

HIGH CARBON STOCK APPROACH

HCSA PEER REVIEW REPORT

Company Name: Asia Pulp & Paper

HCS Assessment Area:

PT. Arara Abadi

PT. Riau Abadi Lestari

14 September 2021

Dear peer reviewers:

Thank you for agreeing to review this HCS study. As you know, we are asking you to do a desk review of the material provided and to highlight any concerns you have about the land cover classification, land-use planning, or consultation processes. We have invited you as an expert in your field, and hope that you will bring your own experience and knowledge to this review to help the company improve its study. We are not asking you to provide a pass/fail decision, just to give your honest opinion and suggestions for changes to the company's plans or activities to ensure that the HCS Approach methodology is implemented correctly. Please refer to the latest [HCSA Toolkit](#) as reference.

Some of the issues raised in the review may be complicated and long-standing, especially those related to land tenure and historical conflict with communities. It is not within the scope of the review for you to do hours of research and determine who is at fault, or to examine stakeholder activities outside of the particular concession or plantation which is the subject of the review. Rather we ask that you call attention to topics that need further research or more information from the company, to improve community relations in the future or to reassure external stakeholders that the intent of the HCS Approach is being followed.

Background information to be provided by the HCSA Secretariat:

a) Did a Registered Practitioner Organisation lead the HCS assessment? If not, has the organisation which led the assessment started the process of registration?

Yes, Ata Marie was a Registered Practitioner Organisation.

b) Was the HCS Team Leader a Registered Practitioner?

Yes, Alex Thorp was a Registered Practitioner.

c) Were at least two (2) HCS team members Registered Practitioners?

Yes, Alex Thorp and Dadan Setiawan were Registered Practitioners.

Was the HCV assessment judged 'satisfactory' (highest rating) by the HCV Resource Network (HCVRN) Assessor Licensing Scheme (ALS)?

(See <https://hcvnetwork.org/reports/find-a-report/>). Not applicable. Assessment conducted prior to January 2015.

Questions for peer reviewers

(Peer Review Panel: Jules Crawshaw)

The estimated time to complete each section is noted in parentheses.

1. Peer Review Summary (2 hours, Lead Reviewer)

1.1. What are the major findings and recommendations from the peer review?

Please refer to the peer review results in this report.

Finding:

This report was reviewed against the HCS toolkit version 2 and the study was done in 2015. In 2015 HCS was in its early stages and a lot of the detail had not been determined. It follows that the information presented here does not really match very well with the toolkit version 2 – as the study pre-dated the release of this toolkit. The company explained that due to the amount of time since the HCV and HCS studies have been done, they have a very limited ability to make any changes or provide additional information.

This study has been done over a suite of concessions that total in the order of 400,000 ha and are spread over a vast landscape. As a result, the information is so summarised that all the detail is lost. To provide an example, nearly 100 villages were involved in this study; so the conservation priorities of any single village get lost in a mass of data as it gets successively summarised. The reviewer as an HCS practitioner knows that a successful HCS study is all about detail and ensuring that minutiae are taken into account. These factors are lost when data is summarised to this degree.

If this study were to be done again the reviewer would recommend doing a “HCV Screening” over the whole landscape (in order to ensure consistency) and then splitting the HCS reports into a concession by concession report.

Reviewers Recommendation:

1. Follow the recommendations below and provide shapefile data. Providing individual maps is not very helpful as the maps are at a scale that cannot be interpreted.

Company's Response:

Noted, we will follow the recommendations as required.

1.2. Did the HCS assessment team include or have adequate access to relevant expertise to undertake the HCS assessment?

Please refer to Section 2 of the Summary Report.

Finding:

Table 5 provides a list of a lot of people that were involved in this assessment. However, it does not actually specify their role in this particular assessment and also it does not detail their relevant qualifications and experience.

The HCSA requires the lead assessor and the GIS specialist to be HCS registered practitioners.

Reviewers Recommendation:

1. List the roles the various people in table 5 undertook in this assessment.
2. Confirm that the lead assessor and the GIS specialist were HCS registered practitioners. This was confirmed with the resubmission.

1.3. What elements of the HCS Approach still need to be completed in order to create a final land use and conservation plan? Are there aspects which you feel need to be re-done?

Please review Section 10 of the Summary Report and the peer review results in this report.

Finding: The major omissions from this study appear to be not taking into account the buffer areas (although this may not have been required in version 1 of the TK). Also the treatment of peat areas remains unclear – all peat areas are considered HCS. Regarding peat areas that have already been converted to exotic tree plantations, it is not clear what HCSA’s policy is on replanting.

Reviewers Recommendation:

1. Include the buffer areas in the patch analysis. The company has explained that this study took place prior to the requirement to consider the buffer areas in the HCS study. Although this review is against version 2 of the HCS toolkit.
2. Mark out all the peat areas which have not been converted as conservation. The company has provided a shapefile of the “peat dome” areas. Though HCSA considers “all peat” areas to be “NO GO” areas. It should be clearly stated the area of plantation on peat areas. The company has stated that they maintain the water table in order to minimise peat subsidence.

Company’s Response:

Based on the reviewer’s recommendation which states that all peat areas that have not been converted into conservation areas, we will explain how the company manages peat areas consisting of the peat dome, peat dome peak and peat ecosystem functions, both protection functions and production functions, according to regulations/ government regulations as follow: 1. **Regulation of the Ministry of Environment and Forestry of the Republic of Indonesia Number: P.10/MENLHK/SETJEN/KUM.1/3/2019 concerning the Determination, Determination and Management of Peat Dome Peak Based on Peat Hydrological Units**

This regulation explains how to manage peat dome peak, peat dome, protection functions of peat ecosystems and functions of peat ecosystem cultivation. In Article 4 Paragraph 2 of the regulation it is explained that the top of the peat dome peak (part of the protected function area of the peat ecosystem) must be made a protected area and prohibited from re-cultivating it. Referring to this regulation, the area that has been planted with industrial plants that fall into the category of peat dome peak area, after harvesting will no longer be cultivated and the permit holder (Company) is responsible for restoring the location. Areas outside the peat dome peak with peat ecosystem cultivation function that have cultivation permit can be carried out until the permit period expires with the obligation to maintain the hydrological function of the peat. The utilization and management of the above can be carried out if the

peat ecosystem restoration document for businesses and plantations is approved by the Government. As an effort to maintain hydrology, Company have constructed canal blocking with runoff, determination of elevation and rainfall points, monitoring and reporting of groundwater level and rainfall.

2. Regulation of the Ministry of Environment and Forestry of the Republic of Indonesia Number: P.17/MENLHK/SETJEN/KUM.1/2/2017 concerning the Development of Industrial Plantation Forests

It is explained in Article 8a of the regulation that the holders of business license for utilization of industrial timber forest products or we used to call it as Izin Usaha Pemanfaatan Hasil Hutan Kayu-Hutan Tanaman Industri (“IUPHHK-HTI”) are required to prepare a proposed revision for the work plan IUPHHK-HTI or we used to call it as RKUPHHK-HTI, based on the Plan Peatland Ecosystem Protection and Management. In Article 8c Paragraph 1 peat dome that have not been planted must be maintained as a peat ecosystem with a protection function, and in Paragraph 2 it is explained that the cultivation function of the peat ecosystem can be allocated as an effective area for production/area of staple crops/area of living plants. In addition, this regulation explains how the mechanism of changing the area which was originally a main plant area into a protected area and the main plant area into a cultivation function. This is explained in Article 8e Paragraph 1 that the change in the area of the main plant to a protection function where there is already a staple plant in the IUPHHK-HTI, its utilization regulated by: 1) existing plants can be harvested in 1 (one) cycle and cannot be replanted 2) mandatory restoration is carried out 3) allocated as a peat ecosystem protected function area in the IUPHHK-HTI spatial layout. Paragraph 2 states that the change in the area of the main plant to a protected function where there is no main plant in the IUPHHK-HTI must be maintained by the peat ecosystem with the protection function being a protected area for the peat ecosystem in the IUPHHK-HTI spatial layout. Paragraph 3 states that the change in the area of basic plants to become a cultivation function, plants can be utilized, and the area can be cultivated again as a staple crop area while maintaining the hydrological function of peat.

