## **Second-Party Opinion**

# **FS Green Bond Framework**



## **Evaluation Summary**

Sustainalytics is of the opinion that the FS Green Bond Framework is credible and impactful and aligns with the four core components of the Green Bond Principles 2021. This assessment is based on the following:



**USE OF PROCEEDS** The eligible categories for the use of proceeds – Bioenergy and Sustainable Forestry – are aligned with those recognized by the Green Bond Principles. Sustainalytics considers that investments in the eligible categories will lead to positive environmental impacts and advance the UN Sustainable Development Goals, specifically SDGs 7 and 15.



**PROJECT EVALUATION AND SELECTION** FS's sustainability department is responsible for the selection and approval of the eligible projects. The Framework defines environmental and social risk management processes that are applicable to all eligible categories. Sustainalytics considers the project selection and risk management processes in line with market practice.



**MANAGEMENT OF PROCEEDS** FS will monitor and track internally the proceeds from each issuance, which will be fully allocated within 12 months from their respective issuance. Pending allocation, the funds will be 100% invested in low-risk commitments or used to repay outstanding debt. This is in line with market practice.



**REPORTING** FS intends to report on allocation of proceeds on its website on an annual basis until full allocation. In addition, FS is committed to reporting on relevant impact metrics. Sustainalytics views FS's allocation and impact reporting as aligned with market practice.

<b>Evaluation Date</b>	August 04, 2021
Issuer Location	Lucas do Rio Verde, Brazil

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## Introduction

FS Agrisolutions Indústria de Biocombustíveis Ltda. ("FS" or the "Company") is a producer of corn-based bioethanol and other ancillary products, such as animal feed. Founded in 2016 in Lucas do Rio Verde, State of Mato Grosso, Brazil, FS's formation is the result of a partnership between the Summit Agricultural Group, a US-based investment fund, and Tapajós Participações S/A, a Brazilian agri-business company. FS set up Brazil's first corn-based ethanol plant in 2017 and is the only company in Brazil to produce ethanol, animal nutrition products and bioenergy exclusively from corn.

FS has developed the FS Green Bond Framework (the "Framework"), under which it intends to issue green bonds and use the proceeds to finance and/or refinance, in whole or in part, existing or future projects that promote renewable bio-based energy and reduce GHG emissions globally. The Framework defines eligibility criteria in two areas:

- 1. Bioenergy
- 2. Sustainable Forestry

FS engaged Sustainalytics to review the FS Green Bond Framework, dated July 2021, to provide a secondparty opinion on the Framework's environmental credentials and its alignment with the Green Bond Principles 2021 (GBP).<sup>1</sup> The Framework has been published in a separate document.<sup>2</sup>

#### Scope of work and limitations of Sustainalytics' Second-Party Opinion

Sustainalytics' Second-Party Opinion reflects Sustainalytics' independent<sup>3</sup> opinion on the alignment of the reviewed Framework with current market standards and the extent to which the eligible project categories are credible and impactful.

As part of this Second-Party Opinion, Sustainalytics assessed the following:

- The Framework's alignment with the Green Bond Principles 2021, as administered by ICMA;
- The credibility and anticipated positive impacts of the use of proceeds; and
- The alignment of the issuer's sustainability strategy and performance, and sustainability risk management in relation to the use of proceeds.

For the use of proceeds assessment, Sustainalytics relied on its internal taxonomy, version 1.9.2, which is informed by market practice and Sustainalytics' expertise as an ESG research provider.

As part of this engagement, Sustainalytics held conversations with various members of the FS management team to understand the sustainability impact of their business processes and planned use of proceeds, as well as management of proceeds and reporting aspects of the Framework. FS representatives have confirmed that: (1) they understand it is the sole responsibility of FS's to ensure that the information provided is complete, accurate and up to date; (2) they have provided Sustainalytics with all relevant information, and (3) any provided material information has been duly disclosed in a timely manner. Sustainalytics also reviewed relevant public documents and non-public information.

This document contains Sustainalytics' opinion of the Framework and should be read in conjunction with that Framework.

Any update of the present Second-Party Opinion will be conducted according to the agreed engagement conditions between Sustainalytics and FS.

Sustainalytics' Second-Party Opinion, while reflecting on the alignment of the Framework with market standards, is no guarantee of alignment nor warrants any alignment with future versions of relevant market standards. Furthermore, Sustainalytics' Second-Party Opinion addresses the anticipated impacts of eligible projects expected to be financed with bond proceeds but does not measure the actual impact. The measurement and reporting of the impact achieved through projects financed under the Framework is the responsibility of the Framework owner.

<sup>&</sup>lt;sup>1</sup> The Green Bond Principles are administered by the International Capital Market Association and are available at <a href="https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/">https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/</a>.

