Minutes of the Meeting

Subject : 3rd Greenhouse Gas Task Force (GHGTF) Meeting
Date : 25th to 26th February 2025 with the respective time at (9:38am - 6:55 pm MYT) and (9:37am - 4:05pm MYT)
Venue : Tower 2, IOI Office, Putrajaya, Malaysia (physical) and Zoom Meeting (virtual)

Name	Organisation	Status
William Siow	IOI	Substantive
Foo Siew Theng	Wilmar International	Substantive
Azizul bin Rahman	Wilmar International	Alternate
Hadi Susanto	Musim Mas	Substantive
Derrick Jovannus	Musim Mas	Alternate
Henry Cai	Permata Hijau Group	Substantive
Elaine Chan	SD Guthrie	Substantive
Muhamad Zaim Azfar Nordin	World Wildlife Fund (WWF)	Substantive
Low Sim Loo	IOI	Alternate
Vincent Leonardo	Permata Hijau Group	Observer
Lim Kah Yau	IOI	Observer
Mohd Al-Faez Md Yusof	Wilmar International	Observer
Ashton Lim Suelee	RSPO Secretariat	Secretariat
Wong Yi Jin	RSPO Secretariat	Secretariat
Lydia Tan	RSPO Secretariat	Secretariat
Absent with apologies:		
Yen Hun Sung	*RSPO Secretariat*	*Secretariat*
Aloysius Suratin	*RSPO Secretariat*	*Secretariat*
Akmal Arif Razali	*RSPO Secretariat*	*Secretariat*
Lynette Tan	*BASF SE*	*Substantive*
Gregor Pasda	*BASF SE*	*Alternate*
Rifki Noor	*Golden Agri Resources (GAR)*	*Substantive*
Goetz Martin	*Golden Agri Resources (GAR)*	*Alternate*
Lai Wei Shoon	*IOI*	*Substantive*
Ahmad Furqon	*World Wildlife Fund (WWF)*	*Alternate*

Note: For more detail on the attendance, kindly refer to the Appendix on the last page of this meeting minute.

The objective of the 2-day physical meeting was to address the PalmGHG V5 Pilot Testing Feedback and to go through the PalmGHG V5 internal and external guidance document. Moreover, the Secretariat will update their ongoing findings for *prisma* streamlining with PalmGHG V5 and the Agridence team was invited to update PalmGHG V5 development timeline. Lastly, the extension of the Terms of Reference (ToR) to include the RSPO GHG Assessment Procedure for New Development and the Simplified GHG Assessment Procedure for New Development has been endorsed by SSC on 24th February 2025. This meeting minute should be read in conjunction with the "RSPO GHGTF 3rd Meeting_v3_24 Feb 2025_post" deck, which is for GHGTF use only.

No	Agenda	Main Discussion Points	Action Points	Progress Update
25th February 2025, Tuesday				
1.0	Opening Remarks Refer to the deck from slides 1-3	The Secretariat and the Chair welcomed the GHGTF members to the meeting. The Secretariat also introduced the Environmental Non-Government Organisation (eNGO) from WWF and three observers. The Secretariat reminded the members that two Codes of Conduct (CoCs), which were due before this meeting, have yet to be signed.	The Secretariat to follow up with the 2 GHGTF alternative members to sign the CoCs.	Pending 2 to sign as of 27 Feb 2025.
2.0	Overview of the agenda, review, and approval of the previous meeting's minutes (MOM), and action progress Refer to the deck from slides 4-9.	The Secretariat outlined the agenda for the meeting with slight change from the initial agenda and informed the members on: ● RSPO Antitrust Statement ● RSPO Consensus-Based Decision-Making Clause ● RSPO Declaration of Conflict of Interest The meeting minutes from the 2nd GHGTF meeting ("2nd MoM") were reviewed for adoption. The Secretariat highlighted all of the action points pertaining to follow-up action points to address some of the issues from the 2nd GHGTF meeting.	The review of the 2nd MoM was proposed by IOI and seconded by SD Guthrie.	
3.0	Update on PalmGHG V5 Pilot Testing Refer to the deck from slides 10-14.	***Topic 1. Pilot Testing Participants*** The Secretariat updated the GHGTF members the 2 responses out of 7 participants (1 from Papua New Guinea and 1 from Africa) came back after the previous meeting (2nd GHGTF) decision to extend to 31st of January 2025 to allow better geographic representation, especially of Africa representation. The Secretariat mentioned there was no response so far but Socfin's feedback was provided prior to the extension timeline from African representation. ***Topic 2. General PalmGHG V5 Feedback***	Topic 2. The Secretariat to host training sessions using the PalmGHG calculator for Growers, Processors & Traders and Certified Bodies in the pipeline.	In planning.

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		The Secretariat presented the overview of the key feedback given from the general questions in the PalmGHG V5 feedback form by category of scope and boundary, challenges of PalmGHG V5 tool and improvements to PalmGHG V5 tool for better reporting which were broken down into the key actions for this phase (V5), after the phase (V5) and compliments. Based on the feedback obtained, the key actions for V5 would be to revise the calculator and external guidance where necessary, specifically on editorial, clarity and data linkage. Moreover, training after the launch for Oil Palm Growers, Processors & Traders and Certification Bodies with translations and data input were highlighted. The key actions after V5 suggested were as follows: ● Research on the Land Use Change and by-product modelling, to improve the cause-effect relationship. ● Reference to a standardised Life Cycle Inventory database and allow for variations from different regions. ● Expand the scope to include indirect emissions generated within the entire supply chain from mills. ● Emerging technologies. ● Data accuracy. ● Implement the environment ISO standard to ensure workflows with GHG emissions protocol and organisation targets. ***<u>Topic 3. Learnings from PalmGHG V5 Pilot Testing</u>*** The Secretariat presented areas to improve the PalmGHG V5 pilot testing, which were broken to the PalmGHG calculator, PalmGHG Manual and its process. ● In PalmGHG V5 calculator, the data management can be done better by reducing the redundancy of keying data, nevertheless this was done to ease the coding for the online version. Moreover, there was feedback for PalmGHG V5 to undergo ISO 14040/44 critical panel review. ● In the PalmGHG V5 manual, there were suggestions to provide the report on modelling assumptions and the background data used i.e. the scope, flowchart of the product system, uncertainties and limitations.		

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		○ The GHGTF Chair asked the Secretariat on the examples of the limitations, which were the boundary of PalmGHG being tied to the Unit of Certification and not by the company, thus may not be applicable to publicly available reporting frameworks. ○ A GHGTF member chipped in the tier 1 default value would be a limitation. ● In regards to the process, the Secretariat noted a briefing session would better assist the participants during the PalmGHG pilot testing process with a clear purpose. Aside from this, the Secretariat shared that they had attended a pilot testing webinar conducted by World Resources Institution and learnt key points to be used in future webinars. ○ A GHGTF member mentioned the GHG Protocol's Land Sector Removal Guidance will be delayed to 2025 Q4.		
4.0	Mill Feedback Analysis Refer to the deck from slides 15-59	***<u>Topic 1. Overview of the PalmGHG V5 Feedback (Mill)</u>*** The Secretariat updated and reminded the overview of the feedback given from the PalmGHG V5, from the 2nd GHGTF meeting. The subsequent topics would be presented by components that were broken down by data input, default value, calculation/methodology and auditability. Minor comments in terms of editorial have been amended directly in the calculator, hence, not raised at the meeting. Other comments will be discussed at the end of the Mill session. ***<u>Topic 2. Extraction (CPO & PK)</u>*** **Data Input:** 1. **Sao Tome and Principe Inclusion**: A comment was made to include Sao Tome and Principe in the *General Information* section during mill creation. However, the Secretariat suggested keeping it as is, as there are no RSPO members from the country.	<u>Topic 2.</u> Secretariat to include Sao Tome and Principe in the calculator. <u>Topic 4.</u> *Data input:* Secretariat to include tonne as a unit and to change the term from "other fuel" to "alternative fuel". Secretariat to consider solar power and mill fuel consumption as an indicator in the	Done. Done. Ongoing.