3. In addition, we also follow other government regulations which include: a) Regulation of the Ministry of the Environment and Forestry of the Republic of Indonesia Number: P.11/MENLHK/SETJEN/KUM.1/3/2019 concerning Periodic Comprehensive Forest Inventory and Work Plans on Utilization Businesses Industrial Timber Forest Products, b). Regulation of the Ministry Environment and Forestry of the Republic of Indonesia Number: P.15/MENLHK/SETJEN/KUM.1/2/2017 concerning Procedures for Measuring Groundwater Levels at Peat Ecosystem Arrangement Points, c) Regulation of the Director General of Pollution and Environmental Damage Control Number: P .10/PPKL/PKG/PKL.0/8/2018 concerning Guidelines for Assessment of Success in the Context of Restoring Peat Ecosystem Functions for Business and/or Activities).

2. Social Issues (4 hours)

Please review Section 3 of the Summary Report and please also look at the full HCV report (Section 4) for how HCVs 5 and 6 were assessed.

The HCSA Toolkit provides more information on the expected quality of community consultation and FPIC procedures.

- 2.1. Does the summary provided in Section 3.1 adequately represent and explain the community engagement, FPIC processes, and participatory mapping activities carried out?

Finding:

Section 3.1 lists the communities that are considered to be affected by the development (table 7).

A description is provided of the following processes:

1. Determining the communities that would be affected by the development.
2. Formal communication with the leaders of these communities regarding the purpose of the assessment and what it would involve.
3. Obtaining permission from the leaders to undertake the study in their respective areas.
4. From the engagement with the community several main themes came out of the process.
5. Further follow ups regarding FPIC were done via the community development programme and the Fire Free Village programme.

Participatory Mapping involved confirming the concession boundaries with the community. This process was largely focussed on identifying land conflicts (e.g. overlapping boundaries). As well as this mapping was done of the land cover and land ownership (e.g. areas where farming was undertaken). Additionally, the company used this opportunity to inform the community of areas that would be considered conservation areas and explained what this meant to the community. There is evidence provided of annual socialisations with the community regarding areas that are set aside from development and reinforcement of HCV-HCS. Examples of this are presented in Laporan FPIC TAHUN 2021 PT. RAL – SDT and Laporan FPIC PT. AA NILO TH. 2020 - Desa Kesuma.

There is mention of a Social Impact Assessment having been undertaken- this appears to resemble the requirement for a Land Tenure and Use Study because one of the outputs of this was the list of affected communities. The SIA presents (on a village by village basis) the results of a questionnaire which breaks the impacts down into the following categories :

- social impact
- impact on the settlement
- impact on public services and facilities
- impact on infrastructure and transportation facilities
- economic impact
- impact on human resources
- impact on safety and how the community considers themselves to be safe
- impact on farming
- impact on the environment
- response to the company's CSR.

The SIA presents good information on a village by village basis at a snapshot point in time. The Social Background Study requires more of a regional perspective and a discussion of social trends that have been emerging over the last decade, as a result of the presence of the company or larger social trends. The SIA has data on individual villages, whilst the SBS needs to provide a perspective right across the society within the affected communities. The assessor that did the SIA would have the appropriate data but needs to aggregate it into a discussion across the communities.

Reviewers Recommendation:

1. If a Social Background Study¹ was undertaken, this should be described. If no SBS was done, this should be done in future studies.

¹ The Social Background Study is a desk-based literature survey that covers all the relevant social, economic and political dynamics in the target area. This includes relevant aspects related to natural resource development and land tenure. Relationships between different ethnic groups present in the area, and local and national political dynamics are also covered, with a historical perspective on all these issues where relevant. It also includes an annotated bibliography of relevant sources.

2. The participatory mapping, based on the description, focused on identifying overlapping boundaries (or areas of land conflict).

There was some mention of land use. However the company should consult Appendix 3 of the Implementation Guide and ensure there is a good base map and all the required features are included, particularly identifying elements such as areas for farming, and hunting, fishing and collection of forest resources. The output map must be provided in this section of the report along with a description of the findings.

3. Provide the participatory mapping reports, which should provide the outputs / findings – currently there is only a discussion of the methods in section 3.

4. The need for participatory mapping and the use of the data that arises from the PM should be reflected in SOPs such as “Mekanisme Identifikasi Hak-Hak Tradisional dan Adat, Hak Dasar Masyarakat Dalam Kawasan Konsesi.”

Company’s Response:

The information provided in the SIA is already sufficient to be develop for the recommended SBS approach. The detail information within SIA can be generated for describing larger social trends in the landscape, referring to SBS approach. *We already explained in our feedback previously as follows:*

The Social Impact Study/SIA (document has been sent) is one of the documents relevant to the Social Background Study. This SIA presents data related to social and economic dynamics in the target area and the impact of the company's operations from the community's perspective. These dynamics are studied and compiled by a neutral third party or consultant. SIA provides input and suggestions from the community, including complaints and requests related to aspects of socio-economic development, religion, culture, education, as well as facilities & infrastructure in the targeted village.

Our participatory mapping refers to conflict area mapping that has been conducted (identified, analysed then mapping) in 2013-2014 towards all APP’s suppliers, then it was incorporated into Integrated Sustainability Forest Management Plan (ISFMP) of the supplier, together with its’ HCV-HCS assessment. Furthermore, on the next RKT (Annual Work Plan) - FPIC socialization activity, the company explained a description of the plan regarding HTI development activities for the next year. This includes production plans, social plans and environmental plans (we attached FPIC Report, file name as mentioned below). On this occasion, the community responded more by submitting activity plans and CD-CSR assistance as an impact of the company's operational existence which is expected to create jobs, and other positive contributions to the dynamics of the socio-economic life of rural communities.

In the SOP “*Mekanisme Identifikasi Hak-Hak Tradisional dan Adat, Hak Dasar Masyarakat Dalam Kawasan Konsesi*”, the District Team of Forest Management records and identifies areas that have important functions as sources of livelihood for local communities in the area based on the results of the HCV assessment, particularly HCV 5 & 6, especially which serves to meet basic needs and areas that have an important function for traditional cultural identity. We have sent the SOP at the time we submitted the Summary Report and along with this Company Response, we attached Laporan FPIC PT. AA NILO TAHUN 2020 - Desa Kesuma and Laporan FPIC TAHUN 2021 PT. RAL – SDT

2.2. Has a tenure study been completed and has it been vetted by independent social experts?

Finding:

A tenure study has been undertaken. This involved forming a team to undertake the tenure assessment which involved company staff and community members. This was used to determine the affected communities.

The company mentions the use of infrastructure facilities below that are available to the community. However, this is more within the scope of the Social Background Study. The tenure study needs to cover who owns the land (e.g. is it owned by individuals or generally owned by the village) and how the company gains access to use the land e.g through land compensation or a combination of lease / royalty payments. These things need to be explained in a separate report, when the information is spread through a suite of reports it is difficult for a reviewer or other third party to understand. Nevertheless, resolving village boundary issues which has been done by the company is an important step forward.

