Forest Carbon Partnership Facility (FCPF)
Technical Assessment of the Final ER-PD-Indonesia

I General Approach of the Review

The Draft ER-PD of Indonesia was delivered to the TAP on July 16, 2018. The first comments of the desk review were delivered to the Focal Point representing the Forest Carbon Partnership Facility (FCPF/World Bank) for Indonesia on July 31, to adjust the agenda for the country visit. The first comments contained the most important observations of the TAP in relation to the major strengths and non-conformities of the Draft ER-PD. In the preliminary report, the TAP also indicated where the information was incomplete and which persons or institutions the TAP would like to interview or visit. During the country visit the main observations of the TAP regarding the ER-PD were discussed with the Indonesian authorities and stakeholders. At the end of the country visit the main outcome of the TAP assessment was presented and a scheme was developed of how to proceed with the second Draft and final version. The TAP report regarding the Draft ER-PD was compiled and delivered to the focal point of the FCPF for Indonesia on August 16, 2018. On Sept 4, 2018 the Advanced Draft was made available to the TAP team, which was the basis of the previous report. The previous TAP report was delivered to the focal point on September 14 and on September 19 the TAP received comments from the FMT to clarify the text of some parts, which were all incorporated in the previous TAP report. On December 10, the December 7 version of the final ER-PD was delivered to the TAP together with annexes related to various sections of the ER-PD, requesting early comments on outstanding issues. The TAP sent some concerns that were not attended and an edited "track change" and a clean 4th version was delivered on December 17. After this version was assessed by Dr. Pontus Olofsson, a 5th version was delivered on January 11, 2019, with changes in the carbon accounting sections and annexes. This final TAP report is based on the latest version, although we refer to comments on previous versions where required, to deliver a report that reflects the whole assessment process.

PART 1 OF TECHNICAL ASSESSMENT: Summary

Date of Current Assessment: December 21, 2018. Final ER-PD version of December 17, 2018, delivered on January 11.

Names of the technical assessment team members:

Person	TAP expertise	Criteria and indicators
Agustin Inthamoussu	Carbon accounting expert	10 – 22
Ben de Jong	Leader	3 – 9; 23, 27.1-27.2
Dodik Ridho Nurrochmat	Local expert	Contribute to 27.1, 27.2, 28.1
Mario Nanclares	Social and environmental safeguards expert	24-26.3, 29, 30.1, 31.1-32.1, 34.1-35.1
Moritz von Unger	Legal expert	28.1-28.3, 33.1 and 36.1-36.3, 37.1-38.4
Pontus Olofsson	Remote Sensing expert	7 - 9

Summary Assessment of the Quality and Completeness of the ER-PD:	Indicators	Initial review	1st Assessment	2nd assessment (final)
The Government of Indonesia (GoI) has done a very good effort to develop a solid ER-PD. It focuses on one of the key islands, where deforestation and forest degradation is a serious issue and where most of the key drivers that trigger deforestation and forest degradation in Indonesia are present. The proposal is of special interest as it intends to develop a regional program that implies dealing with a hierarchical governance structure that goes from the central government to the various regional authorities, and at the same time involves various key stakeholder groups, of which each has an important influence on the use of the forests. As stated in the document, lessons gained from implementing the ER Program in East Kalimantan will be very valuable in finalizing the design of the national REDD+ framework, including the national MRV system, safeguard approaches, benefit sharing arrangements and ER registration requirements. In this assessment report we highlight those issues that may require further refinements to meet the criteria and indicators of the methodological framework. The country is using a very complicated carbon accounting system, where two IPCC methodologies are applied, but it is not clear how these have been separated in terms of area. Also, the methodology of combining map-based and sample-based approaches to estimate the activity data needs to be improved or substituted by the sample-based approach. Low sampling intensity may have introduced differences in the estimations of activity data. Sections III and VI need attention of the GoI, as in these sections there are still indicators with non-conformities, of which 6 are related to Carbon Accounting, 1 to ER Program Transactions and 1 to Data Management.				
II. Level of Ambition → Criteria 1 – 2, including issues relating to legal aspects East Kalimantan's annual emissions from deforestation, forest degradation, and peat degradation are high. Over the ERPA period (2020 to 2024) the ER Program intends to reduce substantially the emissions of the province's reference level emissions, which complies with the indicator of ambition. The proposed program offers a comprehensive approach to REDD+ that covers policy-level changes as well as field-based activities that addresses drivers of deforestation and degradation that are prevalent in most of Indonesia's forested regions. The accounting area has been on the forefront of REDD+ activities in Indonesia, and as such the program could help as an example from which the lessons learned could serve as a valuable tool to finalize the national REDD+ framework, including MRV, safeguards, benefit sharing and ER registration. **In this section all 3 indicators comply with the methodological framework**	**1.1** **1.2** **2.1**	**YES** **YES** **YES**	**YES** **YES** **YES**	**YES** **YES** **YES**
III. Carbon Accounting **III (a) Scope and methods→ Criteria 3 – 6** The program will focus on reducing emissions from deforestation and forest degradation of natural forest. Emissions from deforestation are identified as GHG emissions from the IPCC Land Use Change category "forest land to non-forest land", plus emissions from peat decomposition, peat fire, and mangrove soils that are linked to deforestation. Deforestation is defined by Indonesia as the conversion of natural forest to other land uses (including non-natural forest). Forest degradation is defined as primary forest that converts to secondary forests due to disturbances, such as logging. Emissions from fires are calculated for secondary forests and emissions from logging are estimated both for primary and secondary forests. Disturbance of degraded forest that leads to the change of degraded forest into shrubs is considered deforestation. Thus, emissions due to loss of carbon from the conversion of degraded forest to shrubs is reported under deforestation.	**3.1** **3.2** **3.3** **4.1** **4.2** **5.1** **6.1** **6.2** **7.1** **7.2** **8.1** **8.2**	**YES** **YES** **YES** **YES** **YES** **YES** **NO** **NO** **NO** **NO** **NO** **NO**	**YES** **YES** **YES** **YES** **YES** **YES** **NO** **NO** **NO** **NO** **NO** **NO**	**YES** **YES** **YES** **YES** **YES** **NO** **NO** **YES** **YES** **YES** **NO** **NO**

During the country visit it was explained to the TAP that any area of natural forest converted to non-forest is permanently considered as non-forest. Removals through recovering forest of non-forest land are not accounted for, nor recovering biomass in degraded forest. The country applies the carbon stock change methodology to estimate emissions from deforestation and forest degradation. However, the loss-gain approach is used to estimate loss of carbon due to harvesting (biomass) or forest fire (both biomass and peat) without separating the area where this is applied from the area where the stock change approach is used. This leads to overestimation of emissions due to deforestation of secondary forests, since the EF of secondary forests are not adjusted with the loss of C due to harvesting or fire (both biomass and peat). The TAP suggests to either separate carbon accounting of production forest or to not account for CO_2 emissions from fire and harvesting and only account for non-CO_2 emissions from fire. The mixture of sampling-based and map-based estimation of deforestation and forest degradation assumes that all maps have the same standards and that stratification weights across periods are the same (omission errors, or sample units of deforestation and degradation in map stable strata/classes), which is doubtful. It is not clear why this approach has been used instead of calculating the reference scenario from the sample-based approach. Not all data are made available to help the TAP validate the estimations of the emissions. **III (b) Uncertainties→ Criteria 7 – 9** The country uses simple random sampling to estimate the activity data and uses the results of this analysis to extrapolate the estimated deforested and degraded area to the annual deforestation and forest degradation transition matrices derived from the land-cover map data. As mentioned earlier, this assumes that weights across periods and strata remain the same. The uncertainty related to this extrapolation procedure has not been taken into account, which may be very high taken into account the very low accuracy between map-based and sampling-based data (none of the 14 sampling points classified as degraded forest coincide with degraded forest of the maps and only 18 out of 58 sampling points coincide for deforestation). No information is provided by the GoI on the response design of the sampling methodology (definition of deforestation, forest degradation and non-forest of the samples). It is highly recommended that the country compares GHG emissions directly derived from the sampling-based activity data with the GHG emissions from the procedure used by the country. It is also highly recommended to increase the number of sampling points and/or to apply an optimal stratified sampling design. The probability of double counting emissions from the various drivers of degradation was not taken into account in the Advanced draft of the ER-PD, was seemingly corrected in the 3rd version of the ER-PD (e.g., data of degradation due to timber extraction and fires came from statistics, and production forests were excluded from the maps), but are again re-introduced in the 4th and final version of the ER-PD. **III (c) Reference Level→ Criteria 10 – 13** The reference level is estimated differently from the national FREL submitted by Indonesia to UNFCCC, due to adjustments in the methodology applied to estimate activity data. It is expected that the ER Program will generate lessons that will contribute to the next submission of the national FRL/FREL. The start and end-date of the reference period is defined as 2006 and 2016, respectively, and the forest definition is specified, which is different from the forest definition used in the elaboration of the national FRL (due to typing error?). The TAP recommends that the GoI explains what has driven the unusual	**9.1** **9.2** **9.3** **10.1** **10.2** **10.3** **11.1** **11.2** **12.1** **13.1** **13.2** **13.3** **13.4** **14.1** **14.2** **14.3** **15.1** **16.1** **17.1** **17.2** **17.3** **17.4** **18.1** **18.2** **19.1** **20.1** **20.2** **21.1** **21.2** **22** **23**	**NO** **N.A** **N.A** **YES** **NO** **NO** **YES** **YES** **YES** **NO** **N.A** **N.A** **N.A** **NO** **YES** **NO** **NO** **NO** **NO** **NO** **N.A** **N.A** **NO** **NO** **YES** **N.A** **N.A** **YES** **N.A** **NO** **YES**	**NO** **N.A** **N.A** **YES** **NO** **NO** **YES** **YES** **YES** **NO** **N.A** **N.A** **N.A** **NO** **YES** **YES** **YES** **YES** **YES** **YES** **YES** **N.A** **N.A** **YES** **NO** **YES** **N.A** **N.A** **YES** **N.A** **YES** **YES**	**NO** **N.A** **N.A** **YES** **YES** **YES** **YES** **YES** **YES** **NO** **N.A** **N.A** **N.A** **YES** **YES** **YES** **YES** **YES** **YES** **YES** **N.A** **N.A** **YES** **YES** **YES** **N.A** **N.A** **YES** **N.A** **YES** **YES**

high deforestation of 2016, which raises substantially the average emissions from deforestation and does not coincide with recent literature.

There is an indicator that is not complying with the methodological framework and was largely discussed between Indonesia, FMT and TAP. It is the upward adjustment of the reference level (above average annual historical emissions), due to the emissions in peat decomposition. Indonesia has modified the estimations in peat and corrected the reference level. The TAP finds that the method may be considered as valid but does not comply with the Methodological Framework.

III (d) Reference Level, Monitoring & Reporting on Emission Reductions→ Criteria 14-16

During the term of the ERPA (2020-2024) and within the REDD+ Accounting Area, activity data (AD) and emission factors (EF) will be monitored following the procedure defined in the NFMS (national forest monitoring system) and National Forest Inventory (NFI).

In general terms, the methodology to estimate emissions during the MRV period is the same as the methodology used to estimate the reference level. During the country visit, it could be seen that Indonesia is working in improving the methodology to estimate degradation emissions (activity data) and burnt area.

One of the main concerns is the differences in the data provided to estimate the activity data with maps and the applied unbiased sampling methodology. The TAP suggests to improve the sampling methodology to estimate the uncertainty in activity data, applying an optimal stratified sampling approach, as recommended by the Global Forest Observation Initiative (GFOI).

The double-counting of emissions in production and burned forests due to the application of the gain-loss approach (and thereby only considering the losses due to harvesting and fire and not considering the regrowth of secondary forest) have to be avoided by either separating completely these forests from the stock change approach or not accounting for CO2 emissions due to harvesting and fires (thus the country should only consider non-CO2 emissions from fires). Monitoring of EF (AGB) will be done with field measurements from the permanent sampling plots (PSP) of the National Forest Inventory (NFI) system. The NFI program will increase the number of PSPs for the East Kalimantan region to reduce the uncertainties. During the ERPA, monitoring and verification will be carried out in 2022 and 2024. During the country visit, the TAP noted that at the province level, there are several activities with the focus to improve the activity data and emissions factors and that Indonesia has included these as part of the national monitoring activities.

In summary, the monitoring and reporting on emissions reductions is improving and responsibilities clearly defined.

III (e) Accounting for Displacement (leakage) → Criterion 17

In section 10 of the ER-PD, the explanation or justification of the assessment of the risk have been improved with new versions of the ER-PD. The text has been enhanced and referred to other sections of the document where there is more evidence to substantiate the level of risk of displacement of each driver.

III (f) Accounting for Reversals→ Criteria 18 – 21

The ER-PD has included the identification of the risk of reversals and ER Program designs features to prevent and mitigate reversals. The indicators are now accomplished, after the TAP encouraged the country to incorporate additional evidence of the mitigation actions. **III (g) Accounting for ERs → Criteria 22 - 23** The planned registry and data management system seems to be able to avoid double-counting of ERs in the near future. It is recommended to develop clear links between the registry system at the national level and the databases that will be developed to track the compliance of each participating actor. It is suggested that this link will be established through e.g. the development plans that are required at the different scales, from the level of community, through district up to the national level and other registration systems, each with a clear reference to the national registry of the ER-PD program. **In the Advanced Draft, 7 indicators changed from NO to YES and 21 indicators complied with the methodological framework, whereas 12 indicators still needed to be improved, of which 5 were considered as major and 7 as minor, whereas 10 indicators are not applicable at this stage. In the Final ER-PD an additional 7 indicators changed from NO to YES and one from YES to NO. At this stage, 6 indicators still require attention, of which 3 are considered major non-conformities and 3 minor non-conformities.**				
IV. Safeguards **Actions undertaken to meet WB and Cancun Safeguards→ Criteria 24-26** The Final ER-PD demonstrates how the Program design provide an adequate coverage for many of the WB and Cancun Safeguards. The Final ER-PD describes the analysis as per the requirements of the WB SES. Advanced drafts versions of the SESA, ESMF, IPPF, RPF, and PF as well as FGRM have been prepared in line with the World Bank's safeguards policy requirements. These instruments describe institutional arrangements at national, provincial and district levels to ensure that relevant safeguards provisions and requirements are properly implemented and monitored according to the safeguards principles. An Indigenous Peoples Planning Framework provides operational guidance in line with OP 4.10 to the ERP implementing agencies. The Resettlement Planning Framework (RPF) and Process Framework (PF) serves as a precautionary measure to address risks associated with resettlement risks associated with the Program implementation. The Strategic Environmental and Social Assessment (SESA) has provided context-specific information on environmental and social risks, as well as the associated impacts, and mitigation actions for ERP in East Kalimantan Province. Risks identified in the SESA were used as the basis for developing the Environmental and Social Management Framework (ESMF). **In this section, 3 indicators changed from NO to YES and now 6 indicators comply with the methodological framework, whereas 1 indicator is not applicable at this stage.**	**24.1** **24.2** **25.1** **25.2** **26.1** **26.2** **26.3**	**NO** **NO** **YES** **N.A** **NO** **NO** **YES**	**YES** **NO** **YES** **N.A** **NO** **NO** **YES**	**YES** **YES** **YES** **N.A** **YES** **YES** **YES**
V. Sustainable Program Design and Implementation **V. (a) Drivers and Land Resource Tenure Assessment → Criteria 27-28** The importance of the drivers that cause deforestation has been assessed mainly indirectly and is based on the deforestation rates observed in the specific areas, e.g., the deforestation in the area allocated to estate crops is directly associated to estate crop	**27.1** **27.2** **28.1** **28.2** **28.3**	**NO** **NO** **NO** **NO** **NO**	**YES** **YES** **YES** **NO** **NO**	**YES** **YES** **YES** **YES** **YES**

