Agenda and Concept Note

# CARBON ACCOUNTING TECHNICAL WORKSHOP

***Minascentro Convention Centre, Av. Augusto de Lima, 785***
***Centro, Belo Horizonte – MG, 30190-001, Brazil***

## *Auditorium D*

## Tuesday 28 May, 2024
## 09:00 – 13:00 Brazil (GMT -3)

**Workshop Objectives:**

1. Review results and insights gathered from participants in recent updates and prior events (IEA workshop, Turin Forum, policy symposium)
2. Review key factors driving variability in carbon intensity accounting, including induced effects (ILUC)
3. Consider evidence from case studies that illustrate effects of policy choices related to carbon accounting on biofuel feedstock availability and cost.
4. Help strategize best ways to synthesize key findings and insights to be shared with decision makers that will improve understanding of implications of policy choices related to carbon accounting.
5. Identify next steps and additional analysis or research required for high-impact presentations or panel discussions and recommendations for the G20 and CEM dialogue in October, and beyond.

**Draft AGENDA**

08:30 – 9:00 Coffee (tbc)

09:00-09:10 Welcome and Introductions (Laís Garcia from Brazilian Ministry of Foreign Relations and CEM Biofuture Platform).

09:10-09:15 Overview of Brazil CEM-G20 themes and relationship to the workshop (Laís Garcia)

09:15-09:20 Review workshop agenda and purpose (Keith Kline, Biofuture Platform,).

9:20-10:40 **PANEL 1: Biofuels carbon accounting under different life-cycle assessment methods** Moderator: Joaquim Seabra (UNICAMP)

Note that discussion will be moderated following all presentations. Each presentation is not to exceed 10 minutes, with short Q&A for clarification.

09:20-09:30 Recap of key points from IEA 2024 draft report on methods and policy choices affecting carbon accounting of biofuels. Highlights from the Carbon Accounting Symposium presentation the prior day. (Ilkka Hannula, IEA)

9:30-09:40 Preview relevant results of IEA Bioenergy Task 39 "Comparison of International Life Cycle Assessment of Biofuels Models" (Mateus Chagas, Brazilian Biorenewables National Laboratory LNBR-CNPEM)

09:40-09:50 Recap of GREET pathways and related policy issues. Highlights from the Carbon Accounting Symposium presentation the prior day. (Michael Wang).

09:50-10:00 RenovaCalc – RenovaBio's LCA carbon accounting methodology (Marília Folegatti, EMBRAPA)

10:00-10:10 ISO guidance and Canadian example (Keith Kline, Biofuture)

10:10-10:40 Moderated discussion and additional Q&A. Relevant Q&A related to presentations and explore the following basic questions associated with the workshop goals:

- What are key implications for investment and sustainable feedstock availability that are illustrated by the different approaches reviewed?
- What findings and recommendations are most important, and how can they be effectively communicated.

10:40-11:00 Coffee Break

11:00 – 12:00 **PANEL 2: How should induced effects (e.g., ILUC) be considered when calculating the carbon intensity of biofuels?** This panel will share selected examples to illustrate how choices related to indirect effects and counterfactual assumptions lead to distinct carbon accounting outcomes.
Moderator: Biofuture (Keith Kline, ORNL)

11:00-11:10 Introduction to issues, options as outlined in the draft synthesis report (Biofuels Carbon Accounting Challenges and Solutions) comparing the implications for investment and mobilization of sustainable biofuels under different policy choices in carbon accounting. Note: options to address ILUC concerns: include (1) Apply an ILUC factor based on modelling to any supply chain that uses land or resources; (2) Use risk-based approach to determine which feedstocks/sources are acceptable in terms of risk of LUC; (3) Apply place-based analysis to measure and understand verifiable effects of specific supply chains on land cover and qualities. (Moderator)

11:10-11:20 ICAO/CORSIA – including underlying assumptions related to ILUC and counterfactuals (Marcelo Moreira, Agroicone)

11:20-11:30 ILUC and the marine fuels in the context of IMO (Renan Novaes, EMBRAPA)

11:30-11:40 Product-specific biofuel industry example (Simone Souza, Raizen)

11:40-11:50 Product-specific biofuel industry example (Pat Gruber, Gevo)

11:50-12:00 Product-specific biofuel industry example (Daniel Lopes, F.S.)

**12:00-12:45 Moderated discussion: Strategy and plans for advancing practical, evidence-based policies**. Moderator (Gerard Ostheimer, Biofuture).
Discussion topics:

a) Synthesis of the challenges presented by different methodologies and proposed solutions to overcome challenges.
   i. What methods and policy options best support *consistent, transparent, evidence-based, carbon accounting that is practical for diverse nations and verifiable?*
   ii. What case studies or examples are most enlightening and impactful?
   iii. What are the most effective tools and forms of presentation to inform decision-makers regarding the implications of different carbon accounting choices?
b) What are the implications in terms of support for social, environmental and climate goals, of different policy options?
c) How can we improve the structure and content of the proposed synthesis report?
   i. What are the key messages that need to be shared with decision makers?
   ii. How can we best support stated workshop goals, and strategy to develop improved materials for High-Level Dialogue in October.