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		2. **Estate Presence in Sao Tome and Principe**: A GHGTF member noted that an estate from Sao Tome and Principe exists in their operations and suggested including relevant default values (e.g., electricity). **Calculation/Methodology:** 3. **Correction of Calculation Issues**: GHGTF members reviewed the feedback on calculations and agreed to make the necessary corrections accordingly. ***Topic 3. FFB Supply Base*** **Data Input:** 1. **User Interface for Association:** A list of association types was suggested instead of a drop-down as per V4, and the GHGTF members agreed to remain as is. ***Topic 4. Mill Fuel*** **Data Input:** 1. **User-Defined Fuel Type Units**: It was suggested to include tonne as a unit, and the Secretariat amended it accordingly, and the GHGTF members agreed. 2. **Terminology Change for Biofuel**: emphasise efforts to transition from diesel and gasoline to renewable energy. The Secretariat responded that the current setup already includes options for biofuels and alternative fuels, and no changes were necessary. The GHGTF members agreed. The Secretariat and GHGTF members discussed how PalmGHG V5 calculator can show the efforts made by UoC to reduce fossil fuel use: a. **Dashboard Proposal**: The Secretariat suggested to have a dashboard to track the diesel and gasoline consumption with "other alternative fuel" , with a year-on-year comparison. b. **Solar Power Accounting**: A GHGTF member inquired whether solar power should be measured for emissions. The group confirmed that	dashboard on *prisma* in the future. *Default value:* Secretariat to provide B100 description and guidance on calculating the biofuel blend. Secretariat to do a comparison of the default value using DEFRA for combustion for the next meeting. Secretariat to add a guidance note on why biomass combustion emissions are higher than diesel. Topic 5. *Default values:* Secretariat to update the scope “Electricity exported to grid” for better clarity. *Calculation:*	Done. Done. Done. Done.

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		solar power infrastructure has no emissions but and a GHGTF member suggested adding the number of solar power used from each UoC in the dashboard. **Default Values:** 4. **Biodiesel Blend Percentage**: Two comments requested specifying biofuel blend percentages (B30, B35, B40) or providing emission factors. The Secretariat proposed using the existing B100 description in the calculator so users can calculate blended biofuel emissions. The GHGTF members agreed. 5. **Guidance on Biofuel Blend Calculation**: The GHGTFSecretariat proposed and agreed adding a pop-up description in the calculator for biofuel blend calculations, and the GHGTF members agreed. 6. **Combustion Emission Factor Classification**: ○ A comment suggested changing the combustion emission factor source from "Residential and Agriculture/Forestry/Fishing Farms" to "Energy Industries" and "Manufacturing Industries and Construction" due to the combustion purpose. ○ The Secretariat noted this would impact the methane emission factor. ○ The GHGTF discussed if PalmGHG V5 was aligning to SBTi, the mill would be a non-FLAG hence would make sense to follow "Manufacturing Industries". ○ The Secretariat recalled the previous meeting discussions whereby IPCCIPPC was agreed to be used, however, they questioned why UK DEFRA, and UNFCCC were not used as this was a more recent reference. The GHGTF members suggested the Secretariat do a comparison of UK DEFRA data and IPCC for the next meeting.	Secretariat to ensure XLOOKUP works properly in *prisma.* <u>Topic 6.</u> *Data input:* Secretariat to change biomass export usage to only account for fuel applications. *Default Value:* Secretariat to revise the calculation to the "Avoided Emission approach" with the LHV of biomass to remain. *Auditability* Secretariat to remove the mill emissions related to optional information. <u>Topic 7.</u> *Data Input:* Secretariat to respond to the comment of why aerobic treatment is not	Done. Done. Done. Done. Done.

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		7. **Biogenic vs. Diesel Combustion Emissions**: A comment questioned why biogenic combustion emissions are higher than diesel. The Secretariat explained that biomass burns less efficiently ("dirtier") than pure diesel, requiring higher combustion energy. The Secretariat proposed adding this explanation in PalmGHG V5's calculation sheet, and the GHGTF members agreed. **Calculation/Methodology:** 8. **Separation of Biogenic and Non-Biogenic Combustion**: Two comments suggested separating biogenic and non-biogenic combustion and setting CO2 biogenic emissions to 0. The Secretariat recommended keeping the current method, as the issue had already been resolved. The GHGTF members agreed. ***<u>Topic 5. Mill Electricity</u>*** **Data Input:** 1. **Scope of "Electricity Exported to Grid"**: There were questions on the scope of electricity exported to the grid, particularly regarding whether it includes steam turbine energy and excess energy usage by workers' housing. The Secretariat proposed clarifying this with a clearermore accurate description, and the GHGTF members agreed. **Calculation/Methodology:** 2. **Inconsistency in XLOOKUP Data Pulling**: Feedback highlighted that XLOOKUP was not consistently pulling data. The Secretariat informed the GHGTF members that this issue would be resolved in *prisma*, and the GHGTF members agreed. ***<u>Topic 6. Biomass Export</u>*** **Data Input:**	included in scenario 1. Secretariat to change for the user to provide the methane content or to provide a default value for the methane content with references for audit. Secretariat to ensure more rows for Waste Water Treatment is there in *prisma*. Secretariat to review the Belt filter press paper to check if this can be accounted for in PalmGHG V5 based on the research paper provided by the RSPO member. *Default values:* Secretariat to update the POME to FFB ratio, density of methane, and average COD value.	Done. Done. Done. Done.

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		1. **Clarification on Biomass Export Usage**: 2 participantsA comment raised concerns about the lack of clarity on biomass export usage, specifically whether it was for non-fuel applications and the potential for double counting (e.g., compost and electricity). The Secretariat proposed clarifying that all exported biomass is used for fuel applications, and the GHGTF members agreed. **Default Values:** 2. **Biomass Default Value Calculation Methodology**: Several concerns were raised about the current method of deriving biomass default values by assuming the proportional substitution of coal with biomass. The key concerns were: ○ **Lower Heating Value (LHV) Variations**: Differences in moisture content between Empty Fruit Bunches (EFB), Palm Kernel Shell (PKS), and Mesocarp Fibre (MF) affect the LHV numbers. However, it was decided by GHGTF that the default value was obtained from IPCC under "other primary solid biomass". ○ **Substitution Differences**: EFB and MF were substituted with fuel oil, not coal. ○ The Secretariat presented two calculation scenarios, comparing proposed LHV values and the impact of substituting biomass with fuel oil. The Secretariat continued the "Avoided Emission Calculation Approach" comment (point 3 below) as this was interlinked: 3. **Avoided Emission Calculation Approach**: A suggestion was made to calculate avoided emissions to account for if biomass was used instead of coal. After discussion, the GHGTF members agreed to revise to calculate as avoided emission but to remain with the assumption that LHV values for biomass do	Secretariat to only show the final waste water treatment COD efficiency value in the backend. *Calculation:* Secretariat to amend scenario 1 calculation as per scenario 2 calculation with the updated default values of POME to FFB ratio and average COD value for day 2. Secretariat to amend the formula for include the flare efficiency for combusted biogas to electricity generation. Secretariat to conduct training for data input for scenario 2. <u>Topic 8.</u> *Data input:* Secretariat to remove PK Crusher tab entirely.	Done. Done. Done. Ongoing. Done.

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		not change as this aligns with business-as-usual solid-to-solid substitution practices. **Auditability:** 5. **Double Counting of Biomass Export Between Seller and Buyer**: There was concern about double counting biomass exports, as both mill emissions and optional information include biomass export data. The Secretariat proposed removing the phrase "mill emission, including the optional information", and the GHGTF members agreed. ***<u>Topic 7. Palm Oil Mill Effluent (POME)</u>*** **Data Input:** 1. **Inclusion of POME Being Dumped Directly & Aerobic Treatment in Scenario 1**: Two feedbacks suggested including POME being dumped directly and aerobic treatment in Scenario 1 ("no dataset"). The Secretariat justified keeping the current approach, citing alignment with RSPO P&C 2024 (7.5.1 (C) & 7.54.45 (C)) and that aerobic treatment is not a primary POME treatment method, for which the Secretariat suggested including a guidance note in the calculator. The GHGTF members agreed. 2. **Providing a Hypothetical Methane Content for Scenario 21**: A comment suggested providing a default methane content (%) for Scenario 21. The Secretariat presented research findings and concluded that users should either provide their own methane content or] refer to a provide ad default value together with its reference to be audited - due to variability in methane composition. The GHGTF members agreed. 3. **Wastewater Treatment and Discharge Pathway Row Limitation**: Two feedbacks raised concerns about limited rows for wastewater treatment and	Secretariat to include mobile combustion for mill and estate fuel. <u>Topic 9.</u> *Calculation:* Secretariat to provide justification on peatland conservation as being optional information. Secretariat to remove emission intensity for PKO and PKE from mill summary emission as PK Crusher tab is removed.	Ongoing. Done. Done.

