Forest Carbon Partnership Facility (FCPF)
Technical Assessment of the Final Emission Reduction Program Document (ER-PD) submitted by Vietnam

I General Approach of the Review

This report is based on Vietnam's final draft of its Emission Reduction Program Document (ER-PD) submitted to the Carbon Fund on October 31st 2016. It builds upon an earlier assessment of an advanced draft ER-PD which had been reviewed by the Technical Advisory Panel (TAP) Team in August 2016, as the first formal assessment. Before the production of the advanced draft ER-PD, the TAP Team made an in-country visit to Vietnam in July 2016, during which its members held discussions with a variety of stakeholders of the REDD+ process. In addition to reading a number of background documents on Vietnam, the in-country consultations enabled the TAP to assess the comprehensiveness and logic of the program design and to assess the extent to which the analyses of drivers have influenced the design of, or are reflected in the mitigation or emission reduction options. The TAP Team was composed of five members, who organized themselves around four main components of the ER-PD (Program Design, Carbon Accounting, Social and Environmental Safeguards and Legal Issues). Although experts focused mainly on their areas of expertise, the TAP worked as a team to produce the final assessment, and collaborated on certain aspects of the ER-PD.

From the outset, the role of the TAP is primarily to read the documents provided and to assess their compliance with the criteria set in the Carbon Fund's "Methodological Framework". This report therefore provides a written record of an independent assessment done by the TAP. The Carbon Fund can use this report as a key input into its decisions regarding the quality and completeness of Vietnam's emission reduction proposal.

In essence, the TAP review was guided by both the "Methodological Framework" and this assessment template, and the bulk of the reporting relates to issues of carbon accounting and reference levels/reference emission levels (RL/REL). During and after the TAP Country Visit in July 2016, the two TAP carbon accounting specialists engaged in constructive discussions with their Vietnam counterparts to help ensure that the final methods would comply with both IPCC guidelines and the Methodological Framework used by the Carbon Fund and which was approved by the Carbon Fund Participants (based on a set of guiding principles adopted by the broader Participants Committee). Similarly on Program Design, which covers sections of the ER-PD dealing with the analysis of drivers of deforestation and forest degradation, two members of the TAP held discussions with the Vietnam Team and several other organizations (e.g., UN-REDD and the JICA Teams) and other specialists. In addition, further clarification on the legal aspects of the ER-PD on aspects such as title to ERs and land tenure, as well as issues on participation and safeguards were assessed by one member of the TAP. He did both desk reviews of key documents and during the country visit he held discussions with representatives of stakeholders in Vietnam. Following the in-country visit the TAP provided Vietnam with a list of initial findings. Due to the short time between the in-country visit and the submission of the formal advanced draft ER-PD (August 2016) the assessment of the advanced draft did not vary considerably from the initial report.

The assessment report produced by the TAP in August 2016 based on the advanced draft, was used by Vietnam, as were comments from the Carbon Fund Participants, to produce the final ER-PD, which is the subject of this assessment report produced in November 2016.

PART 1 OF TECHNICAL ASSESSMENT: Summary

Date of Current Assessment: November 15th 2016. Vietnam ER-PD Final Draft October 31st 2016

Name of Assessment team members:

1. Conway, Darragh (Legal Expert): ER Program transactions, land and resource tenure (section 6, part of section 5)
2. Kojwang, H.O. (Lead reviewer and Social and Environmental Safeguards Expert): Safeguards, non-carbon benefits, general coordination, contributions to the program design section and text editing

3. Lee, Donna (Carbon Accounting Expert): Carbon accounting (section 3)
4. McNally, Richard (Country Expert): Ambition, Program design (section 1, part of section 5)
5. Waterworth, Robert (Carbon Accounting Expert): Carbon accounting (section 3)

Summary Assessment of the Quality and Completeness of the ER-PD:

General Remarks from the TAP

The TAP Team has reviewed Vietnam's final ER-PD with much interest and commends the Country Team for the effort to put together a document which is now much improved based on the TAPs comments on the advanced draft ER-PD. The document is quite rich in information on Vietnam's Forest Sector, its participation in REDD+ as a global process and its own national aspirations. The national consultations that preceded the development of the ER-PD have been clearly expressed, as have the key challenges that implementing REDD+ will have to contend with. The description of national and sub-national entities that will manage the REDD+ are clear, despite the appearance of complexity that can be expected in the presence of 'layers' of institutions and interactions across sectors and the functioning of special committees created in the context of REDD+. However, the cross-sector coordination needed to address indirect and underlying causes of deforestation and forest degradation still remains a key issue that the ER-PD should address by establishing suitable mechanisms to address these issues now and in the longer term. Furthermore, the TAP had pointed out the Provincial REDD+ Action Plans (PRAPs) have also been developed though the support of international projects. This gives the impression that that most of the funds to implement them will come from international sources, rather than from Vietnam's own support under the Forest Protection and Development Plan. It is unclear how the ER-PD will be funded and become a sustainable program to which long-term performance-based payments will apply. The listed sources of finance in Section 6.2.2 of the ER-PD remain largely indicative, particularly those that are expected from donor sources. As such, a more comprehensive plan with clear funding priorities should be part of the ER-PD as it transitions into an implementation phase.

The final ER-PD has responded to earlier comments by the TAP on the analysis of drivers of deforestation and forest degradation and the proposed actions to tackle them. The analysis of drivers is now much more comprehensive than in the advanced draft and it is encouraging to note that more quantitative data that can be attributed to each driver has now been provided in the final ER-PD. The document also recognizes that the magnitude of drivers differ in each of the provinces that make up the NCC Region, an observation that implies the in each province mitigation actions will require a careful study on localized drivers. The TAP has taken note of this and while it will still be a challenge to deal with drivers from outside the forest sector, their recognition in the ER-PD and the intention of the ER-PD to improve coordination among sectors is commendable.

The TAP found the volume and quality work on the reference levels, carbon accounting and MMR to be considerable. Following the country visit and submission of the report on the advance draft of the ER-PD, Vietnam have made a number of key improvements. These improvements can be classed as either 1) implemented in the Final ER-PD or 2) improvements that could not be completed in the time available, but that Vietnam has stated they will address in the future. The TAP appreciates the difficulty of completing large technical changes and agrees with Vietnam's stepwise approach. Key improvements made between the advanced and final ER-PD include application of bias correction to activity data estimates and clarification of how the planned ER activities fit with past practices. Proposed future improvements including implementing methods to improve the time-series consistency of the land cover maps, working to ensure consistency between the RL and MMR, moving to a new RL period, increased safeguards and increased us of past forest inventory data. However, some issues remain, including accounting for all removals in the year they occur in reforestation and restoration (inconsistent with IPCC guidelines). The TAP notes that many of the

Indicators	1st Assessment	2nd assessment

ratings classed as 'NO' could be easily addressed in the coming months, and details have been provided by the TAP to help guide the process. The description of safeguard measures and how Vietnam meets safeguard policies set by the World Bank is quite clear, and the issue of the risk of conversion of low value natural forests to cassava and rubber has now been addressed. While the TAP commends Vietnam for recognizing the threat and has expressed optimism that the risk of such conversion remains low, due to existing government policies, the TAP also notes that national and provincial policies do not always work in concert and this could place natural forests at risk of further conversion. So far the empowerment and poverty reduction programs for ethnic minorities and has now been addressed more comprehensively in this final draft ER-PD. The TAP notes that more thought has been given on how to provide the basic needs of local communities, which cannot be achieved by simply protecting the forests. The same applies to benefit sharing mechanisms on which progress has been made and will still benefit from initiatives such as the UN-REDD Phase II Program. So far, the legal aspects of carbon rights, transfer of titles to emission reductions is still 'work in progress' and will need to be addressed by Vietnam and certainly in the context of the signing of the ERPA.			
II. Level of Ambition → Criteria 1 – 2, including issues relating to legal aspects The ER-PD proposes to implement eight specific activities in the six North Central Coast Provinces (the NCC Region) as the core of its emission reduction program. These include: avoided deforestation, avoided degradation (including a sink component from regrowth), enrichment planting to enhance carbon stocks, extending the rotation lengths of plantations and reforestation using long rotation systems and indigenous species in mixed plantations. The ER-PD states that the reason the NCC has been choses is that it has the largest expanse of the remaining broadleaved evergreen forests in Vietnam which are significant repositories of the country's remaining biodiversity hotspots. Within the NCC the ER-P aims to reduce emissions/increase removals by approximately 28.2Mt CO2-e over the eight years. On a national scale, the ER-PD has clearly fits within Vietnam's ambition to not only manage the existing 13.4 million ha of forest but to increase its forest cover to 14.3 million ha by 2015 and to 15.1 million by 2020. By themselves the six NCC provinces constitute a well-defined Jurisdictional Area for the purposes of carbon accounting. The total ER-P accounting area is over 5 million hectares, and the ER-PD target area for implementation of activities is 359,942 ha which represents around 13% of the total forest land in the NCC Regions (2,771,630 ha in 2010). So far, a more comprehensive program to support the realization of emission reductions represented by the eight models has been provided and a clearer vision on tackling the drivers through those models and other supportive actions have now been provided. While dealing with some drivers emanating from outside the forest sector still remains a challenge, the analysis of the drivers is now much more improved.	**1.1** **1.2** **2.1**	**YES** **NO** **YES**	**YES** **YES** **YES**
III. Carbon Accounting **III (a) Scope and methods→ Criteria 3 - 6** **III (b) Uncertainties→ Criteria 7 - 9** **III (c) Reference Level→ Criteria 10 - 13** **III (d) Reference Level, Monitoring & Reporting on Emission Reductions→ Criteria 14-16** **III (e) Accounting for Displacement (leakage) → Criterion 17**	**3.1** **3.2** **3.3** **4.1** **4.2** **5.1** **6.1** **6.2** **7.1**	**NO** **YES** **YES** **YES** **YES** **NO** **YES** **NO** **NO**	**YES** **YES** **YES** **YES** **YES** **NO** **YES** **NO** **YES**