expansion. The impact of the underlying factors is unknown and not qualified (the eight underlying factors identified in the stakeholder consultative meetings are: inadequate policies to protect remaining natural forest inside concessions, lack of incentives, unclear forest boundaries, lack of willingness and capacity on sustainable management practices, low productivity due to limited access to technology and finance, limited livelihood opportunities, lack of capacity of the supervising agency, and lack of incentives for sustainable management practices). The TAP finds that, although the main document explores a long explanation of six components to address deforestation and forest degradation, that many of the planned ER Program Measures are not really addressing the specific drivers nor underlying causes of deforestation and forest degradation, except for component 1 (policy and regulatory response). The TAP suggests to simplify the project design section, such that it is clear how the proposed actions are directly related to the drivers and actors that will be involved in carrying out the activities. This will facilitate the design of the benefit sharing arrangements, safeguards that need to be developed and policy and regulatory requirements that are need for each action. The range of land and resource tenure rights (including legal and customary rights of use, access, management, ownership, exclusion, etc.) as well as categories of rights-holders present in the Accounting Area (including Indigenous Peoples and other relevant communities) have been adequately explored and refined in the Final ER-PD. The document also provides a detailed analysis of several sets of land tenure conflicts and regulatory or procedural gaps concerning the recognition of *adat* communities. The Final ER-PD also provides a good overview of the regulatory context in the different sectors – agriculture, forestry, mining, etc. – and identifies specific challenges in the regulatory design, legal compliance and enforcement. From this analysis, the Final ER-PD, then, identifies clear intervention components targeted and tailored to the tenurial challenges, namely support for the development of spatial planning policies and actions, transparency and access-to-information procedures, as well as better enforcement of protection regimes. A challenge for the ER Program will consist in integrating *adat* communities which have not yet been formally recognized (the vast majority). The ER Program plans to implement a (simple) accreditation procedure with village governments, which could replace the formal *adat* recognition process (see further on Ind. 33.1 below). The relevance of tenure title, including customary tenure title, for the authority to transfer ER title is recognized, and a mechanism for handing the authority to the program entity in return for participation and reward is proposed (see further Ind. 33.1 and Ind. 36.2). **V. (b) Benefit sharing → Criteria 29 – 33** The overall design of the BSP as presented in the Final ER-PD is convincing, reflecting legal principles of accessibility, transparency, and equal rewards for performances. It also fits into the given legal and institutional structures, even though it is observed that the planned process for approving funds may perhaps prove overly lengthy and cumbersome. It is suggested to consider the establishment of concept note formats and standards that are replicable by beneficiaries and eligible for fast-track approval. It is also recommended to consider the availability of bridge funding solutions so that potential beneficiaries can access necessary funding prior to 2022. For the validation of the BSP – when finally drawn up – it will be important to verify that the accreditation process of *adat* communities with villages is accessible, inclusive and	**29** **30.1** **31.1** **32.1** **33.1** **34.1** **34.2** **35.1** **35.2**	**NO** **N.A** **N.A** **N.A** **NO** **YES** **NO** **YES** **N.A**	**NO** **N.A** **N.A** **N.A** **NO** **YES** **NO** **YES** **N.A**	**YES** **N.A** **N.A** **N.A** **YES~~N~~** **~~O~~** **YES** **NO** **YES** **N.A**

effective to minimize the risk that any community willing to participate in the ER Program is held up by a slow or restrictive accreditation process. **V. (c) Non-Carbon Benefits → Criteria 34 – 35** The Final ER-PD identifies non-carbon benefits, in addition to emission reductions actions and investments to reduce deforestation and degradation in East Kalimantan, that the ER Program will result in. Such non-carbon benefits include above all the improvement of livelihoods of forest-dependent communities, and the protection of ecosystem services, including: biodiversity, improved water quality, soil fertility, flooding and erosion control, and habitats of game and fish. Potential non-carbon benefits were identified with stakeholders during meetings related to the development of the ER-PD **In this section, 4 indicators changed from NO to YES, and now 10 indicators comply with the methodological framework, whereas 4 indicators are not applicable**				
VI. ER Program Transactions **VI (a) ERPA Signing Authority and Transfer of Title To ERs → Criterion 36** The Final ER-PD stipulates that the Ministry of Environment and Forestry is to sign the ERPA. However, the relevant authorization has not been made clear. A statement that the Government of Indonesia had the option to have either the Ministry of Environment and Forestry or the Ministry of Finance sign the ERPA and had settled for the former is not supported by evidence. This matter is considered a MINOR non-conformity. Clarification and/or the submission of evidence is considered to be in easy reach and/or easily available. However, this issue must be remedied prior to ERPA signature (mandatory requirement). The ER Program seeks to address matters of ER title through a combination of intra-governmental sub-arrangements, on the one hand, and a contractual mechanism under the benefit sharing plan (BSP), on the other hand: Each stakeholder proposing a contribution in a concept note (see Ind. 33.1 on the content and process for concept notes) will be asked to "acknowledge the authorization of the Program Entity to own and transfer Title to ERs generated by the ER Program in return for benefits and rewards which they will receive". A separate issue concerns competing projects/programs within the Accounting Area, in particular from the jurisdictional program Berau Forest Carbon Program (BFCP). The ER Program is deemed compliant with Indicator 36.2 on the condition that • The contractual mechanism as outlined is inclusive and open to *adat* communities irrespective of their formal recognition; • A revised MoU between the program entity (the Ministry of Environment and Forestry) and the District Government of Berau is agreed which aligns the BFCP with the ER Program and recognizes ER title for the program entity; and • The program entity confirms that there is no other REDD+ license or permit active in the Accounting Area that would authorize the generation of ERs and/or grant ER title. **VI (b) Data Management and ER Transaction Registries → Criteria 37 - 38**	**36.1** **36.2** **36.3** **37.1** **37.2** **37.3** **37.4** **38.1** **38.2** **38.3** **38.4**	**NO** **NO** **NO** **YES** **YES** **YES** **NO** **NO** **N.A** **N.A** **N.A**	**NO** **NO** **NO** **YES** **YES** **YES** **NO** **YES** **N.A** **N.A** **N.A**	**NO** **YES** **YES** **YES** **YES** **YES** **NO** **YES** **N.A** **N.A** **N.A**

The indicators relevant at this stage are deemed met, except for Indicator 37.4 for which relevant information (on administrative and audit procedures) is missing in the Final ER-PD. As remedies should be readily available, non-compliance is deemed minor. **In this section 2, indicators changed from NO to YES, and now 6 indicators comply with the methodological framework, whereas 2 indicators still need to be improved, both considered as minor non-conformities, whereas 3 indicators are not applicable**				
SUMMARY SCORE and overall comment: The first Draft of the ER-PD-Indonesia had an overall score of the initial assessment with 25 indicators that complied with the methodological framework, which increased in the Advanced Draft to 37 indicators that complied; In the Final ER-PD 52 indicators comply. In the first Draft 35 indicators required improvements in various sections, of which 23 remained No in the Advanced Draft; in the Final ER-PD, 9~~8~~ indicators still need some improvements of which 4 are deemed with major non-conformities and 5~~4~~ with minor non-conformities. In total, 18 indicators are not applicable at this stage. In each section a summary is presented with the main topics that still need attention from the GoI.				

PART 2 OF TECHNICAL ASSESSMENT: DETAILED ASSESSMENT

C. 1 The proposed ER Program is ambitious, demonstrating the potential of the full implementation of the variety of interventions of the national REDD+ strategy, and is implemented at a jurisdictional scale or programmatic scale.	
Ind. 1.1 The ER Program Measures aim to address a significant portion of forest-related emissions and removals **[**Ambition and strategic rationale for the ER Program – 2.2]	**YES**
As stated in the ER-PD, East Kalimantan's annual emissions from deforestation, forest degradation, and peat degradation are approximately 62.3 million tCO2e/yr, which is around 10% of the equivalent emissions at the national level. Over the ERPA period (2020 to 2024) the ER Program is estimated to lead to total emission reductions of 97.1 million tCO2e, which is equivalent to a 31% reduction in the province's reference level emissions over that period. As such, it can be considered to aim to address a significant portion of the emissions and removals of the jurisdictional area where it will be implemented and is considered as an important contribution to achieve national significant reductions.	
Ind. 1.2 The ER Program is ambitious, uses new or enhanced ER Program Measures to reduce Emissions or enhance removals**,** is undertaken at a jurisdictional scale and/or takes a programmatic approach (i.e., involves multiple land areas, landowners or managers within one or several jurisdictions), and reflects a variety of interventions from the national REDD+ strategy in a coordinated manner. [Ambition and strategic rationale for the ER Program – 2.2, 2.3]	**YES**
As pointed out in the ER-PD, a critical next step toward national REDD+ implementation is the finalization and implementation of subnational REDD+ frameworks. The proposed program offers a comprehensive approach to REDD+ that covers policy-level changes as well as field-based activities, and that addresses drivers of deforestation that are prevalent in most of Indonesia's forested regions. Lessons gained from implementing the ER Program in East Kalimantan will be valuable in finalizing the design of the national REDD+ framework, including the national MRV system, safeguards approaches, benefit sharing and ER registration.	
C. 2 The Accounting Area matches a government- designated area that is of significant scale	
Ind. 2.1 The Accounting Area is of significant scale and aligns with one or more jurisdictions; or a national-government-designated area (e.g., ecoregion) or areas. **[**Accounting Area of the ER Program – 3.1]	**YES**
Indonesia has made significant progress toward developing a national REDD+ architecture and is at a point where a jurisdictional program will provide added stimulus and practical knowledge for finalizing the national system. The accounting area represents about 6.6% of the total country area and a similar proportion of the forest-related GHG emissions. The accounting area has been on the forefront of REDD+ activities in Indonesia, and as such the program could serve as an example from which the lessons learned could serve as valuable tool to finalize the national REDD+ framework, including MRV, safeguards, benefit sharing and ER registration.	
C. 3 The ER Program can choose which sources and sinks associated with any of the REDD+ Activities will be accounted for, measured, and reported, and included in the ER Program Reference Level. At a minimum, ER Programs must account for emissions from deforestation. Emissions from forest degradation also should be accounted for where such emissions are significant.	
Ind. 3.1 The ER Program identifies which anthropogenic sources and sinks associated with any of the REDD+ Activities will be accounted for in the ER Program	**YES**

[Description of Sources and Sinks selected – 8.1]	
The program will focus on reducing emissions from deforestation and forest degradation. The national REDD+ framework does not recognize activities for the conservation of carbon stocks, whereas emissions and removals from sustainable management of forests and stock enhancement are not included due to lack of data (particularly emission and removal factors).	
Ind. 3.2 The ER Program accounts for emissions from deforestation. [Description of Sources and Sinks selected – 8.1]	**YES**
Emissions from deforestation are identified as GHG emissions from the IPCC Land Use Change category forest land to non-forest land, plus emissions from peat decomposition, peat fire, and mangrove soils that are linked to deforestation. Deforestation is defined by Indonesia as the conversion of natural forest to other land uses (including non-natural forest). In the period 2007 to 2016 deforestation contributed to about 80% of total emissions in East Kalimantan. Conversion to agriculture, particularly to oil palm plantations, was the major cause of deforestation, while conversion to monoculture timber plantations also contributed significantly. Disturbance of degraded forest that leads to the change of degraded forest into shrubs is also considered deforestation. Thus, emission due to loss of carbon from the conversion of degraded forest to shrubs is reported under deforestation.	
Ind. 3.3 Emissions from forest degradation are accounted for where such emissions are more than 10% of total forest-related emissions in the Accounting Area, during the Reference Period and during the Term of the ER-PA. These emissions are estimated using the best available data (including proxy activities or data). [Description of Sources and Sinks selected – 8.1]	**YES**
Emissions from forest degradation include: - Emissions due to the degradation of primary forest - Emissions caused by fire in degraded forest (biomass and peat) - Emission from peat decomposition - Emissions from logging. Forest degradation in the national FREL is defined as a change of a primary forest class to a secondary forest class. Primary forest classes include primary dryland, primary mangrove and primary swamp forests. However, the use of the definition excludes continuing losses of carbon in the degraded forest due to further disturbance. The TAP suggested to describe better how possible double-counting of emissions from degradation is avoided, as many data come from different sources (maps, hotspots, statistics). This is particularly the case with forest fires and logging. Identifying the degree of forest degradation is not a simple task, especially not on a routine basis with the currently used medium-resolution satellite imagery (Landsat); at present, Indonesia has no capacity and data available to assess different levels of degradation. The loss of carbon in the degraded forest due to fire (biomass and peat) as well as due to logging activities by the concessionaires is included in the estimations of emissions, but the loss of carbon due to these drivers are not incorporated in the emission factors of the remaining forests, and thus may create double-counting of emissions, when these logged and burned forests are converted to non-forest land cover types. Therefore, the TAP suggests to consider carbon accounting of production forests separate from the carbon accounting, or not to account for CO_2 emissions from logging and fire, but only to consider non-CO_2 emissions from fire, thus avoiding possible double-counting of emissions when secondary forests are subsequently deforested (see indicator 5.1). Reduced impact logging and fire control in production forests are identified as important activities that will reduce emissions from logging and fire. Reduced impact logging and fire control are considered as the main pillars of sustainable forest management. Under indicator 5.1 the TAP suggests 2 options to avoid double-counting of emissions in harvested and burned forests.	
C. 4 The ER Program should account for, measure and report, and include in the ER Program Reference Level, significant carbon pools and greenhouse gases, except where their exclusion would underestimate total emission reductions.	

Ind. 4.1 The ER Program accounts for all Carbon Pools and greenhouse gases that are significant within the Accounting Area, both for Reference Level setting and Measurement, Monitoring and reporting (MMR). **[**Description of Carbon Pools and greenhouse gases selected – 7.2]	**YES**
The ER program accounts for aboveground and belowground carbon pools and soil carbon for organic soils. Although dead wood may be considered as an important pool, this pool has not been taken into account due to lack of sampling data. Litter is considered as an insignificant pool. The soil carbon pool in mineral soils is excluded from the accounting, since the emissions from these soils are considered as not significant, without providing the data that would support this statement. However, exclusion of any of these pools will most likely underestimate total emission reductions of the program and as such this approach can be considered as conservative (this relates to indicator 4.2). In terms of non-CO_2 greenhouse gases, no data are available of CH_4 and N_2O emissions from peat drainage, but are taken into consideration for forest fires, following IPCC supplement on wetlands (2013).	
Ind. 4.2 Carbon Pools and greenhouse gases may be excluded if: I. Emissions associated with excluded Carbon Pools and greenhouse gases are collectively estimated to amount to less than 10% of total forest-related emissions in the Accounting Area during the Reference Period; or II. The ER Program can demonstrate that excluding such Carbon Pools and greenhouse gases would underestimate total emission reductions. [Description of Carbon Pools and greenhouse gases selected – 8.2]	**YES**
See 4.1	
C. 5 The ER Program uses the most recent Intergovernmental Panel on Climate Change (IPCC) guidance and guidelines, as adopted or encouraged by the Conference of the Parties as a basis for estimating forest-related greenhouse gas emissions by sources and removals by sinks.	
Ind. 5.1 The ER Program identifies the IPCC methods used to estimate emissions and removals for Reference Level setting and Measurement, Monitoring and reporting (MMR). **[**Description of method used for calculating the average annual historical emissions over the Reference Period – 8.3] [Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area– 9.1]	**NO**
The Final ER-PD mentions the use of the most recent IPCC guidelines of 2006 throughout the document and used the 2013 guidelines on estimations of emissions from wetlands. Deforestation and forest degradation were derived from annual maps, except for the period of 2006-2011, where only three maps were elaborated (2006, 2009, 2011). Biomass densities of forest classes were derived from the plots of the national forest inventories that were measured in East Kalimantan and as such can be considered as TIER3, but the biomass densities of non-forest classes were derived from literature. Removals from sinks are not taken into account, as the program will only account for emission reductions. The methodology used to estimate emissions from deforestation and forest degradation follows the IPCC stock change approach, where emissions are estimated through multiplying the area of change (activity data) by an emission factor that considers the carbon densities of the various land cover types as constant over time. However, for logged and burned forests, carbon losses of fires and harvesting are included, which may cause double-counting when these forests are subsequently deforested and where the EF has not been adjusted by the loss of carbon due to harvesting and fire. Taking into consideration that deforestation is highest in secondary dry-land forests this may significantly overestimate the	

emissions. This should be avoided, either by not considering CO_2 emissions due to logging (biomass) or fires (both biomass and peat) and only consider non-CO_2 emissions from fires (taking into consideration that the forest inventory plots will capture the variation in biomass in forests that have been disturbed by either logging or fires), or applying a separate accounting approach to all production forests and exclude these forests from the remaining accounting area where the stock change approach is used. Either approach will affect both the reference level and the potential of ERs. Not taking into account CO_2 emissions and potential REs from logging and forest fires seems to be the most feasible solution at this stage.