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		discharge pathways. The Secretariat stated that this would be resolved in *prisma* by adding more rows, and the GHGTF members agreed. 4. **Chemical Oxygen Demand (COD) Calculation Method**: A suggestion was made to include COD before and COD after instead of COD efficiency as in PalmGHG V4. The Secretariat proposed keeping the current approach but would double-check the formula for accuracy, and the GHGTF members agreed. 5. **Exclusion of Belt Filter Press in PalmGHG V5**: A comment questioned why the belt filter press was not included in the PalmGHG V5 calculator. The Secretariat explained that GHG reduction from this method has not yet been incorporated, and the treatment system was based on CDM. The GHGTF members suggested that the Secretariat review a journal article provided to determine if this method can be accounted for. **Default Values:** 6. **POME to FFB Ratio Adjustment**: A comment suggested that the POME to FFB ratio was too low compared to industry operations. The Secretariat presented the list of default values, and the GHGTF members agreed to use 1.0 as the default value for Scenario 1 to encourage users to use actual data (Scenario 2) due to being conservative. 7. **Density of Methane**: A comment suggested that the density of methane seemed too high and proposed using values from Engineering Toolbox A GHGTF member noted that 20°C is the correct temperature. The GHGTF members agreed to use Engineering Toolbox values with 1 bar pressure and 20°C. 8. **Average COD Value Calculation**: A concern was raised that the default average COD value had a high range of uncertainty. The Secretariat presented research data and sample COD values. The GHGTF members agreed to calculate the average COD value using "proposed 1-4 values" from the actual case studies		

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		and the random sampling from PalmGHG excluding the outlier sampleswhile excluding "random sampling of 8,10". 9. **CH_4 Lost to Atmosphere & Methane Correction Factor (MCF)**: Three feedbacks were received on default values to allow for user-defined values, two of which had already been addressed in a previous GHGTF meeting, where it was decided not to adjust the default CH_4 lost to atmosphere or MCF values as they are based on CDM. 10. **Wastewater Treatment COD Removal Efficiency**: A comment suggested that the COD removal efficiency for wastewater discharged to sea, river, or lake was incorrect. The Secretariat clarified that the final COD removal efficiency should be 100% and is calculated correctly. The GHGTF members agreed to show the final wastewater treatment COD efficiency of 1.0 in the backend just for calculation to avoid confusion, as the user would still need to comply with national regulations on COD discharge values. **Calculation/Methodology:** 11. **Emission Discrepancy Between Scenario 1 and Scenario 2**: Two concerns were raised that Scenario 1 (no POME and COD data provided) resulted in lower emissions than Scenario 2 (POME and COD data provided), potentially giving an advantage to users selecting Scenario 1. The GHGTF members and the Secretariat reviewed the calculations and agreed to update the formulas for Scenario 1 to align with Scenario 2, using a higher methane assumption as the default value. a. The GHGTF members suggested the Secretariat revise the calculation with the agreed default value of POME to FFB ratio and Average COD value for day 2. 12. **Data Linkage Issues & Captured Methane to Gas Engine/Boiler**: Two comments were received regarding data linkage issues and whether captured methane fed into gas engines/boilers was correctly accounted for. The		

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		Secretariat verified that there were no errors, and the GHGTF members agreed to maintain the current calculation approach. 13. **Emissions from Fully Combusted Biogas in Electricity Generation**: A comment questioned why there were emissions when biogas is fully combusted in a gas engine for electricity generation. The Secretariat clarified that these are fugitive emissions due to the capture efficiency of biogas recovery equipment in the Wastewater Treatment System. The GHGTF members agreed with this explanation. a. A GHGTF member suggested to amend the formula as it should be 100% - flare efficiency, to obtain the methane emission from the capture efficiency of the equipment. b. The GHGTF members highlighted to the Secretariat to provide training and guidance on user input for scenario 2. ***Topic 8. Palm Kernel (PK) Crushing*** **Data Input:** 1. **Inclusion of Palm Kernel from Own Sources in Transport Emission Calculations and Estimation of Fuel Consumption simultaneously with Mill**: A comment questioned whether Palm Kernel from own sources should be included in transport emissions, as it is not processed in the same location. Moreover, another comment raised concerns about estimating fuel consumption when a mill and crusher operate simultaneously. a. The GHGTF members discussed the boundary of PalmGHG V5 and concluded to omit the Palm Kernel Crushing Plant as it does not impact compliance with RSPO P&C standards. However, they agreed to revisit this if a downstream calculator is needed.		

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		b. The Secretariat raised if mobile combustion should be included as stationary combustion was currently in the PalmGHG V5 calculator, the GHGTF members agreed to include mobile combustion in the respective fuel consumption tabs. ***Topic 9. Mill Summary*** **Calculation** ● **Clarification on Peatland Conservation in Net Estate Emission:** A comment was raised on why peatland conservation was not included in the net estate emission calculation. The Secretariat suggested aligning with the GHG Protocol to provide justification. The GHGTF members agreed. ● **Resolution of Calculation Issues:** Two comments on calculation inconsistencies were reviewed by the Secretariat, who confirmed that the issues were resolved. The GHGTF members agreed. ● **Inclusion of No Data Available Scenario for Third-Party Emissions:** A feedback pointed out that the third-party scenario only accounts for available datasets but does not cover cases where no data is available. The Secretariat confirmed that this would be resolved in *prisma*, and the GHGTF members agreed. ● **Remove Mill Summary Emission associated with PK Crusher:** GHGTF members reminded the Secretariat of Palm Kernel Oil (PKO) and Palm Kernel Expeller (PKE) to be removed. ***Topic 10. Others*** The Secretariat presented comments that were parked under “Others” comments and the respective analysis. **FFB/Supply Base**		

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		● **Concern on EFB Management:** The PalmGHG calculator does not account for mismanagement of EFB, such as uncontrolled and loose management. The Secretariat noted EFB management is currently reflected in biomass export and fertiliser application, and there were comments from the GHGTF members that mismanagement of EFB is against was not in the P&C standard. **Mill Fuel** ● **Visibility of Default Values:** The tool must display default values clearly as many data points are embedded in Excel formulas that are not visible. The Secretariat highlighted the default value list will be available in PalmGHG V5 in *prisma,* and the GHGTF members agreed. ● **Inclusion of Mesocarp with PKS:** No major issues were raised, but a clarification was requested on maintaining mesocarp with PKS as fuel, the Secretariat mentioned Mesocarp Fibre is a new addition to PalmGHG V5 and the GHGTF members agreed. **POME (Palm Oil Mill Effluent)** ● **Wastewater Management and Treatment:** A few concerns were raised about inefficient wastewater treatment, low methane capture efficiency, and the environmental impact of uncontrolled POME discharge. A suggestion was made to include a composting plant for belt press/decanter cake to improve emissions control. The Secretariat suggested this has been accounted for by increasing the number of wastewater treatment options and highlighted the P&C standard in 7.5.3 (C), 7.2.2, 7.5.1 (C), 7.5.4 (C), and 7.6.1 (C) address POME management , and the GHGTF members agreed. Regarding belt press, further research to be done (linked to Topic 7) and decided in the next meeting. **Mill Summary**		

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		● **Biogenic Combustion Emissions and Waste Management:** A concern was raised that high biogenic combustion emissions indicate weaknesses in waste management. The Secretariat clarified that biogenic emissions in PalmGHG V5 are accounted for as fuel usage and do not necessarily indicate inefficiencies, and the GHGTF members agreed to use the same explanation as discussed in Topic 4. **Others** ● **Expanding Emission Scope to Include Nursery and Worker Housing:** A suggestion was made to include Scope 1 and Scope 2 emissions from nurseries and worker housing in the calculation, the GHGTF members agreed to include nursery and business areas but wanted to exclude workers housing as the calculator is based on life cycle analysis limited to palm oil production.		
5.0	Estate Feedback Analysis Refer to the deck from slides: 61-112	***Topic 1. Overview of the PalmGHG V5 Feedback (Estate)*** The Secretariat updated and reminded the overview of the feedback given from the PalmGHG V5, from the 2nd GHGTF meeting. The subsequent topics would be presented by components that were broken down by data input, default value, calculation/methodology and auditability. Minor comments in terms of editorial have been amended directly in the calculator, hence, not raised at the meeting. Other comments will be discussed at the end of the Estate session. ***Topic 2. 3rd party/Estate data*** **Data Input:** ● **Calculation of Company Average for Owned Estate:** A comment highlighted that the calculation was unclear when using the company average when a complete dataset for 3rd parties was unavailable. The Secretariat suggested adding a description in the information icon, which the GHGTF members agreed to. (Note this was omitted in the "Deriviation and Applicability of Emission Factor).	Topic 2. *Data Input:* Secretariat to remove the derivation of the company average for owned estate as the methodology has changed. Secretariat to ensure the pop-up question of complete dataset to be there for group plantation and third party. *Default values:*	Done. Done.

