Note to the reader

03 November 2020

FSC has worked with ForestFinest Consulting over the last 10 months on the baseline analysis of Asia Pacific Resources International Holdings (APRIL). The results of this analysis are outlined in this report.

This is the first baseline analysis FSC has commissioned and is the result of work the FSC Secretariat is testing in the ending disassociation process as requested by the FSC Board of Directors. The objective of the baseline analysis is to provide a basis for establishing the thresholds for the conditions for the process of ending disassociation with APRIL, often referred to as the roadmap. We wanted to understand the big picture of the scope of the Policy for Association (PfA) allegations to understand the sequencing of conditions and the amount of work this process would entail. This included a quantification of conversion since 1994 and an estimation of the probability of presence of High Conservation Values (HCV) since 1999. The original concept of the baseline was a desk-based, GIS-centered exercise to quantify and evaluate the allegations on APRIL's violation of FSC's PfA. The plan entailed obtaining the high-level quantification of these allegations through a science based, remote approach, while the real minutia and qualification of work would take place in the ending disassociation process which involves ground-truthing, field visits, interviews, and robust stakeholder engagement.

However, as the COV SARS2 virus emerged as a global threat in late January 2020 ForestFinest had to rely on remote, desk-based evaluation and use of spatial technology as the sole components of the methodologies used in this analysis. As a result, this analysis was also a learning opportunity and gave us room to assess the strengths and weaknesses of implementing the methodologies based solely on remote tools and analysis. We learned that we are capable of reaching valuable conclusions, but also that coming to definitive conclusions without ground truthing or calibration of data points on the ground is challenging. We tried to identify those points in the analysis where a lack of calibration of data points on the ground resulted in a higher margin of error or led to a result requiring further qualification.

In this regard, readers should be aware of the limitations of the conclusions we have made in this report. By design, the results we have come to are a starting point for the ending disassociation process, not the result or the definitive answer. When looking at the results of the report entitled *"estimation of probability of the presence of HCVs within the concession boundaries based on retrospective analysis of proxies, and resulting therefrom an estimation of HCV damage and loss within the plantation areas"* the reader should note these results did not consider APRIL's existing HCV assessment reports for 30 of the 50 concessions conducted since 2005. Rather, the estimation is based on the use of proxies and the estimation of damage and loss is limited only to the commercial plantation areas. Therefore, these conclusions have evident limitations and require further qualification in the ensuing ending disassociation process with the aim of determining the extent and quality of the restoration and conservation activities required. In addition, the results of the *identification, quantification and assessment of allegations of potential violations of the PfA from 2013 -2019* is a result of a desk evaluation of media reports and APRILs own grievance mechanism. It does not include interviews, outreach, dialogue or engagement with affected rights-holders or stakeholders. Thus, the resulting significant cases are also subject to further qualification in the ensuing ending disassociation process.

As a final note to the reader, FSC chose 2019 as the end date for evaluating the allegations in this analysis to be able to define the scope of our inquiry. However, this does not mean that any relevant allegations raised after this date will be ignored. Any such allegations will be part of the ending disassociation process, as with any other such process, and subject to PfA assessments and inquiries.

In closing, FSC would like to thank ForestFinest for their hard work, diligence and steadfastness during this project despite all the restrictions they were faced with due to the COVID-19 pandemic.

FSC Baseline Analysis of APRIL Group
Public summary

November 2020

by

ForestFinest Consulting GmbH

Table of contents

1. Executive Summary

In May 2013, Greenpeace, WWF-Indonesia and the Rainforest Action Network filed a complaint to the Forest Stewardship Council (FSC) accusing Asia Pacific Resources International Holdings (APRIL) – a Singapore-based pulp and paper company with operations in Indonesia – of violation of the FSC Policy for Association (PfA) (FSC-POL-01-004). The complaint raised allegations about APRIL's involvement in large-scale deforestation and destruction of high conservation values (HCV) in Indonesia. FSC disassociated from the company in August 2013 after APRIL unilaterally decided to withdraw the FSC certificates it held.