<sup>&</sup>lt;sup>2</sup> The FS Green Bond Framework is available on FS's website at: fs.agr.br

<sup>&</sup>lt;sup>3</sup> When operating multiple lines of business that serve a variety of client types, objective research is a cornerstone of Sustainalytics and ensuring analyst independence is paramount to producing objective, actionable research. Sustainalytics has therefore put in place a robust conflict management framework that specifically addresses the need for analyst independence, consistency of process, structural separation of commercial and research (and engagement) teams, data protection and systems separation. Last but not the least, analyst compensation is not directly tied to specific commercial outcomes. One of Sustainalytics' hallmarks is integrity, another is transparency.



In addition, the Second-Party Opinion opines on the potential allocation of proceeds but does not guarantee the realized allocation of the bond proceeds towards eligible activities.

No information provided by Sustainalytics under the present Second-Party Opinion shall be considered as being a statement, representation, warrant or argument, either in favour or against, the truthfulness, reliability or completeness of any facts or statements and related surrounding circumstances that FS has made available to Sustainalytics for the purpose of this Second-Party Opinion.

# Sustainalytics' Opinion

## Section 1: Sustainalytics' Opinion on the FS Green Bond Framework

Sustainalytics is of the opinion that the FS Green Bond Framework is credible, impactful and aligns with the four core components of the GBP. Sustainalytics highlights the following elements of the FS Green Bond Framework:

- Use of Proceeds:
  - The eligible categories Bioenergy and Sustainable Forestry are aligned with those recognized by the GBP.
  - Within the Bioenergy category, FS intends to finance or refinance capital expenditures related to the production of corn ethanol and operational expenditures related to the purchase of corn feedstock for ethanol production.
    - FS produces both hydrated and anhydrous corn ethanol. The Framework discloses the GHG emissions intensity of FS' hydrated corn ethanol to be 17.68 gCO₂e/MJ and that of anhydrous corn ethanol to be 17.71 gCO₂e/MJ. Sustainalytics views positively that these emissions intensities align with the Climate Bonds Standard Bioenergy Criteria for facilities producing biofuels.
    - FS intends to purchase corn feedstock from suppliers that comply with the FS Sustainability Protocol or are certified against the Climate Bonds Standard Agriculture Criteria Version 1. Sustainalytics has verified in the documentation provided by FS that the grain used as feedstock for the eligible projects will be sourced from second-crop corn in Brazil, specifically in the state of Mato Grosso. Further, Sustainalytics has reviewed FS's policies regarding land protection and deforestation, as well as climate resiliency, which are specifically relevant to the production of energy crops.
    - Considering the emissions thresholds in place and Company's approach to sourcing sustainable feedstock, Sustainalytics considers this activity in the Bioenergy category to be aligned with market practice.
  - The Sustainable Forestry category includes expenditures related to the purchase of forest biomass as feedstock for the generation of steam and electricity for use in biofuel production facilities.
    - FS has confirmed that the expenditures under this category will relate only to the operational expenditures for the procurement of woody biomass, primarily eucalyptus or other fast-growing timber, as feedstock for steam and electricity generation.
    - FS has confirmed that the electricity generation processes will have a lifecycle GHG emissions intensity of less than 100 gCO<sub>2</sub>e/kWh.<sup>4</sup>
    - FS has extensive compliance requirements and processes in place to ensure that the feedstock is sourced from sustainably managed forests. FS conducts socio-environmental analyses for all suppliers to ensure that the forest farms preserve their native vegetation and are deforestation free and has explicitly confirmed within its Framework that it does not source wood from lands that have been illegally deforested. FS also uses geo-spatial analyses and satellite imagery to verify the origination of the feedstock procured and ensures that the farms are not on indigenous or protected land.

<sup>&</sup>lt;sup>4</sup>FS has provided to Sustainalytics indicative data confirming this lifecycle emissions intensity for its power production. It has also provided an independent report confirming that its eucalyptus sourcing results in zero induced land-use change.



- Based on the emissions thresholds in place and FS's approach to sourcing sustainable feedstock, Sustainalytics considers the procurement of forest biomass feedstock under this category to be aligned with market practice.
- Project Evaluation and Selection:
  - FS's sustainability and finance departments are responsible for selecting and approving the eligible projects.
  - FS has strict measures in place to monitor and manage the environmental and social risks associated with the eligible projects. Sustainalytics considers the risk assessment and mitigation processes to be adequate and aligned with market practice. For additional detail see Section 2.
  - Based on the clear allocation of responsibilities for project evaluation and selection and the management processes for social and environmental risks, Sustainalytics considers this process to be in line with market practice.