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		● **Clarity on "Complete Dataset" Option:** Feedback indicated that the option "Do you have a complete dataset for estate data (3rd party)?" was unclear since it existed for owned estates, group plantations, and third parties. The Secretariat proposed making this option appear only for users with complete group plantation and third-party databases. **Default Value & Calculation:** ● **Derivation and Applicability of Emission Factor:** A comment suggested providing a full explanation of how the emission factor was derived and including a disclaimer on its applicability to Malaysia and Indonesia. While the Secretariat agreed, further discussion was needed as the corrected derivation resulted in higher values. ○ The GHGTF members discussed and decided to omit the default value and recommended that uncertified estates without datasets use the highest emissions recorded in their Unit of Certification (UoC), regardless of certification status. Moreover, the GHGTF agreed on the Secretariat's suggestion to automate to obtain the 3rd party emission factor if available. Otherwise, the earlier method to be applied ● **Carbon Sink for Independent Smallholders:** A comment noted that the default value for independent smallholders did not account for carbon sinks. The Secretariat suggested adding a guidance note in the PalmGHG manual to clarify the applicability of PalmGHG V5. Additionally, the emission factor would not consider the carbon sink. ***<u>Topic 3. Land Use Change (LUC)</u>*** **Data Input:** ● **Replanting Cycle & Planting Data Requirement:** There was 2 comments on the clarification of the replanting data option, i.e. the planting data would not be required to fill in. The Secretariat suggested including this in training to avoid confusion. However, after discussions, the GHGTF agreed to remove this feature since other RSPO assessments like the Remediation and	Secretariat to update the default value calculation for those with no complete dataset for uncertified estate to first take the 3rd party emission factor if available, Otherwise, take the highest emission estate recorded by the UoC, regardless of certification status. Secretariat to provide a disclaimer for PalmGHG V5 applicability, and the emission factor does not include the carbon sink in the guidance document. <u>Topic 3.</u> *Data Input:* Secretariat to remove the replanting cycle option. Secretariat to ensure more than 30 rows can be added in	Done. Ongoing. Done. Done.

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		Compensation Procedure (RaCP) and Land Use Change Analysis (LUCA) already account for land cover types before conversion. ● **More Planting Data Rows:** There was a comment to include more fields as the PalmGHG V5 calculator in Excel was limited to 30 rows. the Secretariat mentioned this would be addressed in prisma, and the GHGTF members agreed. ● **Ambiguity in Selecting Land Cover Types:** There was a comment mentioning that their HCV area and planted area was overlapped, the GHGTF members discussed that this should not be an issue due to other RSPO assessments done, i.e. RSPO Land Use Change report, which provides the demarcation. ● **LUC Cut-Off Date & Previous Land Cover:** The discussion focused on how far back LUC emissions should be accounted for in relation to RSPO's cut-off dates. The GHGTF concluded that the previous land cover should be measured from the point when the land was first converted into an oil palm plantation. ● **GHG Protocol's Land Sector Guidance (GHGLSRG) & Discounting Approach:** The discussion covered the current PalmGHG V5 methodology, which applies equal discounting over a 20-year period. A GHGTF member referenced a World Resources Institute (WRI) webinar that indirectly supported using linear discounting for better reporting. While equal discounting spreads emissions evenly over 20 years, linear discounting reflects a decreasing emission trend over time. The GHGTF agreed to revisit this on Day 2. ● **Oil Palm Lifespan & Sequestration Consideration:** The GHGTF Chair pointed out that medium growers can extend oil palm productivity beyond 25 years due to improved genetic strains, raising concerns that sequestration and carbon biomass accumulation after 20-25 years are not currently accounted for in the model with the example of Palm Standing Biomass. The members debated whether adjustments were necessary, but as the default value already considers maximum carbon stock, the discussion was postponed to Day 2.	*prisma* for planting data. Secretariat to highlight how to efficiently key in the planting data input in trainings. GHGTF members to revisit in Day 2 to choose the discounting models, assessment period, inclusion of sequestration beyond LUC. *Default values:* Secretariat to provide guidance on the Soil Carbon Stock ("R" Value). Secretariat to ensure the default values are displayed in *prisma*. Secretariat to check if Central America is categorised under South America in IPCC	In planning. Done. Done. Ongoing. Done.

No	Agenda	Main Discussion Points	Action Points	Progress Update
25th February 2025, Tuesday				
		Default Value: ● **Linking Default Values in Calculations:** The Secretariat presented amendments to link default values directly within the calculation model for clarity. The GHGTF members reviewed and agreed to the changes. ● **Sequestration & Plantation Age:** A suggestion was made to adjust sequestration values based on plantation age, as sequestration rates differ between young and mature palms. The Secretariat explained that this is not feasible under the current methodology, which follows GHGLSRG's equal discounting approach. The GHGTF members accepted this justification. ● **Soil Carbon Stock ("R" Value):** A comment was made on the default value of "R" in the soil carbon stock calculation. The Secretariat proposed enhancing clarity of that "R" represents a fixed C:R ratio of 15 for organic soils in the response (since already available in the calculator), as well as in the calculator and manual. The GHGTF members agreed. ● **Central America Classification in IPCC:** The Secretariat mentioned that IPCC may classify Central America under South America and have identified countries under Central American countries (Costa Rica, Guatemala, Honduras, Panama). The GHGTF members suggested for Secretariat to check on this. ● **Oil Palm Carbon Stock Reference & Biomass Data:** Some members expressed concern that the default oil palm carbon stock values used in PalmGHG V5 are outdated and based on older IPCC references. The Secretariat proposed using a more recent reference, but the GHGTF ultimately decided to continue using IPCC data. Additionally, members noted difficulties in locating references for above-ground and below-ground biomass values, and the Secretariat assured them that prisma would display these references more clearly. **Calculation/Methodology:**	*Calculation/ Methodology:* Secretariat to provide guidance on the calculation for infrastructure emission and to address those oil palm that is beyond the assessment period in LUC calculation. GHGTF members and Secretariat to revisit Land Use Management on Day 2. <u>Topic 4.</u> *Default Value:* Secretariat to ensure the default value references can be found clearly in *prisma*. Secretariat to include a guidance note for the user to refer to NI for forest definition and a disclaimer conservation avoided	Done. Done. Ongoing. Done.

No	Agenda	Main Discussion Points	Action Points	Progress Update
25th February 2025, Tuesday				
		• **CO_2 Emissions from Infrastructure:** A comment highlighted a lack of clarity in how CO_2 emissions from infrastructure are calculated. The Secretariat suggested providing a detailed explanation in the manual to improve transparency, which the GHGTF members supported. • **Infrastructure Double Counting Issue:** A concern was raised about potential double counting in infrastructure-related emissions. The Secretariat confirmed that this issue had been identified and corrected in the calculation model. The GHGTF members agreed with the amendment. • **Verification of Amendment Requests:** A comment suggested further amendments, but after a thorough review, the Secretariat confirmed that no additional changes were necessary. The GHGTF members accepted this decision. • **Older Palm Oil Plantations (>20 Years):** A comment pointed out that some plantations exceed 20 years of age, which is beyond the assessment period accounted for in LUC calculation. The Secretariat suggested including a note the LUC emission would be 0 due to adopting equal discounting as per decided by GHGTF, and the GHGTF agreed. • **Justification for 20-Year Planting Cycle:** 2 comments raised about why the planting cycle was reduced from 25 years in PalmGHG V4 to 20 years in V5. The Secretariat clarified that the rationale for this change would be included in training and socialisation efforts. Based on the previous discussion point in "GHG Protocol's Land Sector Guidance (GHGLSRG) & Discounting Approach" this discussion was to be revisited in Day 2. • **Future Consideration for Tier 2 & 3 Values:** A suggestion was made for users to have the option to conduct more advanced (Tier 2 & 3) calculations. A participant provided a list of potential references for these methodologies. The Secretariat acknowledged this as a possible future improvement but	emission cannot be used for carbon credit claims. Secretariat to put São Tomé and Príncipe under Africa default value. <u>Topic 5.</u> *Data Input* Secretariat to ensure the data input for user-defined fertiliser type is clear in *prisma*. Secretariat to conduct training on fertiliser data input. Secretariat to ensure VLOOKUP is addressed in *prisma*. *Default Value* Secretariat to look into having a single LCI database in the future. <u>Topic 6.</u> *Data input:*	Done. Ongoing. In planning. Done. In planning.

