

Minutes of Meeting

Subject : 2nd Greenhouse Gas Working Group 2 (GHGWG-2) Meeting
 Date : September 20th, 2022
 Time : 9.00 - 11.05 am
 Venue : Zoom Meeting

Name	Organisation	Status
Eza Nurain Abdullah	Sime Darby	Substantive
Peter Callister	New Britain Palm Oil Limited	Substantive
Dita Galina	Musim Mas	Substantive
Derrick Jovannus	Musim Mas	Alternate
William Siow	IOI	Substantive
Lai Wei Shoon	IOI	Substantive
Foo Siew Theng	Wilmar International	Substantive
Azizul bin Rahman	Wilmar International	Substantive
Megan Sim (on behalf of Hema Nadarajah)	WWF	Alternate
Henry Cai	Permata Hijau Group	Substantive
Gotz Martin	Sinar Mas-Golden Agri	Substantive
Siti Nurhayati Kamaruddin	RSPO Secretariat	Secretariat
Akmal Arif Razali	RSPO Secretariat	Secretariat
Azamuddin Hassan	RSPO Secretariat	Secretariat
<i>Absent with apologies:</i>		
<i>Lai Wei Shoon</i>	IOI	Substantive
<i>Hema Nadarajah</i>	WWF	Substantive

No.	Item Descriptions	Main Discussion Points	Action Points	Progress Update
1.	Review of previous meeting's minutes and progress on actions	<p>The RSPO Secretariat began the meeting by going through the meeting agenda. Then, the Secretariat proceeded on explaining the antitrust statement, consensus-based decision making, and declaration of conflict of interest to members.</p> <p>Secretariat reshared the structure of the WG, which is led by the Chair, i.e., William Siow, and supported by two leaders of upstream and downstream subgroups, Peter and Henry, respectively, based on the consensus reached in the first meeting.</p> <p>A brief introduction of the Indonesia Growers representative, Dr. Gotz Martin, and the WWF alternate, Megan Sim, to the WG.</p> <p>The Secretariat reviewed the progress report from the previous meeting's minutes (MOM). There were few minor suggestions for revision. The previous MOM was subsequently endorsed by William and seconded by Henry.</p>	Secretariat to amend the ToR on the appointment of chair and duration of the WG (previously stated April'22 – April'23, will be changed to Aug'22 – Aug'23)	
2.	PalmGHG Version 4 current status	<p>Secretariat continued by sharing the current status of the calculator. To date, the calculator runs well on the front-end in calculating the GHG emissions.</p> <p>The WG was informed that currently the website has issues with back-end due to a mix of coding language used initially. This causes upgrading problems when new improvements are planned such as data extraction and analysis.</p> <p>Secretariat concurred with the Chair that software maintenance (bug fixes, updates etc.) is essential to the software development process in order to constantly assure stable and improved system performance.</p> <p>Secretariat then invited members to provide feedback on the usability and reception of the PalmGHG V4 web-based application since its release.</p>	Secretariat to incorporate the feedback and recommendations from members as part of revamping PalmGHG for the next version to the developers.	

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		<p>Siew Theng mentioned issues she had experienced since the very beginning of using the calculator which are:</p> <ol style="list-style-type: none"> 1. The default values for each site cannot be copied over or set as baseline for the user. 2. Issue which leads to that data for each estate also needs to be duplicated for each mill it supplies to. <p>The Secretariat took note of the improvement that shall be made when upgrading the calculator later.</p> <p>Dr. Gotz, on the other hand, posed an intriguing question regarding Artificial Intelligence (AI) generated default values when he asked, "If more companies are calculating and submitting Scope 1 emission data, would there be an AI integration to collect, analyse, and generate default values for Scope 3?" Or to adhere to the traditional procedure of using literature, study, and discussion to determine the values. He stated that there is now a commercially available carbon calculator and wondered if the WG is exploring it too.</p> <p>Secretariat acknowledged that Scope 3 data are complicated, and that having primary data (Scope 1) addressed by AI to provide default value for Scope 3 is an exciting concept that will be explored further in the feasibility study if it aligns with the WG's interest.</p> <p>Henry emphasised that RSPO has the necessary data if we decide to develop a downstream calculator later. He said that his previous working group had averaged hundreds of data points of CPO GHG emissions from mills for the previous version of PalmGHG to derive a default value. This technique may be applicable to the next iteration of the calculator.</p> <p>To determine whether to make full use of AI, a downstream calculator should consider data from other sources too, such as fertiliser and fuel manufacturers, etc. And Scope 3 emissions from mills are not as big as those from third-party mills, where the majority of FFB comes from external sources.</p>		

