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ROUNDTABLE ON SUSTAINABLE BIOMATERIALS TERMS OF REFERENCE (TOR)

Project Title

Develop Induced Land Use Change values for Brazil to support discussion on ICAO/CORSIA

Application Deadline

March 8th 2021

TABLE OF CONTENTS

1. PROJECT DESCRIPTION	3
2. ABOUT RSB	3
3. CONTEXT, OBJECTIVE AND REQUIREMENT	4
4. SCOPE AND WORK OF THE CONSULTANT	4
5. SCHEDULE	6
6. REQUIREMENTS	6
7. APPLICATION	6
8. EVALUATION CRITERIA	6
9. QUESTIONS/DOUBTS REGARDING THIS TOR.....	6
10. ADDITIONAL REQUIREMENTS	6
11. PAYMENT	7

1. PROJECT DESCRIPTION

The “Fuelling the sustainable bioeconomy (FTSB) - strengthening impact in Brazil” project aims at identifying strategies to reduce the carbon emission in the aviation sector and to stimulate the market for Sustainable Aviation Fuels (SAF), and promote the bioeconomy. Such goals will be achieved by building the socioeconomic, environmental and technical business case for SAF ensuring that there are viable and sustainable feedstock options, production pathways, and adequate market demands through including and engaging stakeholders and consumers. The project will also identify strategies to involve smallholders in the SAF supply chain having in mind the diversity of organizational schemes among them.

2. ABOUT RSB

The Roundtable on Sustainable Biomaterials (RSB) is a global, multi stakeholder and independent organisation that drives the development of a healthy bioeconomy through certification, innovation, advocacy and collaborative partnerships. RSB offers workable and practical solutions to ensure the implementation of environmental and social sustainability on the ground and is the world most trusted, peer reviewed global certification system for sustainable biomass production and conversion.

RSB Recognition

RSB is aligned with the United Nations’ Sustainable Development Goals (SDGs). RSB certification is recognised by WWF, IUCN and the Natural Resources Defence Council as the strongest and the most trusted of its kind. It has been endorsed by SAFUG (Sustainable Aviation Fuel Users Group) for its high level of sustainability assurance and it is increasingly being requested by airlines as an essential part of their biofuel procurement.

Moreover, RSB has also been approved by the European Commission for showing compliance with the sustainability requirements of the Renewable Energy Directive (EU RED). RSB certified biofuel is therefore eligible for tax incentives and subsidies from EU governments seeking to fulfil their renewable fuel obligations imposed by the Renewable Energy Directive (EU RED I).

RSB enjoys the endorsement of the international NGO community, UN organisations and key stakeholders in the biofuel, biochemical and bioplastic industries. For more information visit www.rsb.org.

3. CONTEXT, OBJECTIVE AND REQUIREMENTS

The RSB General Assembly in 2013 decided to focus on the role individual producers can play in preventing indirect impacts and developed a mechanism to promote biofuels with a lower risk of causing negative induced effects. In order to minimise the occurrence of induced Land Use Change (iLUC), also known as indirect Land Use Change, the RSB developed a set of criteria and compliance indicators for economic operators willing to demonstrate that their operations have a low iLUC risk, i.e. are unlikely to cause any displacement of an equivalent biomass production to another location.

CORSIA, the Carbon Offsetting and Reduction Scheme for International Aviation adopted by ICAO (International Civil Aviation Organization), provides the option for airlines to use alternative aviation fuels with lower carbon footprint than the fossil jet fuel to meet their emission reduction obligations. Induced land use change emissions are part of this assessment. ILUC factor results from the GTAP-BIO and GLOBIOM models have become the basis for the default values proposed for CORSIA. However, ICAO default values for Brazil include four feedstock-pathway combinations (Fuel Conversion Process), additionally to some global values.

The objective of this TOR is to hire a consultant service to **develop an iLUC study focusing on identifying iLUC values for Brazil to support the CORSIA scheme and the RSB iLUC certification scheme**. The consulting services entity must have the competence to perform the activities described below and commitment to deliver the products according to schedule.

4. SCOPE AND WORK OF THE CONSULTANT

Induced land-use change can happen either when an agricultural land-use type converted into a new type of use is displaced to elsewhere, in order to continue to meet the demand for its agricultural products, or when the direct conversion boosts a change in the price of agricultural products, causing land to be taken into production elsewhere. The effects of iLUC range from global to local scale, and among crops. It is well recognized the large uncertainty in biofuel-induced land-use change and the need to better understand the gaps.