No	Agenda	Main Discussion Points	Action Points	Progress Update
25th February 2025, Tuesday				
		suggested revisiting the topic after the PalmGHG V5 launch. The GHGTF members agreed. ● **Land Management Categorisation**: A comment was made on whether emissions from converting tree crops or annual crops to oil palm should be classified under Land Management instead of LUC. The Secretariat clarified that this change would not impact emission calculations but would affect reporting structures. The GHGTF decided to revisit this on Day 2 after reaching agreements on other key matters under LUC. ***<u>Topic 4. Conservation</u>*** **Default Values:** ● **Reference for Default Values:** A comment was made requesting clearer references for the default values used in the calculator. The Secretariat assured that prisma would provide better clarity, and the GHGTF members agreed. ● **Classification and definition of Conservation** - "Forested" vs. "Non-Forested": A comment mentioned the current classification and definition of "forested" and "non-forested" too simplistic and suggested incorporating High Conservation Value (HCV) assessments. However, the GHGTF concluded that this approach could not be implemented as it falls under additionality. A member inquired whether a 2000-ha biological corridor could be claimed. The Secretariat responded that such projects would need to demonstrate feasibility for carbon credit approval through Verra, typically requiring a 2–3-year process. ○ The GHGTF members suggested to include a disclaimer that this cannot be used for carbon credit claims. The GHGTF debated how to define these terms. The Secretariat suggested that users should refer to RSPO's Principles & Criteria (P&C) forest definition or their country's National Interpretation (NI). In conclusion, the GHGTF members agreed to retain the IPCC reference, allow users to refer to their NI.	Secretariat to include fuel consumption for scope 3. Secretariat to include biodiesel description. Secretariat to include a note for the user to convert to the standardised unit of measurement. <u>Topic 7.</u> *Data input* Secretariat to ensure the VLOOKUP is addressed in *prisma.* Secretariat to include a note for the user to convert to the standardised unit of measurement. <u>Topic 8.</u> *Calculation/ Methodology:*	Ongoing. Done. Done. Done. Done.

No	Agenda	Main Discussion Points	Action Points	Progress Update
25th February 2025, Tuesday				
		• **Conservation Sequestration Calculation:** A concern was raised about the significant increase in sequestration values from PalmGHG V4 to V5. Some members cautioned if the calculations were based on emissions avoidance rather than annual carbon capture. The Secretariat proposed reviewing the emission factors and presenting a side-by-side comparison of V4 and V5. However, after discussion, the GHGTF members agreed to retain the current approach. • **Default Value for São Tomé and Príncipe:** A previous comment suggested adding a default value for São Tomé and Príncipe. The Secretariat proposed categorising it under Africa, and the GHGTF members agreed. • **Issue with VLOOKUP Functionality:** A comment noted that the VLOOKUP function caused problems in the calculator. The Secretariat identified this as an isolated case and assured prisma would resolve the issue. The GHGTF members accepted this explanation. ***<u>Topic 5. Fertiliser</u>*** **Data Input** • **Classification of Compost Under Fertiliser:** A concern was raised about why compost was categorised under fertiliser, as fertiliser is used in plantations while compost is a by-product of the extraction plant. The Secretariat explained that compost and fertiliser serve the same purpose and could remain grouped together as it is reported by the mills. The GHGTF members agreed. • **Challenges in Inputting User-Defined Fertiliser Data:** A comment highlighted difficulties entering user-defined fertiliser data. The Secretariat proposed keeping the current system as prisma would resolve the issue. The GHGTF members agreed.	Secretariat to remove "including sequestration" as conservation should not be part of the total emission. Secretariat to include "peat conservation area" in the estate summary page. Secretariat to reach out to the participant to clarify their suggestion on crop residue, if necessary. <u>Topic 9.</u> Secretariat to provide more guidance on the definition of Scope 1,2 and 3 in the guidance document.	Done. Done. Ongoing. Ongoing.

No	Agenda	Main Discussion Points	Action Points	Progress Update
25th February 2025, Tuesday				
		• **Exclusion of Micronutrients in Fertiliser Input:** Two comments questioned why macronutrients were included while micronutrients were not. The Secretariat clarified that this was discussed in the 2nd GHGTF meeting, where members agreed that micronutrient emissions were negligible. The GHGTF members confirmed their previous decision made in the 2nd GHGTF meeting. • **Confusion in Data Entry:** Three comments raised concerns about data entry confusion. The Secretariat assured that this would be addressed through training sessions and improvements in prisma. The GHGTF members agreed. • **Issue with VLOOKUP Functionality:** A comment noted problems with the VLOOKUP function. The Secretariat confirmed that this was an isolated issue but assured that it would be addressed in prisma. The GHGTF members agreed. **Default Value** • **Use of a Single Life Cycle Inventory (LCI) Database:** A comment suggested adopting a single LCI database to avoid inconsistencies arising from multiple reference sources. The Secretariat proposed revisiting the issue, as the current references are credible. The GHGTF members agreed. **Calculation** • **Incorrect Default Value Link for Group Plantation and Third-Party Data:** An issue was identified with linking the correct default value for group plantations and third-party data. The Secretariat made the necessary corrections, and the GHGTF members agreed. ***Topic 6. Field Fuel*** **Data Input**		

No	Agenda	Main Discussion Points	Action Points	Progress Update
25th February 2025, Tuesday				
		● **3rd Party Fuel Consumption Under Scope 3:** A suggestion was made to calculate 3rd party fuel consumption under Scope 3 due to the high number of contractor trucks used in participants' operations. The Secretariat agreed and proposed including 3rd party fuel under Field Fuel and the GHGTF members agreed. ● **Inclusion of Biodiesel Description (Similar to Mill Fuel Discussion):** A comment suggested including a description for biodiesel, similar to a previous discussion on mill fuel. The Secretariat proposed adding this in referencing to IPCC, and the GHGTF members agreed. ● **Regional Unit Variations in Fuel Data Entry (Similar to Mill Fuel Discussion):** A concern was raised that fuel data entry should account for regional unit variations as they may differ from international standards. The Secretariat proposed keeping the current approach but adding a note instructing users to convert to a standardised unit of measurement, for standardised reporting. The GHGTF members agreed. ● **Efforts to Replace Diesel and Gasoline with Renewable Energy (Similar to Mill Fuel Discussion):** A comment suggested that the system should emphasise efforts to transition from diesel and gasoline to renewable energy. The Secretariat responded that the current setup already includes options for biofuels and alternative fuels, and no changes were necessary. The GHGTF members agreed. ***Topic 7. Field Electricity*** **Data Input** ● **VLOOKUP Issue in Country Selection for Electricity Emission Factor:** A comment was raised regarding an issue with VLOOKUP when selecting the country for the electricity emission factor. The Secretariat checked and confirmed it was an isolated case but assured that it would be addressed in prisma. The GHGTF members agreed.		

No	Agenda	Main Discussion Points	Action Points	Progress Update
25th February 2025, Tuesday				
		• **Upstream Purchased Electricity Accounting & Default Value:** A clarifying question was asked regarding whether upstream purchased electricity was considered optional and if a default value was provided. The Secretariat confirmed that it is not optional and that default values have been provided. The GHGTF members agreed. • **Accounting for Different Types of Energy Consumption:** A comment suggested considering different types of energy consumption, such as fossil fuels, electricity, and energy used for irrigation. The Secretariat proposed adding a note instructing users to convert their energy usage to a standardised unit of measurement to ensure consistent reporting and a transparent fuel reporting scope. The GHGTF members agreed. • **Promoting Grid Electricity Purchases for Emission Reduction:** A comment suggested that PalmGHG V5 should emphasise the increasing demand for grid electricity purchases to help reduce emissions. The Secretariat responded that this aspect was already covered under biomass export. The GHGTF members agreed. ***Topic 8. Estate Summary*** **Calculation/Methodology** • **Amendment to LUC Calculator to Address Double Counting of Sequestration:** A suggestion was made to revise the Land Use Change (LUC) calculator sheet due to double counting of sequestration. The Secretariat made the necessary amendments, and the GHGTF members agreed. • **Clarification on LUC Calculation and Sequestration Terminology:** A related issue was raised, recommending the removal of the phrase “excluding sequestration” to prevent confusion. It was suggested to maintain gross LUC while keeping crop sequestration as optional information. After deliberation, the GHGTF members agreed to just keep “Estate Emission, excluding conservation”.		