This is considered as a major non-conformity, as the information provided does not comply with the requirements set by the indicator.

C. 6 Key data and methods that are sufficiently detailed to enable the reconstruction of the Reference Level, and the reported emissions and removals (e.g., data, methods and assumptions), are documented and made publicly available online. In cases where the country's or ER Program's policies exempt sources of information from being publicly disclosed or shared, the information should be made available to independent reviewers and a rationale is provided for not making these data publicly available. In these cases, reasonable efforts should be made to make summary data publicly available to enable reconstruction.

Ind. 6.1 The following methodological steps are made publicly available: I. Forest definition; II. Definition of classes of forests, (e.g., degraded forest; natural forest; plantation), if applicable; III. Choice of activity data, and pre-processing and processing methods; IV. Choice of emission factors and description of their development; V. Estimation of emissions and removals, including accounting approach; VI. Disaggregation of emissions by sources and removal by sinks; VII. Estimation of accuracy, precision, and/or confidence level, as applicable; VIII. Discussion of key uncertainties; IX. Rationale for adjusting emissions, if applicable; X. Methods and assumptions associated with adjusting emissions, if applicable. [Forest definition used in the construction of the Reference Level 9.2] [Description of method used for calculating the average annual historical emissions over the Reference Period 8.3] [Activity data & emission factors used for calculating the average annual historical emissions over the Ref. Period 8.3] [Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1]	**NO**

The most important data to reconstruct the reference level, as required by criterion 6, are documented or made available to the TAP or public. The data that are mentioned in the Final ER-PD have shortcomings that do not allow to reconstruct the reference level or the uncertainty related to the estimations. The indicator only requires that the TAP assesses if the data are publicly available, which does not cover completely the criterion, and are commented as such.

I The definition of the forest used in the Final ER-PD is publicly available. The ER-PD does mention the possible effect of the definition on the uncertainty of the estimation of deforestation. However, it is not clear how the application of the forest cover definition of 30% will be used in the land cover analysis, where 3 cover classes are distinguished, namely 10-40%, 40-70% and >70% (see annex 9.3).

II The forest classes used in the analysis are all well-defined, except for production forests. These production forests are no longer separated from the other forest types (see indicator 5.1).

III The activity data that are taken into account are deforestation and forest degradation. The processing of the activity data is not well documented and inconsistency exists, particularly in relation to forest degradation in production forests and forest affected by fire, for which statistics were used that are not reflected in the area where these activities have taken place (see indicator 5.1). Although in the Advanced draft of the ER-PD, production forests were treated separately, in the final version of the ER-PD the production forests integrated in the six major forest classes. Another issue in relation to activity data is that there is no description available how the sample units were categorized into intact forest, degraded forest, and non-forest and how sampling errors were defined.

IV In the first draft of the ER-PD, the biomass in the non-forest cover classes after deforestation were not taken into consideration in the calculation of the emissions, but are now available in the Final ER-PD. Also, the sources of the data are now available.
V The accounting in degraded forest mixes two calculation approaches for the same area, which may cause double-counting of emissions from deforestation of burned and/or logged degraded forests and forest degradation due to logging (see indicator 5.1).
VI Removals are not considered in the accounting approach, and as such no data need to be made available.
VII The estimations of accuracy, precision and confidence level cannot be reconstructed, as not all data sources are available, or data sources are inconsistent or not used correctly (see also 6.1.III, 6.1.IV, 8.1 and 8.2).
VIII The estimations of error in land cover change classes that are used to estimate the reference level are incomplete. No error estimation is presented from the extrapolation of sample-based land-cover change estimations to map-based transition matrices.
IX not applicable
X not applicable

This is considered as a major non-conformity, as the information provided does not comply with the requirements set by the indicator.

Ind 6.2 For the following spatial information, maps and/or synthesized data are displayed publicly, and reasonable efforts are made to explain how these were derived from the underlying spatial and other data, and to make key data sets or analyses publicly available: I. Accounting Area II. Activity data (e.g., forest-cover change or transitions between forest categories) III. Emission factors IV. Average annual emissions over the Reference Period V. Adjusted emissions Any spatial data used to adjust emissions, if applicable. [Forest definition used in the construction of the Reference Level 9.2] [Description of method used for calculating the average annual historical emissions over the Reference Period 8.3] [Activity data &emission factors used for calculating the average annual historical emissions over the Ref. Period 8.3] [Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1]	**YES**

I Maps of the accounting area are presented in the ER-PD.

II Maps are available with the activity data and a file with the transition matrices.

III The emission factors used to calculate the reference level are available.

IV Data are available to reconstruct the annual emissions over the reference period, as calculated by the country

V Not applicable

C.7 Sources of uncertainty are systematically identified and assessed in Reference Level setting and Measurement, Monitoring and reporting

Ind 7.1 All assumptions and sources of uncertainty associated with activity data, emission factors and calculation methods that contribute to the uncertainty of the estimates of emissions and removals are identified. [Activity data and emission factors used for calculating the average annual historical emissions over the Reference Period 8.3] [Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1] [Identification and assessment of sources of uncertainty 13.1]	**YES**

The estimation of uncertainties of the activity data are assessed. As described in GFOI (2013; 2016), to comply with IPCC guidance, activity data need to be estimated from sample data using an unbiased estimator and a confidence interval, using the corresponding variance estimator. During the country visit, a proposal of how to develop an uncertainty analysis of activity data was explained and the RS team of the Indonesian government was committed to include this analysis in the final ER-PD to estimate the reference level and their associated uncertainties. This is accomplished with some shortcomings that will be explained under indicators 6.1, 8.1 and 8.2. The estimation of uncertainty related to emission factors are also included.

Ind 7.2 The sources of uncertainty identified in Indicator 7.1: are assessed for their relative contribution to the overall uncertainty of the emissions and removals. [Identification and assessment of sources of uncertainty 13.3]	**YES**

The estimation of uncertainties of all sources and their relative contribution are estimated. Some inconsistencies exist, that are treated under criterion 8.

C 8 The ER Program, to the extent feasible, follows a process of managing and reducing uncertainty of activity data and emission factors used in Reference Level setting and Measurement, Monitoring and reporting.

Ind 8.1 Systematic errors are minimized through the implementation of a consistent and comprehensive set of standard operating procedures, including a set of quality assessment and quality control processes that work within the local circumstances of the ER Program. [Activity data and emission factors used for calculating the average annual historical emissions over the Reference Period, 13.2] [Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area]	**NO**

The uncertainty of the activity data has not been estimated for all variables and procedures that may create uncertainty and as such no information is available how these possible systematic or random errors will be minimized. Procedures for which the uncertainties have not been assessed include the uncertainty related to the extrapolation of the sampling-based estimates of activity data to the map-based transition matrices. It is not clear why these extrapolations have been carried out instead of estimating directly the emissions from the sample-based approach. Another source of uncertainty that has not been included in the assessment refers to the possible errors in the sampling methodology. Possible sources of error include the classification procedure applied to the samples that has not been explained in sufficient detail (what is the level of error in classifying a pixel into the three cover classes, pixels that changes from intact forest to degraded forest, etc.). No information is provided on the variation in these errors among the persons that carried out the classification of the samples and how this may affect the final outcome. This is particularly important as only a few samples were taken from the LC change classes, which means that errors in a couple of pixels may increase or decrease substantially the area estimations.

This is considered as a mayor non-conformity, as the information provided does not comply with the requirements set by the indicator.	
Ind 8.2 Random errors and other uncertainties are minimized to the extent practical based on the assessment of their relative contribution to the overall uncertainty of the emissions and removals. [Activity data and emission factors used for calculating the average annual historical emissions over the Reference Period 10, 13] [Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1] [Identification and assessment of sources of uncertainty 13.1]	**NO**
Efforts have been undertaken by the Indonesian government to include various sources of uncertainty in the analysis. The ER-PD mentions that additional plot data are collected within the jurisdictional area to reduce the random error in the estimations of EF. Also, an attempt has been undertaken to estimate the uncertainties in activity data, although the methodology applied requires improvements to use it as a basis to estimate the overall uncertainty in the activity data. Uncertainties that need to be incorporated in the estimations are explained under indicator 8.1. Additionally, the sampling doesn't have enough sampling units in the LC change classes to enable a precise estimate of activity data. This is considered as a minor non-conformity as this is directly related to the non-conformity of indicator 8.1	
C 9 Uncertainty of activity data and emission factors used in Reference Level setting and Measurement, Monitoring and reporting is quantified in a consistent way, so that the estimation of emissions, removals and Emission Reductions is comparable among ER Programs	
Ind 9.1 Uncertainty associated with activity data and emission factors is quantified using accepted international standards, for example by providing accuracy, confidence interval, distribution of error, and propagation of error. Where errors in data and methods are considered large as defined in IPCC Guidelines, Monte Carlo methods (numerical simulations) should be used to estimate uncertainty [Activity data and emission factors used for calculating the average annual historical emissions over the Reference Period 13.1] [Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1]	**NO**
To estimate the uncertainty associated with the activity data and emission factors, Tier 1 and Tier 2 estimations of estimating uncertainties are applied, which refers to error propagation and Monte Carlo simulations. However, not all data sources have been included (see indicator 8.1). This is a minor non-conformity as this can be readily applied, once the uncertainties in activity data and emission factors become available, as mentioned in indicators 8.1 and 8.2	
Ind 9.2 Uncertainty of the estimate of Emission Reductions is quantified using Monte Carlo methods. Underlying sources of error in data and methods for integrated measurements of deforestation, forest degradation and enhancements (e.g., as in a national forest inventory) are combined into a single combined uncertainty estimate and are reported at the two-tailed 90% confidence level [Quantification of uncertainty in Reference Level setting 13.2]	**N.A**
Uncertainties in the data to estimate the reference level were combined, using propagation methods and Monte Carlo simulations.	

Ind 9.3 Uncertainty of Emissions Reductions associated with deforestation, forest degradation and enhancements are reported separately if measured through separate (i.e., non-integrated) approaches and when degradation is estimated using proxy data. [Quantification of uncertainty in Reference Level setting 13.2]	**N.A**
The data of deforestation and forest degradation are estimated separately, and as such no integrated methodology was used.	
10 The development of the Reference Level is informed by the development of a Forest Reference Emission Level or Forest Reference Level for the UNFCCC	
Ind 10.1 The Reference Level is expressed in tons of carbon dioxide equivalent per year [Estimated Reference Level 9.7]	**YES**
The Reference level is presented in chapter 8 of the ER-PD. The reference level is expressed in tons of carbon dioxide equivalent per year.	
Ind 10.2 The ER Program explains how the development of the Reference Level can inform or is informed by the development of a national Forest Reference Emission Level or Forest Reference Level, and explains the relationship between the Reference Level and any intended submission of a Forest Reference Emission Level or Forest Reference Level to the UNFCCC [Relation between the Reference Level, the development of a FREL/FRL for the UNFCCC and the country's existing or emerging greenhouse gas inventory 9.8]	**YES**
In chapter 8.8 of the ER-PD the relation between the Reference Level and the national FREL, which Indonesia submitted to the UNFCCC in 2016, is explained. Both documents are aligned and have used the same approach. The differences between the reference level and FREL are the geographical coverage, time frame of analysis and that the reference level includes additional activities such as reduced impact logging activity (RIL), mangroves conversions to aquaculture, among others. These new activities will be included in FREL in the future. Activity data used in the development of the reference level was the same data as in the National FREL but have been enhanced by application of the sample-based approach (Olofsson) to improve accuracy in estimation of it. It is expected that the ER Program will generate lessons that will contribute to the next submission of the national FRL/FREL, e.g. the addition of REDD+ activities, or the improvement of activity data and emission factors. The lessons learnt can be transferred between different documents, as it has been explained during the country visit. Observation: chapter 8.8 is dedicated to explaining the relation between the Reference Level and the development of a FREL for the UNFCCC, but the section could still be improved by describing the institutions in charge of the different topics within the documents, their responsibilities and how they relate (institutional arrangements). The indicator has been assessed positively because the information is mentioned elsewhere in the document.	

Ind 10.3 The ER Program explains what steps are intended in order for the Reference Level to achieve consistency with the country's existing or emerging greenhouse gas inventory [Relation between the Reference Level, the development of a FREL/FRL for the UNFCCC and the country's existing or emerging greenhouse gas inventory 9.6]	**YES**
Indonesia's GHG Inventory is managed by the Directorate for GHG Inventory and MRV, which also maintains the national registry system. The ER Program (through the local Environmental Agency) will report on the emission reductions generated by the implementation of the ER Program to the national registry system (explained in section 9 of the ER-PD). Therefore, the implementation of the ER Program will also provide inputs to the development of the national GHG Inventory. In section 8.8 of the ER-PD it is said that the Directorate for GHG Inventory and MRV plans to change the method of estimation emissions and removals, from Gain and Loss to Stock-difference method and to apply best practices used in the ER-PD for the development of GHG Inventory. These efforts are to increase the consistency between the ER-PD and the National GHG Inventory. Given the text in chapter 8.8 and references elsewhere in the document, the indicator is accomplished.	
C 11 A Reference Period is defined	
Ind 11.1 The end-date for the Reference Period is the most recent date prior to two years before the TAP starts the independent assessment of the Draft ER Program Document and for which forest-cover data is available to enable IPCC Approach 3. An alternative end-date could be allowed only with convincing justification, e.g., to maintain consistency of dates with a Forest Reference Emission Level or Forest Reference Level, other relevant REDD+ programs, national communications, national ER program or climate change strategy [Reference Period 9.1]	**YES**
The end-date of the reference period is clearly defined in 2016 and is two years before the TAP independent assessment (2018). The end date of the reference period is in line with the methodological framework. In that same year the county also has forest-cover data with IPCC approach 3.	
Ind 11.2 The start-date for the Reference Period is about 10 years before the end-date. An alternative start-date could be allowed only with convincing justification as in Indicator 11.1, and is not more than 15 years before the end-date. [Reference Period 9.1]	**YES**
The start-date of the reference period is defined in the ER-PD as 2007. The TAP team have checked the spreadsheets with the calculation of emissions and understood that the year 2007 and 2016 are included in the period, making the start date of the reference period exactly 10 years before the end-date. Although it is not clarified the exact starting and finishing day in each year, it is understood that the complete year is included (1st January 2007 to 31st December 2016).	
C 12 The forest definition used for the ER Program follows available guidance from UNFCCC decision 12/CP.17	
Ind 12.1 The definition of forest used in the construction of the Reference Level is specified. If there is a difference between the definition of forest used in the national greenhouse gas inventory or in reporting to other international organizations (including an Forest Reference Emission Level or Forest Reference Level to the UNFCCC) and the definition used in the construction of the Reference Level, then the ER Program explains how and why the forest definition used in the Reference Level was chosen. [Forest definition used in the construction of the Reference Level 9.2]	**YES**

The national definition of forest submitted to UNFCCC is a land area of minimum 6.25 ha with trees higher than 5 meters at maturity and a canopy cover of more than 30 percent.

However, in the ER-PD the term "working definition" of forest was used. This definition is used to produce land-cover maps through visual interpretation of satellite images at a scale that minimum area for polygon delineation is 0.25 cm2 at 1: 50,000 of scale which equals to 6.25 ha. This definition is in accordance with the Indonesian National Standard (SNI) 8033:2014 on "Method for calculating forest cover change based on results of visual interpretation of optical satellite remote sensing image".