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		<p>He suggested to the Secretariat that annual data be gathered from emission of certified CPO mills in order to produce a default value each year, which could subsequently be analysed using AI.</p> <p>Besides, the Chair commented that the web-application based on PalmGHG is user-friendly, but it also has limitations. Conservation areas hectares will only spit out one figure while we have different types of areas like shrub, forest cover for forestation. Figures for crop sequestration if exceeded to 25 years the value will drop to 0. Secretariat to address this issue to developers later.</p>		
3.	Gap Analysis Discussion for Upstream	<p>The Secretariat passed the mic to the Chair to steer the discussion.</p> <p>The Chair reiterated the necessity to establish boundaries between Scopes 1, 2, and 3 by adhering to GHG Protocol above everything else.</p> <p>Henry concurred and stated that it's one of the ways to improve the PalmGHG calculator. As of now, the emission factor for fertilizer is a combination of Scope 1 and 3 emission which mostly comes from production and distribution of fertilizers. Only urea and nitrogen have used Scope 1 emission. Hence, he suggested segregating emission factors based on Scope emission.</p> <p>The Chair queried if the RSPO would hire a consultant or technical expert since, according to him, the Secretariat already had a wealth of data. RSPO reaffirms that the collected data are useful and would only proceed to benefit from the members' knowledge in developing the gaps study.</p> <p>Siew Theng asked as to what direction RSPO will set up to define scope boundaries. Eza, Azizul and Derrick also concurred with the Chair to define scope boundaries.</p> <p>Peter suggested allocating individual tasks since the WG is not engaging technical experts for the scope defining and members to wisely utilize time by preparing and working in the background for output in the next meeting.</p>	RSPO Secretariat to share the live spreadsheet documents of current PalmGHG formula and emission factors with WG members.	

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		<p>Henry said the technical expert consultation will consume a lot of time in tendering and contracting. So, he suggested to the group to conduct a simple gaps analysis.</p> <p>Dita suggested we could use an alternate emission factor for Scope 3 if we can't use primary data from upstream. According to EU regulation, RED II has now not allowed credit from excess electricity. Group questioned whether the WG wanted to align with ISCC or not.</p> <p>Henry agreed to Dita to look at the current built-in credit mechanism i.e., conservation area or excess electricity credits on either we want to keep or remove them.</p> <p>The suggested for Secretariat to set up a live document for formula and emission factor where members can modify which can be done for gaps analysis in a month or two.</p> <p>Secretariat is also currently engaging software developers for data extraction for raw data to solve challenges that the current calculator is facing.</p>		
4.	New Development GHG Calculator Excel Review	<p>For the land use change (LUC) emission, there are not many changes for the LUC in the EU regulations as mentioned by Dita. Henry asked to transform the spreadsheet into clear boundaries of scope emissions.</p> <p>Henry then touched upon a strict definition of Scope 1 emission which the LUC emission happens only on the first year of clearance. High figures in the first year will gradually go to zero for the rest of 24 years. So, he raised the question whether to follow through a strict definition of Scope 1 emission approach (ISCC or GHG Protocol) or to stick to the current approach that amortized over 25 years.</p> <p>GHG Protocol proposed to use 20 years. ISCC also uses 20 years for LUC. Members unanimously agreed to use 20 years.</p> <p>Many plantations are planted from secondary, or tertiary cycle as mentioned by the chair. Henry stated, for example, that the first cycle</p>	Same as action point in Item 3.	

