of corn in its last harvest, which resulted in the production of 258.9 million liters of ethanol, 7.4 thousand tons of corn oil and 100 thousand MWh of electric energy. It currently employs 591 people, of which 382 in its Lucas do Rio Verde Unit and 216 in its Sorriso Unit.

This section assesses the company's capacity to measure, prevent, mitigate and compensate risks associated to its operations. In doing so, it is possible to ascertain its capacity to maintain the requirements of its green bond issuances.

In this context, we evaluated the company's policies and practices based on both public and confidential information and conducted interviews with key sustainability staff. Additionally, we searched for controversial facts regarding social, environmental and governance aspects involving the company.



Company: FS Bioenergia
Country: Brazil
Sector (GICS): Energy (“Energia”)

Strengths

- ✓ Commitment to renewable energy
- ✓ Energy efficiency in the production process
- ✓ Environmental education initiatives

Improvement Opportunities

- ! Occupational incidents involving outsourced workers
- ! Social and environmental aspects inclusion on the company’s governance practices
- ! Disclosure of minorities in the work force

a. ESG Performance

FS Bioenergia obtained a comfortable ESG performance, with emphasis on its operations of biomass energy cogeneration and waste management practices in its industrial sites.

ESG practices and policies assessment

Environment ●●●● **Comfortable**

Natural Resource Use: The corn-based ethanol production is intensive in water use. In the case of FS Bioenergia, the water is captured through artesian wells. According to the Aqeduct tool⁴, the water stress in the state of Mato Grosso, where the company operations are located, is low. The company has been striving to reduce the proportion of water needed for ethanol production and achieved a 25% reduction between the 2017/2018 and 2018/2019 crop years. This is equivalent to a reduction of 3.92 liters of water per liter of ethanol produced. In addition, the wastewater undergoes internal treatment and is destined to an infiltration pond. The company does not have a formal policy regarding efficiency in resource use and has no operational water reuse initiatives yet.

Additionally, the company is committed to the generation of renewable energy. Eucalyptus chips, forest residues and other types of biomass are used to generate steam and energy for the production process, meeting the plant’s energy needs. The annual cogeneration capacity is of 165 GWh, and 100 GWh were produced in the 2018/2019 crop year. The surplus generated is exported to the national electricity grid (37.4 GWh in 2018/2019).

Ecosystems: Aside from its environmental licensing obligations, the company does not have any additional formal commitments to fauna preservation. On company units, in two environmental studies developed for environmental licensing, the surrounding area’s fauna was analyzed. On both studies it was concluded that the impact of the operation upon the

⁴ <https://www.wri.org/aqueduct>

fauna is low, and monitoring programs were proposed to preserve biodiversity. FS Bioenergia does not have a history of controversies involving fauna.

FS Bioenergia's main risk regarding deforestation is in its supply chain, on corn and biomass purchases. The company has corn and biomass purchasing policies, prohibiting purchase from areas deforested after 2008 in the Amazon biome or after 2018 in the Cerrado biome, which are verified using the PRODES tool and also verifies if the supplier appears on Ibama's embargoed areas list. The company does not have history of involvement in deforestation related controversies.

In its Sustainability Report, the company commits to comply to the national legislation. The company does not have a history of penalties regarding noncompliance with environmental legislation. Environmental management is supported by a software called LEMA, that organizes obligations regarding applicable legislation and environmental licensing terms.

The company does not have a history of incidents involving fire. They have an Emergency Plan, that includes fire prevention and action, and a procedure step by step response to fire situations. The company has an emergency brigade formed by employees trained to act in emergency situations. Fire mitigation equipment, such as fire extinguishers, fire hydrants, smoke detectors, alarm systems and emergency water tanks are spread across the company's units. Furthermore, the company states that all of its sites are regularly licensed and that it has a team dedicated to licensing management, besides hiring a third-party firm for the licensing of new units.

The company does not have recent controversies due to pesticides and chemical fertilizers. Through the RenovaBio initiative, FS Bioenergia monitors some indicators from its suppliers, such as emissions, seed use, fertilizer use, diesel use and inputs. In 2019, the initiative covered 12% of suppliers, and in 2020 it aims to cover 22% according to their annual expansion plan. The company does not have a public policy or statement regarding sustainable agricultural management.

Waste Management: According to FS Bioenergia's Sustainability Report, available on its website, the company's operations do not generate significant amounts of industrial effluents. As previously mentioned, these go through internal treatment, along with the company's domestic effluents, and are then destined to an infiltration pond. Monthly analysis of parameters such as biological oxygen demand (DBO, in Portuguese acronym), chemical oxygen demand (DQO, in Portuguese acronym), pH, turbidity and other indicators are conducted through accredited laboratories and all detected results are in accordance with legislation. Currently, there is no reuse of treated effluent.

FS Bioenergia's productive process aims to reuse as much waste as possible, producing animal nutrition products from the waste generated in the ethanol process. Thus, most of generated waste that isn't internally reused comes from the administrative areas. The company has an Industrial Waste Management Plan that defines temporary storage conditions and final destination per waste type. The plan establishes that only the waste that can't be reused is to be discarded. The company is planning an initiative to educate surrounding communities regarding frying oil reuse and to collect this material to produce biodiesel. FS Bioenergia is not involved in controversies regarding waste management.