Reviewers Recommendation:

1. The tenure study should be expanded to include all the required elements as described in SR1. This includes “The study also assesses existing community practices in relation to livelihoods and conservation, including the usage patterns of areas to be proposed for conservation, whether use is economic, social or cultural.”
2. The tenure study should be provided to the reviewer.

Company’s Response:

Our response on this part are the same with the one stated in our previous feedback:

The tenurial study was carried out along with conflict area mapping. The tenurial study elements contained in our Conflict Resolution SOP. In the FPIC consultation process, the Company conveys information related to the location and planned operational activities of HTI or RKT, including what infrastructure facilities can be utilized by the community such as roads, canals, worship facilities, health facilities and so on. Information related to spatial planning within the concession area, including if there is a protected area in the IUPHHK-HTI area, the community can use it by taking the benefits of NTFPs in the area. It also describes the possible pattern of partnership cooperation plans and/or settlement related to the tenurial or spatial planning contained in the IUPHHK-HTI permit. We attached our Conflict Resolution SOP as stated in the cover email; SOP-AA-G3-001 T1R2 Penyelesaian Konflik Lahan 01042021

- 2.3. Is there a participatory land use map and does it contain the key components of community land use including the minimum requirement of 0.5 ha per person for future garden areas?

Finding: No participatory land use map has been presented and there has been no analysis of future garden areas. The reviewer acknowledges that this would probably have occurred because the HCS study was done in 2015 which predated version 2 of the HCS toolkit (which was released in May 2017). The company's response mentions the SIA, which describes local land use. Similarly conflict mapping has also been done. However the actual participatory maps have to be provided along with shapefiles to show the spatial component of land use.

Reviewers Recommendation:

1. Undertake an analysis of community land use and put this analysis in section 3. These requirements are specified in detail in the Advice Note 1 Section 4.

Company's Response:

The spatial – land use-related information generated in Conflict Mapping is similar and adequate to the information in Participatory Mapping. *We already explained in our feedback previously as follows:*

One of the aims of the SIA is to find out the land uses by the local community. The purpose of the HCV study is partly dedicated to finding out whether there is any use of resources by the community, including for the preservation of their local culture. Conflict mapping is also carried out to find out areas of community utilization that overlap with the planned utilization by the company.

All data from SIA, HCV and Conflict mapping were analysed to find out where the community used it. The community land use we conducted refers to these studies

2.4. Is there a record of consultation with affected communities and FPIC processes on the proposed development, the HCS Approach and issues/concerns they raised? Did the community nominate their own representatives?

Finding: Consultation with the affected communities are mentioned, but there is no detail about the findings, only the methods are mentioned. Documentation of the socialisations with the community are provided in FPIC PT. AA NILO TAHUN 2020 - Desa Kesuma.pdf, Laporan FPIC TAHUN 2021 PT. RAL – SDT.pdf. However it is not clear which villages this covered (in the attendance list it has “JLR II” in the “alamat” column – the reviewer is not sure which village this pertains to? A table should be provided in the summary report with all the affected communities and the dates of the socialisations provided.

While it is not actually mentioned in the summary report, in Indonesia, communities have processes for electing their representatives. These representatives have the authority to make decisions on a suite of matters (including conservation management) but also have the responsibility to socialise the outcomes to the wider community. The crucial statement in the FPIC SOP is

- (2) Tim FPIC desa/dusun ini anggota dan pemimpinannya dipilih sebagai hasil musyawarah antara pimpinan formal (perangkat desa dan kecamatan) dan pimpinan/tokoh informal di desa/dusun; dan berperan sebagai pihak yang menjembatani komunikasi antara masyarakat dan perusahaan sepanjang proses FPIC.

This shows the system that the company uses to ensure the representatives are picked by the community. This should really be mentioned in the summary report.

The summary report also has a list of villages that were involved (table 7) – this is labelled “Sebaran Desa Dalam Areal Kajian” but it should be made clear that these are “affected communities” to ensure terminology exactly matches that of HCSA and there is no room for misinterpretation.

Reviewers Recommendation:

1. A report should be provided which documents what was communicated to the affected communities and the key outcomes of the consultation. A summary of these findings should be included in the summary report.
2. A short description of the process of how the community nominates its representatives should be included.

Company Response:

The table regarding information on village names and timing of socializations-FPIC has been updated in the Summary Report.

We have added the information in the Summary Report. *We already explained in our feedback previously as follows:*

During the joint consultation meeting with affected communities, FPIC, HCV and RKT reports were presented to participants. In accordance with SOP-AA-GW-008, the selection of community representatives for nomination activities is not specifically appointed. In practice, so far, to determine the community selected to participate in this activity, it is the community that is affected and closest to the RKT location, besides that the company also involves village officials, sub-district officials, community leaders or traditional leaders and youth leaders. We attached; SOP-AA-G2-008 T1R2 Pelaksanaan FPIC dalam Pembangunan & Pengelolaan HTI 01042021

2.5. Were their views addressed and reflected in the plans and implementation of the plantation? Is there specific reference to the customary owners being made aware that they can say no to the development and they have the right to independent legal representation with regard to their agreements before they sign (to meet the 'prior informed' test)?

Finding:

Section 3 mentions several points which were raised by the community, these are:

- “• Masyarakat menginginkan adanya akses yang lebih memadai terhadap sumber air bersih;
- Masyarakat mengharapkan adanya peluang lapangan kerja;
- Masyarakat mengharapkan adanya tambahan alternatif mata pencaharian
- Masyarakat menginginkan adanya dukungan untuk perbaikan infrastruktur desa/dusun;
- Masyarakat menginginkan adanya dukungan untuk kegiatan-sosial, keagamaan, dan pendidikan”

All these are wishes are extremely general and there is nothing in the text or associated maps about the community specifically wanting particular areas set aside for conservation / development. This could be reflected in step 1 of the patch analysis where community garden areas or future farm land can be excised from consideration as HCS forest.

Currently there is no documentation of the communities being informed that they could say no to development. It is expected that this would also be included in the Community Engagement SOP. The SOP has subsequently been provided and includes this statement – which addresses the requirement.

manajemen untuk mengantisipasi pro dan kontra di dalam masyarakat.

c) **Jika dari proses ini tidak diperoleh kesepakatan dan masyarakat mempertimbangkan untuk tidak setuju dilakukannya proyek oleh perusahaan/organisasi, maka proses ini dihentikan.**

d) Terhadap klaim-klaim masyarakat yang dasar/landasan klaim yang tidak sah—baik landasan legal maupun k

This is a crucial point, but it is not mentioned in the FPIC report not the summary report. It should be added to these reports.

Currently there is no documentation of the communities being informed that they have the right to independent legal representation.

Reviewers Recommendation:

1. Provide a discussion of how the communities' views were reflected in plans and implementation of the plantation. This should be addressed in terms of specific examples and supported by meeting notes and maps of development plans which reflect the issues raised (e.g. step 1 and 11 of the PADT).
2. State when and how the right to say no to development was explained to the wider community. Supporting evidence should be provided such as meeting notes. The Community Engagement SOP should be referenced (which must include the right to say no within the procedure).
3. State when and how the right to legal representation was explained to the wider community. Supporting evidence should be provided such as meeting notes. The Community Engagement SOP should be referenced (which must include the right to legal representation within the procedure).

Company's Response:

The socialization of FPIC and RKT which is carried out simultaneously to the community at this time (after the company operates) aims to convey the company's operational plan in the area, according to permit given by the Government of Indonesia (Ministry of Environment and Forestry). If there is disagreement, it will be resolved by consensus in a conflict resolution scheme. We have added the information in the Summary Report.

2.6. What recommendations do you have for any improvements regarding community consultation and negotiation of Free, Prior and Informed Consent?