III (f) Accounting for Reversals→ Criteria 18 – 21 **III (g) Accounting for ERs → Criteria 22 - 23** The TAP found that Vietnam had a high level of expertise available in the areas of forest monitoring. Unlike many other countries, Vietnam has a strong history of collecting forest inventory data and developing forest cover maps. This experience can be brought to bear on the development of the RL and MMR for the proposed ER-P. The final ER-PD improves on a number of carbon accounting issues that were identified by the TAP during the initial assessment. These include: • A stated intent to track individual parcels of land through time that will enable: ○ activity data to be monitored using IPCC Approach 2 or 3, ○ a land use change (vs. land cover change) approach, ○ compliance with the safeguard related to natural forest loss, ○ improved monitoring of reversals; • A stated intent to *not* account for removals following natural forest loss (thus fulfilling the Cancun safeguard to avoid incentivizing natural forest loss); • Removal of the adjustment for Program 661 (based on CFP feedback that this would not be compliant with their interpretation of the Methodological Framework), thus making the reference level more conservative; • A stated intent to update the reference period to 2005-2015, based on the revised 2016 MF; • Application of a 4% uncertainty set aside in the estimated ER calculation. There are a few remaining issues, including: • Lack of consistency between the methods applied to develop the reference level and the estimates for expected delivery of ERs, • Assumption that all removals due to enhancement (reforestation and restoration) occur in the year the activity occurs (although this may be considered a simplification that can be improved over time as part of a stepwise approach), • Proportional application of the bias correction—although as above this simplification may be accepted as part of a stepwise approach. Overall, the TAP considers the final ER-PD a significant improvement over the Advanced draft, and that progressively implementing the identified improvements, Vietnam will have a suitable MMR system in place for the purposes of the ER-PD.	**7.2** **8.1** **8.2** **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 NO YES NO N.A N.A YES YES NO YES YES YES NO NO NO NO NO YES YES YES YES NO NO N.A N.A YES NO YES N.A N.A NO N.A NO NO	YES YES YES YES N.A. N.A. YES YES NO YES YES YES YES N.A N.A N.A YES YES YES YES YES YES N.A N.A N.A YES YES YES N.A N.A YES N.A YES NO

IV. Safeguards **Actions undertaken to meet WB and Cancun Safeguards→ Criteria 24-26** The final ER-PD presents a short but clear account of safeguard issues relevant to the ER-P and shows how the key tenets of the World Banks Safeguard Policies and Guidelines have been taken into account. Furthermore, gaps between what Vietnam has proposed in relation to those World Bank Guidelines have also been identified, as have been the expected positive and negative impacts of the ER-PD. There is, however, more that needs to be done to facilitate the participation by ethnic minorities (of which the NCC Region has many) and ensure their legal empowerment. These are critical Social Safeguard Issues. The TAP also notes the real risk of degraded natural forests being converted to	**24.1** **24.2** **25.1** **25.2** **26.1** **26.2** **26.3**	YES NO NO N.A YES YES YES	YES YES YES N.A YES YES YES

other uses, such as plantations and Cassava. Depressed global prices have reduced the impact of rubber as a deforestation driver since 2014, but other land uses could quickly take rubber's place as a key driver and would further erode the rich biodiversity of the NCC Region. Vietnam states that the risk of further conversion of natural forests is low because of the REDD+ Program and national and provincial laws, policies and decisions that, in Vietnam's view, will restrict such conversions. However, the TAP notes that the risk remains as historically national land use policies can be overlooked by provincial government, where land allocation actually takes place. The description of land allocation to rubber and cassava plantation in the final ER-PD ER-PD confirms this tendency. The ER-PD should therefore establish long-term safeguard measures to prevent these conversions. The final ER-PD sufficient attention has been given to rural populations, particularly the ethnic minorities which remain the poorest in Vietnam.			
V. Sustainable Program Design and Implementation **V. (a) Drivers and Land Resource Tenure Assessment → Criteria 27-28** **V. (b) Benefit sharing → Criteria 29 – 33** **V. (c) Non-Carbon Benefits → Criteria 34 – 35** In the review of the advance draft ER-PD, the TAP noted that the Final ER-PD would need to provide a more comprehensive analysis of drivers of deforestation and forest degradation and ensure that their underlying causes are better understood, described and appropriate mitigation actions proposed. The TAP also recommended that emission reduction actions clearly demonstrate how they address both direct drivers and their underlying causes. The key issues identified were: • Limited description of how the proposed interventions will act on the identified drivers. • A general lack of a historical perspective on past tends of deforestation and forest degradation (some measure of magnitude or quantification could help here). • Limited assessment of barriers to SFM which is the key component of the (+) in REDD+. • Lack of clarity on how the models and activities under the ER-PD fit into the country's overall land use perspective , and how feasible they are to implement based on the current drivers of deforestation and forest degradation, and current Government policies and plans. • Insufficient description of how drivers from outside forest sector will be addressed (most of the proposed actions are within the remit of the forest sector). • Lack of description of how the move from short-rotation (lower risk) forestry to longer (higher risk) rotations will work. While the TAP noted these plans are commendable, the section is not quite clear on how this change will be made to work i.e. how the risk aversion tendencies of individual farmers and larger firms will be overcome. This should also include production practices, processing capacity and markets. • Clearer description of the appropriate financing mechanisms for each of the proposed ER actions. The TAP noted that this would not necessarily need to be very detailed but there needs to at least be some description of the source of funding, be it domestic finance from bank, public expenditure, donors projects (e.g. new World Bank one and other development support such as JICA and others). • Improved information on land tenure assessment. While the advance draft ER-PD highlighted many important issues, it was not complete. A more comprehensive analysis of the types and status of tenure in the accounting area, the risks that conflicts and	**27.1** **27.2** **28.1** **28.2** **28.3** **29** **30.1** **31.1** **32.1** **33.1** **34.1** **34.2** **35.1** **35.2**	**NO** **NO** **NO** **YES** **NO** **YES** **NO** **NO** **N.A** **NO** **YES** **YES** **NO** **N/A**	**YES** **YES** **YES** **YES** **NO** **YES** **YES** **YES** **N.A** **YES** **YES** **YES** **YES** **N/A**

uncertainties pose for the ER Program, and how these risks have been integrated into Program design was required. The Final ER-PD includes a much improved analysis of drivers based on the country's review of both the National REDD+ Action Plan (NRAP) and those at the provincial levels (PRAPs). Historical data on forest cover change have been provided (Table 4.2), including changes in land under agriculture, the key driver of forest cover loss (Figure 4.1). In addition quantitative estimates of the areas affected by each driver have been provided and data on forest degradation. The underlying drivers of deforestation and forest degradation have been described (Table 4.4) that shows proposed conversion of forest to non-forest uses, projected till 2020 for the NCC Region. The challenges of converting plantations to longer-rotation regimes have been described as are way to mitigate them. In addition, policy developments that could contribute to the conservation and enhancement of carbon stocks have been identified and described in Section 4.1.3. The expected funding sources for the proposed emission reduction program have also been described in Chapter 6. While the proposed actions to deal with drivers from outside the forest sector still remain rather weak, the program design section has improved markedly. Equally, the assessment of the land and resource tenure situation has improved significantly, and it is now clearer how these issues have been considered and incorporated into the design of the ER-P. There are nonetheless a number of areas where improvement should be sought. Two areas that stand out in this regard are the inadequate consideration of customary rights of local communities, and the failure to provide a credible plan for addressing the ongoing conflicts and ambiguities surrounding forest protection contracts.			
VI. ER Program Transactions **VI (a) ERPA Signing Authority and Transfer of Title To ERs → Criterion 36** **VI (b) Data Management and ER Transaction Registries → Criteria 37 - 38** The ER-PD demonstrates the authority of MARD to enter into the ERPA. It does not, however, provide an adequate analysis of issues of providing Title to ERs, nor does it indicate a clear strategy ensuring that title to ERs can be transferred to the Carbon Fund. There has been an initial decision to build a national data management system; however, there is no evidence of any plans in place to build such a system, and as such it is not possible to assess whether it will comply with the criteria of the MF. No information is provided on whether Vietnam intends to create its own or use an existing ER transaction registry.	**36.1** **36.2** **36.3** **37.1** **37.2** **37.3** **37.4** **38.1** **38.2** **38.3** **38.4**	**YES** **NO** **NO** **YES** **NO** **YES** **NO** **NO** **N.A** **N.A** **N.A**	**YES** **NO** **NO** **YES** **NO** **YES** **NO** **NO** **N.A** **N.A** **N.A**

SUMMARY SCORE and overall comment:

The TAP Team was impressed with the level of effort that was put into preparing the final ER-PD. Vietnam responded positively to the comments by the TAP on the advanced draft ER-PD and worked collaboratively with the TAP team to help address these issues. This led to a vastly improved version being submitted as the Final ER-PD. The TAP noted that the technical capacity and experience of national staff working on the ER-PD, particularly in MRV, Reference Levels and Reference Emission Levels is high, so improvements can be made with limited external help. Consistent with the TAP's earlier statement Vietnam has now revised its analysis of drivers, modified its program design and included key policy aspects that could help scale up the impact of the ER-P. While there are still issues in the carbon accounting sections and ER program transaction sections there has been major improvements in the Final ER-PD.

Based on the methodological framework, there are 78 criteria and indicators, of which 9 were non applicable (N.A) at the time of the first formal assessment but in this assessment the number of non-applicable indicators has risen to 16. The indicators that are not met are outlined in various sections of the review and essentially refer to carbon accounting, safeguards, and program transactions, which includes legal issues. The symbols used in the assessment are YES, NO

where a criterion or indicator is met or not met, respectively. The TAP notes that in 14 cases ratings have been given 'NO' even though Vietnam has proposed solutions to the issues identified. This is particularly the case for the RL and MMR components of the ER-PD. It was the opinion of the TAP that although the solutions could lead to a YES, until these have been implemented it is not possible to rate the criteria as a YES. In these cases the TAP has included comments on suitability of the proposed solutions.

In summary, and out of a total of 78 indicators, 53 are met, 9 are not met and 16 are not applicable. Of the 9 which are not met, 3 fall under the carbon accounting section and 6 under the legal issues and ER program transactions sections of the ER-PD.

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**

Within the NCC to ER-P aims to reduce emissions/increase removals by approximately 28.2Mt CO2-e over the eight years. This is around 17% of the current reference level estimates. However, these numbers will change with revisions to the RL and ER estimates. The areas proposed under the interventions are in some cases ambitious, in particular the proposed reductions in forest degradation. The ER-P also covers a range of interventions, including forest protection, restoration activities, reforestation and improved forest management. However, while the program appears ambitious, until revisions are made (as noted in other parts of the review) it is not possible to assess the true scale of the ER program.

