



RSPO

Roundtable on
Sustainable Palm Oil

GREENHOUSE GAS (GHG) ASSESSMENT PROCEDURE FOR NEW DEVELOPMENT (REFERENCE TOOL FOR SMALLHOLDERS)

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DISCLAIMER STATEMENT

To ensure consistency with the New Planting Procedure (NPP) for Smallholders document and/or any other related documents, the term **‘planting’** in this document, may be used interchangeably with the term **‘development’**.

New oil palm planting or new oil palm development is defined as planned or proposed planting (e.g. land clearing and preparation, including any associated development) on land not previously cultivated with oil palm.

For reference, users are encouraged to refer to the NPP 2015 document glossary for the correct interpretation of terms used in this document.

1.

INTRODUCTION

Criterion 7.8 of Roundtable on Sustainable Palm Oil (RSPO) Principles and Criteria (P&C) 2013, requires Greenhouse Gas (GHG) emission assessment to be conducted for any new development prior to actual land clearing activities. This includes new development by smallholders (be it scheme, associate, or independent smallholders).

RSPO GHG Assessment Procedure for New Development is developed by RSPO's Emission Reduction Working Group (ERWG) to provide guidance on how to conduct the required GHG emission assessment. As the procedure is developed with large industry players in mind, little attention has been paid to the practicality and feasibility of the procedure to be applied to smallholders, who possess fewer resources. This requirement is becoming a hindrance for smallholders wishing to apply for RSPO certification and a hassle to the existing certified smallholder groups.

Recognising this, the ERWG has developed a simplified GHG Assessment Procedure for New Developments to help smallholders to comply with Criterion 7.8. This simplified procedure is developed based on the key findings from the GHG Assessment submissions through RSPO's New Planting Procedure (NPP):

- i. Transformation of peatland to oil palm plantations leads to significant release of carbon and greenhouse gases into the atmosphere. This is due to peat oxidation caused by drainage and improper water management.

- ii. Transformation of land cover with high carbon stock, i.e. disturbed forest to oil palm leads to significant increases in greenhouse gas emissions.

From the two key findings mentioned above, ERWG made the assumption that new planting is proposed on Peatland and/or Vegetation Coefficient 1.0 land. The proposed development is assumed to have avoided land areas with high carbon stocks.

Acknowledging the challenges (technically and financially) faced by independent smallholders in conducting comprehensive land cover and land use mapping using satellite data; ERWG proposed to align the mapping works through RSPO Land Use Change Analysis (LUCA). With the adoption of LUCA into this simplified procedure, classification of the land cover into the coefficient categories will be as per the classification of RSPO Remediation and Compensation Procedures (RaCP), 16 November, 2015.

2.

APPLICABILITY

This guidance is **ONLY** applicable to:

- I. Independent smallholders certified through group certification that have plans for new plantings on cumulative land area(s) less than 500 hectares (ha). The planned area is yet to be cleared and is currently not planted with oil palm. This 500ha is including both:
 - a. Area(s) belonging to existing member(s) of the group
 - b. Area(s) to be planted by new member(s) of the group.
- II. Scheme smallholders and associate smallholders with new planting of <50ha

Scheme and associate smallholders with new development of >50ha; and independent smallholders with new planting of >500ha cannot use the simplified procedure and must adhere to the full GHG Assessment Procedure.

Full GHG Assessment

- Scheme or associate smallholders with areas for new planting > 50ha
- Independent smallholders group with cumulative areas for new planting > 500ha

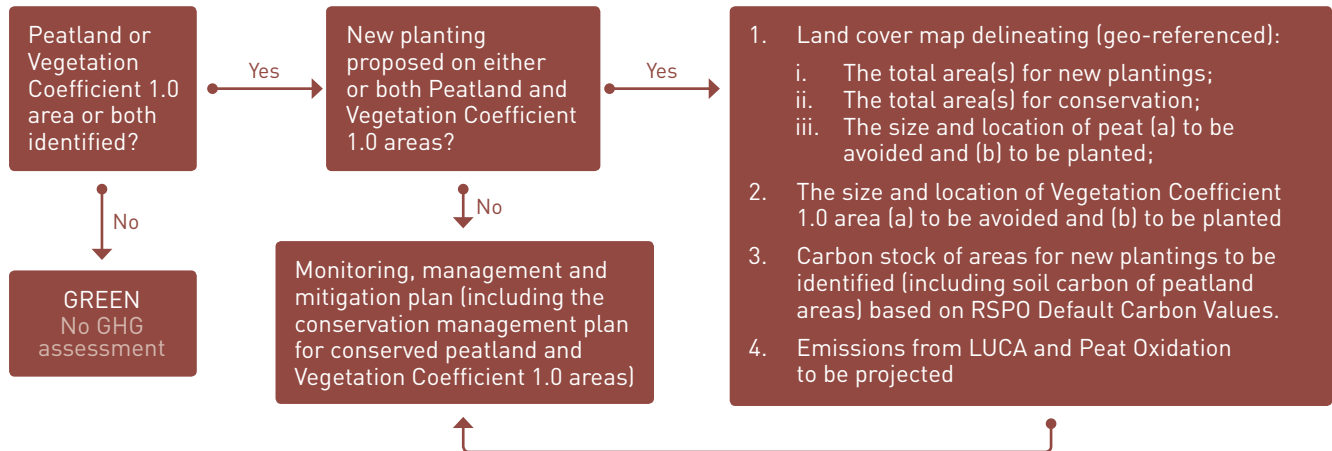
Simplified GHG Assessment

- Scheme or associate smallholders with areas for new planting < 50ha
- Independent smallholders group with cumulative areas for new planting < 500ha

3.