Finding:

The reviewer considers that the community consultation was done thoroughly. It appears the weakness is the documentation - a description of the findings / outcomes must be provided.

Reviewers Recommendation:

1. Follow the recommendations that have already been made in this section. Subsequently the company has provided documentation of FPIC that they have undertaken with the communities (FPIC PT. AA NILO TAHUN 2020 - Desa Kesuma.pdf, Laporan FPIC TAHUN 2021 PT. RAL – SDT.pdf). This includes a description of the socialisations and meeting attendance lists.

3. Ecological and Conservation Values (4 hours)

3.1. Does the summary provided in Section 4.1 of the Summary Report adequately represent the findings of the HCV study?

Finding:

The summary tables and maps have been copy pasted from the 2 HCV reports into the summary report. In this respect it is accurate. However, the information is hard to interpret and raises other questions.

The main questions are – where are the GO / NO GO areas? Comparing Table 1 and Table 9. Table 1 states that PT AA undevelopable area is 92,372 ha but in table 9 states that just the area of HCV1 is 248,162 ha. So, this must mean that much of the HCV1 area will be over the exotic plantations - which needs to be explained.

The current maps labelled “Peta Keberadaan NKT di PT Arara Abadi” and “Peta Keberadaan NKT di PT Riau Abadi Lestari” are difficult to interpret – the estate areas are mapped as dark green (which doesn’t have a corresponding reference in the legend) and as such the areas of HCV 1 within the estates cannot be seen. Furthermore, the scale of the map is too small and therefore the mapping of the HCVs within the estates cannot be interpreted.

Reviewers Recommendation:

1. To make the assessment easier to interpret please add the following columns to table 9. Total HCV area (which is a dissolve of all HCV areas), total concession area, developable area. The company has added the total HCV area and total concession area aggregated to all companies. There is no developable area mentioned (so that the reviewer can understand how much HCV is either already developed or will be developed to exotic plantations).

Company’s Response:

Noted. We have informed the Total HCV area (which is a dissolve of all HCV areas) and the total concession area in Table 9 Summary Report

2. Add a map of an estate by estate basis which shows the GO / NO GO areas with the HCV areas overlaid. Explain the logic for the HCV areas that are developable. In the resubmission, there is an HCS map provided in Annex 3 – but this is not what is really required. To understand the situation well, the report needs to show a map of the GO / NO GO areas so that it is clear where all the HCV areas are that have already been developed.

Company's Response:

Noted. In the HCS Assessment Report, there is no map showing the GO / NO GO area. However, the area was then informed through the company's Integrated Sustainability Forest Management Plan (ISFMP) document which took into account the results of the HCS, HCV, Social and other studies. We have included a map showing the GO/NO GO areas based on that ISFMP in this Company Response.

3. Provide data about the HCV areas that overlie exotic plantations. An explanation has been added "Pada PT Arara Abadi Elemen penting dari keberadaan NKT 1 yaitu beberapa konsesi PT (Distrik) berbatasan langsung dengan kawasan lindung; Distrik Melibur berbatasan dengan Suaka Margasatwa Giam Siak Kecil (GSK), Distrik Sebangka berbatasan dengan Pusat Pelatihan Gajah (PLG) dan GSK, Distrik Berbari berbatasan dengan Suaka Margasatwa Pulau Besar Danau Bawah, dan Distrik Tapung berbatasan dengan Taman Hutan Raya Sultan Syarief Qasim (Tahura SSQ). Selain itu ditemukan kehadiran spesies-spesies penting (Key spesies) seperti Harimau (*Panthera tigris sumatrae*), dan Gajah (*Elephas maximus sumatrae*)." But it still does not make the point clear that there are large wide-ranging mammals that will pass through the exotic plantations and as such these areas are considered HCV1.

Company's Response:

As explained by APCS in the company's HCV Assessment Report, the concession area itself includes protected areas and conservation areas including river border buffer zones and water storage areas as corridors for elephants and other large mammals. This precautionary approach to the determination of HCV 1 is based on areas of natural vegetation or natural forest in young secondary forest, scrub or old secondary forest (areas that were cleared many years ago) successional stages.

Elephants and tigers use plantation areas only as their crossing area, so this does not mean that this area becomes an HCV 1 area (intensity) and other indicators. From the results of the identification and inspection in the field, it will be known which areas are only crossing areas (corridors), and which areas are the habitat areas for large mammals. We have made efforts to protect the presence of large mammal species outside the protected area, for example by placing a warning sign that this area is a large mammal crossing area in an area frequented by these mammals (outside the protected area) and socializing it to workers and the community in the area.

4. Add a short description, for each HCV, about why that HCV is deemed to be present / absent. Things like tree species lists do not really add a lot of information when a landscape this enormous is being considered (e.g. which includes forest on peat / mineral soil) and it is unlikely that there are only 2 mammals that IUCN:VU or above in such an extensive forested landscape, so it is better to remove this information. In the resubmission a short description has been added.

3.2. If the HCV assessment was not judged satisfactory (highest rating) by the ALS scheme of the HCVRN (as noted in the introductory information from the HCS Secretariat – please see page one of this document), please do a cursory review of the HCV report as it relates to HCVs 1-4. Do you have any general comments on the quality of the site description, the analysis of the landscape and national or regional context, or the methods used to undertake the HCV study? Were the determinations of the absence/presence and extent of HCVs 1-4 well-justified? Are the HCV management and monitoring maps accurate?

The HCV Report can be found in the SharePoint.

Finding:

The two HCV assessments have not been reviewed by the ALS.

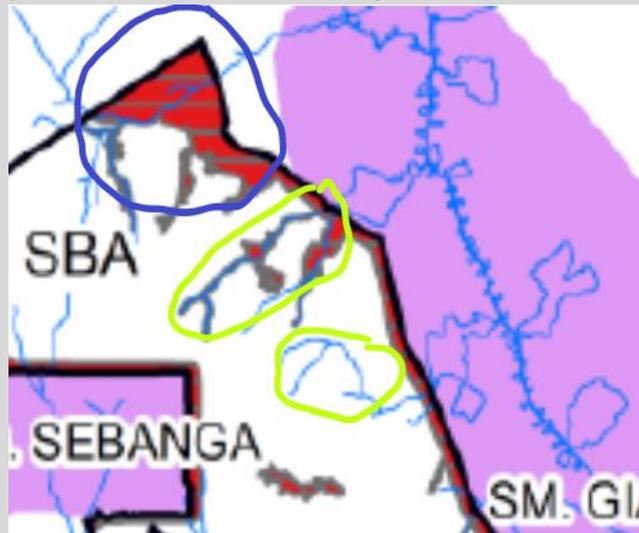
As an overarching comment the PT AA HCV report is over an area of 297,881 ha (or 356,804) and spread over 8 MUs – this should never have been

grouped into a single report – it is just too difficult to interpret.

The site description is more of a “screening assessment” than that of an HCV because it has to cover such a massive landscape. Furthermore much description is devoted to explaining the Indonesia forest licensing system and Indonesian spatial planning system. There is also information about production forest silviculture – which is not appropriate for an HCV report.

Regarding the landscape and regional context the report provides a discussion of all the main topics required e.g social, biodiversity, ecosystems. The problem is it is uninterpretable – e.g 99 villages were visited. It is impossible to pull out any individual requirements and insert these into the M&M recommendations.