On a national scale, the ER-PD has clearly expressed its national ambition to manage 13.4 million ha of forest and increase that forest cover to 14.3 million ha by 2015 and to 15.1 million by 2020, but since we are already in 2016 there should be clarity if the target for 2015 was actually achieved. The ER-PD further asserts that the six North Central Coast Provinces (the NCC Region) is at the core of this ambition since it has the largest expanse of the remaining broadleaved evergreen forests, which are also significant repositories of the country's remaining biodiversity hotspots.

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 stated at Ind. 1.1, the ER-PD's emission reduction targets are ambitious.

The TAP is of the opinion that the ER-PD is still not well coordinated with the National REDD+ Actions Plans (NRAP). However, the new NRAP is currently being developed and this will be based on a much more detailed drivers (and indirect drivers) assessment to develop appropriate policies and measures (PaMs). By the end of 2016, all the Provincial REDD+ Actions Plans (PRAPs) would have been revised with a more robust analyses of drivers of deforestation and forest degradation, including underlying causes. So far the work on drivers has gone on quite well and the PRAPs have shown that the rank of drivers change depending on each province and the ensuing emission reduction programs have been advised to factor that into their designs.

The Final ER-PD identifies and describes a number of policies that could enhance and inhibit the emission reduction targets This is a welcome development. However, it remains to be seen if the ER-P will lead or call for major policy level actions that could bring transformational change. The TAP therefore recommends that the policies which have been described in Chapter 4, Section 4.1.3 form the basis of policy level processes to provide strategic and potentially transformative support to the ER-P.

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**
The six NCC provinces constitute a well-defined Jurisdictional Area for the purposes of carbon accounting and implementing the activities in the ER-PD. The total ER-P accounting area is over 5 million hectares, and the ER-P target area for implementation of activities is 359,942 ha which represents nearly 13% of the total forest land in the NCC Regions. The NCC region is also a designated government agro-ecological zone.	

PART 2 OF TECHNICAL ASSESSMENT: DETAILED ASSESSMENT

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 [Description of Sources and Sinks selected – 8.1]	**YES**

The ER-PD identifies sources and sinks that will be accounted for and these are consistent between the reference level the MMR system and the ER estimates. The ER-PD includes the following REDD+ activities: deforestation, forest degradation, enhancement in existing forests and enhancement through reforestation. It does not include activities for conservation of forest carbon stocks or sustainable management of forests. The TAP notes that this will not lead to the potential for leakage or omission of key emissions sources, but is simply a definitional issue.

The expected ERs are estimated using specific "models" that can be mapped to the various forest transitions or activities (Table 1). We note that the RL approach in the Final ER-PD includes emissions and removals from degradation and enhancement when lands transition between forest classes and deforestation and reforestation when lands move to and from the non-forest category. *Carbon stock changes within a forest class that remains the same forest class are not estimated in the RL*—essentially assigning a "zero" baseline to such activities (yellow squares in Table 1). This may be justified where activities proposed in the ER-PD did not exist during the baseline period or were insignificant. For the ER-PD this needs to be addressed for:

- Models 2 and 3 that aim to reduce the area subject to forest degradation: the calculations of the expected ERs from "avoided degradation" also includes some carbon stock enhancement using an assumed annual growth increment in forest areas that would have otherwise been degraded.
    - Vietnam noted that these areas are likely very small during the reference period.
    - However, the TAP notes that growth will be occurring in these categories (as evidenced by moved upwards to EG-R forest), and it is unclear how much is already occurring.
- Models 6 and 7 that aim to increase stocks in existing plantations ("plantations remaining plantations") by changing management regimes.
    - Vietnam noted that the proposed management regimes do not commonly occur in the NCC, and as such can be considered as zero in the baseline. The TAP agrees that long rotation systems are rare.

The total percentage of expected ERs assumed to be zero in the RL (i.e. from Models 2, 3, 6 and 7 that are related to the enhancement of carbon stock for areas that remain in the same forest class) is 7% for an 8-year period.

Table 1: Example land use matrix used for the reference level showing where the ER-PD models apply. The yellow boxes are not estimated in the current RL.

Year X	**Year X+5**					
	Evergreen Rich1	**Evergreen medium2**	**Evergreen poor3**	**Other forest4**	**Plantation**	**Non-forest6**
Evergreen Rich		Model 1				
Evergreen medium		Model 2	Model 2			
Evergreen poor			Model 3			Model 3
Other forest						
Plantation					Model 6, 7	
Non-forest					Model 4, 5, 8	

	Forest degradation	Afforestation	
	Deforestation	Unchanged	
	Forest quality enhancement		

Ind. 3.2 The ER Program accounts for emissions from deforestation. **[**Description of Sources and Sinks selected – 8.1]	**YES**

Emissions from deforestation are included in the RL and will be monitored in the MMR. Policies and actions to reduce deforestation are included in the ER-P and the calculation of ERs also includes reduced emissions from 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**

The ER-PD calculates that emissions from degradation comprise ~60% of total gross emissions; therefore they should be (and are) accounted for in the ER-PD. The analysis of drivers is consistent with this expectation, as unsustainable wood extraction (legal and illegal) is identified as a key driver, including as the top driver of emissions in at least two of the provinces in the NCC region (Table 4.3).

Degradation is included based on forest class changes detected through remote sensing. However, the TAP notes that such changes are difficult to detect using Landsat 30m resolution images. The accuracy assessment was unable to use higher resolution images to verify the accuracy of detecting the transitions and as such the estimates may be highly uncertain. Further, it is unclear what the changes between forest classes represent. While the changes may be degradation, there could be multiple other causes, both human induced and natural, causing these changes. During the review Vietnam stated that changes will be human induced in the vast majority of cases, but no direct evidence has been provided. The RL and MMR could be improved in the future by addressing this two issues directly.

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 – 8.2]	**YES**

Vietnam has excluded emissions and removals from dead wood (DW), Litter (L), Soils (S), and harvested wood products (HWP); it also excludes non-CO_2 gases. The two reasons for exclusion available are that such pools/gases are insignificant (<10%) or exclusion would be conservative (per Indicator 4.2, the TAP combines the assessment here).

On exclusion of pools:

- Exclusion of DW, L and S is conservative for deforestation and forest degradation. However, this is not necessarily the case if a country is measuring ***net*** emissions/removals and including carbon stock enhancement (e.g. reforestation or SFM). This is because omission of pools is nearly always conservative in the case of positive performance of *either* (avoided) emissions or (increased) removals (due to the fact that, e.g. forests→cropland has lower biomass in these pools; or vice-versa for NF→F). However, the opposite occurs if a country underperforms, i.e. estimations of results are *not* conservative if there are higher emissions or lower removals (than the baseline). Since countries only receive "credits" and not "debits", if only one side (emissions or removals) is estimated, then exclusion is conservative (for crediting only), but a

two-tailed "net" calculation may have a positive overall performance, but not be conservative on one or the other end (e.g. emissions or removals), e.g. if removals are lower than the baseline but avoided emissions out-perform the loss in net removals.

- A Tier 1 analysis by the TAP suggests that soil carbon could be a significant source (i.e. >10%) of emissions/removals, so its exclusion under the reforestation scenario may not be conservative (depending on whether performance in the monitoring period is above or below the reference level for removals). In addition, the MMR system does not include any process to estimate soil carbon change. The TAP notes that detecting and reporting changes in soil carbon under reforestation and restoration is difficult and could require a detailed research/sampling program. Given the complexities with soil carbon measurement, the TAP believes its exclusion may be considered part of a stepwise approach that is consistent with UNFCCC approaches for REDD+.
- HWP: The ER-PD suggests that consideration of Harvested Wood Products is not required by the MF; the TAP believes the MF is actually unclear on this issue, although HWP is considered a pool in IPCC guidance and for this reason should be considered. However, in the case of Vietnam, the exclusion of HWPs is likely conservative as the proposed ER-PD activities include moving plantations to longer rotation periods leading to increasing timber volume over wood chip.

On exclusion of non-CO_2 gases:

- Vietnam's latest GHGI submission (BUR 2014) provides CH_4 and N_2O estimates for emissions in 2010 but do not disaggregate figures for the NCC region or forest-related emissions. However, Vietnam provided to the TAP a calculation of non-CO_2 emissions in the NCC region in 2010 (based on 836 ha of burned forest) of 140,384 tCO_2eq. As a percentage of estimated forest-related emissions from 2005-2010, this would be 1.9% or less than 10% (as a test of significance).
- To verify the level of significance of fire, the TAP compared data from FAOSTAT[1] (which draws from an independent source, i.e. burned forest area from GFED4[2] overlaid on FAO-FRA ecological zones). According to this data, tCO_2e from biomass burning from 2000-2010 was on average 174.45Gg/yr = 174,450 tCO_2/yr. Using Vietnam's estimated forest-related emissions in NCC (only) for the same period (~8.6$MtCO_2e$) suggests *national* non-CO_2 biomass burning is less than 2% of NCC forest-related emissions, or well below the threshold of significance as defined in the MF.

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**

The assessment of this indicator is merged with 4.1 above.

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	**NO**

[1] A full description of the methods used in the FAOSTAT database can be found at: http://faostat.fao.org/Portals/_Faostat/documents/pdf/BurningBiomass.pdf

[2] A description of the Global Fire Emissions Database v.4 can be found at: https://daac.ornl.gov/VEGETATION/guides/fire_emissions_v4.html

Period – 8.3] [Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area– 9.1]	

The ER-PD describes the methods applied for setting the RL and MMR. The emissions estimates are made using Tier 2 emissions factors and Approach 3 representation of lands.

The final ER-PD provides improvements in particular the proposal to track lands through time to better identify land use changes (vs. land cover changes), i.e. implementing a time series consistent IPCC Approach 3 method. Doing so should help to determine if changes are due to harvest or misallocation and also help Vietnam be compliant with Indicator 21, which requires a country to be technically capable of monitoring reversals (see assessment under Indicator 21). The TAP also noted that Vietnam has confirmed that the vast majority of land cover changes are due to human activity.

The following remain issues that represent simplifications that are not consistent with the IPCC Guidelines. The CFPs may consider whether acceptable as part of a stepwise approach to building an MRV system:

- Removals factors for enhancement activities (both reforestation and restoration) are applied fully in the year/period that the activity is detected. In reality this uptake occurs of a number of years. Applying this method leads to an overestimation of removals in the reference level, particularly for reforestation and restoration of natural forests. This method is not consistent with IPCC guidelines.
    - This may be accepted by CFPs if the same method is applied in the crediting period including a discount for the survival / success rate (87%); doing so would front load the credits provided (i.e. overestimate the actual amount of increased removals in the year of detection in the MMR system).
    - For restoration the effect may be compensated by the lack of accounting for removals within categories (Table 1, yellow boxes), with removals only counted when forest moves up a class.
    - For short-rotation plantations the effect will be small due to the short rotation lengths (5-7 years).
- Application of an average carbon stock approach to estimating emissions and removals in harvested plantations (per explanation in Annex 4 of how models 6 and 7 would be calculated for increased removals).
    - The TAP notes that while the use of average carbon stocks is not generally applied in gain-loss approaches, the approach applied in the ER-PD for the reference level may better reflect the estimates that will be assessed by the MRR, as the MMR will measure the total stock change between periods.