No	Agenda	Main Discussion Points	Action Points	Progress Update
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		● **Correction of Estate Emission Calculation:** A comment requested a revision of the estate emission results, as conservation in mineral soil was mistakenly included in the calculation. The Secretariat and GHGTF members reviewed the issue and agreed to remove conservation in mineral soil from the calculation. ● **Addition of a Peat Conservation Area Line:** A GHGTF member suggested adding a specific row for the total hectares of the "Peat Conservation Area" that is currently missing in the calculator. ● **Error in Third-Party Estate Calculation Due to Missing Own Plantation Data:** Two comments raised concerns about an error in the calculation for estates with incomplete third-party datasets. The Secretariat investigated and found that the error occurred when no "Own Plantation" data was linked to the table. However, based on prior agreements, the calculation had been updated to use the highest estate emission from a previously discussed topic, rendering these comments obsolete. ● **Gap in N_2O Emissions from Crop Residues:** A comment highlighted a gap in accounting for N_2O emissions from decaying crop residues (e.g., pruned fronds, spent male flowers, empty fruit bunches (EFB), cover crops, and chipped trunks after replanting) and suggested using an IPCC Tier 2 value. The Secretariat presented the closest IPCC default value used for direct N_2O emissions from fertilisers but was unsure how the participant derived the suggested emission factor. ○ The GHGTF members discussed the issue, noting that the omission of crop residue emissions was a prior decision due to the focus on Tier 1 methodology and difficulty in collecting the data for these crop residues. Nevertheless, EFB has been already been accounted for in the calculator. A GHGTF member recommended that the Secretariat follow up with the participant for further clarification. ***<u>Topic 9. Others</u>***		

No	Agenda	Main Discussion Points	Action Points	Progress Update
25th February 2025, Tuesday				
		Estate Data: ● **Clarification of Scope 1, 2, and 3 Emissions:** A comment mentioned confusion regarding Scope 1, 2, and 3 definitions. The Secretariat proposed adding more guidance on emission scopes in the PalmGHG Manual, and the GHGTF members agreed. ● **Annex for Abbreviations in Excel Sheet:** A suggestion was made to include an annex at the end of the Excel sheet to clarify abbreviations for users. This will be considered for the pilot test in the future, to which the GHGTF members agreed. **Conservation:** ● **Inclusion of Non-Forested Areas in Calculations:** A concern was raised that the current information only refers to forested areas, even though non-forested areas are later included in calculations. The Secretariat suggested that users should refer to RSPO's Principles & Criteria (P&C) forest definition or their country's National Interpretation (NI), the GHGTF members agreed. **Fertiliser:** ● **Error in Auto-Formulated Emission Factor Column:** A comment noted an issue where the user-defined compound fertiliser emission factor displays an error. The Secretariat identified this as an isolated Excel issue that will be resolved in prisma, and the GHGTF members agreed. ● **Expansion of Fertiliser Types:** A comment suggested that some fertiliser types were missing. The Secretariat confirmed that the list has been expanded from 12 to 34 types, and no further changes were needed. ● **Challenges in Fertiliser Data Input from Smallholders:** A concern was raised about the difficulty of obtaining fertiliser input data from smallholders (SH). The Secretariat asked whether smallholders under a Unit of Certification (UoC) should be required to provide data, and a few GHGTF members		

No	Agenda	Main Discussion Points	Action Points	Progress Update
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		mentioned they did not have any difficulty in asking for the fertiliser since the SH usually would be under the UoC for certification, unless they are independent smallholders. **General:** ● **Issues with Lookup Formula in Excel:** Multiple errors were reported regarding the lookup formula across the Excel file, persisting across different Excel versions. The Secretariat proposed ensuring that the lookup function works correctly in PalmGHG V5 (*prisma*), and the GHGTF members agreed.		
6.0	Closing of Day 1	The Secretariat concluded the meeting and briefly presented Day 2's agenda. The Secretariat will prepare the immediate action points from Day 1's discussion and recap in preparation for Day 2 and concluded the meeting.	For your information.	

Meeting adjourned at 6:55pm.

No	Agenda	Main Discussion Points	Action Points	Progress Update
26th, February 2025, Wednesday				
1.0	Opening Remarks Refer to the deck from slides 114-118	The Secretariat outlined Day 2's agenda for the meeting where the afternoon session would cover the agenda "How to socialise the response on pilot testing" rather than "PalmGHG V5 socialisation" due to change in timeline. After the agenda, it was followed by the following : ● RSPO Antitrust Statement ● RSPO Consensus-based Decision-Making Clause ● RSPO Declaration of Conflict of Interest The Secretariat mentioned the Chairman would be arriving before lunch starts from Day 1, and peat was accidentally skipped and would be taken through before recapping from Day 1's discussion.	For your information.	
2.0	Peat Refer to the deck from slides 89-92	**Data Input:** ● **Peat Input Tab Should Not Pop Up if No Dataset is Chosen for 3rd Party:** A comment suggested that the peat input tab should not appear when no dataset is selected for a third party. The Secretariat explained that this is a limitation in Excel but assured that prisma would address the issue. The GHGTF members agreed. ● **Data Not Linking Between Relevant Tabs:** A concern was raised about data not linking correctly across relevant tabs. The Secretariat investigated the issue, found no errors, and identified it as an isolated case. The GHGTF members agreed. ● **Correction of Gaps in Data Linkage:** A comment pointed out gaps in data linkage across different sections. The Secretariat identified and resolved the issue. The GHGTF members agreed. ● **Guidance note on peat area:** the GHGTF members discussed and provided clarification to the Secretariat on the peat-related RSPO assessments and concluded that there should be a guidance note for auditor to check the peat only includes the planted area on peat (ha) and not the total peat area including the set-aside in the planting data.	*Data Input:* Secretariat to include a note for the auditor to note the peat area is only for planted peat. *Default Value:* Secretariat to keep an eye on Hoojier's paper to update the formula once it's published.	Done. Ongoing.

No	Agenda	Main Discussion Points	Action Points	Progress Update
26th, February 2025, Wednesday				
		Default Values: ● **Use of Tier 3 Default Value from Hooijer et al. (2010) Instead of IPCC Value:** A comment mentioned that the Tier 3 default value from Hooijer et al. (2010) was higher than the IPCC value. Based on previous discussions, the GHGTF members agreed to continue using the Tier 3 value and to account for good and bad management practices based on RSPO's default value. ○ The Secretariat followed up and confirmed that no newer publication from Hooijer was available. A GHGTF member stated that an updated paper from Hooijer is expected to be published by the end of the year. **Calculation/Methodology:** ● **Correction of Wrong Formula Used in Calculation:** A comment highlighted the use of an incorrect formula in the calculations. The Secretariat identified and corrected the error. The GHGTF members agreed. ● **Validation of Calculation Methodology:** A concern was raised about inconsistencies in the calculation process. The Secretariat reviewed the methodology, found no issues, and proposed maintaining the current approach while ensuring that prisma would prevent similar errors. The GHGTF members agreed. ● **Proposal to Include Acid Sulfate in Peat Soil Type:** A suggestion was made to include Acid Sulfate as a peat soil type category. The Secretariat sought advise from the GHGTF, where the TF is against this inclusion, as it does not align with the RSPO peat definition.		
3.0	Recap of Day 1 Refer to the deck from slides 119-121, and the "@Compiled RSPO PalmGHG	The Secretariat mentioned nearly 150 comments (excluding the editorials) was addressed in Day 1 and presented the decisions made and the following discussion points, reconfirmation and decisions were made below: ***<u>Topic 1. Extraction</u>***	<u>Topic 1.</u> Secretariat to remove PKO and PKE in the mill summary.	Done.

No	Agenda	Main Discussion Points	Action Points	Progress Update
26th, February 2025, Wednesday				
	Feedback Form" spreadsheet	• Retention of PKO and PKE in Mill Summary Despite PK Crusher Tab Removal: The Secretariat reconfirmed that if the PK Crusher tab were removed and the GHGTF member mentioned to remove PKO and PKE. • Discrepancies in FFB Processing and Production Numbers: The GHGTF members discussed challenges in aligning FFB production with processing numbers due to the reporting period for the Mass Balance supply chain model. They noted that the discrepancy in extraction rates (%) is negligible but suggested providing a guidance note to auditors for operational clarity. ***<u>Topic 2. POME</u>*** • **Feasibility of Using Belt Press Journal Article Default Values in POME Calculations:** The GHGTF Chair shared a Belt Press journal article and requested the Secretariat to assess whether its default values could be used in POME calculations. • **Identification of Default Values for Scenario 1 POME Calculations:** The GHGTF members discussed ensuring Scenario 1 (no COD & POME values) is not advantaged over Scenario 2 (COD & POME values provided). They decided to align Scenario 1 calculations with Scenario 2 and tasked the Secretariat with identifying default values for COD removal efficiency (%) in anaerobic ponds, methane content (%), and POME-to-biogas conversion, referring to a Clean Development Mechanism case study. The GHGTF members emphasised using conservative values to encourage users to account for POME emissions under Scenario 2. • **Inclusion of Anaerobic Pond with Methane Capture in Scenario 1 Wastewater Treatment:** The GHGTF reviewed wastewater treatment types for Scenario 1 and determined that methane capture alone cannot be accounted for without anaerobic pond treatment, which is conventionally the first treatment step. They amended the methodology to include anaerobic ponds	Secretariat to put a guidance note for auditors to provide operational clarity that the numbers for FFB production and FFB processed may not tally. <u>Topic 2.</u> Secretariat to check if the Belt Press can be used in POME calculations. Secretariat to update scenario 1 POME calculation as per scenario 2 and to find the default values of COD removal efficiency (%) in anaerobic ponds, methane content (%) and POME-to-biogas conversion.	Ongoing. Ongoing. Ongoing.