In September 2014, APRIL approached FSC expressing its willingness to comply with FSC's PfA. Based on the commitment expressed by the company - and in line with FSC's mission towards driving positive change in the world's forests - FSC agreed in 2016 to enter dialogue with APRIL to discuss a process for ending disassociation (sometimes referred to as the FSC Roadmap or FSC Remediation Framework Template). The process for ending disassociation is based on five pillars: required governance and infrastructure, remedy for environmental harm, remedy for social harm, prevention of re-occurrence of PfA violations, and re-building trust with the market and stakeholders.

As a prerequisite for ending disassociation process, FSC initiated an analysis of APRIL and its long-term suppliers (Supply Partners) in January 2020, to establish a comprehensive baseline of information with the view of eventually developing a process towards ending the disassociation.

The consultancy firm Forest Finest Consulting (FFC) was appointed by FSC to develop such a baseline analysis of APRIL.

The purpose of this analysis is to assess, to the best availability of information, the extent of any potential past environmental and social harm/damage caused by APRIL's operations in Indonesia. It is to establish a complete, objective and comprehensive baseline data to be used as input for the development of the FSC ending disassociation process.

The scope of the analysis covers 50 concessions located in Sumatra (Indonesia) owned by APRIL and its Supply Partners, covering an area of 885,957.78 Hectares (Ha). The baseline analysis assesses the land use transformation in these concessions in the period from 1994 to 2019. The reason for the analysis scope ending in 2019 relates to when the analysis was conducted and the available data sets at the start of this project. Any relevant data sets for 2020 and into the future will be addressed as part of the FSC ending disassociation process.

The baseline study consists of the following evaluation deliverables in relation to APRIL and its Supply Partners:

a) A *quantification of the forest conversion* by APRIL (1994-2019);
b) An estimation of the *probability of the presence of HCVs* within the concession boundaries based on retrospective analysis of proxies, and resulting therefrom an estimation of potential HCV damage and loss within the plantation areas (1999-2019);
c) A *quantification and mapping of the total number of settlements and buildings* within the concession areas (1994 – 2019);

d) An *identification, quantification and assessment of the allegations* of a potential violation of the PfA (2013-2019);

e) An identification of any *potential system improvements and/or mitigation and remediation actions* made by APRIL (2013 -2019).

The main findings of the baseline analysis of APRIL conducted by FFC are as follows:

Forest conversion:

- The total forest cover change within APRIL's and APRIL's supply partners' concessions since 1994 is 531,350.31 ha.
- 435,877.08 ha of this total forest cover change constitute irreversible forest conversion (i.e. transition of forest cover change from dense forest to commercial plantations).

Probability of the presence of HCVs within the concession boundaries based on proxies:

- For the estimation FFC used data from multiple sources on HCV proxies[1] (indicators of probability of presence of HCVs).
- Of the total study area of 885,957.78 ha, 582,902.35 ha (66% of the total area) were identified as HCV1; 269,939.02 ha (30.47% of the total area) as HCV2; 537,561.66 ha (61 % of the total area) as HCV4; and 602.30 ha (0.07% of the total area) as HCVs 5-6. Note that this accounts for overlapping presence of values across the study area.
- Regarding the estimated HCV loss or damage within the plantation areas, 303,834.95 ha (34% of the total area) were estimated as potential loss of HCV1; 158,696.29 ha (17.91% % of the total area) as potential loss of HCV2; 310,551.86 ha (35 % of the total area) as potential loss or damage of HCV4; and 402.79 ha (0.05% of the total area) as potential loss of HCVs 5-6. When the union[2] of HCV categories is considered in the quantification, then 715,083.12 ha (80.72% of the total area) are classified as potential presence of HCV.
- When the union of HCV categories intersected with APRIL activity area, there is a total of 404,810.13 ha (45.69% of the total concession area subject to this study) of estimated damage or loss to HCVs within the plantation areas since the baseline year.
- However, these findings are not necessarily indicating a violation of the FSC PfA (regarding the amount of the above-mentioned 404,810.13 ha of *estimated* damage or loss of HCV), but rather indicate an estimation of HCV loss or damage in the plantation area. This is to be further qualified in the ensuing FSC ending disassociation process, also aiming to determine the quality of restoration and conservation.