According to FS Bioenergia's Sustainability Report, the company monitors and controls the atmospheric emissions from their operations and reports the annual results to the state's environmental agency. The results for particulate matter, CO, NOx and SO2 are publicly disclosed, also in the Sustainability Report. The company obtained reductions in their emissions of particulate matter, CO and NOx between 2017/2018 and 2018/2019. The company isn't involved in controversies regarding the theme.

Climate Change: FS Bioenergia's Sustainability Report includes a statement on the company's commitment to tackle climate change, by increasing the availability of energy

sources without increasing greenhouse gases (GHG) emissions. Studies hired by the company and performed by Agroicone indicated that corn ethanol represents a reduction of 70% in life cycle GHG emissions compared to gasoline. The company also explains that, considering their other activities (animal nutrition and power cogeneration), their carbon footprint is further reduced. In addition, in 2020 its Lucas do Rio Verde unit obtained two RenovaBio certificates of efficient ethanol production, considering GHG emissions per generated energy, one for each of its ethanol types. The corn purchased by the company is of second crop, which mitigates the risk of indirect impact on land use.

Social



Comfortable

Communities: FS Bioenergia gives priority to hiring local workforce. The company states that their activities can generate up to 4.5 thousand direct and indirect jobs, with 65% in the State of Mato Grosso, where operational units are located. In 2019, the company promoted environmental education lectures for 5 thousand students from local public schools. During the current Covid-19 pandemic, FS Bioenergia donated resources and 70% alcohol to local hospitals and state government. The company aids the development of local businesses in specific cases, such as in their Forestry Promotion Program that offers technical assistance and initial financing for small and medium forestry properties in Mato Grosso, but has no formal policy on the theme or defined regularity for such partnerships yet.

Supply Chain: The company does not have a history of public controversies regarding outsourcing. Outsourced workers represent 4% of their core business work force, with positions in machine operation and health and safety. Furthermore, the company states that outsourced workers are involved in all activities regarding health and safety, except for the Internal Workplace Accident Prevention Week (SIPAT, in Portuguese acronym). The same health and safety indicators of direct and outsourced workers are monitored. For outsourced workers occupied in maintenance the results are better compared to direct workers, but for those occupied in core operations, the results are worse.

FS Bioenergia does not have a history of controversies involving suppliers. Their Supply Policy establishes standard procedures and hiring terms. Their Sustainability Report also indicates that background checks are conducted on new suppliers and every month, regarding environmental and labor compliance (such as deforestation, embargoed areas and slave labor). Sustainability clauses are included on its corn and biomass suppliers' contracts. As previously mentioned, the company monitors additional productivity indicators from some of its suppliers through the RenovaBio initiative and is working to include more suppliers in the next years.

Human Resources: The company does not have history of involvement in controversial human resources issues. They conduct climate surveys with employees, and in 2019, with an 88% satisfaction rate, obtained the 'Great Place to Work' certification. According to its Sustainability Report, in the 2018/2019 crop year, there were 6 occupational incidents, half of them involving outsourced workers. Also, through their report, the company informed that they conduct frequent health and safety trainings, and that in the 2018/2019 crop year, employees were trained on the topic for an average of 39.7 hours each. The company informed that they monitor the worked hours rigorously not to exceed limits established in labor law, using compensatory time off scheme so that employees have more flexibility. As benefits for employees, FS Bioenergia offers health and dental care, leisure club for employees and families, financing of 50% for physical activities, and psychological aid for employees and families via phone. The company offers 6 months for maternity leave, above the mandatory 4 months established in local legislation.

68% of employees are covered by collective labor agreements. The company offers space in their units for union meetings and does not have history of controversies involving unions.

According to its Sustainability Report, in FS Bioenergia's unit there is significant generation of direct and indirect jobs in the construction of new plants and operation phases.

The company is developing the program "Ciclo de Gente" to manage careers and performance evaluation of its employees. Currently, they assess performance and give feedbacks yearly. Besides structuring this feedback process, the company states that it provides financial support to its workers, contributing with 50% of education costs for courses within the worker's occupation area. Furthermore, the company states that it has internal training programs to develop employees, such as the Internal School of Leaders, to develop leadership skills.

The company's Code of Ethics determines that the selection of new employees and internal promotion of employees can't discriminate against religion, race, gender, age, marital status, sexual orientation and disabilities. The company does not have a history of controversies involving discrimination. In its annual Sustainability Report, regarding minorities, only the percentage of female workforce is disclosed. In selection processes for leadership positions, it is mandatory to have at least one female candidate as a finalist.

Governance



Comfortable

Transparency: The company's quarterly financial results are presented on its website, in an area accessible only to investors, shareholders and financial institutions. Also, on its website, FS Bioenergia discloses information about its board, naming its members and respective duties. Its Code of Ethics for staff and Code of Conduct for suppliers are also available on its website. Furthermore, the company's social and environmental initiatives are disclosed through its Sustainability Report, like the Forestry Promotion Program and its commitment to the Foreign Corrupt Practices. Said report is audited by KPMG.