No	Agenda	Main Discussion Points	Action Points	Progress Update
26th, February 2025, Wednesday				
		alongside methane capture while keeping anaerobic pond accounting unchanged. ● **Clarification that Composting Cannot Be the Sole POME Treatment Method:** The Secretariat inquired whether composting alone could be used for POME treatment. The GHGTF members stated this was not feasible, as auditors would verify compliance. ***<u>Topic 3. LUC & Land Management</u>*** ● **Inclusion of Solar Power Panels in Infrastructure Scope:** The GHGTF members agreed to broaden the infrastructure scope beyond plantation and conservation to include solar power panels. ● **Accounting for Land Management Emissions Separately:** The GHGTF members agreed to include land management emissions separately in reporting, with Tree Crop and Annual Crop to Oil Palm listed as distinct lines. ○ The Secretariat highlighted Above Ground Biomass, Below Ground Biomass and Soil Carbon Stock are already included in land management emissions and that their calculations follow the same methodology as LUC. ● **Adoption of Equal Discounting Over Linear Discounting for a 25-Year Assessment Period:** The GHGTF members agreed to remain with equal discounting and to account for a 25-year period, acknowledging that oil palm plantations continue to provide good yields at this age. They noted that while there was no preference between linear and equal discounting, switching to linear discounting in the future remains an option. ● **Consideration of Palm Standing Biomass in LUC Calculation:** The GHGTF Chair reiterated that palm standing biomass continues to sequester carbon post-LUC. A GHGTF member confirmed that the maximum carbon stock for oil palm had already been considered in LUC calculations.	Secretariat to ensure AGD sets a limit that composting % is not 100% on prisma. <u>Topic 3.</u> Secretariat to include solar power in the scope of infrastructure. Secretariat to include land management emission as a new category, following the LUC methodology. Secretariat to update the LUC calculation for the assessment period to be 25 years. Secretariat to research for journal articles to check the feasibility of palm standing biomass sequestering after the 25 assessment period.	Done. Ongoing. Ongoing. Done. Ongoing.

No	Agenda	Main Discussion Points	Action Points	Progress Update
26th, February 2025, Wednesday				
		○ The GHGTF Chair shared the context whereby the peat area with oil palm plantation would be retired to remain and proposed to be under conservation, the GHGTF members cautioned on this and suggested to park under optional information and this should be accounted as non-forested area. ○ A GHGTF member proposed using the OPRODISM model to support evidence of carbon accumulation for the Palm Standing Biomass. The GHGTF members recommended that the Secretariat find supporting journal articles, particularly from Henson, to validate this approach.		
4.0	Streamlining PalmGHG in *prisma* Refer to the deck from slides 126-134	The Secretariat provided an update on its desktop review and interviews related to streamlining PalmGHG in *prisma*. The review covered ACOP procedure with IMEL team, land disclosure, certification, and recertification timelines, along with interviews with the Certification team. ● Challenges were identified in aligning *prisma*'s supply base categorisation with PalmGHG's association types, as *prisma* takes a company-level perspective, whereas PalmGHG categorises based on mill/UoC. ● To address this, the Secretariat proposed allowing users to select their own PalmGHG association type and presented a mapping diagram linking *prisma*'s supply base types to PalmGHG's association types as a guidance. ● GHGTF members agreed with the proposal and suggested categorising *prisma*'s "Own (inside UoC) with not-managed" supply base type under "Group Plantation" in PalmGHG, which would be included under Scope 3 emissions. ● The Secretariat also brought up a discussion on how the GHGTF members calculate the GHG emission intensity for ACOP reporting for (1) Average GHG emissions by hectare, and (2) Average GHG emission per tonne crude palm oil, to propose a clearer guidance for company-level calculations. After deliberation, the formula to calculate would be obtaining the total of numerator then divided by the total of the denominator would be more accurate, rather than divided it by the number of estates available.	Secretariat to add prisma's "Own (inside UoC) with not managed" supply base type under "Group Plantation" in PalmGHG V5. Secretariat to change the formula in the ACOP reporting for standardisation.	Done. Done.

No	Agenda	Main Discussion Points	Action Points	Progress Update
26th, February 2025, Wednesday				
5.0	*prisma* Update by Agridence Refer to the deck from slides 136-138	The Secretariat invited Agridence team to present the updated timeline for the PalmGHG V5 calculator, the following points: ● Development was delayed due to *prisma*'s postponed launch and only began in mid-February 2025. ● Instead of a soft launch, there will be a hard launch with Phase 2 in Q3 2025. ● UAT 1 (May 2025) will focus on core features, such as user-defined default values for fertilisers, Excel synchronisation, members and CB view. ● UAT 2 (June 2025) will include the training manual and the remaining features, such as CB and Secretariat view. The GHGTF members raised their points and concerns with suggestions on the timeline: ● The GHGTF Chair expressed concerns about the postponement but recognised the challenges faced from prisma Phase 1. He emphasised the need for rigorous testing with members and suggested inviting CB and members together to save time and costs based on sharing their Phase 1 experiences in *prisma*. Moreover, the GHGTF member highlighted doing a test run before the launch in case there were any hiccups later on. ● In conclusion, the GHGTF members suggested for Secretariat to work with the Agridence team closely to see which features needed to be prioritised.	Secretariat to work with the Agridence team closely to see which features needed to be prioritised.	Ongoing.
6.0	How to share the feedback from Pilot Testing Refer to the deck from slides 139	The Secretariat passed the floor to the GHGTF members to discuss how the Pilot testing feedback should be shared, if this was for the pilot testing participants who responded or if this process may be similar to RSPO Principle & Criteria process whereby the feedback was published publicly. ● The GHGTF members discussed and concluded to send the responses to the feedbacks to all of the participants who provided feedback for the PalmGHG Pilot Testing and for the Secretariat to share to GHGTF members prior to circulation.	Secretariat to share the responses to PalmGHG V5 Pilot Testing Feedback for the GHGTF members for their review before circulation. Secretariat to compile similar or repeated	Done. Ongoing.

No	Agenda	Main Discussion Points	Action Points	Progress Update
26th, February 2025, Wednesday				
		● A GHGTF member suggested that similar questions be grouped and put in a Frequently Asked Question (FAQ); the Secretariat agreed and suggested putting this in the PalmGHG guidance document.	questions in a FAQ, in the PalmGHG V5 guidance document.	
7.0	PalmGHG Guidance document Refer to the deck from slides: 122-125	***Topic 1. PalmGHG V5 Internal Guidance Document*** The Secretariat noted there is no feedback from the internal guidance document from the GHGTF members but will update based on this meeting's decisions from the PalmGHG V5 pilot testing feedback accordingly. ***Topic 2. PalmGHG V5 External Guidance Document*** The Secretariat presented the comments from the GHGTF members on PalmGHG V5 external guidance document and recapped the decisions made from the 2nd GHGTF meeting. The Secretariat took through the guidance document, chapter by chapter, the following discussion points and decisions: ● **Updates to PalmGHG V5 External Guidance Document:** The Secretariat presented comments from the GHGTF members on the PalmGHG V5 external guidance document and recapped decisions from the 2nd GHGTF meeting. Feedback from pilot testing highlighted the need for improvements, such as consolidating repeated questions into an FAQ section after the technical GHG content chapter. ● **Acknowledgment of Pilot Testing Participants:** The Secretariat inquired how to acknowledge pilot testing participants. The GHGTF members suggested including only the participant's company name rather than individual names, as multiple participants may represent the same company. ● **Reconfirmation of PalmGHG Calculator Evolution Content:** The Secretariat requested reconfirmation of the content regarding the evolution of the PalmGHG calculator. A GHGTF member who was part of the initial GHGWG confirmed that no further amendments were needed. ● **Alignment with ISO 14067 & 14064 Standards:** A GHGTF member noted that the PalmGHG calculator lacks ISO 14067 alignment. The Secretariat suggested revisiting this in the future by conducting a gap analysis and adding it as an appendix, which the GHGTF members agreed upon. Regarding ISO 14064, the	Topic 1. Secretariat to update the internal guidance document based on the decisions made from the 3rd GHGTF meeting. Topic 2. Secretariat to add the PalmGHG V5 Pilot Testing participant's company in acknowledgements. Secretariat to conduct a gap analysis on ISO 14067 and to place this in the appendix of the PalmGHG 5 guidance document. Secretariat to remove KCP in the system boundary.	Ongoing. Ongoing. Ongoing. Done.