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[1] For a definition of "proxies", see the glossary at the end of this summary.

[2] The union tool in GIS: http://wiki.gis.com/wiki/index.php/Union

Quantification and mapping of the total number of communities

- The number of 'settlements' and 'buildings' located within the concessions has significantly increased since 1994, from 23 to 177 settlements and 16 to 338 buildings. There was a significant peak between 2009 and 2014 when the total amount increased by 169%.
- The analysis did not show the movement or removal of any human settlement located within APRIL's or APRIL's Supply Partners' forest management concessions.

Identification, quantification and assessment of allegations of potential violations of the FSC PfA:

- A total of 138 'allegations' of potential violations of the FSC PfA as well as land tenure conflicts were identified in the period 2013-2019.
- Of these 138 allegations, 13 were considered to be based on substantiated information and therefore classified as 'significant cases'.
- Of these 13 significant cases, 6 pointed to the involvement of APRIL and its Supply Partners. 7 of these significant cases were attributed to the involvement of third parties (e.g. local communities) in controversial activities (such as illegal logging and encroachment) outside the scope of the FSC PfA.
- The baseline analysis also identified 124 cases of potential land tenure conflicts in the period assessed. These land tenure conflicts have not undergone a compliance assessment against the PfA but have nonetheless been catalogued in this report.

Potential system improvements, mitigation and remediation actions:

- APRIL has undertaken system improvements, mitigation and remediation actions aimed at ensuring compliance with the FSC PfA since the complaint was filed in 2013.
- Some of the key system improvements identified in the baseline analysis include: increased transparency in monitoring and reporting on legal compliance and regulatory requirements, public declaration of policy commitments on sustainable forest management, implementation of measures towards the protection, management and monitoring of HCVs, and the development and implementation of procedures and systems for managing grievances and land tenure disputes.
- Some of the most relevant mitigation actions identified in this analysis include: implementation of community development and engagement programs, conducting stakeholder consultation and engagement as to mitigate and prevent any potential social impacts related to their operations, as well as the investment of resources in implementing systems and processes for the management (and towards the resolution) of land tenure disputes.
- In terms of remediation, APRIL has identified areas requiring rehabilitation and restoration due to illegal activities undertaken by third parties. APRIL has also allocated land to conservation activities.
- In addition, in the period between 1994 and 2019, FFC identified that 27,072.96 ha have been a gain in forest cover in the areas classified as 'Conservation' and 'Other areas' managed by APRIL and its Supply Partners. This increase or gain in the forest cover could be due to active reforestation (and natural regeneration) within APRIL's conservation areas and beyond.

2. Introduction

In May 2013, Greenpeace, WWF Indonesia and the Rainforest Action Network filed a complaint with FSC International, alleging ongoing large-scale deforestation activities in concessions owned by APRIL in Indonesia, thereby causing negative environmental and social harm due to the damage to HCVs in natural forests. The complaint alleged that these activities constitute a violation of the FSC PfA.

FSC disassociated from the company in August 2013, after APRIL withdrew the FSC certificates it held at the time. Due to the unilateral withdrawal of the FSC certificates by APRIL, FSC was unable to proceed with an investigation led by an independent third party complaints panel as required by the FSC Procedure for processing PfA complaints[3] to clarify whether APRIL was involved in activities in breach of the FSC PfA as alleged in the complaint.

In September 2014, APRIL approached FSC, expressing its willingness to comply with the FSC PfA in the future and to work collaboratively with FSC in a process towards potentially ending its disassociated status. Based on the commitment expressed by APRIL - and in line with FSC's mission towards driving positive change in the world's forests - FSC agreed to enter a dialogue process with APRIL with the view of eventually developing an FSC ending disassociation process.

As a first step in the ending disassociation process , FSC initiated in January 2020 an analysis of APRIL and its Supply Partners with the purpose of assessing, to the best availability of information, the extent of any potential past environmental and social harm/damage caused by APRIL's operations in Indonesia The baseline analysis therefore aims to establish a complete, objective and comprehensive baseline data to be used as input for the development of the FSC ending disassociation process

The consultancy FFC was appointed by FSC for the development of the baseline analysis of APRIL and its Supply Partners. The analysis was carried out from January through October2020.