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.	**YES**

[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]	

Much of the information required to be compliant with this indicator is contained in the ER-PD itself. The TAP's expectation is therefore that the methodological steps for this Indicator will be made publicly available on the FCPF webpage. In addition, we note the following (including information that is public beyond the ER-PD):

- **Forest definition**: The forest definition used in the ER-PD is the same as that used in the FREL/FRL submission to the UNFCCC[3] and can also be found in Circular No. 34/2009/TT-BNNPTNT on criteria for forest identification and classification.
- **Definition of classes of forests**: Land use classes and a stratification system are provided in Section 8.2 of the ER-PD. They are consistent with those in the FREL/FRL submission (although collapsed into fewer categories, see Indicator 10.2). Forest classes are based on the same (publicly available) circular as above.
- **Activity data, and pre-processing and processing methods**: A description of methods used to generate activity data can be found in the ER-PD (in particular, Annex 13).

  Further information on the development of AD at the national level (on which the NCC data is based) can be found at: http://vietnam-redd.org/Upload/Download/File/Report_AD_En_13102015_(ai)_P_4911.pdf
- **Emission factors and description of their development**: This can be found in the ER-PD document (in particular, Annex 14). Further detailed description of NFIMAP Cycles I to IV plot measurement data can be found at: http://vietnam-redd.org/Upload/Download/File/VN_EmissionFactorReport_5028_2130.pdf
- **Estimation of emissions and removals, including accounting approach**: The ER-PD provides information on methods used to estimate emissions and removals (using AD and EF, as above) and the RL description (Annex 15) provides information on the intended accounting approach, with the assumption that similar methods would be used to calculate ERs as those used to calculate the RL.
- **Disaggregation of emissions by sources and removal by sinks**: Annex 15 provides disaggregated estimates of emissions and removals in the (preliminary) reference period. These can be replicated with information from the ER-PD (combining information provided on AD + EF). However, additional information could be provided on the final estimates that include the bias correction (following the accuracy assessment), see Indicator 8.1.
- **Estimation of accuracy, precision, and/or confidence level**, as applicable; Section 12 and Annex 15 provide analysis of the methods applied to estimate uncertainty.
- **Discussion of key uncertainties**; Section 12 includes a discussion of the key uncertainties. However, the TAP found that uncertainties for the ER calculations were missing, in particular those relating to growth rates for the proposed new plantations.
- **Rationale for adjusting emissions**: N/A, as the final ER-PD does not include an adjustment.
- **Methods and assumptions associated with adjusting emissions:** N/A.

As noted above, most of the information to comply with this Indicator is in the ER-PD itself. There are also other documents – such as Circular 34 and reports that are available on the Vietnam UN-REDD website. In the longer term, it would be preferable for all the information (including from future monitoring and the publication of results) to be stored and made publicly available in a single web portal. The ER-PD suggests the FORMIS system will be used as a hub for all the information of the ER-PD, which is encouraging.

[3] http://redd.unfccc.int/submissions.html?country=vnm

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]	**NO**

While an explanation is provided in the ER-PD on how elements of the RL were derived from spatial information, the underlying data sets are currently not publicly available in a single, consolidated location that would make it possible to understand how the data were used in the calculations. However, this indicator may change to a Yes if the below is implemented; since the indicator was written in present tense, however, we scored it as a provision No.

Section 9.9.2 suggests that if the ER-P is approved, Vietnam will "give priority to integrate forest-related data of the provinces in the Accounting Area into the FORMIS system and use FORMIS as the information system of the ER-P". FORMIS (Forest Management Information System) is a system that aims to support forest governance by providing accurate information for decision making in the forest sector. It is currently in Phase 2 of development.

During its in-country mission the TAP held a meeting with a responsible person for the FORMIS system and assesses it to be an extremely suitable platform on which make spatial and other data publicly available. Following the TAP mission, it was suggested that Vietnam could demonstrate more clearly *how* such data and information will be made transparent; for example, exactly what data/information will be publicly available, to whom, and on what timeframe. It was also suggested that the Government may wish to begin a dialogue with FORMIS on what this will require to accomplish this in the FORMIS system (e.g. building a module, agreeing on management of public access, etc.)—as of the time of the TAP mission, there had not yet been discussions with FORMIS directly on these matters.

Note: There has been no further changes or updates on the use of FORMIS moving from the advanced to final ER-PD.

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 ER-PD does provide a list of assumptions applied in the development of the RL. The TAP notes that in the final ER-PD Vietnam has provided additional information and proposed methods that will address the TAPs original concerns.

The proposed MMR method does have good systems in place for estimating uncertainty.

Although not specified in this criteria, the TAP notes that growth rates used in calculating the ERs are not backed by any references and, while within known ranges, appear high in some cases. This issue was not addressed by Vietnam during the review. This could lead to the overestimation of expected emissions reductions through the ER-P. Further, the ER estimates do not include an estimate of uncertainty. The TAP notes that the ER estimates could be improved by estimating the uncertainty around growth rates, not just the risk of lack of delivery.

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 ER-PD does provide an assessment of the relative contribution to overall uncertainty for the sources identified in the ER-PD.

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]	**YES**

The RL uses existing data for both the activity data (forest type maps from previous inventories) and emissions factors (2010 National Forest Inventory). The existing forest maps have been subject to further improvement through a series of donor-supported projects, including the removal of areas of illogical changes. While the maps have been developed using the same methods, they were developed independently of each other. This can

1. Greatly increase the chances of systematic errors due to differences in the way operators interpreted the procedures and the data.
2. Lead to slivers of false change at the boundaries of polygons

The TAP notes that Vietnam has proposed a method to address the issue of slivers by aligning unchanged boundaries. Once implemented this will reduce uncertainties in the AD.

The TAP notes that in the final ER-PD Vietnam has applied a bias correction to the area estimates. However:

- Vietnam has not updated the activity data annex, and the corrected area data do not appear in the ER-PD. This makes it difficult to assess the overall effect of the correction on different classes.
- Due to the large number of classes that need to be assessed, Vietnam collapsed the number of classes to key activities (deforestation, degradation, enhancement and reforestation), for the purposes of calculating bias then applied this proportionally.
    - It is unlikely that the bias is evenly distributed across all the different forest class and class change categories. The TAP notes that this is the most practical method that can be applied at this stage, and that future improvements will be applied through the MMR process

The emissions factors are based on the 2010 forest inventory cycle, which is considered the best data available. This includes standard procedures for measurement and storage of data. Further work has been conducted to clean and improve this data. However, the application of the emissions factors for enhancement activities (reforestation and restoration) as occurring entirely in the year the activity occurred will lead to systematic errors in the final results.

The proposed MMR program includes standard operating procedures and a detailed set of processes for QA/QC in the data collection and analysis process. The TAP notes that the proposed mapping methods should provide consistency between the RL and the MMR, the methods change between the RL and the MMR. However, the methods for estimating emissions, through updating of inventory data, may not lead to consistent results (with the reference level relying on only the 2010 NFI data). This may be addressed through a recalculation. The TAP notes that Vietnam are currently reviewing the 2005 NFI data to see how it may be used in the RL and MMR systems. This would increase consistency.

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]	**YES**

The random errors and uncertainties for the RL identified in the report were minimized to the extent possible using the existing data. Where other potential sources of error were identified by the TAP (see Indicator 7.1 in the advanced ER-PD report), Vietnam has provided details of how these will be addressed in the future.

Until the MMR system is operating is it not possible to assess if all errors and uncertainties have been minimized. The proposed methods do include processes for minimizing errors and for calculating uncertainties and the MMR is well designed and consistent with other countries methods. As noted in Indicator 7.1, there is no error or uncertainty assessment for the ER estimates.

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]	**YES**

For the RL the uncertainty estimates for the activity data and EFs are quantified. In the advance draft ER-PD the error and bias was assessed, but then the bias corrections were not applied in the final results. In the Final ER-PD Vietnam has applied a bias correction and this has led to a change in the RL estimates. The TAP commends Vietnam for making this change.

However, the TAP notes that to apply the bias correction required the use of a simple approach where bias corrections for broad activity categories (e.g. deforestation) were simply prorated across a range of AD data (for example, all forest types that move to non-forest). In reality it is highly unlikely that the bias is equal for all the different forest types. The TAP acknowledges that developing bias corrections for all classes through all time steps would be a large and cumbersome process and the method applied should provide acceptable results in the short-term. Vietnam could explore other methods in the future to improve the RL and MMR estimates.

The TAP also notes that there are no uncertainty estimates provided for the ERs directly. For the ERs expected to come from avoided deforestation and degradation the uncertainty estimates developed for the RL could be applied. However, there are no uncertainty estimates provided for other ER actions, in particular those due to changes in plantation management and the growth of natural forests following protection.	
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
Monte Carlo methods were not applied for the estimation of Emissions Reductions. However, the TAP noted that Monte Carlo methods may not be needed given the relatively simple methods applied. The ER-PD does include total uncertainty estimates by each overarching category (deforestation, forest degradation, reforestation and restoration). It does not include the total combined uncertainty for all the emissions and removals from all activities. The ER-PD does not provide a transparent description of the process that would allow the TAP to assess if the uncertainties reported are at the two-tailed 90% confidence interval. The activity data uncertainty estimates use 95% confidence intervals (assuming two-tailed). The TAP does note that the ER-PD does provide a description of the process of calculating uncertainty and this indicator may be addressed by updating the text to include the information required in this indicator.	
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 estimates are made through a single system and do not currently use proxy data. Annex 2 includes separate uncertainty estimates provided for each broad intervention for the RL (deforestation, degradation, restoration and reforestation). However these do not include bias corrections (see Indicators 8.1 and 9.1)	
C 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**
Yes, the RL 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**

The ER-PD explains some of the similarities and differences between the RL (in the ER-PD) compared to the FREL/FRL submitted to the UNFCCC. The two used the same forest definition and data from NFIMAP-4. While not all elements are exactly the same in the UNFCCC submission vs. the ER-PD, the two can be said to be generally consistent. For example, the RL collapses some of the land cover categories in the national FREL/FRL. NCC-specific Emission Factors were also estimated, but using the same national data from the NFI. There are also some differences in the Activity Data when the analysis was downscaled to the NCC region. The TAP does not consider these differences material.