#### Management of Proceeds:

- FS will monitor and track internally the proceeds from each issuance, which will be fully allocated within 12 months of each issuance. FS has also defined a maximum lookback period of three years for refinancing. Pending allocation, the funds will be 100% invested in low-risk commitments or used to repay outstanding debt.
- Based on the processes for tracking, allocation and the temporary use, Sustainalytics considers this process to be in line with market practice.

#### Reporting:

- Until full maturity, FS will provide allocation and impact reporting to investors and on its website on an annual basis, as a part of its Sustainability Report.
- Allocation reporting will cover aspects such as the share of proceeds allocated to each eligible category, the proceeds allocated to eligible assets in comparison to the total amount raised from each issuance and the share of financing to refinancing.
- Under Impact reporting, FS intends to cover key performance indicators such as carbon intensity
  of ethanol production, the volume of biofuel produced, standing forest area and the carbon
  inventory per hectare of standing forest
- Based on the commitment for allocation and impact reporting, Sustainalytics considers this
  process to be in line with market practice.

#### **Alignment with Green Bond Principles 2021**

Sustainalytics has determined that the FS Green Bond Framework aligns with the four core components of the GBP. For detailed information please refer to Appendix 1: Green Bond/Green Bond Programme External Review Form.

## Section 2: Sustainability Strategy of FS

#### Contribution of framework to FS's sustainability strategy

Sustainalytics is of the opinion that FS demonstrates a commitment to sustainability with a focus on three key environmental areas as outlined in the Company's six "Goals FS 2030" sustainability commitments: (i) Reduce CO<sub>2</sub> Emissions, (ii) Social and Environmental Responsibility, and (iii) Water, Waste and Effluents.<sup>5</sup>

Sustainalytics highlights the following environmental goals and achievements by FS related to these commitments:

- 31.7 million tCO<sub>2</sub>e avoided through the replacement of gasoline with biofuels by 2030. Development
  of biofuel production facilities under the Framework are expected to directly contribute to the
  achievement of this GHG emissions reduction goal. As of the 2019-2020 harvest season,<sup>6</sup> FS reports
  contributing to an annual GHG emissions avoidance of 816,000 tCO<sub>2</sub>e through its production of
  ethanol as a gasoline substitute.<sup>7</sup>
- Ensure that the entirety of FS's biomass supply chain is separated from any involvement in deforestation and the exploitation of protected lands. The Company's financing of sustainable

<sup>&</sup>lt;sup>5</sup> FS, "Goals FS 2030", at: https://www.fs.agr.br/en/goals-fs-2030/

<sup>&</sup>lt;sup>6</sup> The harvest year runs April 1 to March 31.

<sup>&</sup>lt;sup>7</sup> FS, "Annual Sustainability Report – 2019/2020", at: <a href="https://api.mziq.com/mzfilemanager/v2/d/34aeec8a-d08e-440f-ad7f-324e1e1e7745/fd60c563-5da6-55ac-60cb-e01adce59915?origin=2">https://api.mziq.com/mzfilemanager/v2/d/34aeec8a-d08e-440f-ad7f-324e1e1e7745/fd60c563-5da6-55ac-60cb-e01adce59915?origin=2</a>



forestry initiatives under the Framework is expected to contribute to its social and environmental responsibility goals across its supply chain.<sup>8</sup>

- Reduce the quantity of organic waste disposed to landfills by 80% by 2030. FS's procurement of biomass feedstock for energy production under the Framework is expected to contribute to the sustainable utilization of organic waste material and aid in the achievement of the Company's waste reduction goals.<sup>9</sup>
- Successful implementation of a carbon capture and storage (CCS) system at one of the Company's bioenergy plants, resulting in a negative carbon footprint for the facility. Sustainalytics recognizes that incorporating CCS technology into bioenergy developments can be an integral part in advancing the role of bioenergy in addressing climate change.<sup>10</sup>

Based on the above, Sustainalytics is of the opinion that that the FS Green Bond Framework is aligned with the Company's overall sustainability strategy. Sustainalytics further encourages FS to report on indicators such as operational GHG emissions in order to substantiate its progress towards achieving the sustainability targets.

#### Well positioned to address common environmental and social risks associated with the projects

Sustainalytics recognizes that the net proceeds from the bonds issued under the Framework will be directed towards eligible projects expected to generate positive environmental impacts. Yet, Sustainalytics is also aware that such eligible projects could lead to negative environmental and social outcomes. Some key environmental and social risks associated with the eligible projects could include community relations and stakeholder participation, land use and biodiversity issues, in particular those related to deforestation or land conversion, and occupational health and safety at both FS's facilities and those of third-party producers.