The normative framework used as reference and guideline for FFC when conducting this assessment was the FSC PfA. The FSC PfA is the normative framework describing a series of activities considered to be unacceptable in the FSC certification framework. The FSC PfA is thus the framework used as the starting point of evaluation of disassociated companies, in the context of baseline analyses, as well as in the process of the development of the process for ending disassociation. Results of readiness assessments and/or baseline analyses pointing to the implementation of social and environmental system improvement measures and mitigation actions are understood as demonstration of commitment by disassociated organizations to FSC, as well as solid grounds for entering into the process of the development of a company-specific process for ending disassociation.

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[3] 'Processing Policy for Association Complaints in the FSC Certification Scheme' FSC-PRO-01-009

As part of the FSC PfA normative framework for the baseline analysis, the 'Spectrum of clear and convincing evidence' shown in figures 1 and 2 below was used as guideline and reference[4].

Figure 1: Spectrum of clear and convincing evidence (FSC, 2020)
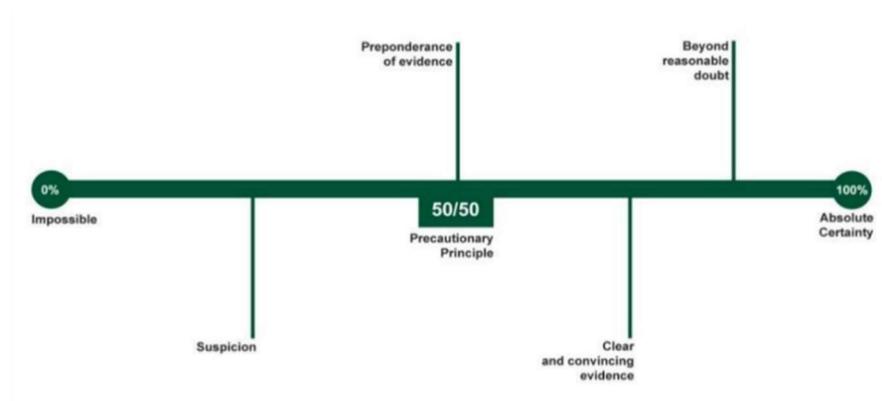
Figure 2: Spectrum of clear and convincing evidence (II) (FSC, 2020)

No triangulation of allegation by trusted sources	Triangulation of allegation in trusted sources	GIS Validation of points at minimum 80% accuracy
Low probability of presence of HCV	Eyewitness account and independent report	High probability of presence of HCV
Low probability of presence of dwellings and community infrastructure	Medium probability of presence of HCV	High probability of presence of dwellings and community infrastructure
	Medium probability of presence of dwellings and community infrastructure	
Suspicion	**Preponderance of evidence**	**Clear and convincing evidence**
Allegation not substantiated	Allegation of significant concern, significant case	Allegation validated, PfA violation concluded

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[4] Figures 1 and 2 have been developed by FSC International in alignment with the 'Standard of Certainty' provided in Annex 4 of the FSC Procedure for 'Processing Policy for Association Complaints in the FSC Certification Scheme' (FSC-PRO-01-009).

The following sections of this summary provide detailed information on the scope of this baseline analysis, the methodologies used, as well as of the findings and conclusions obtained. It is complemented with graphs, figures and images as well as with a glossary of terms including all relevant definitions and abbreviations used in this document.

3. Objectives and Outputs

The objective of the baseline analysis is to establish a complete, objective and comprehensive baseline data to be used as input for the development of the FSC ending disassociation process. This baseline data will enable FSC to formulate - in the context of the ending disassociation process - reasonable, proportionate and equitable requirements for APRIL to correct and address any identified weaknesses in its operations, remedy any environmental and social impacts caused, and prevent the re-occurrence of similar issues in the future.