The TAP notes that the final ER-PD now incorporates the same strategy for ensuring conversion of natural forests to plantations will be counted as a loss of forest carbon stock (i.e. by stating that the same areas would not be eligible for future removals). This is related to Indicator 24.1 on Safeguards, with respect to the UNFCCC safeguard on incentivizing the protection and conservation of natural forests (and that actions are not used for the conversion of natural forests). This is a positive improvement in the final ER-PD.

One noted difference between the ER-PD (Annex 15) and the modified submission (early draft shared with the TAP) is that the RL construction currently assumes that there is no change in forest carbon stock for forests remaining in the same class. The modified submission provides differences in measurements of carbon stock for each forest class in past NFI cycles. It is assumed that, going forward, the revised RL and estimated ERs will include these changes in carbon stock per class to capture changes in forest areas that remain in the same class, consistent with the methods suggested in the modified FREL/FRL submission, although this is not entirely clear in the final ER-PD.

The ER-PD also suggests that the RLs used in the accounting area for the ER-P (for the NCC region) will be nested into the national FREL/FRL submission to the UNFCCC, in order to avoid double counting of ERs. It suggests the ER Program would report its performance to the Vietnam REDD+ Office, which is responsible for reporting on REDD+, including information that would be included in BUR submissions. While details on how the "nesting" would be accomplished were not provided, the TAP considers the statement of intent a positive signal—although more details will be required to avoid double counting (see Criterion 23).

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]	**NO**

The ER-PD suggests Viet Nam is in the process of preparing a second BUR and that the RL *can* contribute to improving GHG estimates for the LULUCF sector. However, there is no explanation on intended steps to ensure the RL achieves consistency with future GHGIs.

Note: There has been no change from the advanced to the final ER-PD on this issue, i.e. no further details were provided.

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 reference level developed for the Advance Draft ER-PD used a reference period of 2000-2010 (based on compliance with the 2013 version of the Methodological Framework). However, the criteria for the reference period changes shortly before the Vietnam submission (June 2016) when the CF Participants modified this Indicator to "two years before the TAP starts its assessment".

The final ER-PD states Vietnam will shift the reference period to a more recent time period (e.g. 2005-2015). While more recent data is not yet be fully available for a more recent time period, the TAP agrees with the decision of Vietnam to avoid a large gap between the reference and crediting periods and to provide a more accurate representation of expected emissions/removals in the crediting period. The ER-PD does document a plan to move to this reference period. The end date in this instance would be 1.5 years prior to the start of the TAP assessment, but is justified as Vietnam has long been on a 5-year cycle of developing forest inventory data. The TAP commends Vietnam for making this change.	
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 proposed Reference Period in the Final ER-PD (2005-2015) is compliant with this indicator (see comments in Indicator 11.1).	
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**
Vietnam specified the forest definition used in the RL construction. The definition is consistent with that applied in the UNFCCC submission. The TAP notes that the stratification of forest types is different in the FREL/FRL submission to the UNFCCC, but consistent with the ER-PD (which collapses several forest types into one category given similarities in carbon stock estimates and to reduce the level of uncertainties).	
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]	**YES**
The proposed reference level uses an average historical NET emissions calculation (while showing both average emissions and removals), which is compliant with the interpretation of CFPs on this indicator (based on comments by CFPs on the Advanced draft ER-PD).	
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:	**N/A**

(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. [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].	
Vietnam has revised the final ER-PD to remove the proposed adjustment that was in the advance draft ER-PD, per guidance provided by CFPs, this Indicator is N/A because Vietnam does not meet the eligibility requirements.	
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**
N/A (as above)	
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**
N/A (as above)	
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**
The ER program uses the same or demonstrably equivalent methods for setting the Reference Level and for ongoing MMR. The exception is treatment of forest classes which remain in the same forest class as described in Indicator 3.1 (in which the assumption is currently "zero" for all classes). However, the MMR system will be able to detect changes within a class and the RL may also integrate carbon stock changes within classes once the RL shifts period to 2005-2015.	

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 MMR system should be able to report at least twice during the period, if not more frequently. The method proposed is spatially explicit and now states that individual parcels of land will be tracked through time (as per Approach 3). Degradation is current estimated from changes between forest classes and does not use proxy data.	
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 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]	**YES**
Vietnam is using Tier 2 for aboveground biomass estimates and IPCC defaults for root: shoot ratios. Tier 1 is not used for any pools. The TAP considers the answer to this indicator as "YES" because Tier 2 estimates are applied. However, the TAP notes that currently the EFs used in the RL are based on the 2010 forest inventory, applied back to 2000 using remote sensing. Given Vietnam will shift its RL period to 2005-2015, it has the opportunity to update the EFs to include changes in forest classes that remain the same forest class (using EFs from the new cycle). This would both improve the RL and also be more consistent with the methods described in the modified UNFCCC submission. During the measurement period EFs will be calculated using a newer inventory system. It is unclear if any differences in EFs would be to actual changes or due to differences in the measurement and sampling system.	
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**
The Forest Monitoring System proposed in the ER program is based heavily on the planned NFMP for Viet Nam. This includes a new national scale mapping method, improved forest inventory data and systems for the collection and processing of local data collected by forest rangers and communities. As such the ER program MMR will likely be consistent with the national system. However, it is not clear how any additional data collected as part of the ERP will be used by the national system. For example, data on the growth and management of new forest plantations is not explicitly addressed in the NFMS or MMR plans. These issues will need to be addressed as the programs are implemented.	
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]	

The proposed activities for the ER program include piloting within the Provincial Forest Monitoring System (PFMS) monitoring, verification and reporting of forest cover including the use of village-based forest patrolling teams that can report detected forest change from on the ground, and use tablets to record information and send it to a database (which is the checked by District, then Provincial authorities). This system is described in the following document and has been supported by JICA:

http://www.vietnam-redd.org/Upload/CMS/Content/REDD%20projects/JICA-DienBienREDDpilot/SUSFORM-NOW/00_Implimentation%20handbook-en.pdf

This system is not used for mapping or to develop forest cover change, but can be useful as a verification system. The ER-PD suggests information from the tablet system would be integrated into FORMIS II. While it is unclear how the tablet system, which has been piloted, will be scaled up and how information will be integrated into the national monitoring system, the piloting work to date is compliant with "exploring opportunities" for community participation in forest monitoring and the ER-PD suggests that further expansion of these activities will occur.

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 the advanced draft, the TAP had alluded to the fact that unless the ER-P provide and support alternative agricultural; production systems in the accounting area, there is a likelihood of localized displacement within the accounting area. In that regard, the risk of such displacement, without mitigating factors would be medium to high. In addition the TAP was also of the opinion that, while the risk of displacement for the other drivers are generally low, the risk of international displacement was at least medium. If the Program somehow managed to tackle illegal logging then this may simply cause greater illegal activities over the border, particularly in Lao PDR.

The final ER-PD presents the risks and proposed mitigation actions respectively (tables 10.1 and 10.2). It does so an improvement in the descriptions of risks of displacement and sensible mitigation actions. For instance, by Vietnam signing a Voluntary Partnership Agreement with the EU in the context of FLEGT and also getting into agreement with neighbouring countries (Lao and Cambodia) on the legal sourcing of timber that Vietnam imports from them are noteworthy developments. While the control cross –border movement of illegal timber is a difficult issue , it is important that exporting countries are now part of the process to find solutions, as is the fact that a number of Vietnam's timber importing companies are now getting chain of custody certification.

Despite the positive developments, the TAP is of the opinion that the risk rating of displacement as "low" may be overly optimistic given the difficulties in controlling cross-border displacements. As such the ER-PD should consider this a serious risk and give higher priority in mitigating the risk.

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 already described under 17.2, Vietnam recognizes the risks of displacement as depicted in tables 10.1 and 10.2, which includes program design features to minimize such risks.	
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**
While an assessment of the anthropogenic and natural risks of reversals has been carried out, there is no clear differentiation of risks during the term of the ERPA and after the end of the term of the ERPA. This needs to be added.	
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**
Information has been provided on how the Program will mitigate risks and address the sustainability of ERs (Table 11.1). However, it is not always clearly justified that these activities will be able to mitigate these risks. The risk of higher prices for commodities, for example, could lead to a major reversal in land use. Rubber has expanded rapidly in the NCC due to government support programs and high prices in the past decade. These prices have since fallen considerably, while the price of the other main crop which is exported, cassava, remains fairly low. If the prices were to spike significantly and/or other profitable crops introduced to the area history in Vietnam has shown this to be a major driver of forest loss and degradation. Stricter policies which are being introduced will help mitigate this risk. However, this would need to be complimented by stronger enforcement capacity. The ER-PD has indicated Option 2 to develop an ER Program CF Buffer. The determination of the reversal set aside percentage, based on guidance provided, is provided in Annex 4 (Table 4.1). It does not provide details on how the reversal risk choices (high, medium, low) were derived. The TAP notes that the final ER-PD has increased the Reversal Risk Set Aside for Risk B, which the TAP views as appropriate. There remains ineffective vertical/cross sectoral integration. Plans and activities continue to be implemented very much on a sectoral basis which makes it highly challenging working and finding solutions across sectors which is particularly important for REDD+. In many cases there is also ineffective coordination vertically and although there are a myriad of different plans and policies in Vietnam, implementation remains a major challenge. For these reasons we would deem that there is medium risk. Also with Default Risk C there is certainly a lack of experience in decoupling economic growth and deforestation and forest degradation and there continues to be a lack of understanding and efforts to address the underlying drivers of	

deforestation (in particular around governance). Although there is an improving legal and policy environment to support REDD+, there is a lack of domestic support and the continued expectation that this will be supported through international agencies. This in the TAPs opinion remains at least a medium risk and the ER-PD should reconsider its assessment of this.

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**

Vietnam has chosen Option 2. Comments on the reversal risk assessment are provided in Criterion 18.

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**

The final ER-PD states that time series change sequences will be tracked for each parcel of land; this allows for much better tracking of reversals (in the traditional sense), in particular it will avoid misclassifying plantation management as deforestation. Therefore, this indicator has changed from No to Yes.