SIMPLIFIED GHG ASSESSMENT

Applicable smallholders can refer to the following decision tree for specific information and assessments required, based on the decision(s) made on areas for new plantings.



Note

- i. RSPO discourages planting on peat. Please take note that for any proposed new planting on peatland, Criterion 7.4 of P&C shall be strictly adhered. Extensive development on peat is to be avoided (no more than 20% of the total area).
- ii. Intact primary forest is to be avoided.

Report of Simplified GHG Assessment for New Planting

Instruction: This report and (if applicable) management plan is to be submitted together with the standard NPP report. Page 6 is showing the screen shots of Table 1, 2 and 3 that provides calculation for Carbon Stock and Emission of New Planting Areas. To use the table, please click [here](#).

ONLY fill in non-coloured cells of all tables. Grey-coloured cells are formulated with an automative-calculation; and the figure will ONLY appear with data input in non-coloured cells.

This report can be printed for hard copy submission to the auditor for verification. However, a copy of this report is to be attached with the Standard NPP report for submission.

Final LUCA, HCV reports, and relevant maps are to be attached. Maps submitted should include clear indication of peatland presence

1. Is there any presence of peatland? YES NO
 2. Based on Land Use Change Analysis, is there any Vegetation Coefficient 1.0 category of land presence? YES NO
-

*If your answer for question 1 and 2 is 'no'; **no further assessment required, go directly to the bottom of this sheet to sign**

*If your answer for question 1 or 2 or both 1 and 2 is 'yes', **proceed with completing question 3**

3. Is there any proposed new planting on peatland? YES NO
**Please take note that for any proposed new planting on peatland, Criterion 7.4 of P&C shall be strictly adhered. Extensive planting on peat is to be avoided (no more than 20% of the total area)*
 4. Based on Land Use Change Analysis, is there any Vegetation Coefficient 1.0 category of land presence? YES NO
**Please take note that intact primary forest is to be avoided*
-

*If your answer for question 3 and 4 is 'no'; **proceed with completing ONLY table 1, Management Plan & Statement of Acceptance of Responsibility**

*If your answer for question 3 or 4 or both 3 and 4 is 'yes', **please proceed with completing this report template & Management Plan**

Table 1. Summary of Total New Planting Area

| No | Vegetation Coefficient Categories | Total area (s) (ha) | Peat soil (ha) | Mineral soil (ha) | Conservation area (s) (ha) | HCV area(s) (ha) | Peat conservation area(s) (ha) | Peatland conserved (ha) |
|-------|-----------------------------------|---------------------|----------------|-------------------|----------------------------|------------------|--------------------------------|-------------------------|
| 1 | 1.0 | | | | | | | |
| 2 | 0.7 | | | | | | | |
| 3 | 0.4 | | | | | | | |
| 4 | 0 | | | | | | | |
| TOTAL | | | | | | | | |

Table 2. Above-Ground, Below-Ground & Peat Soil Carbon Stock of New Planting Areas

| No | Vegetation Coefficient Categories | Above-ground & Below-ground Carbon Stock | | | Peat Soil Carbon Stock | | |
|-------|-----------------------------------|--|--|-------------------------------|------------------------------------|--|-----------------|
| | | Proposed new planting (ha) | RSPO default Carbon Stock Value (tCarbon/ha) | Total Carbon Stocks (tCarbon) | Proposed new planting on peat soil | RSPO default Carbon Stock per peat depth | Peat depth (cm) |
| 1 | 1.0 | | 128 | | | 7.05 | |
| 2 | 0.7 | | 75 | | | 7.05 | |
| 3 | 0.4 | | 9 | | | 7.05 | |
| 4 | 0 | | 0 | | | 7.05 | |
| TOTAL | | | | | | | |

*If peat depth is not known/measured, 3m default is to be used

Table 2. Above-Ground, Below-Ground & Peat Soil Carbon Stock of New Planting Areas

| No | Vegetation Coefficient Categories | Emissions from Land Cover Change (per year) | | | Emissions from Peat Oxidation (per year) | | |
|-------|-----------------------------------|---|---|---|--|--|-------------------|
| | | Proposed new planting (ha) | Emission Factors (tCO _{2e} /ha/yr) | Total Emissions (tCO _{2e} /yr) | Proposed new planting on peat soil (ha) | RSPO default Carbon Stock per peat depth (tCO _{2e} /ha/cm/yr) | Water level* (cm) |
| 1 | 1.0 | | 10.078 | | | 0.91 | |
| 2 | 0.7 | | 2.305 | | | 0.91 | |
| 3 | 0.4 | | -7.695 | | | 0.91 | |
| 4 | 0 | | 0 | | | 0.91 | |
| TOTAL | | | | | | | |

*If water level is not measured and no water management in placed, 100cm default value is to be used

Statement of Acceptance of Responsibility

I, the undersigned, acknowledge this document serves as the summary of GHG assessments for the below mentioned areas and accept responsibility for the assessments and management plan developed.

| | | | |
|--|---|------|---|
| Name of Group | : | | |
| Name of Group Manager | : | | |
| Name of person responsible for this assessment | : | | |
| Signed by Group Manager | : | Date | : |

The RSPO is an international non-profit organisation formed in 2004 with the objective to promote the growth and use of sustainable oil palm products through credible global standards and engagement of stakeholders.

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