The object identification is purely based on the appearance in the imagery. Manual- visual classification through an on-screen digitizing technique based on key elements of image/photo-interpretation was applied as a classification method. This is a very demanding work, but Indonesia Government showed, during the country visit, that they have the capacity and the resources to do it.

The definition of forest used in the reference level is the same as in the National FREL and it is consistent with national GHG Inventory.

C 13 The Reference Level does not exceed the average annual historical emissions over the Reference Period. For a limited set of ER Programs, the Reference Level may be adjusted upward by a limited amount above average annual historical emissions. For any ER Program, the Reference Level may be adjusted downward.

Ind 13.1 The Reference Level does not exceed the average annual historical emissions over the Reference Period, unless the ER Program meets the eligibility requirements in Indicator 13.2. If the available data from the National Forest Monitoring System used in the construction of the Reference Level shows a clear downward trend, this should be taken into account in the construction of the Reference Level [Average annual historical emissions over the Reference Period 9.6, 13.2]	**NO**

The Reference Level is estimated as an average of emissions of the historical period for many sources of emissions: deforestation, degradation, emissions in mangroves, logging and emissions from fires. However, emissions in peat decomposition has been adjusted upward to reflect the inherited emissions.

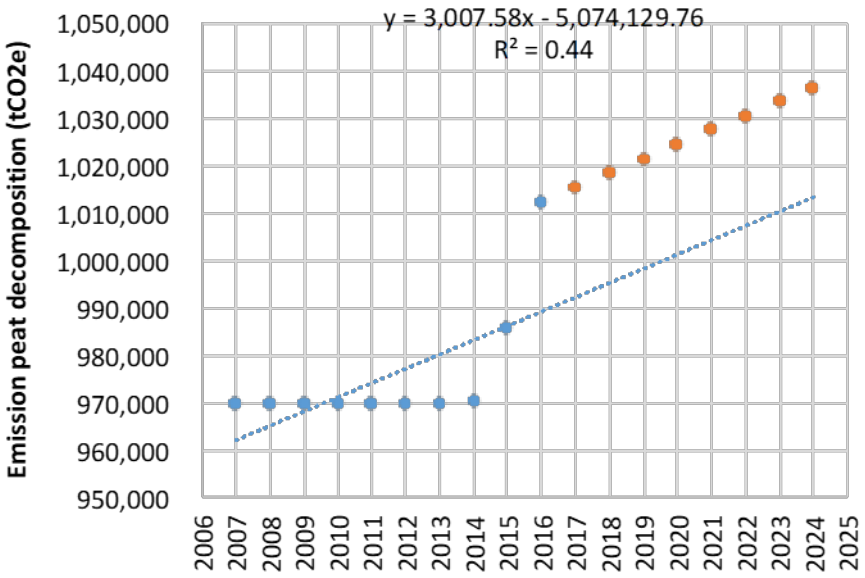
Indonesia is proposing an upward adjustment above average annual historical emissions over the reference period, to account for the cumulative emissions from peat soil over time. Emissions from peat soil are not instantaneous; they occur repeatedly on a given hectare of land for many years following an Activity (e.g., conversion of peat forest to non-forest).

During the country visit, and afterwards during the TAP assessment process, this topic was discussed with the Government of Indonesia and the ER-PD has been updated in every version the corresponding section. The original version of the ER-PD considered that emissions in peatland in the reference level needs to reflect the inherited emissions. After first TAP assessment, the Government decided to consider emissions in peatlands with constant values, not as an average of annual historical emissions, but with the value of the last year of the historical period. This meant that under the monitoring period no deforestation can occur in peat forest in order to have zero emission reduction from the activity. The TAP in this case did not agree with the approach followed and proposed alternative ones. This last version of the document, the emissions in peat lands are considered as in the first version of the ER-PD and as they have been also considered in the national FREL submitted to UNFCCC.

The Government of Indonesia argues that the rationale for seeking an upward adjustment is to reflect the cumulative (not instantaneous) nature of peat emissions resulting from past disturbances. And that for purposes of estimating a baseline for future emissions from peat soil, calculation of an average emission over the Reference Period is not relevant

since baseline emissions in years after the end of the Reference Period will be at least as high as the last year of the Reference Period (reflecting cumulative past activities), plus additional emissions reflecting future activities.

Considering this assumption, the baseline for future peat soil emissions for a Reference Level under a 'business as usual' scenario is estimated as the initial emission of 1,012,266 tCO2e/ha/yr -peat emissions occurring in E Kalimantan in the final year 2016 of the reference period- and adding 3,008 tCO2/ha/yr which is obtained from linear regression estimate (see figure below).



The TAP acknowledges the methodology used and assumptions made to elaborate the reference emission level. Despite it is a reasonable approach to consider the inherited emissions, following IPCC methods and considering the local circumstances, inherited emissions have not been considered in the Methodological Framework yet. It does only accept upward adjustments under two eligibility requirements, which are not the case of Indonesia. This is case is not unique for Indonesia as other parties have also cumulative emissions in soil organic carbon in deforested areas.

The TAP encourages Indonesia to elaborate a new method to estimate the reference emission level, considering the actual version of the methodological framework and previous discussions with TAP team.

Once the reference emission level is adjusted to follow the methodological framework, Indonesia may need to explain the unusual spike in GHG emissions in the year 2016, which raises substantially the average emissions from deforestation (already requested in previous indicators).

This is considered as a major non-conformity as the approach followed is not in line with the Methodological Framework.

Ind 13.2 The Reference Level may be adjusted upward above average annual historical emissions if the ER Program can demonstrate to the satisfaction of the Carbon Fund that the following eligibility requirements are met: (i)Long-term historical deforestation has been minimal across the entirety of the country, and the country has high forest cover (country or jurisdictional area); (ii)National circumstances have changed such that rates of deforestation and forest degradation during the historical Reference Period likely underestimate future rates of deforestation and forest degradation during the Term of the ERPA.	**N.A**

[Explanation and justification of proposed upward or downward adjustment to the average annual historical emissions over the Reference Period, Quantification of the proposed upward or downward adjustment to the average annual historical emissions over the Reference Period 9.6].	
Not applicable	
Ind 13.3 For countries meeting the eligibility requirements in Indicator 13.2, a Reference Level could be adjusted above the average historical emission rate over the Reference Period. Such an adjustment is credibly justified on the basis of expected emissions that would result from documented changes in ER Program circumstances, evident before the end-date of the Reference Period, but the effects of which were not fully reflected in the average annual historical emissions during the Reference Period. Proposed adjustments may be rejected for reasons including, but not limited to: i. The basis for adjustments is not documented; or ii. Adjustments are not quantifiable. [Explanation and justification of proposed upward or downward adjustment to the average annual historical emissions over the Reference Period, Quantification of the proposed upward or downward adjustment to the average annual historical emissions over the Reference Period 9.6]	**N.A**
Not applicable	
Ind 13.4 An adjustment of the Reference Level above the average annual historical emissions during the Reference Period may not exceed 0.1%/year of Carbon Stocks [Explanation and justification of proposed upward or downward adjustment to the average annual historical emissions over the Reference Period, Quantification of the proposed upward or downward adjustment to the average annual historical emissions over the Reference Period 9.6]	**N.A**
Not applicable	
C 14 Robust Forest Monitoring Systems provide data and information that are transparent, consistent over time, and are suitable for measuring, reporting and verifying emissions by sources and removals by sinks, as determined by following Criterion 3 within the proposed Accounting Area	
Ind 14.1 The ER Program monitors emissions by sources and removals by sinks included in the ER Program's scope (Indicator 3.1) using the same methods or demonstrably equivalent methods to those used to set the Reference Level. [Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 10.1]	**YES**
During the term of the ERPA (2020-2024) and within the REDD Accounting Area, activity data (AD) and emission factors (EF) will be monitored following the procedure defined in the NFMS (national forest monitoring system) and National Forest Inventory (NFI). The ER Program will apply methods for monitoring activity data and estimating emission factors that are aligned with the approach used in developing Indonesia's FREL and that comply with established standards for the measurement of satellite imagery (LANDSAT) interpretation to estimate forest cover changes. During the ERPA term (2020-2024), activity data (AD) and emission factors (EF) will be monitored in the Accounting Area to measure emissions from deforestation and forest degradation. Monitoring will follow the procedures defined in the NFMS (national forest monitoring system) and in the East Kalimantan forest inventory. For measuring degradation from	

logging, activity data (AD) and emission factors (EF) will be monitored following the procedures defined in the Protocol on Auditing of Logging Performance (TNC, 2015), which is the same procedure used in the construction of the Reference Level.

The TAP encouraged Indonesia in previous TAP reports to incorporate further information on the methods for estimation emissions and removals in the reference level and MRV. Also, to include the description of the MRV system from the province level and how this will be merged into the national level. ER-PD has been improved by the addition of this information.

The First Draft and Advanced Draft ER-PD did not include activity data uncertainty analysis. During the country visit, a proposal on how to develop an uncertainty analysis of activity data was explained and the RS team was planning to include this procedure in the estimation of the reference level and emission reductions. The assessment of the accuracy of the land cover map and the resulting sample-based estimation of area has been done, using Olofsson et al. (2014) and incorporated in the final version of the ER-PD and accounted for in the uncertainty analysis (see also indicator 7.1 and 7.2). As mentioned under previous indicators, it is important the rectify the inconsistencies that exist in the various data sources presented to the TAP, as this may have consequences in all estimations of the reference level and ER.

In addition, activity data related to logging in the logging area was derived from the annual logging plan documents from natural forest logging concessions. During monitoring, the selective logging area will be assessed in concessions implementing RIL. The TAP recommended incorporating evidence to demonstrate that the activity data for emissions from logging in the MRV section is following the same approach as in the reference level, which was included in the final version of the ER-PD.

Ind 14.2 Activity data are determined periodically, at least twice during the Term of the ERPA, and allow for ERs to be estimated from the beginning of the Term of the ERPA. Deforestation is determined using IPCC Approach 3. Other sinks and sources such as degradation may be determined using indirect methods such as survey data, proxies derived from landscape ecology, or statistical data on timber harvesting and regrowth if no direct methods are available [Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1]	**YES**

The paragraphs below summarize the monitoring of every activity data.

Deforestation: The activity data will be monitored annually, with the same approach as in the reference level. The methodology requires adjustments, as explained in various indicators.

Degradation will be monitored annually with the same approach as deforestation and with the reference level. However, there is an existing method to determine different levels of degraded forest (no degraded, medium degraded, highly degraded) that has already been applied in some districts in East Kalimantan, and that could be applied to the whole Province in the future. The TAP recommends incorporating this method in the ER-PD, as requested in indicator 14.1.

Monitoring of the area of mangrove converted to aquaculture follows the same procedure as described under deforestation.

Activity data related to logging during monitoring will be assessed in concessions implementing RIL, every year, but for concessions without RIL will be estimated from logging statistics.

At the moment, the Government of Indonesia is developing a new approach for estimating burnt areas, using satellite image (Landsat 7/8) in combination with hotspot data and verified with observed burnt area data on the ground. This new approach might be adopted in the future as this approach will have higher certainty. Meanwhile, the ER-PD is considering the monitoring of forest fires annually with the same method applied for the estimation of the reference level.

Ind 14.3 Emission factors or the methods to determine them are the same for Reference Level setting and for Monitoring, or are demonstrably equivalent. IPCC Tier 2 or higher methods are used to	**YES**

establish emission factors, and the uncertainty for each emission factor is documented. IPCC Tier 1 methods may be considered in exceptional cases [Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 10.1]	

The monitoring of Emission Factors for aboveground biomass in forests (used in deforestation and degradation emission calculations) will be done with field measurements from the permanent sampling plot of the National Forest Inventory system. Monitoring of carbon densities of non-forest classes is not considered in the current methodology. During the ERPA, monitoring, reporting and verification will be carried out at minimum in 2022 and after 2024 and the new data will be used to improve the accuracy. In the case the improvement is significant, the Reference Level will be recalculated, in case the methodological framework allows that.

Emission Factors for peat decomposition and mangrove soils will not be monitored to maintain consistency with the EF used in the development of REL.

Emission factors from logging will be monitored following the procedure defined in the Protocol on Auditing of Logging Performance (TNC, 2015) and VCS methodology VMD0047, respectively. For the construction of the RL, Griscom et al., 2014 was used, which applies the same methodology.

The Government of East Kalimantan has developed a web portal for the sub-national MRV system for managing all the processed data from the national and also from local governments. The system is to be operated by the Provincial Environmental Office (DLH) as the East Kalimantan MRV Focal Point. The system is still using a temporary server but will be migrated to East Kalimantan Province server. This MRV web portal will increase public participation of OPD to village communities or indigenous people to participate in monitoring the condition of forests and changes in the forest/land that occurs.

C 15 ER Programs apply technical specifications of the National Forest Monitoring System where possible

Ind 15.1 ER Programs articulate how the Forest Monitoring System fits into the existing or emerging National Forest Monitoring System, and provides a rationale for alternative technical design where applicable. [Relation and consistency with the National Forest Monitoring System 10.3]	**YES**

Section 9 of the ER-PD provides information of the approach for measurement, monitoring and reporting. In chapter 9.3 it is also explained its relation to the existing National Forest Monitoring System. MMR system of the ER Program will be institutionally integrated with the national forest monitoring system. As it is required by the indicator, the ER Program is articulating how the Forest Monitoring System fits into the existing National Forest Monitoring System (NFMS), as they are fully integrated, articulation is clear and robust.

However, during the TAP´s country visit, the MRV system was explained with more detail, and the relation with different institutions under the MRV were better understood. It was seen that the Forest Monitoring System was also complemented by sub-national institutions measuring and monitoring at the ground level. These institutions need to be harmonized and aggregated to the national level. The section in the ER-PD on MRV has been improved substantially, as recommended by the TAP.

C 16 Community participation in Monitoring and reporting is encouraged and used where appropriate

Ind 16.1 The ER Program demonstrates that it has explored opportunities for community participation in monitoring and reporting, e.g., of ER Program Measures, activity data, emission factors, safeguards and Non-Carbon Benefits, and encourages such community participation where appropriate	**YES**

[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 10.1, 10.3]	
Community participation play an important role in the ER Program through monitoring activities. There are many entities (village governments, community groups, concessions) that will participate in monitoring of deforestation. Among other activities, the ER entities will be involved in conducting ground checking and in monitoring and reporting the occurrence of deforestation in the accounting area to the Working Group on REDD+. There is also a mobile application that has been developed for the monitoring of forest and that is connected to the MRV web-portal.	
C 17 The ER Program is designed and implemented to prevent and minimize potential displacement	
Ind 17.1 Deforestation and degradation drivers that may be impacted by the proposed ER Program measures are identified, and their associated risk for displacement is assessed, as well as possible risk mitigation strategies. This assessment categorizes Displacement risks as high, medium or low. [Identification of risk of Displacement 11.1]	**YES**
In section 10 of the ER-PD, risks of displacement are properly identified and assessed. Although the explanation or justification of the assessment of the risk is briefly described, the document in other sections has more evidence to understand the grade of the risk of displacement of each driver. During the country visit, the TAP found that there was more explanatory and supporting information to extend the analysis in this section: existing decrees, FSC certification in timber forests, amount of HCV that companies must protect, national moratoriums, plans to increase the oil palm productivity (instead of area), involvement of communities in monitoring, social forestry, among others. The TAP recommended to incorporate these aspects in the corresponding chapter. The analysis has been improved with satisfactory information.	
Ind 17.2 The ER Program has in place an effective strategy to mitigate and/or minimize, to the extent possible, potential Displacement, prioritizing key sources of Displacement risk. [ER Program design features to prevent and minimize potential Displacement 11.2]	**YES**
As explained in indicator 17.1, the displacement analysis is better described in the Final ER-PD. The Program is designed to minimize the risk of displacement outside of the accounting area and support improvements beyond it. For example, the program supports governance improvements related to land and there will be work done to reduce social conflict and resolution of overlapping land claims. The Program also supports sustainable production through certification in the oil palm and timber sectors, and RIL in natural forests. In addition, a number of drivers are believed to have a high or medium risk of displacement and the program design includes measures to mitigate these risks: • Forest clearing for mining (high risk of displacement) • Destruction of mangrove for aquaculture (high risk of displacement) • Conversion of the forest to estate crops (medium risk of displacement) • Unsustainable forest harvesting (medium risk of displacement) These drivers are discussed in the correspondent chapter in the ER-PD, showing the strategy to mitigate and/or minimize potential Displacement, prioritizing key sources of Displacement risk.	