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		<p>would be 128 tC/ha (taking figure from Disturbed Forest land cover type) then 23.5 tCO₂/ha, the second year would be using Oil Palm (Vigorous) land cover type which is 234.04 tCO₂/ha. In the end, it will eventually be offset by crop sequestration, and when all cover types and sequestration throughout 20 years are totalled together, regardless of when the initial plantation cycle began, the final figure for LUC emission is zero.</p> <p>Members agreed to review the default values for LUC emissions.</p> <p>On the crop sequestration part, Henry stated that currently we are using the OPRODSIM/OPCABSIM model. PalmGHG uses averaged data equally over 25 years that is different from other calculators' methods. The preferred method is, in the first year, the crop sequestration is higher than LUC emission, then as the plantation ages, the crop sequestration value declines, and LUC emissions become higher every cycle. The question is whether members should maintain and update the current model or to align ourselves closer to another approach with the preferred method.</p> <p>Dr Gotz iterated the aim of the exercise to get the correct absorption rate averaged over the time and it is impracticable to do in such details for large plantations and supply chains. Perhaps to seek a method that is not overcomplicating.</p> <p>Henry agreed with Gotz and proposed to discard the current model and to adopt alternate methodology i.e., ISCC methodology which is using constant value for every cycle year with adjustment on from third to fourth planting year the crop sequestration and LUC emissions value will be zero.</p> <p>The current default value for Palm Oil (Vigorous) is 63.83 tC/ha and ISCC value is 60 tC/ha. The current value for Palm Oil (Average) is 59.29 tC/ha which is also a matter to be discussed for members to conclude a single value for both land cover type emission.</p>		

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		<p>Alongside discussion, Siew Theng queried if we are aligning with RED II, is the comparison to other methodologies worth to be done? The Chair argued the comparison made to gauge if RED II criteria covers comprehensively the emission factors that members understood for PalmGHG and to align with recommendations set by EU regulation initially. Hence, to have a comparison between PalmGHG, ISCC, and RED II.</p> <p>Henry claimed that the current PalmGHG methodology is comprehensive. It did accurately reflect the realities of palm oil plantations on the ground most of the time. But some emission parameters were not even covered by ISCC, and some ISCC-covered factors were not covered by PalmGHG. Vice-versa. PalmGHG captures the emission transportation of fertilisers, but it does not account for the usage of pesticides. Due to this, Siew Theng reiterated the major aim of the PalmGHG to follow a realistic approach or to do a general or approximated approach. This will gauge how in-depth the discussion on improving the current methodology for PalmGHG.</p> <p>For the time being, in the stepwise, Dr Gotz, Peter, and Derrick argued that the WG to get alignment first with other tools then to begin reviewing current default values. The Chair concurred with members on the approach.</p>		
5.	Gap Analysis Discussion for Downstream	<p>Henry started and agreed with the Secretariat to identify and define study boundaries as well as to conduct a comparative and feasibility study for downstream operational GHG emissions.</p> <p>Secretariat queried if the WG should engage consultants as well to conduct the studies.</p> <p>Dr Gotz opined that the downstream calculator is simpler than the upstream calculation. Downstream emission factors, in his view, like fuel consumption and chemicals are well-researched and could be duplicated from upstream which the WG could initially start working on its own first without having to engage external consultants.</p>	Same as action point in Item 3.	

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		<p>Peter mentioned that Sime Darby Oil does have a calculator that is already in use that can be leveraged for comparative study.</p> <p>On setting up the boundaries, the Secretariat believed that it should be limited to refineries only as the main input is CPO with consistent processing activities. Further downstream, palm oil derivatives are only one of many raw inputs of which the processes vary considerably depending on the final product (e.g., food vs biofuel vs hygiene products etc), which makes it near impossible to have a generic tool to cater to them.</p> <p>Henry suggested the scope to include the site and the production plant complexes (refineries and oleochemicals). While Siew Theng believed to limit to refineries and kernel crushing plant (KCP) first because these are main elements, and further downstream's process flow and input use are slightly different.</p> <p>Dita stated if the WG is to develop calculators for audit purposes, it should go back only to the site itself, not the product. Dr. Gotz concurred with Dita.</p> <p>The WG agreed that the emission boundary is set to the site of interest (not limited to refinery, KCP etc.) where it produced and audited.</p>		
6.	Input from Certification Body (CB)	<p>Secretariat presented technical issues arising from the certification body based on the last RSPO audits. Secretariat sought after the WG members' inputs and decision for the inquiries. Below are the summarized inquiries presented.</p> <ul style="list-style-type: none"> ● The calculator is erroneously reporting the conservation areas present on the farms ● In the categorization of forest types, mistakes are being made in the assignment of "Intervened forests" and "Non-intervention forests" ● In some companies they are included in the GHG calculator, the forest areas associated with the "compensation" projects presented to RSPO. Is this possible? 	RSPO Secretariat to respond to CB on the outcomes of WG's discussion.	