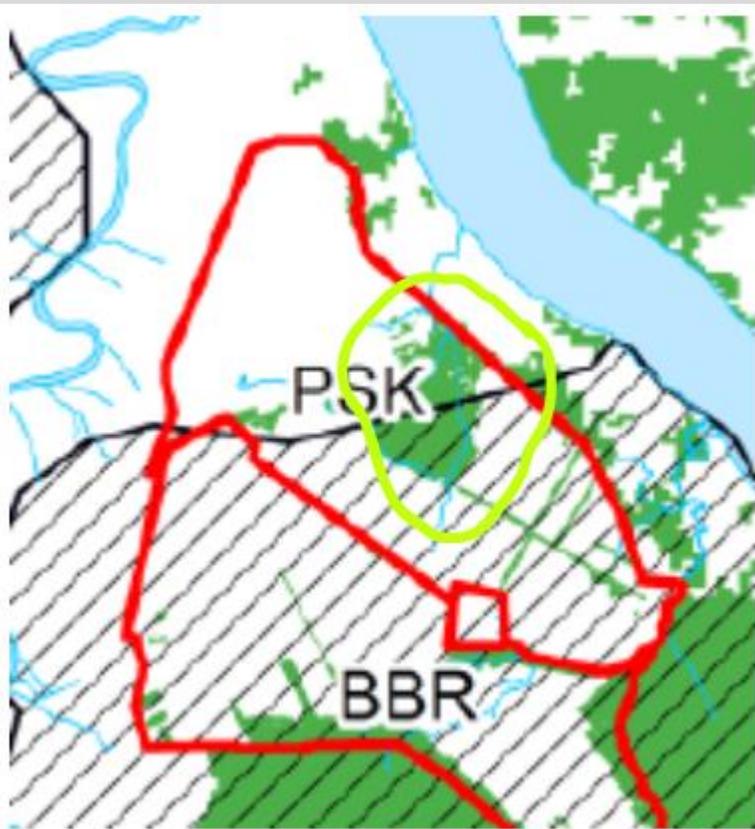
HCV 1.1 – rather hard to understand the rationale – some rivers have riparian buffers (green circle) and others don't. Also the rationale for buffers to protected areas is not clear (e.g. the blue circle has a buffer – but there is no adjoining protected area?)



HCV1.2 The mapping of HCV1.2 appears to be focussed on the ranges of tigers and elephants – but the green circle shows that the existence of HCV1.2 tree species has not been taken into account. On resubmission, the company has stated that “HCV 1.2 emphasizes endangered species and the designation of these HCV areas is approached on a precautionary basis.” This approach is acceptable, but it does not mean that CR vegetation does not get considered as HCV1.2. Information is not provided about the location of HCV1.2 tree species, so using the precautionary approach all forest should be considered HCV1.2, which based on the clip below, it is not.

Company’s Response:

HCV 1.2 emphasizes designation of HCV areas for this endangered species using the basic principle of precautionary approach. We have described in the Summary Report the tree species that fall into the Critical Endangered Species (CR) or HCV 1.2 category. Based on the HCV Assessment conducted by APCS, observations in the PT Arara Abadi concession area found 13 endangered flora species that can be categorized as CR or HCV 1.2. These species are generally found in areas of natural vegetation or natural forest in young secondary forest, scrub or old secondary forest (areas that were cleared many years ago) successional stage



HCV 1.3 – regarding HCV 1.3 delineation it is stated :

HCV/A 1.3 Delineation

Referring to the 2010 revision of the Indonesia HCV Toolkit, important populations for prioritisation in determining HCV 1.3 are all species identified under HCV 1.2 as well as viable populations of other species considered rare, endangered, vulnerable, endemic or protected by the Government of Indonesia. If a district is part of a home range for tigers or elephants, then that district, including areas of acacia forest, comes under HCV 1.3 management. If forest on an elephant and tiger distribution map has yet to become an acacia plantation, then it must become a protection area.

Considerable information is presented about field work that was undertaken relating to identification of RTE and endemic species. In delineating HCV 1.3 – it appears this has not been taken into account and HCV1.3 just follows HCV1.2 – this method does not follow the toolkit.

HCV2.2 – this is mapped over kerangas forests and the ecocline between wetland and non wetland ecosystems. The reviewer raises the question about why the ecocline between peat and mineral soils is not taken into account. Fig 89 -90 need to map the kerangas and wetland areas in order for the reviewer to be able to ascertain whether the HCVs have been correctly mapped.

HCV2.3 – Fig 91 -93 relate to HCV 2.2 not to HCV2.3 – the wrong maps are in the document.

HCV 3 and 4 appear adequate.

Reviewers Recommendation:

1. Explain the rationale for the delineation for HCV 1.1, 1.2 and 1.3 answering the questions raised above. On the resubmission, using the clip from the map as an example as to why some rivers have riparian buffers that are considered HCV1 and other rivers do not have riparian buffers. Similarly, in the north west there is a large area of HCV 1.1 delineated but has no adjacent protected area.

Company's Response:

All rivers have riparian buffers, but these buffers are not clearly visible in the HCV Assessment Report sent to the Reviewer. However, Reviewer can check the HCV Shapefile that we sent earlier (file name: HCV_Group2.zip), where areas suspected of not having a riparian buffer have been covered. In the HCV Assessment conducted by APCS, apart from forest areas directly adjacent to protected areas, the determination of HCV 1 delineation is also carried out by setting aside areas designated for protected or conservation areas including river border buffer zones, water storage areas and protected areas as corridors. As in the northwest, there are areas designated as HCV 1, due to the precautionary approach, all forest areas in the company's concessions are designated as HCV 1 even though they are not directly adjacent to protected areas.

2. Map the kerangas forests and the wetland and non wetland ecosystems in the HCV2.2 maps. Explain why the ecocline between forests on peat and mineral soil was not taken into account. On resubmission it is explained that these reports are no longer editable

3. HCV2.3 insert the correct maps. On resubmission it is explained that these reports are no longer editable.

3.3. Please review Section 9.2 of the Summary Report. Was the methodology used for the Pre-RBA and the Rapid Biodiversity Assessments (if any) satisfactory? Did the RBA(s) reveal any significant biodiversity values that should have been captured in either the HCV assessment but were not, or warrant protection?

Note that this is a check of procedures, not outcomes. The HCSA Toolkit provides more information on the expected quality of the RBA and the Pre-RBA.

Finding: Table 22 documents on a patch by patch basis the PADT outcomes for each patch, but no mention is made of a pre-RBA or RBA. There are no patches that are considered high risk – which would require an RBA. It is assumed this is a medium cover landscape so none of the LPP require an RBA.

On resubmission it is explained by the company that the reports were written too long ago and no further information is available.

Reviewers Recommendation:

1. State whether this is a Medium or low forest cover landscape.
2. Add another column to table 22 which is the “Outcome” i.e. conserve / develop – this should reconcile with table 23.

3.4. Are the forest conservation management and monitoring activities outlined in Section 10.3 adequate? Do they take into account forests and protected areas outside the concession?

Finding: Section 10.3 provides 8 recommendations relating to management and monitoring activities as well as a discussion of the concept of Collaborative Conservation Management. The recommendations are all valid, as is the CCM, however, considerably more detail is required. Major threats are fire and encroachment – there is no specific mention of M&M relating to this even though the Fire Free Village programme is mentioned elsewhere in the report. There is mention of satellite monitoring, but by the time encroachment is large enough to be picked up by a satellite, the company would have a major problem on its hands. As such, how are “at risk” areas identified and managed?

Reviewers Recommendation:

1. Add recommendations on fire prevention and management. On resubmission the company has explained that they have applied adaptive management to broaden their management to cope with the threat of fires.
2. Add recommendations relating to encroachment as preserving the boundaries of the forest areas should be the main focus. If the boundaries are maintained the forest condition will naturally improve. Addressed with the resubmission.
3. Add discussion on ownership – who owns all the conservation areas. If these are not owned by the company how does the company manage these areas? From the company’s response it appears this recommendation has been misunderstood. The company interpreted the term “conservation areas” as Government mandated “Protected Areas”. The reviewer meant that conservation areas should be the sum of all HCV or HCS areas. So how are conservation values managed when the areas are under community management?