Ind 17.3 By the time of verification, the ER Program has implemented its strategy to mitigate and/or minimize potential Displacement	**N.A**
Only applicable at the time of verification.	
Ind 17.4 ER Programs are also invited to report on changes in major drivers in the ER Accounting Area, any Displacement risks associated with those drivers, and any lessons from the ER Programs' efforts to mitigate potential Displacement	**N.A**
Only applicable at the time of verification.	
C 18 The ER Program is designed and implemented to prevent and minimize the risk of reversals and address the long-term sustainability of ERs	
Ind 18.1 The ER Program has undertaken an assessment of the anthropogenic and natural risk of reversals that might affect ERs during the Term of the ERPA and has assessed, as feasible, the potential risk of reversals after the end of the Term of the ERPA [Identification of risk of Reversals 12.1]	**YES**
ER-PD has included the identification of the risk of reversals and the ER Program design features to prevent and mitigate reversals, and as such complies with this indicator. The country has considered all the risk factors of reversals present in the tool: "Lack of comprehensive and sustained support of the relevant stakeholders", "lack of institutional capacities and/or ineffective vertical/inter-sectoral coordination", "lack of long-term effectiveness in addressing the underlying causes" and "exposure and vulnerability to natural phenomena". No other risks were assessed. The TAP encouraged Indonesia, in previous TAP reports, to incorporate additional information concerning the mitigation actions, and demonstrate how the risk rating was applied to each factor. The TAP commends Indonesia for the improvement of the chapter, enhancing the description of the different risks, making them more understandable for an outsider.	
Ind 18.2 The ER Program demonstrates how effective ER Program design and implementation will mitigate significant risks of Reversals identified in the assessment to the extent possible, and will address the sustainability of ERs, both during the Term of the ERPA, and beyond the Term of the ERPA [ER Program design features to prevent and mitigate Reversals 12.2]	**YES**
Chapter 11.2 of the ER-PD describes how the program is preventing or mitigation reversals. The indicator has been assessed negatively with the previous versions of the ER-PD. However, the latest version has enlarged and improved the description For example, the risk factor 'Lack of comprehensive and sustained support of the relevant stakeholders' is assessed and referred to other section of the document, showing that ER program was developed through a participative process involving all relevant stakeholders.	

In the lack of institutional capacities and/or ineffective vertical/inter-sectoral coordination, the ER Program recognizes weak institutional capacity as an underlying driver of deforestation and includes activities to strengthen forest supervision and management within the state forest area and on non-forestry land.	
C 19 The ER Program accounts for Reversals from ERs that have been transferred to the Carbon Fund during the Term of the ERPA	
Ind 19.1 During the Term of the ERPA, the ER Program accounts for Reversals from ERs using one of the following options: ▪ Option 1: The ER Program has in place a Reversal management mechanism (e.g., buffer reserve or insurance) that is substantially equivalent to the Reversal risk mitigation assurance provided by the 'ER Program CF Buffer' approach referred to in option 2 below, appropriate for the ER Program's assessed level of risk, which in the event of a Reversal during the Term of the ERPA will be used to fully cover such Reversals. ▪ Option 2: ERs from the ER Program are deposited in an ER Program-specific buffer, managed by the Carbon Fund (ER Program CF Buffer), and based on a Reversal risk assessment. ERs deposited in the ER Program CF Buffer (Buffer ERs) will not be transferred to the Carbon Fund. In the event that a Reversal event occurs during the Term of the ERPA, an amount of Buffer ERs will be cancelled from the ER Pro [Reversal management mechanism, Selection of Reversal management mechanism 12.3]	**YES**
Indonesia has selected option 2	
C 20 The ER Program, building on its arrangements put in place during the readiness phase and during the Term of the ERPA, will have in place a robust Reversal management mechanism to address the risk of Reversals after the Term of the ERPA	
Ind 20.1 At the latest 1 year before the end of the Term of the ERPA, the ER Program will have in place a robust Reversal management mechanism or another specified approach that addresses the risk of Reversals beyond the Term of the ERPA	**N.A**
Only applicable before the end of the ERPA term.	
Ind 20.2 If the ER Program has selected option 2 under Indicator 19.1, all or a portion of the Buffer ERs of the ER Program, subject to a Carbon Fund review of the Methodological Framework and a decision of the parties to the ERPA in 2019, will be transferred to the mechanism identified in Indicator 20.1 at the end of the Term of the ERPA. If the ER Program fails to meet the requirements of Indicator 20.1, all remaining Buffer ERs in the ER Program CF Buffer will be cancelled	**N.A**
Only applicable before the end of the ERPA term.	
C 21 The ER Program monitors and reports major emissions that could lead to reversals of ERs transferred to the Carbon Fund during the Term of the ERPA	

Ind 21.1 The ER Program Monitoring Plan and Monitoring system are technically capable of identifying Reversals [Monitoring and reporting of major emissions that could lead to Reversals of ERs 12.4]	**YES**

As it was seen during the country visit and in the description of the ER-PD, there is a good MRV system and NFMS, that is capable of identifying reversals.

The ER Program's MMR system, as described in Section 9 of the ER-PD (Approach for measurement, monitoring and reporting), will continue to operate beyond the lifetime of the ER Program as part of the national REDD+ framework. The MMR system will thus be able to monitor and report reversals of ERs. In the event that reversals are detected, Indonesia will notify the Carbon Fund within a time period of no greater than ninety days.

The detection of the reversals will be monitored through the MRV Web portal. The forest areas that have been protected by the ER Program in the Accounting Area will be delineated and monitored by the Working Group and by ER Entities. The Working Group will develop a standard operating procedure for the detection of reversals.

Ind 21.2. The ER Program reports to the Carbon Fund within 90 calendar days after becoming aware of any emissions in the Accounting Area or changes in ER Program circumstances that, in the reasonable opinion of the ER Program, could lead to Reversals of previously transferred ERs by the next Monitoring event. The ER Program explains how the potential Reversals would be addressed by additional ER Program Measures or by the Reversal management mechanism described in Indicator 19.1.	**N.A**

Only applicable at the time a reversal occurs and at the time of verification.

C 22 Net ERs are calculated by the following steps:

1. Subtract the reported and verified emissions and removals from the Reference Level

2. Set aside a number of ERs from the result of step 1, above, in a buffer reserve. This amount reflects the level of uncertainty associated with the estimation of ERs during the Term of the ERPA. The amount set aside in the buffer reserve is determined using the conservativeness factors for deforestation listed in the MF. For estimated emissions reductions associated with degradation, the same conservativeness factors may be applied if spatially explicit activity data (IPCC Approach 3) and high-quality emission factors (IPCC Tier 2) are used. Otherwise, for proxy-based approaches, apply a general conservativeness factor of 15% for forest degradation Emission Reductions.

3. Set aside a number of ERs in the ER Program CF Buffer or other reversal management mechanism created or used by an ER Program to address Reversals

[Ex-ante estimation of the Emission Reductions 14.3]	**YES**

Chapter 13 of the ER-PD presents the calculation of the emission reductions that the program has the intention to achieve (ex-ante estimations). The emission reductions under the program are estimated within each activity: deforestation, primary forest degradation, peat decomposition, mangrove soils, logging (that should be considered as sustainable forestry activity) and forest fires.

The final estimation of emissions reductions is considering the set-aside from the uncertainty level and the risk of reversals that is calculated in Reversal chapter in the ER-PD.
Observation, according to the MF the estimation of buffer volume to set aside in buffer account should not be estimated as 26% of the ER after 4% uncertainty set-aside. The buffer volume should be estimated as an additional 26% of the volume that Indonesia is willing to sell during ERPA. Following this method, Indonesia can indirectly estimate the ER that could be sold apart from the ERPA.

C 23 To prevent double-counting, ERs generated under the ER Program shall not be counted or compensated for more than once. Any reported and verified ERs generated under the ER Program and sold and/or transferred to the Carbon Fund shall not be sold, offered or otherwise used or reported a second time by the ER Program Entity. Any reported and verified ERs generated under the ER Program that have been sold and/or transferred, offered or otherwise used or reported once by the ER Program Entity shall not be sold and transferred to the Carbon Fund

(i) [Participation under other GHG initiatives 18.1]	**YES**

Up to now, the Emission Reduction Program, or any part of the Emission Reduction Program has not transferred and is not planning to transfer Emission Reductions to any other GHG Mitigation Initiative. It is expected that the final decision on whether to use excess ERs for domestic compliance or to engage with other GHG initiatives will be finalized by the signing of the ERPA.

(ii) [Data management and Registry systems to avoid multiple claims to ERs 19.2]	**YES**

As stated in the ER-PD, the National Registry System (SRN) provides data management for: FREL/FRL, MRV reporting, implementation of Social and Environmental Safeguards (integrated with Safeguards Information System/SIS), implementation costs and source of costs, supporting activities, and contribution to NDC. The SRN manager is responsible for maintaining consistency between data and information on REDD+ implementation at national and sub-national levels and avoidance of double-counting. Implementation of SRN PPI is done by stages: registration, technical data validation, and verification of actions and resources.

C 24 The ER Program meets the World Bank social and environmental safeguards and promotes and supports the safeguards included in UNFCCC guidance related to REDD+

Ind 24.1 The ER Program demonstrates through its design and implementation how it meets relevant World Bank social and environmental safeguards, and promotes and supports the safeguards included in UNFCCC guidance related to REDD+, by paying particular attention to Decision 1/CP.16 and its Appendix I as adopted by the UNFCCC [Description of how the ER Program meets the World Bank social and environmental safeguards and promotes and supports the safeguards included in UNFCCC guidance related to REDD+ 15.1]	**YES**

It is required by the FCPF Carbon Fund Method Methodological Framework that the design of the ER program considers and fulfills World Bank and UNFCC social and environmental safeguards.

Section 14.1.1 of the Final ER-PD describes how the Program is being designed considering the standards of the referred safeguards guidelines in relation with the assessment of the environmental and social risks and impacts of the Program and the development of the instruments to appropriately manage those risks and impacts.

The advanced drafts of the SESA, ESMF, IPPF, RPF, and PF as well as FGRM have been prepared in line with the World Bank's safeguards policy requirements. Further refinement of the above instruments and consultations are currently ongoing. The GoI commits to ensure implementation of the safeguards frameworks prepared under the ER-PD across the Program's life cycle.
Among the development of the above-mentioned safeguards instruments, MoEF and East Kalimantan Government have performed different efforts to meet the World Bank and UNFCCC safeguards requirements such as:

(a) consultations with a broad range of stakeholders (section 5.1),

(b) analytical work and policy development processes pertaining to REDD+ development, taking into account possible social and environmental risks and adverse impacts, and (section 14.1.2)

c) development of required safeguard framework to minimize and/or offset such risks and impacts, such as those on biodiversity, livelihoods and land titling.

The PRISAI and SES-REDD+ Kaltim outline safeguards compliance standards consistent with World Bank safeguards principles and include safeguards performance indicators that will need to be achieved by program entities.

The ESMF and its associated frameworks, including the FGRM, serve as reference safeguards instruments that will bring together earlier safeguards initiatives into a more comprehensive framework. These instruments provide recommendations for institutional arrangements at national, provincial and district levels to ensure that relevant safeguards provisions and requirements are properly implemented and monitored according to the safeguards principles.

Analysis carried out during the SIS-REDD+ process, indicates that existing instruments in general provide adequate coverage for many of the Cancun Safeguards.

The Final ER-PD adequately identifies WB Operational Policies triggered by the Program, presenting further explanation with regards to the rationale of triggering these policies and how gender concerns and social inclusion are being addressed in the ERP (Section 14.1.2).

Consultations have guided the development of SESA, ESMF and other Safeguards instruments to meet the World Bank's safeguards requirements.

A compatibility analysis was conducted to identify possible gaps between the relevant World Bank's safeguards and GoI's framework for the management of environmental and social aspects of the ERP (described in Section 14.1.2.2). Included in the compatibility analysis are Indonesia's relevant regulatory frameworks at national and sub-national levels. Table 14.3. provides a summary of the compatibility analysis.

Overall, there is no significant gaps between Indonesian safeguards and the World Bank safeguards policies, except on the FGRM.

Section 14.1.1 summaries mitigation measures to the risks and impacts of the ERP referring to the triggered World Bank Safeguards Policies, outlining the relevance of such safeguards in the ERP, and listing the environmental and social potential risks and impacts and mitigation actions

Ind 24.2 Safeguards Plans address social and environmental issues and include related risk mitigation measures identified during the national readiness process, e.g., in the SESA process and the ESMF, that are relevant for the specific ER Program context (e.g., land tenure issues), taking into account relevant existing institutional and regulatory frameworks. The Safeguards Plans are prepared concurrently with the ER Program Document, and are publicly disclosed in a manner and language appropriate for the affected stakeholders [Description of how the ER Program meets the World Bank social and environmental safeguards and promotes and supports the safeguards included in UNFCCC guidance related to REDD+ 15.1]	**YES**

GoI has mainstreamed environmental and social risk mitigation measures into the ER program through the development of the following safeguards instruments:

- Strategic Environmental and Social Assessment (SESA) intended to provide further context-specific information on environmental and social risks and impacts in East Kalimantan.
- Environmental and Social Management Framework (ESMF) as an instrument to assess potential E&S risks and impacts under the ER Program operation.
- Indigenous Peoples Planning Framework (IPPF) to provide operational guidance in line with OP 4.10 to the ER-PD implementing agencies.

- Resettlement Planning Framework (RPF) and Process Framework (PF) to serve as a precautionary measure to address risks associated with resettlement risks associated with the Program implementation.
- Feedback and Grievance Redress Mechanism (FGRM) the ERP.

The Strategic Environmental and Social Assessment (SESA) has provided context-specific information on environmental and social risks, as well as the associated impacts, and mitigation actions for ERP in East Kalimantan Province. The SESA takes stock of various existing environmental and social assessments for specific development activities as well as policy development processes at both the national and sub-national levels relevant to the Program.

Potential key environmental risks identified in the SESA include loss of natural habitats and key biodiversity species at areas designated as non-forest and/or through indirect introduction of invasive species, contamination of soil and water, and health risks associated with the use of pesticides and as result of poor waste management practices, successes in reducing impacts on forests could lead to displacements of these impacts to other areas.

Potential key social risks identified in the SESA include risks associated with activities conducted in areas under existing and potential conflicts and/or disputes or areas with overlapping boundaries and/or claims, between customary and common/formal laws and processes and in areas with competing claims especially with concessions, livelihoods impacts including displacement due to bans on timber logging, oil palm plantation and artisanal mining activities, community and health safety risks for fire prevention and suppression activities, lack of awareness, management capacity and participation of community in managing social forestry, institutional capacity constraints to manage potential environmental and social risks at field level, as well as gender inequalities and social exclusion. Further details on these risks and mitigation actions are provided in Section 14.1.2.2 and Annex 14.2.

Risks identified in the SESA were used as the basis for developing the Environmental and Social Management Framework (ESMF). The document addresses the following environmental and social key considerations for the ESMF.

Key Environmental Considerations

a. Development of Biodiversity Management Framework for the Project or biodiversity management;
b. Addressing the risk of access restriction due to protected area and HCV designations;
c. Introduction of sustainable management of forest and oil palm to ensure best practices; and
d. Mitigating the risk of deforestation and environmental (water) degradation due to alternative livelihoods provided in the ER Program (e.g., aquaculture).