No	Agenda	Main Discussion Points	Action Points	Progress Update
26th, February 2025, Wednesday				
		Secretariat raised concerns about alignment and the need for an audit. A GHGTF member recalled that PalmGHG was approximately 80% aligned with ISO 14064. ● **Exclusion of Kernel Crushing Plant (KCP) from System Boundary:** A GHGTF member recommended removing the KCP and its associated content (PKO and PKE) from the system boundary based on previous decisions. The Secretariat was reminded to include the KCP in the exclusion section. ● **Guidance Document for Audit Process:** The GHGTF members discussed whether a separate guidance document was necessary for the audit process. Based on pilot testing feedback, they agreed to include this section in the existing guidance document. ● **Revisions to System Boundary Diagram:** The GHGTF members suggested updating the system boundary diagram to present it as a life cycle approach, ending at waste. A GHGTF member recommended referring to sustainability reports from companies for best practices. ● **Definition of Exclusions in the Guidance Document:** The GHGTF members debated whether a list of excluded activities should be explicitly stated. They concluded that exclusions should be categorized according to the GHG Protocol Standard and Reporting framework. ● **Merging of Scope and Reporting Boundary Chapters:** The GHGTF members suggested merging these chapters as they are interlinked. ● **Inclusion of Upstream FFB Supplier Transport:** A GHGTF member reminded the Secretariat to include upstream purchase of Category 4 for FFB supplier transport in the guidance document. ● **Presentation of Calculation Methodology Components:** The GHGTF members discussed the best approach for presenting calculation methodology components. A member suggested starting with components related to own plantations and addressing third-party elements last. ● **Auditing of %N for Manure:** The Secretariat inquired whether %N for manure would be audited. A GHGTF member confirmed that it would be. As a result, the guidance document was amended to include organic fertiliser and POME in addition to inorganic fertiliser.	Secretariat to separate the auditor guidance document from PalmGHG V5 guidance document, if necessary, a separate document is needed. Secretariat to update the system boundary diagram as a life cycle approach. Secretariat to update the exclusion to refer to the categories under GHG Protocol. Secretariat to combine scope and reporting boundary chapters. Secretariat to include upstream FFB supplier transportation.	Ongoing. Ongoing. Ongoing. Ongoing. Ongoing.

No	Agenda	Main Discussion Points	Action Points	Progress Update
26th, February 2025, Wednesday				
		● **Explanation of Calculation Methodology Components:** The GHGTF members and Secretariat discussed how best to present the calculation methodology. A reference to ISCC's approach, which includes formulas and a brief explanation, was brought up. The Secretariat noted that formulas for PalmGHG V4 are available in the calculation sheet and proposed maintaining an explanation rather than including formulas. The GHGTF members agreed. ● **Conservation Calculation Methodology:** The GHGTF members suggested including a definition of non-conservation alongside conservation in the guidance document. They also suggested adding the term "Agroforestry" to include palm standing biomass. ● **Additional Guidance Updates:** The Secretariat and GHGTF members reviewed and updated the guidance document based on decisions from Day 1, including revisions related to biomass export and third-party FFB suppliers. ***Topic 3. Learnings from PalmGHG V5: PalmGHG Manual*** The Secretariat presented the general feedback from the PalmGHG V5 pilot testing feedback which would be relevant to the manual such as applicability, reporting the modelling assumptions, flowchart on the product system, cut-off, uncertainties and limitations and areas of improvement. ● A GHGTF member suggested including the references for the emission factors in the appendix to allow transparency so that the references can be updated in the guidance document when needed. ● The GHGTF members agreed with the general feedback provided and the Secretariat suggested that the GHGTF members have time to review the updated guidance document when ready. ● The GHGTF members also agreed that some areas of improvement, including uncertainties to be considered in the next review. A section on limitations to be included in the current guidance document.	Secretariat to add manure and organic fertiliser in the guidance document. Secretariat to present the components related to "Own plantation" first in the calculation methodology chapter. Secretariat to check the non-forested conservation definition with the term "Agroforestry" and to revisit in the next meeting. Secretariat to update accordingly based on the decision made in this meeting. <u>Topic 3.</u> Secretariat to include the references for the	Done. Ongoing. Ongoing. Ongoing. Ongoing.

No	Agenda	Main Discussion Points	Action Points	Progress Update
26th, February 2025, Wednesday				
			emission factors in the appendix section. GHGTF members to review the guidance documents once draft 2 is ready.	Ongoing.
8.0	GHGTF ToR Revision Refer to the deck from slides 140-142	The Secretariat shared GHGTF's updated ToR to include the guidance documents on the GHG assessment procedure for New Development (growers and smallholders) that was presented to the Standard Steering Committee (SSC) on 20th February and endorsed by on 24th February 2025. The Secretariat presented a high-level view on the updates required by breaking down to components. ● The Secretariat shared that the GHG assessment new development tool for growers would mirror the PalmGHG V5's update and the GHG assessments for smallholders would require minor changes. The Secretariat would share the details in the subsequent meetings. There were no objections from the GHGTF members.	Secretariat to share the details of the updates required for the GHG assessment procedure for New development guidance documents and tools.	Ongoing.
9.0	AoB Refer to the deck from slides 143-144	The Secretariat updated that Matt Ramlow (WRI) declined the invitation, the NDA for WRI Indonesia was still under review, and the technical guidance update expected in January 2025 was not yet available. ● The GHGTF Chair inquired about RSPO Secretariat's actions, and the Secretariat recapped its engagement with GHG Protocol in Switzerland, noting that GHG Protocol has stopped reviewing PalmGHG and that the Land Sector Removal Guidance draft had not been shared for RSPO's review. ● GHGTF members suggested that RSPO Secretariat joins the GHG Protocol technical working group, as it is collaborating with ISEAL to refine Scope 3 supply chain guidance.	Secretariat to join GHG Protocol's technical working group for scope 3. Secretariat to follow up with its legal team for the NDA.	Ongoing. Done.

No	Agenda	Main Discussion Points	Action Points	Progress Update
26th, February 2025, Wednesday				
		● On the other hand, RSPO is still waiting response from the legal team to review the NDA revised by WRI Indonesia.		
10.0	Closing remarks of Day 2 & the 4th GHGTF meeting.	In closing, the Secretariat summarised what has been done in the 2-day meetings and thanked the members once again for coming physically for the meeting. The Secretariat also invited the GHGTF Chair to close off the meeting. The Chair thanked members for attending in person. The Secretariat presented the 4th GHGTF meeting agenda, which will be held virtually, and members agreed on the tentative dates of March 19 or 21, 2025. The Secretariat sent a poll for members to confirm their availability. The Secretariat greeted Salam Ramadan to officially end the meeting.	GHGTF members to vote on their availability for the 4th GHGTF meeting.	Done.

Meeting adjourned: 4:05pm (MYT).

Appendix

3rd GHGTF Physical Meeting Attendance List

No	Name	Organisation	Mode	Attendance	
				Day 1 (25 Feb 2025)	Day 2 (26 Feb 2025)
1	Ahmad Furqon	WWF			
2	Azizul Rahman	Wilmar International Limited	Physical		
3	Derrick Jovannus	Musim Mas Pte. Ltd.	Physical		
4	Elaine Chan	SD Guthrie Berhad	Physical		
5	Foo Siew Theng	Wilmar International Limited	Physical		
6	Goetz Martin	Golden Agri-Resources Ltd			
7	Gregor Pasda	BASF SE			
8	Hadi Susanto	Musim Mas Pte. Ltd.	Physical		
9	Henry Cai	Permata Group Pte. Ltd.	Physical		
10	Jin Yi Yoo	Agridence	Virtual	X	
11	Lai Wei Shoon	IOI Corporation Berhad	Virtual	X	X
12	Lim Kah Yau	IOI Corporation Berhad	Physical		

No	Name	Organisation	Mode	Attendance	
				Day 1 (25 Feb 2025)	Day 2 (26 Feb 2025)
13	Low Sim Loo	IOI Corporation Berhad	Virtual	✓	X
14	Lynette Tan	BASF SE	Virtual	X	X
15	Muhamad Zaim Azfar Bin Nordin	WWF	Physical		
16	Rifki Noor	Golden Agri-Resources Ltd	Physical	X	X
17	Vincent Leonardo	Permata Group Pte. Ltd.	Physical		
18	William Siow	IOI Corporation Berhad	Physical		
19	Zhi Wei Cheng	Agridence	Virtual	X	✓
20	Aloysius Suratin	RSPO	Virtual	X	X
21	Ashton Lim	RSPO	Physical		
22	Lydia Tan	RSPO	Physical		
23	Wong Yi Jin	RSPO	Physical		
24	Yen Hun Sung	RSPO	Virtual	X	X
25	Mohd Al-Faez Md Yusof	Wilmar International	physical		X