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		<ul style="list-style-type: none"> ● In some of the companies audited so far, the areas of the compensation projects have been included in the GHG calculator with the aim of reporting the capture of emissions by these forested areas and favouring the final data reported in the calculator. ● In the cases we have reviewed, the "compensation project area" is added as if it were an "annexed lot" with a "planting date". The issue of the planting date is somehow wrong because they are "natural forests" that have not been planted by the company. And in many cases, the compensation project is located outside the management units of the company, therefore they could not be assigned to a "production batch". In addition, adding these areas in the calculator is also an issue that alters the data of the total areas of the management units that are reported in the audits. I would be grateful if it is possible to make this addition. <p>The Chair questions where the conversation area is located? If it's within their concessions, we could allow them for compensation/ carbon offsetting. If it's far, they could go for insetting.</p> <p>Peter says it depends on where the conversion area is. If it's within the certification area, it would not be a problem.</p> <p>And Dr. Gotz also thought it really depends on ownership of the land where it's happening. If we are supporting the community-based project, then the ownership is by them. If they made Free, Prior and Informed Consent (FPIC) and negotiated some carbon share, it would be good to include that in overall GHG reporting.</p>		
7.	AOB	Secretariat to complete tasks on actions items discussed for the WG members to work upon. To update in email and WhatsApp channels.	Secretariat to send out information for the next meeting.	

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		<p>Secretariat emphasized the Doodle poll for the WG members to cast their votes for the next meeting and prompted members to continue working on the development of the work plan.</p> <p>Henry and Dr. Gotz proposed organizing a physical meeting in which members could attend for a full day or two. The member of the WG consented to a physical meeting. The Secretariat will suggest voting dates for the physical conference.</p> <p>Secretariat: GHGWG is encouraged to nominate alternate replacements for substantive members for the meeting. Technical experts are also allowed to join the meeting to talk about technical issues if the members agree.</p> <p>Next Meeting: Last of week of Oct</p>	<p>Secretariat to setup another Doodle poll for physical meetings before and after RT RSPO 2022</p> <p>Secretariat to send out CoC to attending/future alternates for signatures.</p>	

Terms of Reference

RSP0 Greenhouse Gas Working Group

Introduction

The RSP0 Greenhouse Gas Working Group (GHGWG) was first formed in May 2009 to establish a mechanism to quantify and determine the boundaries in measuring GHG emissions. As a result, in 2012 the PalmGHG calculator Version 1 (an Excel-based calculator) was developed, which enabled identifying, monitoring and assessment of GHG emissions from upstream palm oil production.

In 2016, the PalmGHG was revamped into a desktop-based software as Version 2.1.1 and Version 3.0. After two years, the PalmGHG Version 4 (currently in use) was upscaled into a web-based software.

Note: This Terms of Reference (ToR) was developed in two parts — the first part explains the role of the first subgroup and the second part explains the role of the second subgroup (Annex 1).

Main Purpose

To revise the methodology (i.e. calculation boundary, emission factor and calculations) for PalmGHG. The establishment of this GHGWG is to also echo the Malaysian Palm Oil Association (MPOA) request on the PalmGHG Tool.

Scope of Work

- i. PalmGHG
 - Developing a gap study which includes identifying areas that overlap with other GHG initiatives/calculator/methodologies with the existing PalmGHG calculator as well as opportunities for improvement in emissions/sinks/removal and reporting
 - Evaluating the current PalmGHG emission boundary (plantation and mill activities)
 - Recommending GHG emission reduction targets to support the revision of the 2018 Principles and Criteria (P&C)
 - Supporting the P&C review Task Force on GHG-related matters
 - Evaluating outdated emission factors and incorporating new emission factors (including Scope 3 emission)
 - Overseeing the development of the PalmGHG calculator Version 5

Expected Outputs

- i. A report based on the Gap Analysis on GHG emissions calculation and recommendation for emissions reduction target to support the revision of the P&C 2018
- ii. PalmGHG Version 5

Meeting Frequency

Members of this working group are expected to meet once/twice every three months.