Key Social key considerations

a. Community economic development (livelihood) program to substitute the loss of restriction to forest resources due to boundary strengthening for private sectors;
b. Enforcing FGRM and establishing a project contact person to facilitate any complaint and to use the existing mechanism as the main conflict resolution platform.;
c. Establish a social mapping database with regular update to reflect the dynamics of social issues;
d. Address the risk of access restriction due to protected area and HCV allocations;
e. Regular monitoring of the Social Forestry program to avoid any failure that can be a trigger to open forest area/more deforestation;
f. Develop an indigenous people planning framework (IPPF) and conduct training to relevant stakeholders on this;
g. Develop effective scheduling and planning to minimize the risk of delay in capacity building activities;
h. Properly identify credible trainers and/or training institutions to deliver the required capacity building sessions;
i. Encourage participation of local farmer groups on the forest and land fire management program/community-based forest and fire management;
j. Encourage participation from the private sector on the land and forest fire management; and
k. Develop a Gender Action Plan for the ER Program.

The institutional arrangement section of the ESMF seeks to define roles and responsibilities of different stakeholders at various levels, acknowledging that activities under ERP will cover broad sector categories and involve multiple agencies both at national, provincial and district levels during implementation.
The multi-stakeholder consultation that guided the formulation of the safeguards instruments and its results are documented and made available to public access at the web SIS (ditjenppi.menlhk.go.id/sisredd).
The advanced draft of the SESA, ESMF, IPPF, FGRM, RPF, and PF report have been consulted and will be disclosed by the MOEF and the World Bank in both Bahasa Indonesia and English prior to the World Bank's appraisal of the program. Stakeholder engagement, including public consultations with affected communities, is on-going and will continue as part of the finalization of the above instruments. A summary of these consultations is found in Annex 5.

C 25 Information is provided on how the ER Program meets the World Bank social and environmental safeguards and addresses and respects the safeguards included in UNFCCC guidance related to REDD+, during ER Program implementation

Ind 25.1 Appropriate monitoring arrangements for safeguards referred to in Criterion 24 are included in the Safeguards Plans [Description of arrangements to provide information on safeguards during ER Program implementation 15.2 and 6.1]	**YES**

Section 14.2.1 describes how the institutionalized mechanisms of SIS-REDD+ linked to the ERP will be managed and made available to local and international institutions, as well as to individuals during the implementation phase.

Principle, Criteria, Indicator (PCI) is the basis for the development of SIS-REDD+, which serves as an umbrella reporting and monitoring platform for safeguards compliance for the overall ER program implementation.

SIS-REDD+ is currently being piloted in East Kalimantan and necessary improvements are being sought by the Province to further operationalize the SIS-REDD+.

Safeguards Information System (SIS) REDD+ intends to promote transparency and accountability from the site level. For this purpose, the MoEF has formulated APPS, a Safeguards Implementation Assessment Tool that provides a checklist of supporting documents required as evidence of REDD+ safeguards implementation.

SIS-REDD+ present the necessary information on how safeguards are managed and respected in REDD+ activities, ranging from the project sites to district, provincial and national SIS management units. An institutional structure and distribution of tasks and responsibilities for the information system from the site to national level have been established. Two components were created to promote transparency and ease access to safeguards information provided in SIS-REDD+:

1. A database, to manage data and information on safeguards implementation; and
2. A website, tracking progress on safeguards implementation

The SIS-REDD+ website (http://ditjenppi.menlhk.go.id/sisredd) provides a public access to REDD+ implementers or users to report their activities by filling in the checklists and uploading necessary documents as required by the APPS.

SIS-REDD+ has been designed to receive inputs from various stakeholders and allow SIS management units at the sub-national and national levels to work with independent third parties through the establishment of a Multi-Stakeholder Forum or Institution.

The documents properly indicate further development and improvement that are required to ensure a sound information system on safeguards that can support a full implementation of REDD+ efficiently, that includes: (a) improving the institutional and legal mandate, and (b) capacity building.

Ind 25.2 During ER Program implementation, information on the implementation of Safeguards Plans is included in an annex to each ER monitoring report and interim progress report. This information is publicly disclosed, and the ER Program is encouraged to make this information available to relevant stakeholders. This information is also made available as an input to the national systems for providing information on how safeguards are addressed and respected (SIS) required by the UNFCCC guidance related to REDD+, as appropriate.	**N.A**
Only applicable at the time of verification.	
C 26 An appropriate Feedback and Grievance Redress Mechanism (FGRM) developed during the Readiness phase or otherwise exist(s), building on existing institutions, regulatory frameworks, mechanisms and capacity	
Ind 26.1 An assessment of existing FGRM, including any applicable customary FGRMs, is conducted and is made public. The FGRM applicable to the ER Program demonstrates the following: i) Legitimacy, accessibility, predictability, fairness, rights compatibility, transparency, and capability to address a range of grievances, including those related to benefit-sharing arrangements for the ER Program; ii) Access to adequate expertise and resources for the operation of the FGRM [Description of the Feedback and Grievance Redress Mechanism (FGRM) in place and possible actions to improve it 15.3]	**YES**
The ERP FGRM has been consulted with relevant stakeholders at all levels. Stakeholders include local communities, private companies, local government such as the sub-national government apparatus organization or Organisasi Perangkat Daerah (OPD), and FCPF Carbon Fund program secretariat office in Samarinda, East Kalimantan, represented by the Regional Council on Climate Change (DDPI) (Table 14. 10). There are several arrangements in place for making the process and results open for public access, ranged from conventional (including the village offices announcement board and village halls, telephone, letter) to non-conventional media such as web-based social media (whatsapps, sms, and email). The ER program will assign a team or individual focal point, which will ensure that all the submitted complaints from stakeholders have been resolved by the relevant working units and ensure complaint monitoring. The ERP FGRM is currently placed under the SIS-REDD+ system, set up by the Ministry of Environment and Forestry, that is being developed further into a web-based FGRM. This ER-PD document includes a gap analysis of the existing safeguards against World Bank Safeguards policies that comprises an initial assessment of existing FGRM mechanisms. The ESMF states that the FGRM will utilize the existing systems through the GAKKUM (law enforcement) and PSKL, Perhutanan Sosial and Kemitraan Sosial (Social Forestry and Partnerships) units under the MoEF at the national level, which will be linked to the SIS REDD+ reporting of safeguards implementation. Each ER executing agency will implement the existing FGRM mechanisms under the GAKKUM and PSKL. These systems allow the public, communities or individuals affected by the ER activities to report complaints and obtain resolution in a timely manner. The system also records and documents all complaints and tracking of resolution on a web-based platform through the SIS REDD+. It is mentioned that under the ERP, a Program Management Unit (PMU) at the national level and provincial REDD+ Taskforce, with extension units at the district level will be established to monitor and report grievances and conflicts to relevant stakeholders in a coordinated and timely manner.	

The following FGRM processes are identified: a) receive and record grievance; b) screen and categorize grievances; c) acknowledge receipt and its follow up action; d) refer to the relevant ministries, for non ER P grievances, e) investigate, for ER P grievances, which includes field visit for verifying and validating grievances; f) act/follow up and g) conclude. An appeal to the court might take place, in the case of not reaching a mutually agreed resolution.

An initial analysis and identification of the relevant regulatory frameworks and their roles in FGRM especially with regards to conflict handling has been conducted and it is stated that this will feed into the current initiative of FRGM refinement.

Ind 26.2 The description of FGRM procedures, included in the Benefit-Sharing Plan and/or relevant Safeguards Plans, specifies the process to be followed to receive, screen, address, monitor, and report feedback on, grievances or concerns submitted by affected stakeholders. As relevant, the Benefit-Sharing Plan and/or relevant Safeguards Plans and/or ER Program Document describe the relationship among FGRM(s) at the local, ER Program, and national levels **[**Description of the Feedback and Grievance Redress Mechanism (FGRM) in place and possible actions to improve it 15.3**]**	**YES**

The FGRM mechanism for the ER-PD is provided in Figure 4 of the ESMF, while a FGRM document is provided in Annex 7. The ER-PD states with regards to BSP that any grievances regarding the carbon fund payment transfer and its mechanism will be addressed through the FGRM (Chapter 14.3).

Stakeholders can submit a grievance, directly or indirectly, through a number of ways (personally, electronic, by phone, media chatting (whatsapp, line, sms, etc.) and face to face meetings.

The grievance will be recorded in the grievance list within a certain time after receiving the grievance. A recording officer will be assigned to receive any grievance, who will formally declare the grievance within 2 days since the grievance was filed and inform that grievance in 10 working days. Feedback in the form of oral and written will be given until correspondence records are maintained and recorded.

The grievance officer will lead a grievance inquiry, if needed. Once the response is approved, the grievance officer will take the approved end language and respond formally using the appropriate communication vehicle in the appropriate language.

In cases where the applicant is dissatisfied with and/or refuses to accept the action of the proposed resolution, the grievance may be submitted to the Appeal Committee for review and final decision.

Ind 26.3 If found necessary in the assessment mentioned in Indicator 26.1, a plan is developed to improve the FGRM [Description of the Feedback and Grievance Redress Mechanism (FGRM) in place and possible actions to improve it 15.3]	**YES**

Section 14.3.4. outlines a Plan to improve FGRM that includes, among others, the following efforts:

- Well-defined measures for monitoring, reviewing and reporting the FGRM to feed into the corrective actions such as revisiting KRP, changing mitigation plans.
- Enforcement mechanisms of administrative and legal sanctions.
- The President Office's LAPOR, a web-based FGRM initiative
- Community consultative meetings for development planning and implementation (*Musyawarah Perencanaan Pembangunan/Musrenbang*), available at all levels, including the village level.
- Better defined incentives and disincentives to be used as part of a grievance handling mechanism (like incentives for the community to provide accurate reports).
- Legal mitigation and litigation technical support: These are often required especially for the communities who are in dispute with companies.

- Better community engagement in the development and refinement of FGRM through providing checks and balances.
- Translating further the national FGRM regulatory frameworks (such as on AMDAL and KLHS) in a more practical, comprehensive and appropriate manner.
- Well qualified paralegals at field levels, with skills and experience as mediators and facilitators.

C 27 The ER Program describes how the ER Program addresses key drivers of deforestation and degradation

Ind 27.1 The ER Program identifies the key drivers of deforestation and degradation, and potentially opportunities for forest enhancement [Analysis of drivers and underlying causes of deforestation and forest degradation, and existing activities that can lead to conservation or enhancement of forest carbon stocks 4.1]	**YES**

The key drivers of deforestation and degradation are explained in Section 4.1. "Analysis of drivers and underlying causes of deforestation and forest degradation, and existing activities that can lead to conservation or enhancement of forest carbon stocks."

The ER-PD reports seven main drivers of deforestation and forest degradation in Indonesia, particularly in East Kalimantan, i.e.

1) Mining

2) Conversion of natural forests to industrial timber plantations

3) Conversion of forest to estate crops

4) Deforestation due to encroachment for subsistence agriculture

5) Aquaculture in mangrove forests

6) Fire

7) Unsustainable logging practices

The TAP finds significant improvement in the Final ER-PD. The document has described and explained strong arguments of the drivers of deforestation in East Kalimantan. The relation of the main drivers of deforestation and the eight underlying factors of deforestation, i.e. inadequate policies to protect remaining natural forest inside concessions, lack of incentives, unclear forest boundaries, lack of willingness and capacity on sustainable management practices, low productivity due to limited access to technology and finance, limited livelihood opportunities, lack of capacity of the supervising agency, and lack of incentives for sustainable management practices, have been explained clearly.

Overall the TAP finds that the ER-PD document has accommodated inputs and comments according to the consultation process in Jakarta, Bogor, and Samarinda. However, some notes are given in the ER-PD document that several assumptions cannot be verified and may not be fully accurate, meaning that the actual impact of each driver may differ from the estimation, e.g., some of the land use designations may have been made after deforestation had already taken place. In sum, however, TAP agrees that the ER-PD has provided an indication of the relative scale of each driver and identified activities that can address deforestation in East Kalimantan.

Ind 27.2 The ER Program identifies currently planned ER Program Measures and how they address the key drivers identified in Indicator 27.1, and the entities that would undertake them [Description and justification of the planned actions and interventions under the ER Program that will lead to emission reductions and/or removals 4.3] [Institutional and implementation arrangements 6.1]	**YES**

TAP finds that the revised ER-PD has addressed seven main drivers of deforestation, i.e. (1) mining, (2) timber plantations, (3) estate crops, (4) subsistence agriculture, (5) aquaculture in mangrove forests, (6) natural and human-induced fires, and (7) unsustainable logging practices. Besides those main drivers, the ER-PD also explains seven underlying causes of deforestation, i.e.

1. Lack of a conducive incentives framework
2. Poor spatial planning leading to unclear land use boundaries
3. Lack of willingness and capacity to implement sustainable management practices
4. Low productivity of local farming due to limited access to technology and finance
5. Limited alternative livelihood opportunities for local communities
6. Lack of capacity for supervision of forested areas
7. Lack of incentives for sustainable management practices (sustainable forest management, sustainable plantation)

Those underlying causes of deforestation have been explained clearly, including institutions and persons who are responsible (in charge) for each activity to mitigate or address those causes of deforestation. The ER-PD team has restructured the document and now the revised ER-PD has shown that the proposed programs (activities) address the main and underlying drivers of deforestation.

The ER-PD highlighted that it is very important to consider potential transformation of the institutional framework for forest governance, from the center to the local level in the form of Forest Management Units (FMU or KPH). There are also some important national and province-level efforts to address the broader land governance issues, such as overlapping land rights, lack of access for local communities, and resulting conflict. The ER-PD also mentions that there are significant changes in private sector governance with greater focus on sustainability, driven in part by market pressure. The ER-PD convinces that most activities are integrated into national and province-level strategies and development plans. In addition, the program design also considers the distribution of remaining forests, the threats to those forests, and the key stakeholders involved in the respective areas.

The ER-PD mentions that the activities to address deforestation and forest degradation are grouped into six components. The first two components address weak land and forest governance. The second component seeks to strengthen the capacity of the government to protect remaining forests. The third and fourth components are concerned with the management practices of oil palm companies and forestry companies respectively. The fifth component seeks to address deforestation linked to encroachment and agriculture from communities surrounding forest areas, and the last component includes all activities related to program management, including monitoring and evaluation. The revised ER-PD also provides an overall summary of the different components and subcomponents of the ER Program and how they respond to the drivers of deforestation and forest degradation.

C 28 The ER Program has undertaken and made publicly available an assessment of the land and resource tenure regimes present in the Accounting Area

Ind 28.1 The ER Program reviews the assessment of land and resource tenure regimes carried out during the readiness phase at the national level (i.e., SESA) and, if necessary, supplements this assessment by undertaking an additional assessment of any issues related to land and resource tenure regimes in the Accounting Area that are critical to the successful implementation of the ER Program, including: I. The range of land and resource tenure rights (including legal and customary rights of use, access, management, ownership, exclusion, etc.) and categories of rights-holders present in the Accounting Area (including Indigenous Peoples and other relevant communities); II. The legal status of such rights, and any significant ambiguities or gaps in the applicable legal framework, including as pertains to the rights under customary law;	**YES**

III. Areas within the Accounting Area that are subject to significant conflicts or disputes related to contested or competing claims or rights, and if critical to the successful implementation of the ER Program, how such conflicts or disputes have been or are proposed to be addressed; and IV. Any potential impacts of the ER Program on existing land and resource tenure in the Accounting Area. The ER Program demonstrates that the additional assessment has been conducted in a consultative, transparent and participatory manner, reflecting inputs from relevant stakeholders [Description of land tenure systems, analysis of laws and regulatory framework 4.4 and 4.5, stakeholder consultation process 5.1]	

The Final ER-PD has significantly improved from previous Draft ER-PD versions. The Final ER-PD makes reference to several assessments of land and resource tenure regimes carried out during the readiness phase at the national level and in the Accounting Area. These assessments are of particular importance for the purpose of the ER Program. The range of land and resource tenure rights (including legal and customary rights of use, access, management, ownership, exclusion, etc.) and categories of rights- holders present in the Accounting Area (including Indigenous Peoples and other relevant communities) have been explored in the assessment and are well presented in the Final ER-PD.