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**

While the TAP has assessed this indicator to be a Yes, it notes that the ex-ante estimation of expected Emission Reductions (ERs) was not made as a comparison to the RL—rather, it was based on specific activities/models, expected hectares where interventions would take place, and the resulting impact on emissions/removals from those specified activities. This allowed for the use of different methods to calculate the RL vs. estimated ER delivery.

As explained (and illustrated) in Criterion 3, at least four of the eight proposed "models" (Models 2, 3, 6 and 7) assume generation of ERs (all from removals, labeled "C+" in Table 4.3, Annex 4) that are currently not estimated (or assumed to be "zero") in the proposed RL.

The expected ERs are based on application of eight "models", on 224,930 ha of land (4.4% of the total land area of the NCC region), that are expected to be carried out over the ERPA period. The estimates are considered to be conservative as they do not include expected changes from the full range of REDD+ policies and measures suggested in the ER-PD. However, given the dynamic nature of Vietnam's lands, it also means that expected GHG flux variabilities may overtake the actual impacts that occur from the seven models, or activities, on what is currently a small fraction of the NCC region (see Annex 4, Table 1.1 for the % of land use class area for each model – for example, plantation models 6 and 7 are expected to be implemented in 7.6% of the total plantation areas). Another example are the historic emissions from EGR-R to EGR-M forests which changed from ~13.5MtCO_2 in 2000-2005 to ~4.9MtCO_2 in 2005-2010; and from EGR-R to EGR-P from 3.5Mt to 5.3Mt in the same periods. Overall the differences in the two periods were around 3Mt in (increased) emissions and 26Mt in (increased) removals. The ER-PD suggests that some interventions will be targeted at hotspot areas (e.g. Model 3); this approach should help reduce the "signal to noise" ratio during the monitoring period.

There are also differences in how removals are estimated over time. Models 4, 5 and 8 are calculated by averaging out the carbon benefits of the models over 10-year periods, whereas the RL assumes full carbon stock uptake of the plantation when first detected (e.g. by the Landsat imagery, so several years after planting). This results in a conservative estimate of ERs, i.e. an overestimation of removals in the RL and/or an underestimation in the monitoring period. However, the difference could be very large and could result in Vietnam not being able to demonstrate

achievement of the estimated ERs even if area targets are reached. Removals related to avoided deforestation and degradation (models 1, 2 and 3) are spread over 5-year periods and therefore not comparable to the RL. However, in the longer term the accounting of carbon benefits may "true up" (although not necessarily during the ERPA term).

The TAP notes that the assumed survival rate of plantations in the RL is 87%, but is 90% in the estimated ER calculation

Finally, the TAP notes that in the final ER-PD, Vietnam applied an uncertainty set-aside (4% of total ERs). A 4% "conservativeness factor", given the current accuracy assessment estimations, is a credible assumption.

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 14.1]	**NO**

The ER-PD states that the "ER Program will be nested into the national REDD+ implementation to avoid double counting of emission reduction and/or removal enhancement" and that any REDD+ results will be nested into the national REDD+ performance to be reported to the UNFCCC in the BUR technical annex (Section 4.20). The ER-PD also states an intent to develop a registry (Section 18.2), although the information provided is very general and limited (see assessment for Indicator 37.2).

In particular, the ER-PD does not yet describe how "nesting" of projects may be managed within the NCC region, as well as any details or methodologies on how nesting ERs sold from the NCC region would be included in a national level accounting system—particularly given that currently the NCC data is somewhat consistent, but not the same as the national level estimations, including those used in the national FREL/FRL (see assessment in Indicator 10.2).

The ER-PD does not appear to clarify participation in other GHG initiatives, but rather describes in Section 18.1 some of the national level systems (e.g. the GHG Inventory and NDC). For example, currently, there is one CDM A/R project in Vietnam (although not located in the NCC region). There may also be at least one additional project (that the TAP was able to discover) in the pipeline within the NCC region: the Khe Nuoc Trong Carbon Balanced Project (World Land Trust as the project developer), although the TAP does not have information on the status of the project. World Land Trust's website suggests the project would like to engage in voluntary offsetting.

In sum, it would be useful for the ER-PD to provide a status of REDD+ related projects in the country and how double counting will be avoided both from project to subnational level programs (such as within the NCC), as well as with the national level system of monitoring performance.

(ii) [Data management and Registry systems to avoid multiple claims to ERs 19.2]	**NO**

Explanation covered above.

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**

The final ER-PD presents a short but clear account of safeguard issues and has shown how the key tenets of the World Banks Safeguard Policies have been taken into account. Furthermore gaps between what the ER-PD proposes in relation to those World Bank Guidelines have also been identified, as have been the expected *positive* and *negative impacts* of the ER-PD. The TAP has also noted the presence of a Gender Action Plan preceded by an analysis

There is however more that needs to be done with respect to the facilitation of participation by ethnic minorities of which the NCC Region has many and their legal empowerment which are a critical Social Safeguard Issue. Furthermore poverty reduction efforts among the ethnic minorities appears to be a challenge since the ethnic minorities that hold communal tenure land rights could be disadvantaged since even the Vietnam Land Law of 2013 does not make provision for communal tenure.

A critical safeguard issue with respect to the project interventions is that the support for plantations will lead to a further loss in the remaining natural forests. This issue is of high concern given that forest which can be classified as 'degraded' natural forest can be converted to tree crops such as rubber and acacia. Although rubber has been the major driver of conversion, because of current depressed global prices, the threat from forest plantations remains. This threat may be made all the more likely with the forthcoming revision of the forest law. This law will have provisions to re-designate 'non-critical' protection forest to production forest and could possibly will lead to the likely large scale conversion of protection forest to plantations. It is important that the ER Program ensures that this is no conversion of natural forest of plantations. This is already picked up in the UNFCCC FREL submission.

Another critical issue is basic food security and poverty alleviation. If the ER-PD restricts the use of forest land for food crops, without alternative options then demand for land for subsistence farming will continue to be a threat to the sustainability of the ER Program. The ER Program has nothing on support to agriculture as it is just focused mainly on forests. The focus which is entirely within the forest sector remains cause for worry.

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**

The TAP observes that Table 14.1 depicts a clear appreciation of the ER-PD of the World Banks Operational Policies on Safeguards and what the ER-PD aims to do to address each item under the operational policies. In the previous assessment, the TAP had pointed out what it perceived to be a real risk of the remaining degraded natural forests being converted to rubber and acacia plantations and other crops such as cassava; a development which may further erode the rich biodiversity of the NCC Region. As such it had recommended a strong safeguard against such a risk in the accounting area and indeed nationally. It also pointed out the fact that ethnic minorities, given that Vietnam's Land Law of 2013 which does not recognize community tenure (*common property rights*), are likely to be marginalized despite the fact that they constitutes 11.5% of the overall population of the NCC Region and in many cases over 90% of the forested upland area.

In the current version of the ER-PD has made reference to the fact that there will be consultations with appropriate government agencies that the hydro-power and other infra-structure projects within the ERP area will need to comply with safeguard policies. In addition, the ER-PD in Chapter 10, Table 10.1 suggests that the risk of further loss of natural forests to other uses remains low because of other government policies and in the Provincial REDD Action Plans which support stronger land use plans and has safeguards in place. Despite such assurances, there is still a medium risk that should cassava and rubber prices improve in the global market, poor degraded forest lands could become vulnerable to planned conversion and the ER-PD should recognize this.

Within the context of Vietnam's Ethnic Minority Policy Framework, will be used as a mechanism alongside others such as grants and loans to deal with poverty reduction aspects of the ERP. In addition the government's Resettlement Planning Framework (EMPF) will be used to guard against loss of livelihoods of the rural poor. Chapter 4, sections 4.3, subsection 4.3.3, have described poverty reduction strategies, and have made reference to the revised Provincial REDD+ Action Plans (PRAPs) which contain livelihood support activities to affected populations.

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**

As in the preceding version of the ER-PD, the final draft has issues that will trigger World Bank Safeguards have been identified and described. In addition section 14.2 now contains information that gives a clear process through which safeguards will be addressed and monitored.

Information has now been provided on the process of consultations on safeguards, with specific reference to Vietnam's SESA Phase I process, which highlighted safeguard matters that would be triggered in a REDD+ program. The ER-PD has also stated that during the implementation of the ER Program, an M and E system will be designed and be based on performance benchmarks of which one will be on safeguards. So far the guidelines of the M and E system have been proposed in the ER-PD.

It is also stated that in the recent revision of PRAPs safeguard issues were discussed, including in the design of an ESMF associated with the PRAPs and special attention has been given to interactions with ethnic minorities to ensure that safeguard issues that will be triggered are addressed. In addition the ER-PD states that safeguards will be monitored both at the provincial and at the program (national) levels and currently, Vietnam is preparing a draft System for Information on Safeguards (SIS)

While no institutional structure has been provided for the monitoring of safeguards, the final draft of the ER-PD clearly illustrates what it will do to monitor safeguards and is aware of which ones it will need to address and monitor. A new SESA Phase II will also take up and highlight the issue of safeguards

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 TAP has taken note of the fact that Vietnam's Land Law of 2013 has made provisions for FGRM even though no specific FGRM has been specifically developed for the advanced draft of the ER-PD. It also states that grievances should be lodged and addressed at the local level The TAP has also noted that Vietnam subscribes to FPIC Principles elaborated and approved by member states under the auspices of the UNFCCC The role of Communal Reconciliation Committees has also been described in relation to benefit sharing but also in the context of solving common complaints.	
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 procedures for the lodging of grievances and the principles guiding the process have been clearly described as already stated under 25.1 but what is lacking is a comprehensive system to monitor benefit sharing, FGRM and safeguards.	
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**
Yes, this is in place as already described under 26.1	

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**

In the advance draft, that TAP had observed that analysis of drivers of deforestation and forest degradation was weak and the link between the direct drivers, the identified barriers and the proposed emission reduction programs could be made clearer in the Final ER-PD. In line with that, the TAP had stated its expectations as (i) identification of the key drivers (e.g. agriculture, infrastructure, illegal and unsustainable logging and others, including any quantification where possible; (ii) link between what has been described as barriers showing the indirect/underlying causes to these key drivers; (iii) identifying priority underlying causes and develop policies and measures (PaMs) to address them; and (iv) link the PaMs directly to the intervention areas and activities. With regard to those expectations, the TAP now recognizes that the current version of ER-PD has provided a much more detailed analysis of drivers of deforestation and forest degradation (Chapter 4, Section 4.1.1 and 4.1.2) and also included quantitative estimates of levels of deforestation and degradations that are associated with each of the key proximate drivers. The chapter has also listed and described an array of 8 models on protection of natural forests (avoided deforestation), rehabilitation of degraded forests to enhance carbon stocks, afforestation / reforestation and transformation of current plantations from short to longer-rotation regimes. It has added a subsection which describes underlying causes of deforestation and forest. There is also a subsection that describes actions to deliver the '+' (SFM, rehabilitation, conservation) under the ER-P.

