

Assessment Note of Indonesia's Revised Emission Reductions Program Document

Prepared by the Facility Management Team (FMT)
of the Forest Carbon Partnership Facility (FCPF)

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Summary

On February 7 at the 19th meeting of the Carbon Fund, the Carbon Fund Participants decided to provisionally include Indonesia's ER-PD into the portfolio of both Tranche A and Tranche B of the Carbon Fund.

The provisional inclusion, and the provisional authorization of the Trustee to lead the ERPA negotiations with Indonesia, are deemed approved upon fulfillment of the conditions in substance satisfactory to the TAP set out in the [Resolution CFM/19/2019/1](#).

The Government of Indonesia (GOI) submitted the revised ER-PD on April 29, 2019, which was shared with the TAP to conduct an assessment. **The TAP concluded that all conditions are met in substance satisfactory to the TAP.** This note summarizes the TAP's findings of the assessments and serves to inform the decision-making of the CFPs.

Conditions 4 a)- c) in resolution CFM/19/2019/1	Met/not met
a) Revise approach to estimate the Reference Level in peatlands	Met
b) Use a single approach to estimate GHG emissions from forest degradation	Met
c) Account for deforestation in areas covered by forest fires	Met

It is important to note that the TAP has raised an additional issue related to a change included in the revised final ER-PD. The issue is related to the sampling approach used to estimate net deforestation and can be addressed along with the other TAP recommendations to reduce uncertainty in the longer-term (previously recorded as part of recommendation 5 in the [Chair's Summary](#)). If this issue is not resolved prior to ERPA signature, the FMT proposes a covenant to be included in the ERPA with Indonesia to address this issue.

Assessments of fulfillment of conditions

1. Condition 4 (a)

“Revise and resubmit the approach used to estimate the emissions included in the reference level to (1) apply the most recent estimate of emissions from peat decomposition from a year no later than 2018 to each year during the reference period, and (2) remove the calculation for emissions associated with projected future deforestation (3,008 tonnes CO₂e/year) from the calculation of the reference period.”

TAP’s determination: **This condition is met.**

The country attended the request of the CFPs satisfactorily and included estimates of deforestation of peat forests for 2017 and 2018. Projected future inherited emissions from peat decomposition during the Reference Period are no longer included.

2. Condition 4 (b)

“Revise the approach to monitoring degradation in secondary forests to reduce the risk of double counting by eliminating the use of logging data in the accounting of degradation; as a consequence, degradation will be monitored in both production and non-production forests. “

TAP’s determination: **This condition is met.**

Degradation due to logging is no longer taken into consideration. Emissions from fire are only estimated for secondary forests that remained as secondary forests in 2016. If these forests are deforested during the ERPA term, their corresponding emission factor will be adjusted according to the estimated emissions of CO₂ from fire. This is in accordance with IPCC guidance and Indonesia’s carbon accounting approach (which only accounts for emissions and not removals). This is considered an adequate response to condition 4 (b).

3. Condition 4 (c)

“Account for emissions from deforestation in areas that have been affected by forest fires during the reference period by using specific emission factors for such areas during the reporting period. “

TAP’s determination: **This condition is met.**

Emissions from peat fires of areas deforested after 2006 are taken into account in the reference scenario, in accordance with the request of the CFPs.

Additional observation: The TAP has remaining major concerns in relation to the methodology used to estimate activity data and its uncertainty. Concerns were already in the January 2019 version of the ER-PD, and the revised final ER-PD (May 2019 version) introduced a new element in the estimation of deforestation and degradation, which should be corrected going forward as well. That is, the country applied a sampling approach to estimate the forest cover change during the 2006 - 2016 period for four classes: stable forest, stable non-forest, deforestation and forest degradation. The estimates from the sample approach and their relation to the map-based estimates were subsequently used to correct the

transition matrices based on map pairs. According to GOI the sampling-based estimates of deforestation and deforestation are NET since lands that transition from forest to non-forest and back to forest were classified as stable forest following the used interpretation protocol.

Going forward the TAP recommends to use a classification protocol that ensures that deforestation or degradation can only happen once to derive GROSS estimates. With the data currently available by the GOI, the TAP suggests the following future technical corrections to improve the estimation of the reference level and associated uncertainty:

- Eliminate forest gain and recovery of degraded forest from the transition matrices to ensure that deforestation or forest degradation data does not include areas that had forest gain or recovered forest in previous years (using a mask of all areas that are deforested and degraded from 2006 onward). This applies to both the map-based transition matrices (i.e. masking in the post-processing of forest cover change maps) and the sampling-based estimation (i.e. masking in the classification protocol).
- Only use stable forest, stable non-forest, deforestation and forest degradation as strata for the stratified sampling estimation. This will reduce the uncertainty of the estimates.
- Only estimate deforestation and forest degradation using the sampling-based approach between 2006-2016 and their related emissions. Maps can be used to “extrapolate” to forest types, non-forest land cover classes and sub-periods, but estimation of error due to this “extrapolation” needs to be considered. To avoid having to estimate the error due to “extrapolation”, a number of adjustments to the sampling plan would be required. In order to correct the “extrapolation” to forest types and non-forest LC classes, the TAP recommends to use all classes, that is three forest types to degradation, and various forest types to non-forest LC classes in the classification system of the classification protocol of the response design. In order to correct the “extrapolation” to sub-periods, the classification protocol of the response design should also indicate the expected year or period or occurrence of deforestation and forest degradation in order to enable the estimation of deforestation and deforestation per sub-period. To improve the efficiency of the estimation, a stratified random sampling approach is recommended, with a minimum number of three strata: areas with no change (forest and non-forest) and areas with high probability of change (based on the maps), and sample size in each stratum defined by the expected error in each stratum (as recommended by GFOI) and the total acceptable error.

These recommendations should be addressed as part of the technical improvements to activity data (condition 5 of the [Chair’s Summary](#)). If this issue is not effectively addressed prior to ERPA signature, the FMT proposes a covenant to be included in the ERPA with Indonesia to address this issue.