Company’s Response:

The Company operates under a concession license called the “Izin Usaha Pemanfaatan Hasil Hutan Kayu-Hutan Tanaman Industri (IUPHHK-HTI)” obtained from the Government. This is because the operational area is a state forest area (especially production forest or Hutan Produksi). The state owns the entire forest area, including the concessions, the community within the concessions and protected areas. In the process of managing and protecting these areas, the Company also involves the community. As in accordance with the license, the Company is required to manage and maintain conservation areas within the concessions that the Company uses.

We already explained in our feedback previously as follows:

The Company obtained an HTI management permit from the Government. The concession area must have a spatial plan, one of which is a protected area. The company is obligated to maintain and manage protected areas within its concessions. In managing protected areas in our concessions, The Company carry out security patrols, monitoring changes in land cover, monitoring biodiversity, and structuring protected area boundaries.

4. Add discussion on how “at risk” areas are identified and managed. Addressed with the resubmission.

4. **Image Analysis** (6 hours, including land use planning/Decision Tree Section 6 below)

4.1. Please review Section 6.1 of the Summary Report. Was the Area of Interest correctly identified?

The HCSA Toolkit explains how the AOI should be identified.

Finding: It is stated in section 6.1 “AoI untuk Penilaian SKT mencakup semua lahan yang belum dikembangkan dalam konsesi ini.” This statement does not appear to be accurate as a shapefile of the patch analysis shows that the patch analysis was done over the whole concession. However, mapping of the AOI over the whole concession does not align with the toolkit. The Toolkit states :

“The Area of Interest (AOI) to be mapped must include the development area and also the broader landscape adjacent to the development area..... The boundary of the AOI must be aligned to either administrative or natural boundaries, for instance hydrological catchments or other landscape units. Rationale for the determination of the boundary must be provided.” (mod 4 pg 15). Though this conflicts with the information in Module 5 pg 15 which states HCS forest analysis should be done “1 km around the development area”. At a minimum the analysis should consider a 1 km buffer around the concession boundaries.

Reviewers Recommendation:

1. Extend the land cover mapping to include a 1 km buffer around the concessions and then redo the patch analysis over this extended area.

Explained with the resubmission that this was a pilot project and the HCSA methodology changed subsequently.

4.2. Please review Section 6.2 of the Summary Report. Were the images used of adequate quality, including resolution and date?

The HCSA Toolkit describes the expected quality of the images.

Finding:

The company only provided a picture of the images not the images themselves. This picture was at a very small scale so the reviewer was not able to check it for quality (e.g. was it sufficiently cloud free to undertake landcover classification).

The images that were used were all Landsat, which has a resolution of 30 m, which is adequate (provided higher resolution images are not available).

The images that were used were : L8_12659_Juni2014, L8_12660_Juni2013, L8_12660_Juni2014, L7_12759_Juni2014, L8_12759_Mei2014, L8_12760_Mei2014, L8_12760_Juni2014. The study started in January 2015 so all the images are less than 12 months old – it was assumed that the 2013 image was used over areas of cloud cover.

Reviewers Recommendation:

1. Provide the actual images that were used for undertaking the classification, not a picture of the images.

The company has suggested that the reviewer search for the required satellite images. However, providing the correct datasets is the company's job, not **the reviewer's job**.

Company's Response:

Noted. The Company asked Reviewer to download it because the Company didn't have the actual images at that time, when the Company knew it was publicly available. In parallel, the Company kept searching for it internally, it takes quite some time but then finally obtained it. The images have been processed at the time the HCS Assessment is carried out. Along with the final submission of this Company's Response (Peer Review Report), the Company will keep sending this final image

- 4.3. Please do a quality check using the images provided in 6.3. Was the initial vegetation classification done properly? Do the land cover areas in the tables in Section 6 look reasonable? Are there any obvious errors in classification?

The HCSA Toolkit provides more information regarding the expected quality of the image analysis.

Finding: The actual satellite images are required to do initial vegetation cover checking. Only a picture of the images has been provided in the initial data supply.

Reviewers Recommendation:

1. Provide the actual images that were used for undertaking the classification, not a picture of the images.

The company has suggested that the reviewer search for the required satellite images. However, providing the correct datasets is the company's job, not the reviewer's job. Consequently, the reviewer cannot review the quality of the classification.

Company's Response:

Noted. The Company asked Reviewer to download it because the Company didn't have the actual images at that time, when the Company knew it was publicly available. In parallel, the Company kept searching for it internally, it takes quite some time but then finally obtained it. The images has been processed at the time the HCS Assessment is carried out. Along with the final submission of this Company's Response (Peer Review Report), the Company will keep sending this final image

5. Forest Inventory (4 hours)

5.1. Please review Sections 7.1 and 7.2 of the Summary Report. Were the sample plots selected, set up, and measured properly? Please check the inventory plot layout for adequacy.

The HCSA Toolkit describes the expected quality of the forest inventory process.

Finding: The following description of the plot set up has been provided "Plots were measured along transects strategically located across the areas of interest. Only trees with diameter at breast height (DBH) greater than 5cm were measured. The species and a sample of tree heights were also recorded." The size and shape of the plots are described in section 7.4 and follow the approach suggested in the HCS toolkit.

A map of the plot locations has been provided, but because of the scale of the map the reviewer cannot make any worthwhile comments.

Reviewers Recommendation:

1. Please add specific information on how the number of plots required to reach the required level of accuracy was determined prior to the inventory. In the resubmission a short description of how the number of plots was calculated. The reviewer was expecting to see calculations of the number of plots per landcover class based on the area and the standard error – this is described in Advice Note 1 section 2.

Company's Response:

The calculation requested by the Reviewer could not be fulfilled by the Company, because the information related to the number of plots per land cover class was not included in the HCS Assessment Report by Ata Marie and the assessment was carried out in one Riau landscape, which of course was very broad. However, the Company has tried to contact Ata Marie's Assessor, namely Alex Throp to ask for the data, but he stated that he no longer have it, because the Assessment process has been carried out long ago (2014-2015).

2. Please provide a shapefile of the plot locations along with a description about how the plots were located (e.g. were the start of the transects based on a random point location algorithm in GIS?). A description of how the plots were located has been provided with the resubmission. However, this should be added to the summary report also.

Company's Response:

Noted, we have added the information in the Summary Report

5.2. Please review Section 7.3 of the Summary Report. Was the forest inventory team qualified?

The HCSA Toolkit describes the expected qualifications of the forestry team.

Finding: Table 16 provides information about the roles of the people involved in the field inventory but no information about their qualifications and experience.

Reviewers Recommendation:

1. Please add information about the qualifications and experience for the field team leader, the species identification specialist and the measuring technician. This information should show that these individuals meet the requirements detailed in pg 28 module 4. With the resubmission additional information has been added in Annex 1.

5.3. Please review Section 7.4 of the Summary Report. Was the allometric chosen adequate?

The HCSA Toolkit provides more guidance on choosing an allometric equation.

Finding:

Table 18 describes the allometrics used. The reviewer is not familiar with any of these equations however based on the descriptions of their applicability their use in this area seem reasonable. Furthermore, the carbon stocks seem in line with what one would expect.

Reviewers Recommendation:

No recommendation.

- 5.4. Please review Sections 7.5, 7.6, 7.7 and 7.8 of the Summary Report, and do a cursory review of the forestry data and statistical analysis. Are there any obvious errors in the raw forestry data? Are there any flags where a result does not seem consistent with your rough interpretation of the land cover image? Do the final carbon classes seem accurate given what is known about other forests in the region?