Given the current knowledge gaps and the need to understand this dynamic for SAF production in Brazil, RSB requires from the consulting a proposal addressing the following activity:

- 1) **Model iLUC default values for selected pathways/feedstock in Brazil based on ICAO requirements.**
 - a. This study must be able to provide a quantitative analysis considering the iLUC GHG emissions intensity, expressed in $\text{gCO}_{2\text{eq}}/\text{MJ}$.
 - b. The fuel conversion processes and feedstocks shall include the following:
 - i. SAF from corn ethanol by using the ATJ process.
 - ii. SAF from macauba oil by using the HEFA process.
 - iii. SAF from palm oil by using the HEFA process.

Details of the pathways indicated above will be discussed between the parties.

- 2) **Scenario analysis:** Identify sensitive parameters and run different scenarios capable of:
 - a. Identifying strategies to reduce iLUC impact in the selected crops and SAF technologies in Brazil (e.g., better land zoning, excluding current high carbon stock lands used for feedstock/biofuel production in Brazil, management practices).
 - b. Building a comprehensive knowledge that enables decision-makers to choose feedstocks/pathways with low iLUC values.
- 3) **Identify the iLUC risk level for each feedstock/pathway** (might be part of the scenario analysis).
- 4) **Stakeholder engagement:** put together experts on iLUC modelling and engage the stakeholders for comments on assumption taken in the model.
 - a. Note that stakeholder engagement might be an important approach to define scenarios and discuss results. We thus strongly suggest a participatory decision/discussion with an WWF and RSB partner. RSB and WWF will support the stakeholder engagement process.

The applicant is welcome to provide advice on any additional activity that may add value to the research scope.

4.1. Deliverables*

(the order and format can be discussed between the Parties)

- 1) Kick-off meeting to discuss deliverables, engagement and first approach for scenarios.
- 2) Presentation with preliminary outcomes.
- 3) Presentation of the final outcomes, including adjustments from the previous deliverable (if any).
- 4) Results in usual formats that allow the reproduction of graphs and maps (for example, Excel, shapefile).
- 5) Compile comments from the stakeholders and indicate how the comments were taken into consideration (include in the final report).
- 6) Written report in Word document including the results and discussion of all activities.

*** Please note that deliverables must be in English. In case of non-editable pictures, images, charts, or similar, a Portuguese version shall also be provided.**

5. SCHEDULE

A detailed schedule must be provided along with the proposal, considering **starting no later than May 2021 and final deliverable within 4 months (no later than Aug 2021)**. Payments will be made upon deliveries. The final schedule must be mutually agreed between the Parties.

6. REQUIREMENTS

The consultant company requirements include:

- Located in Brazil.
- Proven technical experience in iLUC modelling of at least 3 years.
- Proven experience in biofuels, specially SAF.
- Proven knowledge about current discussions under ICAO/CORSIA, specially on iLUC issues.

7. APPLICATION

Deadline: March 8th 2021

Documents required: 1) detailed proposal defining the quote for each outcome. 2) at least three references and CVs of the researchers and consultants. **Consultants must send the quote in Brazilian currency (real).**

The documents must be sent to simone.souza@rsb.org and carolina.grassi@rsb.org.

8. EVALUATION CRITERIA

Applications will be evaluated based on fulfilment of the above criteria (consultant requirements, timeline, and documents required) and budget.

9. QUESTIONS/DOUBTS REGARDING THIS TOR

Any question or doubt regarding this TOR must be sent to our team at least 3 working days in advance of the application deadline. Please, note that is under Consulting company' responsibility to provide a clear proposal, in accordance with this TOR. In the event of a lack of clarity in the proposal, RSB will not contact the consulting company to request additional information.

10. ADDITIONAL REQUIREMENTS

The progress of the project shall be discussed with the RSB's team by joint video or telephone conference. This will typically be on a **bi-weekly basis**, depending on the progress of the study. Note that communication with the RSB's team might happen in both English and Portuguese.

11. PAYMENT

Payments will be made upon deliveries. The Consultant shall submit an invoice to the Association by the 20th day of the calendar month following the completion of a deliverable and the Association shall make the payment by the 30th of that calendar month.

Payment	Upon delivery of	Payment date*
20% of the quote	Deliverables 1	30 th day of the deadline month
40% of the quote	Deliverables 2, 3 and 4	30 th day of the deadline month
40% of the quote	Deliverables 5 and 6	30 th day of the deadline month

*** The Consultant shall submit an invoice to the Association by the 20th day of the calendar month following the completion of a deliverable and the Association shall make the payment by the 30th of that calendar month.**