The Final ER-PD gives an overview of the range of rights and categories of rights holders in East Kalimantan both under formal law as well as under customary law as recognized by the Constitutional Court in a series of rulings. Generally, land status can be divided into three categories, i.e. state land, indigenous peoples' land – a title of customary (*adat*) law – and private land. On state land, rights can be allocated to individuals or to legal entities through concessions and licenses. State lands include the entire area designated as Forest Estate, and lands without private title that are outside the forest estate, so called APL.

According to Decentralization Law 23/2014, the Forest Estate (with the exception of forest conservation areas) is managed by the provincial government and controlled by the national government. Day-to-day management of these areas is the mandate of the Forest Management Units (KPH). All forest conservation areas (such as Nature Reserves, Wildlife Reserves, and National Parks) are controlled and managed by the central government, i.e. Ministry of Environment and Forestry. The lands outside the Forest Estate are under the mandate of the district and provincial governments. These can issue licenses for agriculture (estate crops), mining, and public works, as well as allocated for local/indigenous peoples.

Local communities in East Kalimantan manage land areas for settlement, cultivation, and for social facilities and worship. Local land-uses include the collection of non-timber forest products and various forms of agroforestry systems, while the types of land ownership claim depend on the history of each community group.

The Final ER-PD explains that the community generally gains verbal land ownership, with physical or written evidence. Verbal recognition is the recognition of community groups to ownership and/or control of land. Generally, knowledge is owned by the Traditional Institutions (*adat*), and partly owned by the Village Officials. Recognized physical evidence can be an orchard (having various local names, such as *Lembo, Rondong*/Kutai, *Munaant*/Tunjung, *Simpukng*/Benuaq) or previous evidence of use in other forms. Documents that have been used as evidence for ownership include: Land Certificates from Village Heads, Letters of Declaration of Release of Land Rights from Heads of Sub-districts or Notaries, and individual or communal land certificates for land ownership.

Formalization of customary rights has been a slow process, however, which in turn has led to the overlap of commercial land use licenses with customary lands, often resulting in conflict or dispossession, or both. The resulting land access regimes are often the outcome of negotiated processes, where lack of clearly codified rights often places customary communities at a disadvantage to large concession holders.

To tackle these and other conflicts, authorities at all levels of government have triggered a wide-reaching land reform process in recent years, focusing on better recognition of customary rights, stricter management regimes for licensing,

creation of local forest management units which better monitor both forest management and protection, promotion of social forestry schemes, as well as assistance with land tenure disputes.

Overall, the Final ER-PD provides a clear and comprehensive mapping of different tenure titles, conflicts, and the potential role of the ER Program in addressing them (sections 4.3 and 4.4). The relevant assessments have been elaborated in a consultative and evidently transparent manner (see details in section 5).

Ind 28.2 The ER Program explains how the relevant issues identified in the above assessment have been or will be taken into consideration in the design and implementation of the ER Program, and in the relevant Safeguards Plan(s). If the ER Program involves activities that are contingent on establishing legally recognized rights to lands and territories that Indigenous Peoples have traditionally owned or customarily used or occupied, the relevant Safeguards Plan sets forth an action plan for the legal recognition of such ownership, occupation, or usage. Beyond what is required for the successful implementation of the ER Program, the ER Program is encouraged to show how it can contribute to progress towards clarifying land and resource tenure in the Accounting Area, where relevant. [Assessment of land and resource tenure in the Accounting Area 4.4] [Description and justification of the planned actions and interventions under the ER Program that will lead to emission reductions and/or removals 4.3]	**YES**

The Final ER-PD identifies clear intervention components targeted and tailored to the tenurial challenges, namely support for the development of spatial planning policies (including the "One Map Policy") and actions (including support to formal gazetting intended to recognizing *adat* community rights), transparency and access-to-information procedures, and the revocation of licenses (primarily in the mining sector) and better enforcement of protection regimes (in particular in the forest management sector concerning, e.g., provisions on reduced impact logging, primary forest and peatlands moratoriums, measures to support *adat* communities within license plots and other), as well as facilitative help to improve dispute settlement procedures and the level of community participation, mainly in social forestry programs.

A challenge for the ER Program will consist in integrating *adat* communities which have not yet been formally recognized (the vast majority). The Final ER-PD provides a comprehensive overview of the type and magnitude of the challenge as well as of the regulatory status quo. Ministry of Forestry regulations adopted to accelerate gazetting – a precondition for the recognition of *adat* communities – shows initial success with 78% of East Kalimantan's State Forest Area having been formally gazette in 2018.

The Final ER-PD also mentions supportive actions from non-state actors, namely a private initiative called the Ancestral Domain Registration Agency (Badan Registrasi Wilayah Adat, BRWA), which so far has helped make some 170,000 hectares *adat* community land registration-ready.

The ER Program intents to support both government and non-government action to facilitate the formalization process of *adat* communities, while installing safeguards to protect those communities for which formalization will not yet happen during and as part of the ER Program. The Final ER-PD specifies that as part of the ER Program, a range of safeguards measures have been prepared, including an Indigenous Peoples Planning Framework (IPPF), Resettlement Planning Framework (RPF) and Process Framework (PF) (see section 14). These frameworks serve as a precautionary measure to address access restrictions and claims on land and natural resources, should such restrictions materialize as a result of improved forest management (see also, in this context, section 14.1.2.1 of the Final ER-PD, which states that "the ER program may adversely impact on these communities' access to land use and natural resources").

The list of ER Program activities planned and described in section 4 of the ER-PD does not appear to include any such restrictions. The TAP notes, however, that while the installation of procedural safeguards from a precautionary point of view responds well to the needs of Indicators 28.1 and 28.2, among others, the design of the ER Program and its

implementation must avoid any and all illegal access and use restrictions. This includes restrictions contrary to customary law provisions.

Ind 28.3 The ER Program provides a description of the implications of the land and resource regime assessment for the ER Program Entity's ability to transfer Title to ERs to the Carbon Fund [Transfer of Title to ERs 18.2]	**YES**

The ER-PD foresees a mechanism under which holders of land tenure title – including customary title – are requested to authorize the transfer of title to ERs to the program entity (see section 17.2 of the ER-PD). This authorization is to be made as part of participation agreements between local/*adat* communities (as well as other potential participants), on the one hand, and the program entity, on the other hand, concluded after the submission and acceptance of concept notes, see below under Indicator 33.1).

The Final ER-PD points out that *adat* communities are part of this authorization process irrespective of their formal recognition status with government institutions. Accreditation with village governments – which we imagine to be simple and fast – is the only procedural requirement for *adat* communities to participate in the ER Program and to access benefits thereunder. Authorization to transfer title to ERs, then, is realized in the same way as for other participants/contributors to the ER Program (see further under ind. 36.2).

C 29 The ER Program provides a description of the benefit-sharing arrangements for the ER Program, including information specified in Indicator 30.1, to the extent known at the time.

Description of benefit-sharing arrangements [16.1 in ER-PD of 15 Jan. 2016]	**YES**

The ER-PD benefit-sharing arrangements reaches a diverse group of beneficiaries, which includes four levels of government, companies, as well as communities that are often located in remote villages and that may not have official titles to land.

To further ensure that the benefits flow to these beneficiaries in a way that avoids bureaucratic delays, ERPA funding at the central level will be managed by the Environmental Fund Management Agency while key decisions for disbursement at the subnational level will be made by the provincial government.
Funding from the Carbon Fund will be managed by the Environmental Fund Management Agency (BLU-BPDLH). The BLU-BPDLH is still under development but is expected to be operational at least by the time of the first ERPA payment. It will adopt international standards for fund management and distribution, and it will use a custodian bank as trustee.
At the national level, BLU-BPLDH will transfer funds to MoEF's Directorate Generals that are involved in the ER Program, including the DG of Climate Change, and the Research Development and Innovation Agency. The transfer mechanism to central government institutions will be through non-tax revenue and its utilization will be included in MoEF's budget in accordance with activities in the Benefit Sharing Plan. Transfers will be regulated through Ministry of Finance Regulations.
The fund flow to the provincial level, including FMUs, will be based on contracts between BLU-BPDLH and the East Kalimantan Provincial Government. Transfer to district governments and to other recipients (e.g., village governments and Services) will be based on contracts between BLU-BPDLH and the recipients, with the East Kalimantan Provincial Government (Governor) as witness. The funds will flow directly from BLU-BPDLH to the recipient's bank account. Village governments will be responsible for transferring funds/benefits to local and *adat* communities within their jurisdiction. The recipients will utilize the funds in accordance with the Benefit Sharing Plan. The province and district governments will detail the intended use of their funds in their budget documents (DPA).
The ER Program will have two reporting periods (2022 and 2024), each followed by an ER payment from the Carbon Fund roughly one-year after (2023 and 2025). Benefits will be distributed following these two payments.
The Government of Indonesia will report on ERs to the World Bank and it may take up to one year to verify these ERs and make payment. Following this, it may take three months to one year, depending on budget cycles, for benefits to be distributed to beneficiaries.

C 30 The Benefit Sharing Plan will elaborate on the benefit-sharing arrangements for Monetary and Non-Monetary Benefits, building on the description in the ER Program Document, and taking into account the importance of managing expectations among potential beneficiaries.

Ind 30.1 The Benefit-Sharing Plan is made publicly available prior to ERPA signature, at least as an Advanced Draft, and is disclosed in a form, manner and language understandable to the affected stakeholders for the ER Program. The Benefit-Sharing Plan contains the following information: The categories of potential Beneficiaries, describing their eligibility to receive potential Monetary and Non-Monetary Benefits under the ER Program and the types and scale of such potential Monetary and Non-Monetary Benefits that may be received. Such Monetary and Non-Monetary Benefits should be culturally appropriate and gender and inter-generationally inclusive. The identification of such potential Beneficiaries takes into account emission reduction strategies to effectively address drivers of net emissions, anticipated implementers and geographical distribution of those strategies, land and resource tenure rights (including legal and customary rights of use, access, management, ownership, etc. identified in the assessments carried out under Criterion 28), and Title to ERs, among other considerations. Criteria, processes, and timelines for the distribution of Monetary and Non-Monetary Benefits. Monitoring provisions for the implementation of the Benefit-Sharing Plan, including, as appropriate, an opportunity for participation in the monitoring and/or validation process by the Beneficiaries themselves [Description of benefit-sharing arrangements 16.1]	**NA**

The ER-PD describes direct and indirect benefits and a proposed proportion of benefits to be distributed based on the performance of the beneficiary in emission reductions.
The eligibility criteria for beneficiaries have been designed to ensure that all relevant contributors to emission reductions can benefit from the Carbon Fund will go to the Ministry of Finance, which manages Indonesia's public program, with the village governments playing a central role in channeling benefits to local people.
The ER Program's benefit sharing arrangements recognize and reward the following three types of entitlements to benefits: (i) policy development, implementation and administration by government institutions; (ii) the implementation of activities in the field; and (iii) rights to benefits due to rights to land where emission reductions take place. The following categories of beneficiaries are identified:

- Government institutions involved in policy development, and program management at the central government level, and at the subnational levels.
- Private Sector. Companies that implement ER activities are estate crop companies, and owners of mining concessions, and of the various types of forestry concessions
- Local communities including adat communities that live in or near program areas where ER activities take place, or that implement activities that lead to ERs such as alternative livelihoods, fire protection, or forest monitoring.

Fund distribution will require that the beneficiaries have a significant role in REDD+ implementation. Private companies and government institutions will also have to have a legal status, allowing them to enter into contractual agreements.
The value of benefits to be shared by the ER Program's benefit sharing mechanism will be determined by the value of the sale of verified ERs to the Carbon fund.
All beneficiaries, except for private companies will be eligible for receiving monetary benefits. Non-monetary benefits will be in addition to benefits associated with the Program activities (non-carbon benefits), as these are already funded by the ER Program budget. The use of monetary benefits will be determined through contracts.
National, provincial, and district governments will primarily receive monetary benefits for operational costs, but they play a role in channeling benefits to other beneficiaries.
While the funding from ER payments will be purely performance-based, the distribution of benefits will take into account other considerations, such as policy relevance, investment cost, and opportunity cost.

Benefits for the private sector and communities will be based on Concept Notes that report on performance and include proposals for the use of benefits. This indicator is considered as not applicable at this stage.	
C 31 The benefit-sharing arrangements are designed in a consultative, transparent, and participatory manner appropriate to the country context. This process is informed by and builds upon the national readiness process, including the SESA, and taking into account existing benefit-sharing arrangements, where appropriate	
Ind 31.1 The Benefit-Sharing Plan is prepared as part of the consultative, transparent and participatory process for the ER Program, and reflects inputs by relevant stakeholders, including broad community support by affected Indigenous Peoples. The Benefit-Sharing Plan is designed to facilitate the delivery and sharing of Monetary and Non-Monetary Benefits that promote successful ER Program implementation. The Benefit-Sharing Plan is disclosed in a form, manner and language understandable to the affected stakeholders of the ER Program [Description of stakeholder consultation process 5.1] [Summary of the process of designing the benefit-sharing arrangements 16.2]	**NA**
ER-PD states that the Benefit Sharing Mechanism is being design through a consultative process involving key stakeholders. The ER program itself was developed through a participative process involving all relevant stakeholders. Drivers of degradation and deforestation, ER Program activities, and the benefit sharing mechanism were discussed with the key stakeholders in East Kalimantan in November 2017. BSP arrangements described in Section 15 this Section are the result of a long process that has involved numerous consultations, ministerial decrees, and presidential regulations. The next steps toward finalizing the arrangements involve stakeholder consultations at the district level, the finalization of the Benefit Sharing Plan, and the establishment of the BLU-BPDLH. The types of benefits for each category of beneficiary were discussed in previous consultations, but will be further discussed in consultations in early 2019 and finalized in the Benefit Sharing Plan (expected August 2019). It is included a roadmap for the completion of the Benefit Sharing Mechanism (Section 15.2). This indicator is considered as not applicable at this stage	
C 32 The implementation of the Benefit-Sharing Plan is transparent	
Ind 32.1 Information on the implementation of the Benefit-Sharing Plan is annexed to each ER Program monitoring report and interim progress report and is made publicly available [16.1]	**N.A**
Only applicable at the time of verification.	
C 33 The benefit-sharing arrangement for the ER Program reflects the legal context	
Ind 33.1 The design and implementation of the Benefit-Sharing Plan comply with relevant applicable laws, including national laws and any legally binding national obligations under relevant international laws [Description of the legal context of the benefit-sharing arrangements 16.3]	**YES**

The Benefit-Sharing Plan (BSP) is still under development and expected to be finalized in August 2019 (section 15.1.1), with stakeholder consultations at different levels, including district level, planned between January and May 2019 (section 15.2).

The Final ER-PD outlines key principles guiding the BSP design as well as aspects of the institutional and governance structure. The BSP is to follow the overall logic that "all relevant contributors to emission reductions can benefit from the program, with the village governments playing a central role in channeling benefits to local people". The principle of "equal access" translates into an identification of different types of beneficiaries – government institutions, private sector companies (holders of commercial licenses or concessions for crop cultivation, timber extraction, mining, etc.), as well as "[local] communities as well as *adat* communities".

Some 25% of the "gross ERPA payments" will cover "operational costs" of government institutions (at all levels, national, provincial, district, village). This funding is static, i.e. non-performance-based. 65% of the proceeds, by contrast, are distributed strictly on the basis of performance and specific contribution to the ER Program. Another 10% will be handed out to zero-deforestation communities to reward ongoing forest protection measures.

The Final ER-PD makes clear that to qualify as potential beneficiary, local communities – including *adat* communities – will require accreditation by village governments only. Such accreditation is available across the Accounting Area. It does not need to be backed by formal recognition of *adat* communities by national or district level governments.