Sustainalytics acknowledges that FS addresses these risks through the following existing internal policies and processes:

- Development of the Sustainability Matrix tool for stakeholder engagement targeting dialogue with both internal and external stakeholders on five key pillars: a valuable business, people and culture, business ethics, innovation and technology, and care for people and environment.<sup>11</sup> This tool was created through input from stakeholders across the Company's value chain, including employees, suppliers, regulators, financial institutions and customers.<sup>12</sup>
- Certification of FS's biofuel products under the government of Brazil's RenovaBio programme, which
  requires compliance with a zero-deforestation policy and assigns the products an energy efficiency
  score based on lifecycle environmental impacts.<sup>13,14</sup>
- Development of FS's Sustainability Policy for Social and Environmental Responsibility in the Supply Chain, which establishes commitments to sustainability compliance requirements for all of the Company's suppliers of corn and biomass. Under this policy, FS uses the digital platform Agrotools to evaluate and monitor the sustainability performance of suppliers, ensuring that they are not operating in converted high-carbon stock lands.<sup>15,16</sup>
- FS's consolidated Occupational Health and Safety policy has been implemented in all of its plants, offices and construction sites. The policy incorporates the Safety Practice Index as well as ongoing safety training programmes for employees and contracted third parties.<sup>17</sup> Sustainalytics encourages

<sup>&</sup>lt;sup>8</sup> <u>Ibid.</u>

<sup>9</sup> Ibid

<sup>&</sup>lt;sup>10</sup> Princeton University Student Climate Initiative, "Preventing Climate Change with BECCS: Bioenergy with Carbon Capture and Storage", at: <a href="https://psci.princeton.edu/tips/2020/11/15/preventing-climate-change-with-beccs-bioenergy-with-carbon-capture-and-storage">https://psci.princeton.edu/tips/2020/11/15/preventing-climate-change-with-beccs-bioenergy-with-carbon-capture-and-storage</a>

<sup>&</sup>lt;sup>11</sup> FS, "Annual Sustainability Report – 2019/2020", at: <a href="https://api.mziq.com/mzfilemanager/v2/d/34aeec8a-d08e-440f-ad7f-324e1e1e7745/fd60c563-5da6-55ac-60cb-e01adce59915?origin=2">https://api.mziq.com/mzfilemanager/v2/d/34aeec8a-d08e-440f-ad7f-324e1e1e7745/fd60c563-5da6-55ac-60cb-e01adce59915?origin=2</a>

<sup>&</sup>lt;sup>12</sup> FS, "Annual Sustainability Report – 2019/2020", at: <a href="https://api.mziq.com/mzfilemanager/v2/d/34aeec8a-d08e-440f-ad7f-324e1e1e7745/fd60c563-50ac-60cb-e01adce59915?origin=2">https://api.mziq.com/mzfilemanager/v2/d/34aeec8a-d08e-440f-ad7f-324e1e1e7745/fd60c563-50ac-60cb-e01adce59915?origin=2</a>

<sup>&</sup>lt;sup>13</sup> Brazilian Sugarcane Industry Association (UNICA), "Renovabio – The Program", at: <a href="https://www.sugarcane.org/sustainability-the-brazilian-experience/renovabio/">https://www.sugarcane.org/sustainability-the-brazilian-experience/renovabio/</a>

 $<sup>^{14}</sup>$  FS, "Annual Sustainability Report – 2019/2020", at:  $\underline{\text{https://api.mziq.com/mzfilemanager/v2/d/34aeec8a-d08e-440f-ad7f-324e1e1e7745/fd60c563-5da6-55ac-60cb-e01adce59915?origin=2}$ 

<sup>15</sup> Agrotools, at: https://agrotools.com.br/

<sup>&</sup>lt;sup>16</sup> All information pertaining to FS Bloenergia's Sustainability Policy: Social and Environmental Responsibility in the Supply and Sales Chain, was provided by the Company to Sustainalytics directly.

<sup>&</sup>lt;sup>17</sup> FS, "Annual Sustainability Report – 2019/2020", at: <a href="https://api.mziq.com/mzfilemanager/v2/d/34aeec8a-d08e-440f-ad7f-324e1e1e7745/fd60c563-5da6-55ac-60cb-e01adce59915?origin=2">https://api.mziq.com/mzfilemanager/v2/d/34aeec8a-d08e-440f-ad7f-324e1e1e7745/fd60c563-5da6-55ac-60cb-e01adce59915?origin=2</a>



FS to publicly disclose this document, as well as to continue its reporting on workplace health and safety.