The expected outcome of this baseline study is to provide a comprehensive set of data in relation to APRIL and its Supply Partners including at least the following information outputs:

a) A *quantification of the forest conversion* by APRIL (1994-2019);
b) An estimation of the *probability of the presence of HCVs* within the concession boundaries based on a retrospective analysis of proxies, and resulting therefrom an estimation of potential HCV damage and loss within the plantation areas (1999-2019);
c) A *quantification of the total number of communities* within the concessions (1994-2019);
d) An *identification and quantification of the allegations* of potential violation of the PfA (2013-2019);
e) An identification of any *potential system improvements and/or mitigation and remediation actions* made by APRIL (2013 -2019).

4. Scope

The geographical scope of the baseline analysis includes all 50 concessions held by APRIL and its Supply Partners in Sumatra, Indonesia. These concessions amount to a total of 885,957.78 hectares.

The overall area under consideration in this analysis includes:
- RAPP (Riau Andalan Pulp and Paper): 14 concessions; 341,688.77 ha.
- APRIL Supply Partners: 36 concessions; 544,269.01 ha.

Figure 1: RAPP's and Supply Partners' concessions on Sumatra island (FFC, 2020)
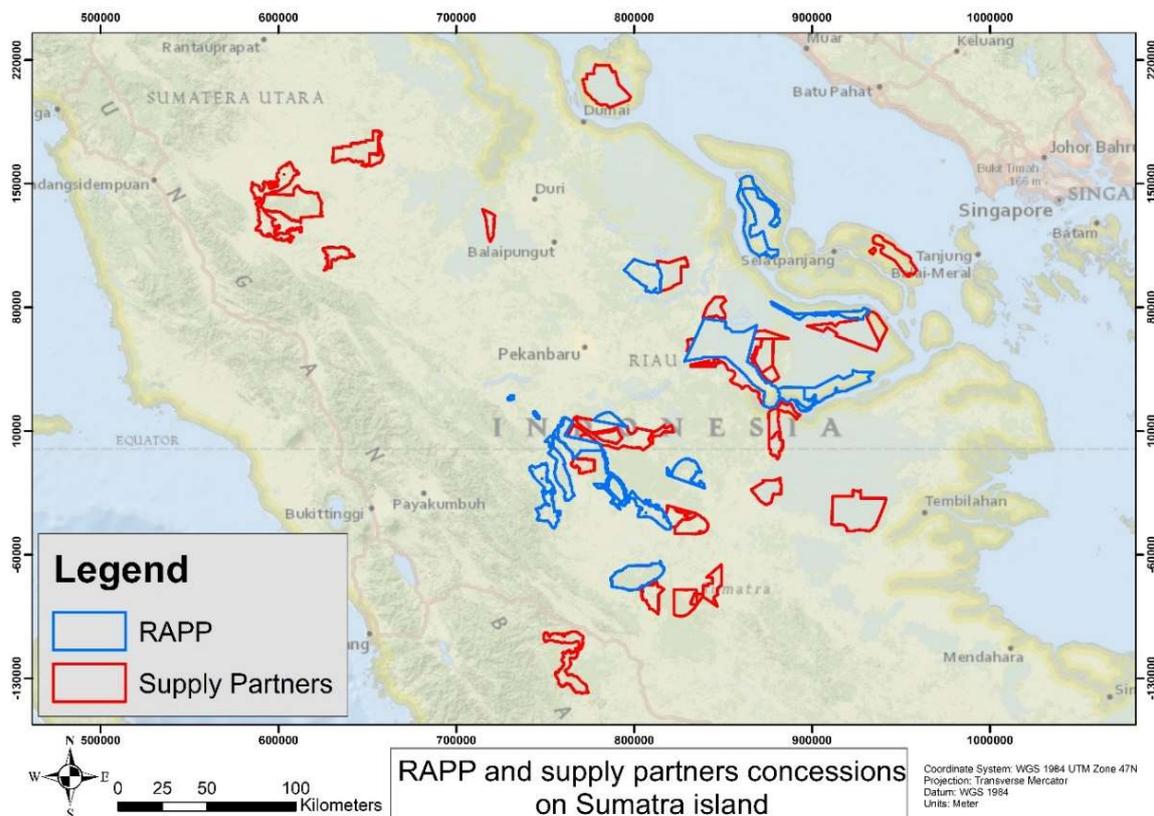
Most information outputs resulting from this baseline analysis (points b-e mentioned above) cover the geographical scope described above.