The description of drivers relies on information gathered from the PRAPs and on a number of other sources. Several of the PRAPs included separate assessments of drivers which provided useful information and which largely confirmed findings from other analyses of deforestation. The document makes it clear that field-based activities will need to respond to localized drivers which will be identified during program implementation through REDD+ Needs Assessments and Social Screening Reports. To scale up impact at the national level, the ER-PD has provided a description of policy developments that it considers relevant in Section 4.1.3.

Despite the significant improvements that have been made the ER-PD does is still not quite explicit on how it will address some underlying causes. For instance a discussion within government on governance reform to curb illegal logging and for stronger land use plans endorsed by both national and local governments could reduce the threat of degradation and conversion of natural forests.

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**

Just as already stated under indicator 27.1 the TAP has taken note of the proposed emission reduction program that is also summarized in tables 4.5. In table 4.7 the links between ER program activities, direct drivers and underlying causes have been made, even though improvements can still be made. However, corporate governance issues, some of which affect the forest sector have not been addressed. It is however important for the ER-PD to point out governance factors that will influence the course and achievements of the ER program even it may not directly influence them.

Another important improvement is the fact that an exercise to revise PRAPs is underway and will be concluded before the end of 2016. It has also improved the analysis of drivers of deforestation and forest degradation.

The Final ER-PD describes policies and incentives (Section 4.1.3 of the ER-PD) which it hopes will support the chosen interventions (e.g. longer rotation, mixed species plantations, co-management of natural forests) which could lead to the scaling up of impact. Furthermore a variety of financing sources to implement the ER-P even though it is not exhaustive, has been provided

Another useful addition to the ER-PD is that expected sources of funding for the program has been provided during the proposed 8-year period of the program (Chapter 6, Table 6.3) While there have been significant improvements, addressing underlying causes of deforestation and forest degradation could be made more clear.

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; 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]	**YES**

The Final ER-PD has addressed most of the issues raised in the assessment of the Advanced draft ER-PD regarding this indicator. A separate document containing a detailed assessment of land and forest tenure (the "Land Tenure and Resources Report") has also been prepared and shared with the TAP. This indicator can therefore be considered to have been met.

There are however a number of areas that could be improved, and the TAP deems it important that these issues are addressed in the implementation of the ER-P. The following provides an updated assessment of the specific sub-indicators:

With respect to **Item I**, the range of land and resource rights in the accounting area are presented. The analysis is better organized and clearly presented. It is also more complete, and now includes all the major categories of forest owner. The analysis is limited to statutory and contract rights (i.e. "legal" rights, as opposed to "customary" rights). However, it is acknowledged that since customary rights play a subordinate role to statutory rights and there is no centralized record of them, it may not be feasible to provide this information.

With respect to **Item II,** the discussion of the legal status of rights has improved. The different types of tenure are discussed, information is presented on the proportion of land for which land use rights certificates (LURCs) have been

issued, and there is discussion of the *de facto* access to forests by those without formal rights. Several gaps and ambiguities are also highlighted, including the discrepancy between the land and forest laws with respect to the allocation of natural production forests, and the uncertainty regarding the legal status of communities.

A continuing concern of the TAP concerns the dismissive treatment of customary rights in the ER-PD. While the TAP recognizes that customary tenure plays a subordinate role to statutory tenure in the Vietnam legal system, the broad statements made in the ER-PD claiming that customary land use is not recognized by the law do not appear to be supported by the evidence. Indeed, the Land Tenure and Resources Report prepared for the ER-PD itself states that customary law is – insofar as it does not go contrary to statutory rules – both recognized and important in guiding management and allocation at local level.[4] The same report states elsewhere that in practice (government) forest management entities often acknowledge the customary use of forest resources.[5] This calls into question the statement in the ER-PD that communities "recognize that this type of land tenure has disappeared."

Furthermore, there are a number of legal ambiguities which are not mentioned in the ER-PD, though most of these are highlighted in the Land Tenure and Resources Report. They include:

1. Discrepancies between the processes for forest allocation and land allocation, and associated ambiguities;
2. Ambiguities regarding the status of forest contractors. This is mentioned in the benefit sharing section (15.5.2), though given the key role of forest protection contracts in ER Program activities the TAP would expect it to be more fully addressed in the land tenure section;
3. Issues concerning the duration of forest rights, which are in practice often allocated only for short periods;
4. Absence of implementing regulations to guide forest allocation to communities.

With respect to **Item III**, there is a better and more detailed description of conflicts in the Accounting Area, and most of the main types of conflicts prevalent in the area are well explained, in particular disputes between forest management entities and local communities over access to forest and disputes over compensation for resettlement. With respect to the former, the Adaptive Collaborative Management Approach (ACMA) is proposed as a means to address the conflict. There are however no strategies proposed to deal with the latter issue.

An important issue that is not identified here regards the frequent conflicts between forest management entities and forest contractors, which are not mentioned in this section, though they are highlighted in the Land Tenure and Resources Report.[6] Given that the ER-P targets the protection of some 61,260 ha of natural forest through these contracts, the TAP considers it important to give more consideration to this issue and how it will be addressed.

With respect to **Item IV**, impacts of the ER-P on land rights are not addressed in the section on land tenure (Section 4.4). The chapter on safeguards (Ch. 14) does highlight some relevant risks, including potential restrictive land zoning processes and restricted access to forest land, which is proposed to be overcome through supporting livelihood development and productivity. It would be helpful to provide a fuller assessment of the potential impacts of the program on land and resource tenure, and ideally in Section 4.4 as well as Ch. 14.

Finally, the assessment does appear to have been conducted in a consultative and participatory manner, given that land issues appear to have fairly broadly discussed in the stakeholder consultations described in Chapter 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.	**YES**

[4] Ministry of Agriculture and Rural Development, Assessment of the Land Tenure and Land Resources Report, October 2016, Page 46.

[5] Ibid, page 74.

[6] Ibid, page 66.

[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]	

The ER-P does explain how most of the relevant issues have been taken into consideration in the design of the ER-P, and includes a number of activities aimed at clarifying and strengthening land tenure and addressing land conflicts. There are however a number of shortcomings that the TAP considers important to highlight and address in ER-P implementation.

The two principal strategies proposed are forest land allocation (FLA) through granting land use rights certificates (LURCs) and the Adaptive Collaborative Management Approach (ACMA).

The Adaptive Collaborative Management Approach (ACMA) is described in detail in Chapter 15, as well as in Section 4.3.2. The arguments for why it is considered a promising strategy to address the land tenure issues identified are well laid out and are in principle convincing. The strong representation of local communities and the involvement of relevant stakeholders such as the District People's Committee (DPC) and forest management entities is to be commended. The inclusiveness of decision making holds promise for the eventual implementation of decisions, and the provision of a mechanism for resolving land disputes is also praiseworthy.

At the same time, the TAP considers it important that follow up is undertaken to assess the success of the ACMA in practice. This is likely to depend on a number of factors, including obtaining/maintaining buy-in from both forest management entities and communities, the ability of different entities to compromise, their willingness to follow through with agreements made and the success of the activities agreed in improving day-to-day living conditions.

FLA is included among the activities that can be included in management plans adopted in specific ACMA committees, and as part of the plantation transformation component. It would be useful to have a clearer picture of how FLA will be undertaken with respect to communities, given that this is an area currently subject to some legal ambiguity.

In contrast, the ER-PD does not provide a proposal for how customary rights will be taken into account in program implementation. While there may be scope for obtaining more recognition for customary rights through the ACMA, there is no specific attention paid to this issue. Moreover, the Safeguards Plan does not provide for any measures to provide legal recognition of rights (i.e. LURCs) to ethnic minorities This is a notable omission, given that customary rights are recognized by the law as among the bases for allocating forest land, in particular for communal land (Land Law 2013, Art. 5(3), 131, 143; Civil Code 2015, Art. 5, 175, 208, 211). The TAP considers that the ER-P has the potential to make a significant positive contribution to the formal recognition of customary rights, and that the absence of measures to address this issue represents a missed opportunity.

Another important issues is that it is not clear how the Program will address issues experienced with forest protection contracts. As discussed under C28.1, given they are indicated as a key instrument for implementing the ER-P, it would be important to clarify how the ER-P will go about addressing the various problems that are currently experienced with their use.

In Section 14.1 on safeguards there is some indication that the land and resource tenure assessment has been taken into account in the Safeguards Plan, such as through addressing the issue of restricted access for ethnic minorities to forest resources through the Ethnic Minority Planning Framework.

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]	**NO**

There have been no changes made in the final ER-PD to Section 17.2 on Transfer of Title to ERs. As was the case in the Advanced draft, there is some high-level assessment of the implications of the land and resource tenure issues in the country for the ability to transfer title in Section 18.2, and several important questions that need to be considered are

identified. However, this assessment would need to be developed in significantly more detail in order to enable a more complete assessment of the implications in question and allow for risks relating to title to be adequately identified.

Vietnam could consider two questions that could help to address this indicator. The first is the identification of the entities other than the State that can claim some form of land and resource rights in the Accounting Area and the extent to which these entities participate in the Program or may have their land and resource rights limited by the Program. Note that state companies may not necessarily be considered as 'the State' from a legal point of view. The second could be the extent to which the major conflicts and issues identified in the land and resource tenure assessment may pose a risk to the ability to transfer unencumbered title to ERs.

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 TAP has taken note of the use of Adaptive Collaborative Management Approach (ACMA) to discuss and develop a Benefit Sharing Mechanisms and a Plan. Furthermore, descriptions of institutional capital benefits on the one hand, and natural, physical and financial capital benefits on the other, have been provided. A proposed modality for benefit sharing based on four technical criteria, has been described. The legal barriers or constraints that will face benefit sharing have also been clearly stated in section 15.3.2 and going forward Vietnam needs a comprehensive set of proposals and a plan to overcome them. Important among these is the status of households versus communities during the distribution of benefits and also the treatment of contractors or licensed operators in Forest Protection and Development. The section also singles out the need to clarify, *rights to carbon*, land and forests, particularly *forest allocation* and associated *land use rights*. As an operating principle the sharing of benefits should include all legitimate stakeholders

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 Program12. 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]	**YES**

In general the benefit sharing section has much improved. The ACMA is described with relative clarity and appears credible. One thing that is not clear to me is the extent to which the ACMA will have autonomy over spending the finance allocated to it, and to what extent this will be guided by general rules on benefit sharing. Title to ERs is mentioned in the benefit sharing section as a challenge to be addressed, but there is no proposal for how to address it.