- Use of an internal tracking system that reviews the Brazilian government's Rural Environmental Information Registration data of all suppliers and references it against regions subject to environmental restrictions imposed by the State of Mato Grosso's Secretary for the Environment (SEMA), the Brazilian federal government's Brazilian Institute of Environment and Renewable Natural Resources (IBAMA) and the Chico Mendes Institute for Biodiversity Conservation.<sup>18</sup>
- Adoption of a code of ethics applicable to all FS employees, as well as a code of conduct for all suppliers and business partners.<sup>19</sup> Further, the Company's governance guidelines include an anticorruption policy that aligns with both the Brazilian Anti-Corruption Law and the Foreign Corrupt Practices Act in the US.<sup>20</sup>

Based on these policies, standards and assessments, Sustainalytics is of the opinion that FS has implemented adequate measures and is well positioned to manage and mitigate environmental and social risks commonly associated with the eligible categories.

## **Section 3: Impact of Use of Proceeds**

Both use of proceeds categories are aligned with those recognized by the GBP. Sustainalytics has focused below where the impact is specifically relevant in the local context.

#### Importance of Biofuel Production in Brazil

The transportation sector is responsible for 24% of all GHG emissions globally, with road vehicles accounting for nearly three-quarters of sector emissions. <sup>21</sup> The sector also faces specific decarbonization challenges as demand continues to grow at a rapid pace, particularly in emerging economies. <sup>22</sup> For this reason, climate solutions need to be multifaceted and address the sector's emissions on multiple fronts. Biofuels can play an important role in mitigating transportation sector emissions by offering an alternative to traditional gasoline in passenger and commercial vehicles, a role that Brazil in particular has embraced in recent years. <sup>23</sup>

The Brazilian commitment to domestic biofuel use has been evident since the 1970s with the introduction of the Programa Nacional do Álcool (Proálcool) which set mandatory ethanol blends for gasoline across the country at up to 25%.<sup>24</sup> As of 2018, Brazil had increased its mandatory ethanol blend to 27% for all gasoline, and furthermore, 73% of all cars in the country could operate on ethanol fuel alone as result of the widely successful adoption of flex-fuel vehicles.<sup>25,26</sup> With corn and sugarcane ethanol representing up to 43% and 90% reductions in lifecycle emissions respectively when compared to gasoline, ethanol use plays an integral role in the decarbonization of the transportation sector.<sup>27,28</sup> In 2015, the Brazilian government reinforced its commitment to this decarbonization pathway at the United Nations climate conference in Paris through a Nationally Determined Contribution (NDC) to increase its share of biofuels in the national energy mix to approximately 18% by 2030.<sup>29</sup> The achievement of this target would require ethanol production to double if only domestic supply were used, establishing a clear need for expanded ethanol infrastructure.<sup>30</sup>

<sup>&</sup>lt;sup>18</sup> Ibid.

<sup>&</sup>lt;sup>19</sup> FS, "Code of Ethics (Código de Ética e Conduta)", at: <a href="https://api.mziq.com/mzfilemanager/v2/d/34aeec8a-d08e-440f-ad7f-324e1e1e7745/5ec277b9-1c9f-e9ef-dd49-326e7ebe7713?origin=2">https://api.mziq.com/mzfilemanager/v2/d/34aeec8a-d08e-440f-ad7f-324e1e1e7745/5ec277b9-1c9f-e9ef-dd49-326e7ebe7713?origin=2</a>

<sup>&</sup>lt;sup>20</sup> All FS governance policy and procedure documents are available at: https://www.fs.agr.br/en/ir/policies-and-procedures/

<sup>&</sup>lt;sup>21</sup> IEA, "Global Energy Review 2020", at: <a href="https://www.iea.org/reports/global-energy-review-2020">https://www.iea.org/reports/global-energy-review-2020</a>

<sup>&</sup>lt;sup>22</sup> IPCC, "Transport", (2018), at: https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc\_wq3\_ar5\_chapter8.pdf

<sup>&</sup>lt;sup>23</sup> International Council on Clean Transportation, "Brazil Passenger Vehicle Market Statistics" (2015), at: https://theicct.org/sites/default/files/publications/Brazil%20PV%20Market%20Statistics%20Report.pdf

<sup>&</sup>lt;sup>24</sup> Encyclopedia of Energy, "National Energy Policy: Brazil – Proalcool Program", at: <a href="https://www.sciencedirect.com/topics/engineering/proalcool-program">https://www.sciencedirect.com/topics/engineering/proalcool-program</a>

<sup>&</sup>lt;sup>25</sup> Rapid Transition Alliance, "The Rise of Brazil's Sugarcane Cars" (2018), at: <a href="https://www.rapidtransition.org/stories/the-rise-of-brazils-sugarcane-cars/">https://www.rapidtransition.org/stories/the-rise-of-brazils-sugarcane-cars/</a>
<sup>26</sup> Wessex Institute of Technology Press, "The Brazilian experience of flex-fuel vehicles technology: towards low carbon mobility" (2014), at: <a href="https://www.witpress.com/Secure/elibrary/papers/UT14/UT14045FU1.pdf">https://www.witpress.com/Secure/elibrary/papers/UT14/UT14045FU1.pdf</a>