The HCSA Toolkit provides more guidance on what statistical analysis should be used.

Finding:

No forest plot data has been provided.

The values in the carbon classes seem consistent with what one would expect in this region.

Reviewers Recommendation:

1. Provide an excel sheet of the forest plot data, ensuring that calculations of carbon stock are embedded in the spreadsheet. Please ensure there is a link between the plot id and the shapefile of the plot locations provided in section 5.1. With the resubmission the company has explained that the data is no longer available, primarily because the study was done a long time ago.
2. Provide an excel file of the statistical analysis, ensuring this is linked to the forest plot data. With the resubmission the company has explained that the data is no longer available, primarily because the study was done a long time ago.
3. Provide an anova and a scheffe test both in the report and in the plot data spreadsheet. A screen snapshot of the scheffe test is provided. However this scheffe test is for the plot data right across Riau which includes 1067 plots, as opposed to the 337 plots that were provided on the plot shapefile associated with this report. As such it is assumed the plot data is no longer available either.

Company's Response:

The HCS Assessment by Ata Marie was carried out at a landscape scale covering the entire concession area in Riau, therefore the Scheffe tests available in the Assessment Report cover plots in the entire Riau landscape (1067 plots). This is the background why Company cannot provide specific Scheffe test for PT Arara Abadi and and PT Riau Abadi Lestari (337 plots), according to Reviewer recommendation.

6. Land use planning (6 hours with Image Analysis above)

- 6.1. Please review Section 8.1 of the Summary Report. Was the initial vegetation classification map adequately calibrated and adjusted to take into account forest inventory results?

The HCSA Toolkit provides more guidance on how to incorporate the forest inventory results into the land cover map.

Finding: The plot locations have not been provided so this analysis cannot be undertaken at this stage.

Reviewers Recommendation:

1. Provide the plot locations – ensuring the final land cover class is included in the attribute table of the plot locations.

On resubmission an analysis was done of the land cover shapefile versus the land cover that was called at the location of each of the plots. It appears the landcover was matched with the plots.

- 6.2. Please review Section 9 of the Summary Report. Was participatory mapping data used in step one to identify community lands that should be enclaved? Were patches merged correctly? Was the core area correctly identified? Was the connectivity analysis done correctly?

The HCSA Toolkit explain how to merge patches and identify the core area.

Finding:

Regarding the land that was enclaved in step one as community lands the following statement is made “1. Pohon keputusan awal merekomendasikan pemetaan partisipatif untuk mengidentifikasi tanah masyarakat sebelum stratifikasi SKT akhir. Dalam proses PT Arara Abadi dan PT Riau Abadi Lestari input ini dikelola oleh tim ISFMP.” However, there does not seem to be any land set aside as community land and no results of the PM have been presented.

The only patch analysis data is “Patch_analysis_group2” – there are a number of fields in this file, but the reviewer just has to guess what the fields mean which is not adequate. There is no patch core area presented, as such, the reviewer cannot determine if the core area has been correctly identified. Similarly with the connectivity analysis, there is insufficient information in the shapefile to determine whether the connectivity analysis has been done properly.

Another thing that seems unusual is that there are large areas of peat that are not considered HCS area. Based on Step 11 of the PADT – peatlands are considered “indicative conserve”

Reviewers Recommendation:

1. Present the results of the PM highlighting which areas were identified as community lands and therefore enclaved. In table 22 (results of the patch analysis) there does not seem to be any mention of community lands. Explain how the community lands were worked into the landscape plan. On resubmission the company has provided textual explanation. However, the reviewer was expecting to receive a shapefile and map of the PM in order that the spatial extent of community lands could be understood.

Company Response:

One of the aims of the SIA is to find out the land uses by the local community. The purpose of the HCV study is partly dedicated to finding out whether there is any use of resources by the community, including for the preservation of their local culture. Conflict mapping is also carried out to find out areas of community utilization that overlap with the planned utilization by the company. The spatial – land use-related information generated in Conflict Mapping

is similar and adequate to the information in Participatory Mapping. All data from SIA, HCV and Conflict mapping were analysed to find out where the community used it. The community land use we conducted refers to these studies.

2. Provide a shapefile which includes the patch core area and includes a description of the result of every step in the PADT and the final decision conserve / develop. The company mentions the use of POKJA for decision making regarding the final outcome of the HCS study. The use of POKJA is not mentioned in the HCS toolkit.

Company Response:

POKJA was not mentioned in the HCS Toolkit, but as we explained before the HCS Assessment was carried out before the emergence of the Toolkit. The results of the Assessment along with other studies such as the HCV Assessment, Social Impact Assessment and others become the basis for the preparation of the Company's Integrated Sustainability Forest Management Plan (ISFMP) and the basis to determinate POKJA's final decision for the management of the concession area. The POKJA consists of NGOs, Community, Academics, Government and Companies, so the decisions made by POKJA are joint decisions of the parties (not a unilateral decision of the Company). It can also be said that what the POKJA-ISFMP doing already cover the current scope of the HCV-HCS Integrated Assessment and HCSA ICLUP.

3. Explain how peatlands are treated in the final conserve / develop decision and how this is consistent with the HCS Approach. On resubmission the company has stated "The final decision was decided on the ISFMP by the POKJA (NGO, Community, Academics, Government, Company) through a hierarchical analysis." This seems quite vague to the reviewer as it doesn't clearly state how this is consistent with the HCSA. The HCSA requires all peat areas to be considered as HCS and therefore to be conserved from development.

Company response :

Management of the peat area consisting of the Peat Dome, Peat Dome Peak and the peat ecosystem function, both protection and production functions, the Company manages according to Government regulations as explained before:

1. Regulation of the Ministry of Environment and Forestry of the Republic of Indonesia Number: P.10/MENLHK/SETJEN/KUM.1/3/2019 concerning the Determination, Determination and Management of Peat Dome Peak Based on Peat Hydrological Units

This regulation explains how to manage peat dome peak, peat dome, protection functions of peat ecosystems and functions of peat ecosystem cultivation. In Article 4 Paragraph 2 of the regulation it is explained that the top of the peat dome peak (part of the protected function area of the peat ecosystem) must be made a protected area and prohibited from re-cultivating it. Referring to this regulation, the area that has been planted with industrial plants that fall into the category of peat dome peak area, after harvesting will no longer be cultivated and the permit holder (Company) is responsible for restoring the location. Areas outside the peat dome peak with peat ecosystem cultivation function that have cultivation permit can be carried out until the permit period expires with the obligation to maintain the hydrological function of the peat. The utilization and management of the above can be carried out if the peat ecosystem restoration document for businesses and plantations is approved by the Government. As an effort to maintain hydrology, Company have constructed canal blocking with runoff, determination of elevation and rainfall points, monitoring and reporting of groundwater level and rainfall.