The section describes expectations of stakeholders, particularly local communities on what they see as non-carbon benefits and it is a whole lot of development needs which they expect to be met; land allocation, access to NTFPs, health facilities, infra-structure and other investments in livelihood support. They see this as benefits they deserve by their participation and support for the ER Program. Elsewhere in the ER-PD, a poverty alleviation plan in program areas, which had been called for in the social safeguards section has also been well-described and speaks to non-carbon benefits, alongside biodiversity and ecological processes. It is noteworthy that local communities are more driven by their livelihood needs and tend to perceive biodiversity as the preserve of provincial and national level governments.

As yet, there is no specific benefit sharing plan but this is envisaged in the ER Program Areas as has been described and will be one of the issues the ACMA process will address. It is also described in section 16.3 that discussions held so far, suggest that the payment of direct monetary benefits to all LURC holders will be a huge logistical undertaking and may introduce excessive transaction costs. Instead the ACMA units will decide how monetary benefits will be distributed at local levels. In fact, a suggestion is that funding of livelihood investments should be made from monetary benefits that accrue from ER processes, rather than distribute them to individual households.

While a clear system for benefit sharing will still be made and the criteria and time lines for distributions clarified, the thinking behind BSM and the strategy to use to use the ACMA process to implement BSM is well articulated.

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]	**YES**

From the ER-PD Chapter 5 describes Stakeholder Consultations in a clear and comprehensive manner and section 5.2 shows how the comments from consultations have been addressed in the program design. In addition there is indication there that the ACMA will designed to respond to concerns raised in the consultations.

In principle the ACMA is itself a participatory approach, since it involved village representatives in the committees and each one has a full time participation specialist.

It appears that in general ethnic minorities were consulted as part of the ER-P, and they would be integrated within the ACMA. It is a little concerning that the ER-PD continues to disregard the role of customary rights (see p.138 – "There are of course some differences in the context of Vietnam – notably issues surrounding customary rights to lands and territories").

Chapter 15 and its sections such as 15.2 of the ER-PD clearly makes a link between ACMA and a Benefit Sharing Mechanism and states that a draft BSM has been prepared. A roadmap to comply with the FCPF Carbon Fund Methodological Framework has been prepared and the legal context of the draft BSM has also been described.

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 final ER-PD contains a more complete description of the benefit sharing arrangements, which shows that they have been designed with the legal context in mind. Section 15.5.1 demonstrates that there is existing legal basis for collaborative management approaches, although some of the legislation cited is not outdated and has been replaced. The arrangements also appear to be broadly in line with legislation on the first pilot benefit sharing arrangements for REDD+ (Decision No. 5399/QD-BNN-TCLN) which, although it does not apply to the ER-P, can be considered indicative of overall policy direction on benefit sharing.

At the same time, the TAP notes that there is as yet no nationally-applicable legislation on benefit sharing in REDD+ initiatives. On the basis of the usual practice in Vietnam, it can be expected that the Government will seek to regulate this through legislation in the future. It is therefore important to ensure that the benefit sharing arrangements are in line with any future legislation.

In addition, the TAP notes that the legal constraints identified in the Advanced Draft of the ER-PD and highlighted by the TAP in its assessment of 15 August 2016 remain unaddressed. In particular, there is no clear plan for addressing the issues of communities' lack of legal personality and the unclear legal status of forest contractors. The TAP recommends that follow up is undertaken to ensure that these issues are addressed in Program implementation.

Finally, the TAP notes that the Final ER-PD does not clarify what the legal status of ACMA committees will be. Given that they will be responsible for managing funding it would appear necessary for them to have legal personality, and the legal structure chosen will need to be able to accommodate not only this function but also their membership, decision-making process and relationships with different entities (forest management entities, DPC, communities etc.). The TAP emphasizes the importance of following up to ensure this is designed in a way that reflects the legal context and enables the approach to function as described.

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 ER-PD has clearly described non-carbon benefits in the context of Vietnam and in that regard the following observations have been made by the TAP:

- Local communities view non-carbon benefits quite broadly as opposed to Institutions of Government operating at provincial and higher levels. The communities view non-carbon benefits in terms of investments to eliminate rural poverty, in addition to rights to access NTFPs and land for production forestry. This is an important issue that can help to improve the livelihoods of local people and help sustain emission reduction programs;
- Between national, provincial and local levels the perceptions on what priority non-carbon benefits are tend to differ;

- Provincial structures are generally reluctant to cede control of forest resources to local communities since they themselves have resource constraints that forest resources can help alleviate; and,
- Improved governance seems to be perceived as a focal non-carbon benefit of REDD+ besides biodiversity and ecosystems services, for which there already exists FPES schemes in Vietnam.

Despite the above points which have been noted, the TAP expected an explicit description of ecosystem / ecological services as a key non-carbon benefit and the protection of which should also be a key safeguard issue, alongside the social and economic ones. The potential for the further loss of the remaining natural forests is a threat which this ER-PD ought to guard against more clearly in the document.

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]	**YES**

Based on the observations in under Criterion 34.1 there is evidence of consultation of stakeholders who view non-carbon benefits broadly and in the context of their socio-economic needs, in addition to ecological benefits.

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**

Priority non-carbon benefits have been described in Chapter 16 and this includes a reference to the forest based PES (PFES) systems which is already operational in Vietnam particularly in the context of hydro-power installations. An approach to provide information on priority non-carbon benefits has been described in Section 16.2, even though it does not quite stand out as a system for gathering or providing information. It can certainly be improved.

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 17.1]	**YES**

Yes, the legal instruments referred to provide MARD with this authority. The ER-PD refers to the authority of MARD to act on behalf of the Government for the ER-P, referencing its designation as the lead agency on REDD+ and as responsible for coordinating the mobilization of REDD+ funding, as set out in the Approval of the National Action Plan for Reduction of Green-house Gas Emissions through Efforts to Reduce Deforestation and Forest Degradation, Sustainable

Management of Forest Resources, and Conservation and Enhancement of Forest Carbon Stocks; Prime Minister's Decision 799/QD-TTg 27 June 2012.

The TAP also notes that, according to Decree 199/2013/ND-CP dated 26 November 2013 of the Government, MARD has the overall authority for the management, development, protection and use of forest, and the exploitation and processing of forest products.

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 17.2]	**NO**

There have been no changes made in the Final ER-PD to Section 17.2 on Transfer of Title to ERs. As in the Advanced Draft, there is an initial assessment of some of the issues that may arise in transferring title to ERs to the Carbon Fund in Section 18.2, and the ER-PD recognizes the "need to study and develop a legal framework for forest carbon rights, trading and transfer forest carbon credits." There is also an indication that these issues will be addressed through the adoption of a Decision by the Prime Minister, and additional information has been provided to the TAP indicating that there is ongoing discussion on this issue and that there is some clarity emerging on the overall approach that will be taken to addressing carbon titles at the national level.

It nonetheless appears that there is as yet no clear plan to address the question of ensuring title to ERs can be transferred to the Carbon Fund. It is indicated that a Decision will be adopted to regulate the issue of carbon title, but the TAP understands from meetings with MONRE that such a Decision will take at least 1-2 years to be adopted, and there remains uncertainty regarding how exactly the Decision will seek to regulate carbon title, although some information has been provided separately regarding the overall approach being considered. In any case, there is no indication of how, based on the overall approach to regulating carbon title adopted through such a decision, the ER Program will secure its ability to transfer Title to ERs generated by the Program to the Carbon Fund.

As noted under Indicator 28.3, it will also be important to better link the assessment of land and resource tenure to the ability to transfer title to ERs and provide an indication of the approaches that will be used to minimize the risk of competing claims to title from the different categories of persons that are participating in the Program, including both landowners and local individuals/communities without land titles.

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]	**NO**

Though the requirement to obtain the ability to transfer title only strictly arises at the time of transfer, the fact that this issue has not yet been considered in detail raises concerns. It is important to highlight that the development of a strategy to secure title to ERs and, in particular, actually going about securing titles can take considerable time.

Moreover, there is currently no indication of the development of an accounting mechanism for ensuring that ERs regarding which secure title is not secured can be deducted from the amount transferred to the Carbon Fund, and there is similarly no indication that this has been taken into account in the calculation of estimated ERs (Ch. 13).

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**
Yes, Section 18.2 indicates there has been a decision to maintain a national REDD+ Program and Projects Data Management System, referred to in the ER-PD as a "REDD+ Registry".	
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]	**NO**
There have been no changes made in the final ER-PD to Section 18.2 on Data Management and Registry Systems. The information on registries in Section 18.2 therefore remains quite general and limited. There is no detailed description of how the registry will look, its key components and what kinds of data and information will be generated to populate, update and maintain it. More information will be needed to determine whether the proposed REDD+ Registry would meet the requirements of this indicator, including information on the overall scope, design and framework of the registry, how it will be integrated into existing systems, the legal framework, the mechanism for avoiding multiple claims to etc. It would also be important to have an indication of the timeline for developing the Registry. There is reference made to links between the Projects and Programs Data Management System and the existing land registry, but it is not clear what the relationship between the two would be. It would be important to better understand this relationship. The TAP also notes the intention stated by MONRE to encourage the development of private REDD+ projects in the future. The existence of a private REDD+ market would reinforce the need for a robust system that avoids multiple claims over title to ERs, particularly where Government programs and private projects exist side-by-side.	
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 18.2]	**YES**
The ER-PD acknowledges that the system would need to be computerized and open to the public, but does not provide details on plans to ensure this is the case. No further information is provided in the final draft of the ER-PD. The TAP recommends that follow up is undertaken to monitor compliance with this indicator in practice.	

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**
Information on compliance with this indicator is not provided in the Final ER-PD.	
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]	**NO**
No information is provided in Section 18.2 on whether Vietnam intends to create its own or use an existing ER transaction registry.	
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**
[This may be non-applicable depending on the specific ER program]	
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**
[This may be non-applicable depending on the specific ER program]	
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**
[This may be non-applicable depending on the specific ER program]	