<sup>&</sup>lt;sup>27</sup> Rapid Transition Alliance, "The Rise of Brazil's Sugarcane Cars" (2018), at: <a href="https://www.rapidtransition.org/stories/the-rise-of-brazils-sugarcane-cars/28">https://www.rapidtransition.org/stories/the-rise-of-brazils-sugarcane-cars/28</a> USDA, "Factsheet – Lifecycle Greenhouse Gas Emissions of Corn-Based Ethanol", at:

https://www.usda.gov/sites/default/files/documents/Ethanol\_Report\_Factsheet\_Final.pdf

<sup>&</sup>lt;sup>29</sup> UNFCCC, "Federative Republic of Brazil – Intended Nationally Determined Contribution Towards Achieving the Objective of the United Nations Framework Convention on Climate Change", at:

 $<sup>\</sup>underline{https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Brazil%20First/BRAZIL%20iNDC%20english%20FINAL.pdf.}$ 

<sup>&</sup>lt;sup>30</sup> Energy Policy, "Exploring policy options to spur the expansion of ethanol production and consumption in Brazil: An agent-based modeling approach" (2018), at: <a href="https://www.sciencedirect.com/science/article/pii/S0301421518306207">https://www.sciencedirect.com/science/article/pii/S0301421518306207</a>



Investments by FS in the production of corn ethanol are expected to contribute to the achievement of the bioenergy component of Brazil's NDC and expand the development of biofuel production in alignment with transportation sector carbon intensity reduction targets, such as those set out by Brazil's national biofuel policy, RenovaBio.<sup>31</sup>

#### Importance of Sustainable Forestry Practices to Support Biomass Power in Brazil

Contributing to both renewable energy development and sustainably managed forest resources, biomass power that utilizes sustainable feedstock sources has a meaningful role to play in a sustainable Brazilian economy. Formalized in the country's NDC under the Paris Climate Agreement, Brazil's sustainable development goals specifically target renewable energy and sustainable forestry. The NDC commits to, by 2030, eliminate illegal deforestation, restore 12 million hectares of forests, enhance sustainable native forest management and expand non-hydroelectric domestic renewable energy sources (including wind, biomass and solar) to 23% of the national energy mix. 33

As one of the largest forests in the world and given its proximity to large scale agricultural operations, the Brazilian Amazon rainforest is particularly vulnerable to deforestation, having lost more than 13% of its total forest cover between 1970 and 2013. 34,35 In this context, the management of rainforest resources in accordance with sustainable economic development principles is a key component of a low carbon future for Amazonian countries, such as Brazil. 36

Investments by FS in Brazilian sustainable forestry projects that support the production of feedstock for biomass power are expected to contribute to the achievement of Brazil's renewable energy and sustainable forestry goals under its NDC.

#### Alignment with or contribution to SDGs

The Sustainable Development Goals (SDGs) were set in September 2015 by the United Nations General Assembly and form an agenda for achieving sustainable development by the year 2030. The bond issued under the FS Green Bond Framework advances the following SDGs and targets:

Use of Proceeds Category	SDG	SDG target
Bioenergy	7. Affordable and clean energy	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix
Sustainable Forestry	15. Life on Land	15.2 Sustainable management of forests, halt deforestation, restore degraded forests and increase afforestation and reforestation

#### Conclusion

FS has developed the FS Green Bond Framework under which it may issue green bonds and use the proceeds to finance and/or refinance, in whole or in part, existing or future projects that are expected to provide positive environmental impact and contribute towards the transition to low-carbon transportation. Sustainalytics considers that the projects funded by the green bond proceeds are expected to provide positive environmental impacts.

The Framework outlines a process by which proceeds will be tracked, allocated, and managed, and commitments have been made for reporting on the allocation and impact of the use of

<sup>&</sup>lt;sup>31</sup> USDA – Foreign Agricultural Service, "Implementation of RenovaBio - Brazil's National Biofuels Policy", at:

https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName=Implementation %20 of %20 Renova Bio %20 and Management Programmes And Ma

<sup>%20</sup>Brazil%27s%20National%20Biofuels%20Policy\_Sao%20Paulo%20ATO\_Brazil\_02-25-2021

<sup>&</sup>lt;sup>32</sup> IEA Bioenergy, "Country Reports – Brazil 2018 Update", at: https://www.ieabioenergy.com/wp-content/uploads/2018/10/CountryReport2018\_Brazil\_final.pdf

<sup>&</sup>lt;sup>33</sup> UNFCCC, "Federative Republic of Brazil – Intended Nationally Determined Contribution Towards Achieving the Objective of the United Nations Framework Convention on Climate Change", at:

https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Brazil%20First/BRAZIL%20iNDC%20english%20FINAL.pdf