ERPA proceeds will be managed by the Environmental Fund Management Agency (BLU-BPDLH) which was legally created in 2017 and recently organized to function as a public service agency (*Badan Layanan Umum/BLU*).

Disbursement of funds will happen from 2022 (in line with the payment cycle for agreement under the ERPA). To access funding, potential beneficiaries must submit "concept notes" outlining specific activities and needs. These concept notes will be submitted to different government agencies (depending on the type of beneficiary either the Community Empowerment Services (DPMPD) or Forestry and Estate Crop Services) and then validated by Provincial Environment Service (DLH) as well as the Governor of East Kalimantan. Intermediaries (such as NGOs) will be used to support communities that lack the technical capacity to develop the concept notes.

At the legal level, the overall design of the BSP as presented in the Final ER-PD is convincing, reflecting legal principles of accessibility, transparency, and equal rewards for performances. It also fits into the given legal and institutional structures, even though it is observed that the planned process for approving funds may perhaps prove overly lengthy and cumbersome. It is suggested to consider the establishment of concept note formats and standards that are replicable by beneficiaries and eligible for fast-track approval. It is also recommended to consider the availability of bridge funding solutions so that potential beneficiaries can access necessary funding prior to 2022.

For the validation of the BSP – when finally drawn up – it will be important to verify that the accreditation process of *adat* communities with villages is accessible, inclusive and effective to minimize the risk that any community willing to participate in the ER Program is held up by a slow or restrictive accreditation process.

C 34 Non-Carbon Benefits are integral to the ER Program

Ind 34.1 The ER Program outlines potential Non-Carbon Benefits, identifies priority Non-Carbon Benefits, and describes how the ER Program will generate and/or enhance such priority Non-Carbon Benefits. Such priority Non-Carbon Benefits should be culturally appropriate, and gender and inter-generationally inclusive, as relevant [Outline of potential Non-Carbon Benefits and identification of Priority Non-Carbon Benefits 17.1 in the reviewed ER-PD of 15 January 2016]	**YES**

The Advanced Draft ER-PD identifies non-carbon benefits, in addition to emission reductions actions and investments to reduce deforestation and degradation in East Kalimantan, that the ER Program will result in.

The expected non-carbon benefits and priority non-carbon benefits are described in Table 16.1. Such non-carbon benefits include above all the improvement of livelihoods of forest-dependent communities, and the protection of

ecosystem services, including: biodiversity, improved water quality, soil fertility, flooding and erosion control, and habitats of game and fish.

Another key expected benefit of the ER Program is improved forest governance which will lead to reduced land conflict, and to an improved investment climate. Priority non-carbon benefits, are those that are a direct outcome of reduced deforestation, such as the preservation of ecosystem services; and those that are aligned with government and local priorities and are therefore integral to the program design, such as those linked to improved forest governance and livelihoods.

Ind 34.2 Stakeholder engagement processes carried out for the ER Program design and for the readiness phase inform the identification of such priority Non-Carbon Benefits [Description of stakeholder consultation process 5.1]	**NO**

Although it is stated that the system for benefit sharing including non-carbon benefits have been discussed at national level, the document needs to include information that allows to support that affirmation.

There is no information on how the identification of the Non-Carbon Benefits is related with the stakeholder engagement process.

It is suggested to include information about how Non-Carbon benefits were identified and informed, opinions collected and following steps to be carried out.

This is considered as a minor non-conformity given that the provided evidence is insufficient but can be readily attended.

C 35 The ER Program indicates how information on the generation and/or enhancement of priority Non-Carbon Benefits will be provided during ER Program implementation, as feasible.

Ind 35.1 The ER Program proposes an approach utilizing methods available at the time to collect and provide information on priority Non-Carbon Benefits, including, e.g., possibly using proxy indicators. If relevant, this approach also may use information drawn from or contributed as an input to the SIS [Approach for providing information on Priority Non-Carbon Benefits 17.2]	**YES**

The document states that SIS REDD+ will include evidence-based information on non-carbon benefits and will include both quantitative and qualitative data collection and will be based on consultations with target stakeholders.

Information can be compared to the baseline information collected as part of the SESA. Information on non-carbon benefits will be collected on a regular basis, will be presented in regular progress reports, and will be made available to the public. An initial list of indicators is presented in Section 16.2.

Ind 35.2 Information on generation and/or enhancement of priority Non-Carbon Benefits will be provided in a separate annex to each ER Program monitoring report and interim progress report, and will be made publicly available	**N.A**

Only applicable at the time of verification.

C 36 The ER Program Entity demonstrates its authority to enter into an ERPA and its ability to transfer Title to ERs to the Carbon Fund

Ind 36.1 The ER Program Entity demonstrates its authority to enter into an ERPA with the Carbon Fund prior to the start of ERPA negotiations, either through: i. Reference to an existing legal and regulatory framework stipulating such authority; and/or ii. In the form of a letter from the relevant overarching governmental authority (e.g., the presidency, chancellery, etc.) or from the relevant governmental body authorized to confirm such authority. [Authorization of the ER Program 18.1]	**NO**

The Final ER-PD foresees that the program entity, the Minister of Environment and Forestry represented by its Secretary General will sign the ERPA. It cites as legal basis for the program entity's authority the Forestry Code (Law No 41 of 1999), a 2007 ruling of the Constitutional Court, Regulation No 77 of 2018 (organizing the ER Program fund – BPDLH – as a public service agency, as well as Decree No 70 of 2017 on REDD+ Procedures.

The TAP could not access the court ruling in question nor Regulation No 77 of 2018. From the Forestry Code and Decree No 70 of 2017 (TAP has reviewed a non-authorized English version of the latter), the authority to execute the ERPA is not evident.

It is noted that the Ministry of Environment and Forestry previously signed the Letter of Intent with the Carbon Fund trustee and that the decision to have the same Ministry sign the ERPA would be consistent with this earlier practice. However, the ER-PD does not provide conclusive information on the underlying authorization. Moreover, the Final ER-PD concedes that "either MoF or the Program Entity has the authority to sign" and that "[after] a series of consultations conducted by the Program Entity and relevant key stakeholders, GoI decided that the Program Entity will sign ERPA" (section 17.2 ER-PD). No evidence is provided as to the form and substance of this GoI decision.

This is considered as a minor non-conformity given that the provided evidence is insufficient but can be readily attended.

Ind 36.2 The ER Program Entity demonstrates its ability to transfer to the Carbon Fund Title to ERs, while respecting the land and resource tenure rights of the potential rights-holders, including Indigenous Peoples (i.e., those holding legal and customary rights, as identified by the assessment conducted under Criterion 28), in the Accounting Area. The ability to transfer Title to ERs may be demonstrated through various means, including reference to existing legal and regulatory frameworks, sub-arrangements with potential land and resource tenure rights-holders (including those holding legal and customary rights, as identified by the assessments conducted under Criterion 28), and benefit-sharing arrangements under the Benefit-Sharing Plan [Transfer of Title to ERs 18.2]	**YES**

The ER Program seeks to address matters of ER title through a combination of intra-governmental sub-arrangements, on the one hand, and a contractual mechanism under the benefit sharing plan (BSP), on the other hand (see also above, under Ind. 28.3, on access to the contractual mechanism for *adat* communities).

Notwithstanding the inconclusive regulatory framework – an issue, as the Final ER-PD states, that may be addressed in the near future by the Indonesian legislator – the ER Program is to implement an authorization scheme tailored to its specific needs and to the variety of stakeholders, including *adat* communities. Each stakeholder proposing a contribution in a concept note (see Ind. 33.1 on the content and process for concept notes) will be asked to "acknowledge the authorization of the Program Entity to own and transfer Title to ERs generated by the ER Program in return for benefits and rewards which they will receive".

Provided this authorization mechanism is open to all stakeholders, including *adat* communities irrespective of their formal recognition by government authorities, and that it is implemented as suggested, the program entity's ability to transfer title to ERs has been demonstrated in principle.

A separate matter relates to ongoing carbon project activities within the Accounting Area. Ecosystem restoration licenses (IUPHHKRE) have been given out for land included in the ER Program (to the benefit of *PT Global Green* and the

Orangutan Habitat Restoration Program, see section 17.2 ER-PD). In the past, such licenses have been used across Indonesia as the basis for REDD+ project implementation, triggering credit issuance rights and trading options for project proponents. It is noted that any issuance and credit transfer outside the ERPA with the Carbon Fund would undermine the authority of the program entity to transfer title in accordance with Indicator 36.2.

It is not clear whether the existing IUPHHKRE licenses have been used to acquire REDD+ project licenses. No project registration and credit issuance to date appear to have taken place, however. The same appears to be the case for the *Berau Forest Carbon Program (BFCP)*, a jurisdictional program under development/implementation by the District Government of Berau in partnership with The Nature Conservancy (TNC) and other partners. In this case, a Memorandum of Understanding (MoU) between the program entity, Ministry of Environment and Forestry, and the District Government exists which allows the development of voluntary REDD+ activities. The Final ER-PD notes that this MoU needs to be revised to align it with the ER title arrangements under the ERPA under negotiation with the Carbon Fund. It stipulates that a "series of agreements" between the program entity and the District Government will be concluded until March 2019 "on the incorporation of the BFCP into the ER Program".

In sum, the ER Program is deemed compliant with Indicator 36.2 on the condition that

- Access to participation agreements concluded on the basis of a "concept note" under the Benefit Sharing Plan is inclusive (granted to *adat* communities irrespective of the status of formal recognition) and that each participation agreement includes a reference to the ER title authorization;
- A revised MoU between the program entity (the Ministry of Environment and Forestry) and the District Government of Berau is agreed which aligns the BFCP with the ER Program and recognizes ER title for the program entity; and
- The program entity confirms that there is no other REDD+ license or permit active in the Accounting Area that would authorize the generation of ERs and/or grant ER title.

Ind 36.3 The ER Program Entity demonstrates its ability to transfer Title to ERs prior to ERPA signature, or at the latest, at the time of transfer of ERs to the Carbon Fund. If this ability to transfer Title to ERs is still unclear or contested at the time of transfer of ERs, an amount of ERs proportional to the Accounting Area where title is unclear or contested shall not be sold or transferred to the Carbon Fund [Transfer of Title to ERs 17.2]	**YES**

The three pre-conditions listed under Ind. 36.2 must have been completed at the time of transfer of ERs at the latest. As long as they are, the ER Program is deemed compliant with Ind. 36.3.

It is noted that should any of the three pre-conditions not be met at the time of ER transfer, the consequences are as follows: If no adequate revision of the BFCP MoU has been reached, the ER amount should be reduced by the number of ERs subject to potential BFCP issuance. The same applies for any other REDD+ projects or programs that will issue or risk issuing credits. If no evidence can be provided for the systematic implementation of the authorization mechanism as outlined in section 17.2 ER-PD (see above, Ind. 36.2), however, the ER title transfer under the ER Program may be jeopardized as a whole.

C 37 Based on national needs and circumstances, the ER Program works with the host country to select an appropriate arrangement to avoid having multiple claims to an ER Title.

Ind 37.1 Based on national needs and circumstances, the ER Program host country has made a decision whether to maintain its own comprehensive national REDD+ Program and Projects Data Management System, or instead to use a centralized REDD+ Programs and Projects Data Management System managed by a third party on its behalf. In either case of a country's use of a third party centralized REDD+ Programs and Projects Data Management System, or a country's own national REDD+ Programs and Projects Data Management System, the indicators below apply [Data management and Registry systems to avoid multiple claims to ERs 18.2]	**YES**

Indonesia has made the decision and opted for a national data management system. The system – called "National Registry System" (accessible at http://ditjenppi.menlhk.go.id/srn/) – is partially established and operational. It is meant to become the central platform for data and information management concerning both climate change adaptation and mitigation action. REDD+ activities are integrated in the system.

Ind 37.2 A national REDD+ Programs and Projects Data Management System or a third party centralized REDD+ Programs and Projects Data Management System needs to provide the attributes of ER Programs, including: i. The entity that has Title to ERs produced; ii. Geographical boundaries of the ER Program or project; iii. Scope of REDD+ activities and Carbon Pools; and iv. The Reference Level used. An ER Program for the Carbon Fund should report its activities and estimated ERs in a manner that conforms to the relevant FCPF Methodological Framework C&Is [Data management and Registry systems to avoid multiple claims to ERs 18.2]	**YES**

At this moment, the National Registry System provides only data on 'responsible party/-ies', the location (without geographical boundaries) and two ER values (claimed and verified). It does not provide precise geographical information, details on carbon pools and REDD+ activities or the reference level.

However, MoEF Regulation No 70/2017 foresees additional functions of the National Registry System, including the registration of information on "location, approach and REDD+ tools" as well as information on the reference level, MRV reporting, implementation of Social and Environmental Safeguards (integrated with Safeguards Information System/SIS), implementation costs and source of costs, supporting activities, and contribution to Indonesia's Nationally Determined Contribution (NDC).

While the indicator is deemed met, it is recommended that the final ER-PD clearly states which of the functions are already operational and when the other functions will become operational.

Ind 37.3 The information contained in a national or centralized REDD+ Programs and Projects Data Management System is available to the public via the internet in the national official language of the host country (other means may be considered as required). [Data management and Registry systems to avoid multiple claims to ERs 19.2]	**YES**

The website is available and easily accessible (including in the local language).

Ind 37.4 Administrative procedures are defined for the operations of a national or centralized REDD+ Programs and Projects Data Management System; and an audit of the operations is carried out by an independent third party periodically, as agreed with the Carbon Fund [Data management and Registry systems to avoid multiple claims to ERs 18.2]	**NO**

The website of the National Registry System explains the steps for registering information by proponents and verifying this information (at the registration as well as at each verification step) by the registrar ("Secretariat"), but administrative procedures for the operations of REDD+ programs are not available. Audit information is also not available.

This is considered as a minor non-conformity given that the provided evidence is insufficient but can be readily attended.

C 38 Based on national needs and circumstances, ER Program host country selects an appropriate arrangement to ensure that any ERs from REDD+ activities under the ER Program are not generated more than once; and that any ERs from REDD+ activities under the ER Program sold and transferred to the Carbon Fund are not used again by any entity for sale, public relations, compliance or any other purpose

Ind 38.1 Based on national needs and circumstances, the ER Program host country has made a decision whether to maintain its own national ER transaction registry, or instead to use a centralized ER transaction registry managed by a third party on its behalf [Data management and Registry systems to avoid multiple claims to ERs 18.2]	**YES**
The Advanced Draft ER-PD clarifies that the decision to maintain a national ER transaction registry has been made.	
Ind 38.2 The national or centralized ER transaction registry reports ERs for the Carbon Fund using the accounting methods and definitions described above in the MF [Data management and Registry systems to avoid multiple claims to ERs 19.2]	N.A.
Regulation No 70/2017 appears to guarantee that the accounting agreed in the ER-PD/MF synchronizes with the registry reports to be entered into the National Registry System. Indonesia will need to show how it synchronizes projects and programs that occur within the same boundaries. Will the two projects registered for East Kalimantan be deregistered once the ER Program is registered, or will they be nested within the program. If the latter, the final ER-PD should explain how double-counting will be avoided. This relates to the double counting of ERs (double issuance) as well as to the double counting of contributions (double monetization). If projects are nested, the identity of stakeholders involved in the project and/or the ER Program will need to be registered in order to avoid double counting of contributions.	
Ind 38.3 An independent audit report certifying that the national or centralized ER transaction registry performs required functions is made public. [Data management and Registry systems to avoid multiple claims to ERs 19.2]	N.A
Not yet specified	
Ind 38.4 Operational guidance exists, or is in advanced stage of preparation, that clarifies the roles and responsibilities of entities involved in the national or centralized ER transaction registry, as well as rules for operation of the registry. [Data management and Registry systems to avoid multiple claims to ERs 19.2]	N.A
Operational guidance outside MoEF Regulation No 70/2017 – which defines what needs to go into the National Registry System but does not identify the process – and the above-mentioned description of registration steps (Indicator 37.4) is not available.	

Annex 1 to the TAP technical assessment