2. Regulation of the Ministry of Environment and Forestry of the Republic of Indonesia Number: P.17/MENLHK/SETJEN/KUM.1/2/2017 concerning the Development of Industrial Plantation Forests

It is explained in Article 8a of the regulation that the holders of business license for utilization of industrial timber forest products or we used to call it as Izin Usaha Pemanfaatan Hasil Hutan Kayu-Hutan Tanaman Industri (“IUPHHK-HTI”) are required to prepare a proposed revision for the work plan IUPHHK-HTI or we used to call it as RKUPHHK-HTI, based on the Plan Peatland Ecosystem Protection and Management. In Article 8c Paragraph 1 peat dome that have not been planted must be maintained as a peat ecosystem with a protection function, and in Paragraph 2 it is explained that the cultivation function of the peat ecosystem can be allocated as an effective area for production/area of staple crops/area of living plants. In addition, this regulation explains how the mechanism of changing the area which was originally a main plant area into a protected area and the main plant area into a cultivation function. This is explained in Article 8e Paragraph 1 that the change in the area of the main plant to a protection function where there is already a staple plant in the IUPHHK-HTI, its utilization regulated by: 1) existing plants can be harvested in 1 (one) cycle and cannot be replanted 2) mandatory restoration is carried out 3) allocated as a peat ecosystem protected function area in the IUPHHK-HTI spatial layout. Paragraph 2 states that the change in the area of the main plant to a protected function where there are no main plant in the IUPHHK-HTI must be maintained by the peat ecosystem with the protection function

being a protected area for the peat ecosystem in the IUPHHK-HTI spatial layout. Paragraph 3 states that the change in the area of basic plants to become a cultivation function, plants can be utilized, and the area can be cultivated again as a staple crop area while maintaining the hydrological function of peat.

3. In addition, we also follow other government regulations which include: a) Regulation of the Ministry of the Environment and Forestry of the Republic of Indonesia Number: P.11/MENLHK/SETJEN/KUM.1/3/2019 concerning Periodic Comprehensive Forest Inventory and Work Plans on Utilization Businesses Industrial Timber Forest Products, b). Regulation of the Ministry Environment and Forestry of the Republic of Indonesia Number: P.15/MENLHK/SETJEN/KUM.1/2/2017 concerning Procedures for Measuring Groundwater Levels at Peat Ecosystem Arrangement Points, c) Regulation of the Director General of Pollution and Environmental Damage Control Number: P .10/PPKL/PKG/PKL.0/8/2018 concerning Guidelines for Assessment of Success in the Context of Restoring Peat Ecosystem Functions for Business and/or Activities).

4. Expand the land cover mapping to include the buffer areas – consistent with section 4.1 of this review. It is explained that the assessment was done prior to the decision by HCSA to include buffer areas in the assessment.

6.3. Please review Section 9 of the Summary Report, and select a few sample patches to test that the Decision Tree was used correctly. Were the patches correctly identified as High, Medium, or Low Priority? Was the Patch Analysis done according to the HCS Approach Decision Tree?

The HCSA Toolkit explains how to prioritize patches and go through the Decision Tree.

Finding:

The results of the patch analysis are presented in table 22 – however this does not link to the “Patch_analysis_group2” shapefile. Therefore the reviewer cannot check this section.

Reviewers Recommendation:

1. Provide a shapefile of the PADT and includes a description of the result of every step in the PADT and the final decision conserve / develop.

It is explained that this data is no longer available

6.4. Please review Sections 10.1 and 10.2 of the Summary Report. Were the final integrated conservation and land use planning steps completed to maximize the ecological and social viability of the conservation areas (HCV, HCS, peatland, riparian zones, customary forest, etc)? Were the results of the final ground verification (if any) adequately incorporated into the land use plan and final HCS map?

Finding: The final landscape plan is presented in section 10.2 of the report. However it is at a scale that that results in the map being too small to be interpreted. Furthermore, it is presented along with the Tata ruang using the categories TPO, TNK and KON which the reviewer doesn't know what these mean.

Reviewers Recommendation:

1. Present a map of each estate with the land cover as a background and also the HCS, HCV and peat areas. The company has presented the HCS areas in appendix 5 (though not of each estate and the HCV, peat areas and landcover were also not included).

Company's Response:

Noted, the Company has provided a map based on the reviewer's recommendation.

2. Provide a shapefile of the HCS, HCV and peat areas. A shapefile of the peat dome has been provided, however, the company should provide a shapefile of peat (irrespective of depth) as HCSA does not differentiate between deep and shallow peat – it considers all peat as “NO GO” area. All HCV and peat

areas should be considered HCS and therefore “conserve” based on the HCS approach. Comparing the HCS areas in section 10.2. This does not match with the HCV and peat areas provided. Where peat areas have been cleared and planted with exotics, it is not clear what HCSA’s policy on replanting / restoration of peat areas is.

Company’s Response:

Management of the peat area consisting of the Peat Dome, Peat Dome Peak and the peat ecosystem function, both protection and production functions, the Company manages according to Government regulations as explained before:

1. Regulation of the Ministry of Environment and Forestry of the Republic of Indonesia Number: P.10/MENLHK/SETJEN/KUM.1/3/2019 concerning the Determination, Determination and Management of Peat Dome Peak Based on Peat Hydrological Units

This regulation explains how to manage peat dome peak, peat dome, protection functions of peat ecosystems and functions of peat ecosystem cultivation. In Article 4 Paragraph 2 of the regulation it is explained that the top of the peat dome peak (part of the protected function area of the peat ecosystem) must be made a protected area and prohibited from re-cultivating it. Referring to this regulation, the area that has been planted with industrial plants that fall into the category of peat dome peak area, after harvesting will no longer be cultivated and the permit holder (Company) is responsible for restoring the location. Areas outside the peat dome peak with peat ecosystem cultivation function that have cultivation permit can be carried out until the permit period expires with the obligation to maintain the hydrological function of the peat. The utilization and management of the above can be carried out if the peat ecosystem restoration document for businesses and plantations is approved by the Government. As an effort to maintain hydrology, Company have constructed canal blocking with runoff, determination of elevation and rainfall points, monitoring and reporting of groundwater level and rainfall.

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It is explained in Article 8a of the regulation that the holders of business license for utilization of industrial timber forest products or we used to call it as Izin Usaha Pemanfaatan Hasil Hutan Kayu-Hutan Tanaman Industri (“IUPHHK-HTI”) are required to prepare a proposed revision for the work plan IUPHHK-HTI or we used to call it as RKUPHHK-HTI, based on the Plan Peatland Ecosystem Protection and Management. In Article 8c Paragraph 1 peat dome that have not been planted must be maintained as a peat ecosystem with a protection function, and in Paragraph 2 it is explained that the cultivation function of the peat ecosystem can be allocated as an effective area for production/area of staple crops/area of living plants. In addition, this regulation explains

how the mechanism of changing the area which was originally a main plant area into a protected area and the main plant area into a cultivation function. This is explained in Article 8e Paragraph 1 that the change in the area of the main plant to a protection function where there is already a staple plant in the IUPHHK-HTI, its utilization regulated by: 1) existing plants can be harvested in 1 (one) cycle and cannot be replanted 2) mandatory restoration is carried out 3) allocated as a peat ecosystem protected function area in the IUPHHK-HTI spatial layout. Paragraph 2 states that the change in the area of the main plant to a protected function where there are no main plant in the IUPHHK-HTI must be maintained by the peat ecosystem with the protection function being a protected area for the peat ecosystem in the IUPHHK-HTI spatial layout. Paragraph 3 states that the change in the area of basic plants to become a cultivation function, plants can be utilized, and the area can be cultivated again as a staple crop area while maintaining the hydrological function of peat.

3. In addition, we also follow other government regulations which include: a) Regulation of the Ministry of the Environment and Forestry of the Republic of Indonesia Number: P.11/MENLHK/SETJEN/KUM.1/3/2019 concerning Periodic Comprehensive Forest Inventory and Work Plans on Utilization Businesses Industrial Timber Forest Products, b). Regulation of the Ministry Environment and Forestry of the Republic of Indonesia Number: P.15/MENLHK/SETJEN/KUM.1/2/2017 concerning Procedures for Measuring Groundwater Levels at Peat Ecosystem Arrangement Points, c) Regulation of the Director General of Pollution and Environmental Damage Control Number: P .10/PPKL/PKG/PKL.0/8/2018 concerning Guidelines for Assessment of Success in the Context of Restoring Peat Ecosystem Functions for Business and/or Activities).