<sup>&</sup>lt;sup>34</sup> Amazonian Network of Georeferenced Socio-Environmental Information (RAISG), "Amazon Under Pressure 2020", at: https://www.amazoniasocioambiental.org/en/publication/amazonia-under-pressure-2020/

<sup>&</sup>lt;sup>35</sup> Amazonian Network of Georeferenced Socio-Environmental Information (RAISG), "Deforestation in the Amazonia (1970-2013)", at: <a href="https://www.amazoniasocioambiental.org/wp-content/uploads/2017/01/Deforestation\_in\_the\_Amazonia1970-2013.pdf">https://www.amazoniasocioambiental.org/wp-content/uploads/2017/01/Deforestation\_in\_the\_Amazonia1970-2013.pdf</a>

<sup>&</sup>lt;sup>36</sup> Brazilian Journal of Political Economy, "Analyzing the economic impacts of sustainable development programs in the Brazilian Amazon" (2004), at: <a href="https://www.scielo.br/j/rep/a/479DvwTByQxbKV4XNnt8RGb/?lang=en">https://www.scielo.br/j/rep/a/479DvwTByQxbKV4XNnt8RGb/?lang=en</a>

### **FS Green Bond Framework**



proceeds. Furthermore, Sustainalytics believes that the Framework is aligned with the overall sustainability initiatives of the Company and that the green use of proceed categories will contribute to the advancement of the UN SDGs 7 and 15. Additionally, Sustainalytics is of the opinion that FS has adequate measures to identify, manage and mitigate environmental and social risks commonly associated with the eligible projects funded by the use of proceeds.

Based on the above, Sustainalytics is confident that FS is well-positioned to issue green bonds and that the Framework is robust, transparent, and in alignment with the four core components of the Green Bond Principles 2021.



# **Appendices**

# Appendix 1: Green Bond / Green Bond Programme - External Review Form

# **Section 1. Basic Information**

Issuer name:		FS Agr	FS Agrisolutions Indústria de Biocombustíveis Ltda.			
	en Bond ISIN or Issuer Green Bond Framework ne, if applicable:	FS Gre	FS Green Bond Framework			
Revi	ew provider's name:	rider's name: Sustainalytics				
Com	pletion date of this form:	August 04, 2021				
Publ	lication date of review publication:					
Sect	ion 2. Review overview					
SCOP	E OF REVIEW					
The fo	ollowing may be used or adapted, where approp	oriate, to s	summarise the scope of the review.			
The re	eview assessed the following elements and con	ifirmed th	neir alignment with the GBP:			
$\boxtimes$	Use of Proceeds	$\boxtimes$	Process for Project Evaluation and Selection			
$\boxtimes$	Management of Proceeds		Reporting			
ROLE(	(S) OF REVIEW PROVIDER					
$\boxtimes$	Consultancy (incl. 2 <sup>nd</sup> opinion)		Certification			
	Verification		Rating			
	Other (please specify):					
	Note: In case of multiple reviews / different p	oroviders,	, please provide separate forms for each review.			
EXECU	UTIVE SUMMARY OF REVIEW and/or LINK TO	FULL RE\	/IEW (if applicable)			
Please	e refer to Evaluation Summary above.					



#### Section 3. Detailed review

Reviewers are encouraged to provide the information below to the extent possible and use the comment section to explain the scope of their review.

#### 1. USE OF PROCEEDS

Overall comment on section (if applicable):

The eligible categories for the use of proceeds – Bioenergy and Sustainable Forestry – are aligned with those recognized by the Green Bond Principles. Sustainalytics considers that investments in the eligible categories will lead to positive environmental impacts and advance the UN Sustainable Development Goals, specifically SDGs 7 and 15.

use of proceeds categories as per GBP:					
$\boxtimes$	Renewable energy		Energy efficiency		
	Pollution prevention and control		Environmentally sustainable management of living natural resources and land use		
	Terrestrial and aquatic biodiversity conservation		Clean transportation		
	Sustainable water and wastewater management		Climate change adaptation		
	Eco-efficient and/or circular economy adapted products, production technologies and processes		Green buildings		
	Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBP		Other (please specify):		
If applicable please specify the environmental taxonomy, if other than GBP:					

#### 2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section (if applicable):

FS's sustainability department is responsible for the selection and approval of the eligible projects. The Framework defines environmental and social risk management processes that are applicable to all eligible categories. Sustainalytics considers the project selection and risk management processes in line with market practice.