Business Behavior: FS Bioenergia has no history of involvement in controversial corporate governance cases. Furthermore, the company provides internal documents regarding corporate governance in its website, such as the Code of Ethics, anti-corruption policy and others. The company has a corporate area dedicated to environmental management. Its internal sustainability committee, composed by executive officers and other leaders, approaches social and environmental subjects in periodic meetings. Although the company has a few measures in place to hire women for leading roles (as previously mentioned), its board of directors has no female participation. Lastly, although FS Bioenergia does not have a formal policy on this matter, it stated that the executive bonus for 2020/2021 includes criteria related to the application of socio-environmental policies.

The company has no history of involvement in corruption cases. Furthermore, it has an internal process to investigate and punish corruption and fraud cases - the complaints are addressed to the CEO and go through an internal audit, that evaluates their severity. An anonymous channel receives such complaints. In addition, the company commits to comply with Brazilian Anti-corruption law and USA⁵'s Foreign Corrupt Practices Act (FCPA), and to train all of its employees in order to prevent and combat corruption.

No controversies or cases were identified that generated negative exposure of FS Bioenergia in the media.

Through this analysis, we concluded that FS Bioenergia has comfortable ESG practices and technical know-how of its activities. In addition, the company has no involvement in controversial cases in its recent history. Therefore, we conclude that the company has the capacity to measure, prevent, mitigate and compensate for risks and sustain the conditions that allow it to receive resources from future green bond issuances based on their Green Bond Framework.

⁵ United States of America

Method

SITAWI's analysis is based on a proprietary methodology, aligned to internationally recognized standards. It consists of two stages:

- 1) Issuance Assessment - the first step is to assess whether the use of resources has a potential for positive environmental impact, consistent with the condition of Green CRA. Therefore, we compare the issue to the four components of the Green Bond Principles (GBP).
 - Use of Proceeds: purpose of CRA and its alignment with the categories of Green Bond Principles and Climate Bonds Taxonomy;
 - Project Evaluation and Selection: guarantee of environmental benefits associated with the payment of the company's debt to finance corn ethanol production;
 - Management of Proceeds: procedures applied for financial management of proceeds, to guarantee the allocation on activities eligible as green;
 - Reporting: Disclosure of information on tracking and allocation of proceeds, as well as the expected positive impacts of financed operations.

- 2) Company ESG Performance - we evaluate the company that operates the project, regarding best sustainability practices comparing with internationally recognized standards, such as GRI⁶ and others. In this context, the main aspects analyzed are:
 - Policies and practices for measuring, preventing, mitigating and compensating for ESG risks from its activities;
 - Company contribution to sustainable development and mitigation of climate change;
 - Controversies involving the company;

This analysis comprehends 3 dimensions and 10 themes, prioritized according to the materiality of each theme for the company:

Analyzed policies and practices

Dimension	Practices
Environmental	<ul style="list-style-type: none"> • Natural Resource Use • Ecosystems • Waste Management • Climate Change
Social	<ul style="list-style-type: none"> • Communities • Clients • Supply Chain • Human Resources
Governance	<ul style="list-style-type: none"> • Transparency • Business Behaviour

Labels

Assurance Level

⁶ <https://www.globalreporting.org/Pages/default.aspx>

Assurance Levels

Reasonable Able to convincingly confirm the assurance principles and objectives.

Moderate Able to partially confirm the assurance principles and objectives.

Limited Inability to confirm the assurance principles and objectives.

Performance Level

 Superior

The company or the project has the best practices in that dimension, becoming a reference for other companies in ESG performance through the search for innovation and continuous improvement, thus contributing in a relevant way to sustainable development, including commitments to maintain this contribution over the long term.

 Comfortable

The project or the company meets the minimum requirements for compliance with the local legislation on the specific theme, in addition to being aligned with international sustainability standards (ex: IFC Performance Standards and GRI), contributing in a broad way to sustainable development.

 Satisfactory

The project or the company meets the minimum requirements for compliance with the local legislation in the specific topic.

 Insufficient

The project or company does not meet the minimum requirements for compliance with the local legislation on the specific topic.

 Critical

The company or project does not present evidences of its performance in the specific dimension.

Controversies

Level of Severity and Responsiveness related to controversies

Level of Severity

Not Significant	Breaks the law and/or negatively affects stakeholders but does not cause damage or causes minimal damage that does not require remediation.
Significant	Breaks the law and / or negatively affects stakeholders, with average level of remediation difficulty and cost.
Critical	Breaks the law and negatively affects stakeholders, with the caused damage being irreparable or with difficult or costly remediation.

Responsiveness

Proactive	In addition to the company taking corrective action to face de controversy, it adopts measures that go beyond its obligations, performing systematic procedures to prevent reoccurrence.
Corrective	The company performs the necessary actions to correct the damages and communicates properly with impacted stakeholders.
Defensive	The company takes insufficient action to correct the damages or issues a statement without taking corrective action.
Non-responsive	There is no action or communication from the company regarding the controversy.