**12:45 Wrap-up and plans for next steps**.

1. Laís Garcia: Expectations for ETWG-IV and CEM in October; and related events and efforts.
2. Ilkka Hanula: Plans for reports and presentations for CEM and subsequent events.
3. Biofuture: deliverables planned for CEM15 and beyond
4. Next steps (Lais Garcia and Keith Kline):
   a. Identify volunteers for task group(s) to work on improving recommended materials and to support next steps identified in preparation for high-level meeting in October.
   b. Propose schedule for follow-up calls or working meetings or webinars, as necessary, to develop concise but impactful presentations to support the objectives *for more consistent, transparent, evidence-based, carbon accounting methods that are practical and verifiable.*

13:00 Closure.

====== ======== ======

**Logistics notes:**

- Please provide any presentation materials to your session Moderator (Joaquim or Keith) and cc to der@itamaraty.gov.br and events@biofutureplatform.org no later than Monday 27 May.
- The two 'Recap' presentations will be supported by full-length presentations from the previous day's Symposium, to be distributed for awareness in advance.
- The draft synthesis report outline will be distributed for awareness in advance.

Attendees will be invited to share feedback and suggestions regarding the materials presented and discussion, and on specific needs for additional work to be completed prior to the October CEM and G20 meetings.

## Organizers

This workshop is organized by the Government of Brazil (Ministry of Foreign Relations/Ministry of Mines and Energy) and the Clean Energy Ministerial (CEM) Biofuture Platform Initiative (chaired by the US Department of Energy and supported by Oak Ridge National Laboratory). The International Energy Agency (IEA) and other members of the CEM Biofuture Initiative, are also supporting the planning and implementation of the event.

**Point of Contact:** For questions or additional information, contact **der@itamaraty.gov.br.**

## Background

The Brazilian Presidency of the G20 will welcome delegations to Belo Horizonte for the third Meeting of the G20 Working Group on Energy Transitions (ETWG-III), from 27 to 30th May. This is the third ETWG event aiming to prepare substantive recommendations and goals for discussion in October during the G20 and Clean Energy Ministerial meetings.

The Biofuture Platform Initiative is coordinating with the government of Brazil to organize a series of side-events that support the 2024 G20 and Clean Energy Ministerial agenda and the priority theme of sustainable fuels. The International Energy Agency (IEA) hosted a preparatory workshop in Paris on 23 April, followed by the G7 Sustainable Biofuels International Forum in Turin Italy, on 28 April with the Joint Statement on Sustainable Biofuels. Additional events are being planned for ETWG-III (Belo Horizonte, Brazil) and ETWG-IV (Foz do Iguaçu, Brazil).

The perceived sustainability of biofuels depends in part on the calculated carbon intensity of the fuel. The calculated carbon intensity of a biofuel depends on the approach, data, and assumptions used for the analysis. Thus, investments required today to scale-up sustainable biomass feedstock production depend on regulatory markets that can be supported by clear, science-based, and replicable methods for determining the carbon intensity of biobased fuels and products.

In collaboration with Brazil and the IEA, the CEM Biofuture Platform Initiative is supporting a series of activities to address the need for improved carbon intensity accounting with the following **objectives**:

**a)** *Propose a way forward for policies that rely on CI accounting of biobased products by providing recommendations for decision-makers for more consistent, transparent, evidence-based, carbon accounting methods that are practical and verifiable.*
**b)** *Develop effective communication materials and strategies for the high-level meetings in October 2024.*

Proposed next steps following technical workshop; process leading up to high-level dialogue in October:

- Draft results from the workshops to be synthesized by moderators for review by Biofuture members and stakeholders (see separated workshop report outline).

- Aim to organize iterative improvements via virtual calls or webinars as needed, prior to the panel presentation(s) in October for a high level dialogue “Seeking consensus on performance-based sustainability assessments and frameworks” (CEM, G20, and IV ETWG).

This is one of several events aiming to gather input and guidance for upcoming reports on Carbon Accounting for Biofuels and other Sustainable fuels, in support of Brazil’s G20 presidency.

## International Context

Biofuels remain a pillar for clean energy transitions. To be on track with the IEA Net Zero Emissions by 2050 (NZE) Scenario, biofuels would need to grow by 2.5 times from today to 2030, displacing almost 800 Mt of fossil $CO_2$, or 10% of today’s global transport emissions. However, the world is currently not on track with these targets, and significant additional efforts are needed to accelerate deployment.

International collaboration is critical for increasing biofuel production. India’s G20 presidency in 2023 highlighted the importance of “Fuels for the future”, which culminated with the creation
of the Global Biofuels Alliance. This year, under Brazil's presidency, there is a strong emphasis
on building consensus around the important role of sustainable biofuels.

Social and political acceptance of biofuels depends on the perceived sustainability of biomass production and use. Assessing effects of the use of biomass for any purpose, requires consideration of alternative uses of the biomass, and alternative management options for natural resources. Accounting for the carbon cycle in biomass production and use is complicated because it depends on dynamic interactions among human managed landscapes, economic markets, and environmental systems. Thus, carbon accounting relies on assumptions about how these systems will interact under alternative management scenarios and dispositions of the biomass.

The Biofuels Carbon Accounting Technical Workshop is one of several events and analyses coordinated by the Biofuture Platform Initiative in support of accelerating a transition to clean renewable fuels and products. For more information, see
https://www.cleanenergyministerial.org/initiatives-campaigns/biofuture-platform/