#### **Evaluation and selection**

☑ Credentials on the issuer's environmental sustainability objectives
 ☑ Documented process to determine that projects fit within defined categories
 ☑ Defined and transparent criteria for projects eligible for Green Bond proceeds
 ☑ Documented process to identify and manage potential ESG risks associated with the project

## **FS Green Bond Framework**



	Summary criteria for project evaluation and selection publicly available		Other (please specify):			
Info	rmation on Responsibilities and Accountabilit	y				
$\boxtimes$	Evaluation / Selection criteria subject to external advice or verification		In-house assessment			
	Other (please specify):					
3. N	MANAGEMENT OF PROCEEDS					
Ove	rall comment on section (if applicable):					
with		alloc	nd tracked internally by FS and will be fully allocated ation, the funds will be 100% invested in low-risk s in line with market practice.			
Trac	cking of proceeds:					
$\boxtimes$	Green Bond proceeds segregated or tracked	by th	e issuer in an appropriate manner			
$\boxtimes$	Disclosure of intended types of temporary investment instruments for unallocated proceeds					
	Other (please specify):					
Add	litional disclosure:					
	Allocations to future investments only		Allocations to both existing and future investments			
	Allocation to individual disbursements		Allocation to a portfolio of disbursements			
	Disclosure of portfolio balance of unallocated proceeds		Other (please specify):			
4. R	EPORTING					
Ove	rall comment on section (if applicable):					
FS i			site on an annual basis until full allocation. In addition ics. Sustainalytics views FS's allocation and impact			
Use	Use of proceeds reporting:					
	Project-by-project	$\boxtimes$	On a project portfolio basis			

## **FS Green Bond Framework**



	Linkage to indiv	idual bond(s)		Other (pl	lease specify):
	Info	ormation reported:			
		Allocated amounts			Green Bond financed share of total investment
		Other (please specify):			
	Free	quency:			
		Annual			Semi-annual
		Other (please specify):			
Impa	act reporting:				
	Project-by-proje	ct	$\boxtimes$	On a pro	oject portfolio basis
	Linkage to indiv	idual bond(s)		Other (p	please specify):
	Info	ormation reported (expected	l or ex	k-post):	
		GHG Emissions / Savings			Energy Savings
		Decrease in water use			Other ESG indicators (please specify): Carbon intensity of ethanol production, Volume of biofuel produced, Standing forest area, Carbon inventory per hectare of standing forest
	Free	quency			
		Annual			Semi-annual
		Other (please specify):			
Mea	ns of Disclosure				
	Information pub	lished in financial report	$\boxtimes$	Informa report	ation published in sustainability
	Information pub documents	lished in ad hoc		Other (p	please specify):
Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review):					
Where appropriate, please specify name and date of publication in the useful links section.					
USEFUL LINKS (e.g. to review provider methodology or credentials, to issuer's documentation, etc.)					



#### SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE

Type(s) of Review provided:					
	Consultancy (incl. 2 <sup>nd</sup> opinion)		Certification		
	Verification / Audit		Rating		
	Other (please specify):				
Re	view provider(s):	Da	te of publication:		

#### ABOUT ROLE(S) OF INDEPENDENT REVIEW PROVIDERS AS DEFINED BY THE GBP

- i. Second-Party Opinion: An institution with environmental expertise, that is independent from the issuer may issue a Second-Party Opinion. The institution should be independent from the issuer's adviser for its Green Bond framework, or appropriate procedures, such as information barriers, will have been implemented within the institution to ensure the independence of the Second-Party Opinion. It normally entails an assessment of the alignment with the Green Bond Principles. In particular, it can include an assessment of the issuer's overarching objectives, strategy, policy and/or processes relating to environmental sustainability, and an evaluation of the environmental features of the type of projects intended for the Use of Proceeds.
- ii. Verification: An issuer can obtain independent verification against a designated set of criteria, typically pertaining to business processes and/or environmental criteria. Verification may focus on alignment with internal or external standards or claims made by the issuer. Also, evaluation of the environmentally sustainable features of underlying assets may be termed verification and may reference external criteria. Assurance or attestation regarding an issuer's internal tracking method for use of proceeds, allocation of funds from Green Bond proceeds, statement of environmental impact or alignment of reporting with the GBP, may also be termed verification.
- iii. Certification: An issuer can have its Green Bond or associated Green Bond framework or Use of Proceeds certified against a recognised external green standard or label. A standard or label defines specific criteria, and alignment with such criteria is normally tested by qualified, accredited third parties, which may verify consistency with the certification criteria.
- iv. Green Bond Scoring/Rating: An issuer can have its Green Bond, associated Green Bond framework or a key feature such as Use of Proceeds evaluated or assessed by qualified third parties, such as specialised research providers or rating agencies, according to an established scoring/rating methodology. The output may include a focus on environmental performance data, the process relative to the GBP, or another benchmark, such as a 2-degree climate change scenario. Such scoring/rating is distinct from credit ratings, which may nonetheless reflect material environmental risks.



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