Composition

This proposed GHG WG-2 will be supported by two subgroups. The first subgroup will look at the upstream emission scope and the second subgroup will look at the downstream emission scope.

As agreed during the 27th Standard Standing Committee (SSC) meeting, the first subgroup will be drawing members from the former Emission Reduction Working Group (ERWG) to oversee upstream emission-related scope of work (PalmGHG). The second subgroup, also as agreed in the SSC meeting, will be formed to look at the downstream emissions related scope of work. Both the subgroups will be reporting to the main working group.

The group must comprise mainly specialists in GHG measurement for upstream and downstream emissions, with familiarity of plantation or climate change matters. The composition proposed for each sector of RSPO follows:

- Indonesian, Malaysian and ROW Growers (3 substantive and 3 alternate)
- Environmental NGOs (1 substantive and 1 alternate)
- Social NGOs (1 substantive and 1 alternate)

In addition, some independent GHG experts may be invited to join/ provide inputs. There will be **one Chair, selected** from Growers and Processors & Traders with refineries.

Role of the Secretariat

The Secretariat should support the working group and facilitate interactions with the members and stakeholders. The Secretariat will also oversee the preparation of commissioned studies and other work.

Active Period

The working group will be carrying out its work from **August** 2022 to **August** 2023.

Note: All members of the WG will not be involved in any consultancy work as per the RSPO Code of Conduct

Terms of Reference

Subgroup - RSPO Greenhouse Gas Working Group

Introduction

There has been growing interest among RSPO members to report downstream GHG emissions. In line with this, RSPO is seeking to develop a mechanism to calculate downstream GHG emissions, with the aim of measuring operational emissions which is the largest emissions contributor for downstream activities.

RSPO is also aware of the palm oil industry's growing interest to be Net Zero. With more members embarking on this journey, the existing upstream emissions calculator (PalmGHG) and a downstream emissions methodology (to be developed) will be an instrumental tool towards this commitment. This would also guide members to espouse one of the goals of the Shared Responsibility requirements.

Main purpose

To conduct a comparative study based on existing initiatives in measuring downstream emissions for the palm oil sector that will be used to report operational emissions.

Scope of work

- A comparative study based on existing initiatives in measuring downstream operational GHG emissions for the palm oil sector
- A feasibility report evaluating methodology for RSPO to measure downstream operational GHG emissions

Expected Outputs

- A comparative study based on existing downstream emissions calculators and methodologies
- A feasibility study proposing a methodology for RSPO to measure downstream operational GHG emissions

Meeting Frequency

Members of this subgroup are part of the RSPO Greenhouse Gas Working Group (GHGWG) and are expected to meet once/twice every three months. The subgroup discussion will take place independent of that of the working group's meeting; however, the working group will be kept updated on the progress of this subgroup.

Composition

This proposed GHGWG-2 will be supported by two subgroups. The first subgroup will look at the upstream emissions scope of work and the second subgroup will look at downstream emissions scope of work.

As agreed during the 27th Standard Standing Committee (SSC) meeting, the first subgroup will be drawing members from the former Emission Reduction Working Group (ERWG) to oversee upstream emissions-related scope of work (PalmGHG). The second subgroup, also as agreed in the SSC meeting, will be formed to look at the downstream emissions scope of works. Both the subgroups will be

reporting to the main working group.

A subgroup will be overseeing the scope of works listed here in Annex 1. The subgroup must comprise mainly members familiar with oil palm life cycle inventory/assessment, GHG Protocol for operational emissions as well as members familiar with downstream processes in the palm oil industry.

- Palm Oil Processors and Traders with refinery (2 substantive and 2 alternate)
- Consumer Goods Manufacturers (2 substantive 2 alternative)
- Environmental NGOs (1 substantive and 1 alternate)
- Social NGOs (1 substantive and 1 alternate)

In addition, some independent experts may be invited to join/ provide inputs.

Role of the Secretariat

The Secretariat should support the subgroup and facilitate interactions with the members and stakeholders. The Secretariat will also oversee the preparation of commissioned studies and other work.

Active Period

The subgroup will be carrying out its work from August 2022 to August 2023.

Note: All members of the subgroup will not be involved in any consultancy work as per the RSPO Code of Conduct