As an exception, the *quantification of the forest conversion* (point a) covers a slightly smaller area. This is due to the prevalence of infrastructure in these areas that must not be regarded as conversion areas.

The need for infrastructure areas not to be included in the forest conversion quantification analysis is stipulated in the FSC PfA: "*For the purposes of this Policy, the establishment of ancillary infrastructure necessary to implement the objectives of responsible forest management (e.g. forest roads, skid trails, log landings, fire protection, etc.) is not considered conversion.*"

The total area of interest for the total forest conversion quantification is thus:

	Total area (Ha)
Total concessions of APRIL and Supply Partners	885,957.78
Infrastructure area	(18,231.37)
Total area of interest	**867,726.41**

Time scope

The overall starting point for the baseline analysis is the year 1994, as FSC was founded as an organization in 1993. Given that the establishment of FSC as an organization as well as its normative framework (Policies and Procedures) occurred in 1993 and onwards, FSC can only require companies to comply with its rules and requirements after that point in time onwards (i.e. as of 1994). Companies' liability and responsibility to comply with FSC's normative framework and organizational values does not apply retrospectively (i.e. regarding periods before 1994). Therefore, 1994 was defined as the overall baseline year for the baseline analysis.

In addition, the 'baseline year' for each analysis is defined as the year before the first planting year for each concession. The 'time scope' for all analyses covers periods until the end of December 2019. The period subject to analysis was determined to cover until the end of December 2019 as this was the time when FFC was appointed by FSC International for conducting the baseline analysis. FFC initiated the baseline analysis in January 2020, assessing the situation of APRIL in a retrospective manner (from 1 January 2020 backwards).[5]

The table below gives an overview on the time periods considered for the analysis of each of the information outputs:

Table 1: Time periods for this analysis (FFC, 2020)

Output	Time period analyzed	Rationale
Quantification of the forest conversion	1994-2019	Founding of FSC in 1993; thus baseline year 1994 chosen.
Estimation of the probability of presence of High Conservation Values (HCVs)	1999-2019	Concept of HCV Forests was introduced by FSC in 1999. Considering the FSC rules and criteria, this year is therefore

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[5] NOTE: There may have been more recent allegations that were raised in the course of 2020. Given the scope of this baseline analysis, these are thus not reflected in this analysis. Any further and future allegations will be incorporated by FSC in the context of the ending disassociation development process.

		set as the "HCV baseline year", also for concessions where operation started before 1999.
Quantification and mapping of the total number of communities	1994-2019	Founding of FSC in 1993; thus baseline year 1994 chosen.
Identification, quantification and assessment of the allegations	2013-2019	i.e. from the time of APRIL's and FSC's disassociation until the latest 2019 data available
Identification of potential system improvements and/or mitigation and remediation	2013-2019	i.e. from the time of APRIL's and FSC's disassociation until the latest 2019 data available.

Moreover, the HCV concept and approach were established by FSC in 1999[6]. Since then, different national and international adaptations and version have been created to identify and manage environmental and social values in production landscapes.

The below milestones in the development of the HCV concept and its implementation by APRIL are seen as relevant for this analysis and have been considered when setting the time period under the scope of this analysis:

- **1999:** The FSC HCV approach came into place for HCVs 1-4 (HCVs 5&6 were not included yet)
- **2003–2008:** The Indonesian Toolkit "Guidelines for the identification of High Conservation Values in Indonesia (HCV Toolkit - Indonesia)" was published by ProForest and the Rainforest Alliance[7]. In 2003 the first HCV Indonesia Toolkit was developed as a "translation" of the concepts and principles of the Global HCVF Toolkit to the Indonesian context. In 2008 a revised version of the HCV Toolkit Indonesia was published by a consortium of NGOs.
- **2005:** The first HCV analysis was carried out for APRIL's Supply Partners' concession areas (2005-2009: HCV assessment by IPB).
- **2010:** The first HCV analysis for a RAPP concession was carried out by APRIL.
- **2012**: FSC included HCVs 5 and 6 in FSC Principles and Criteria V5[8]

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[6] See Glossary at the end of this summary for an overview/definition of the six HCV categories

[7] GUIDELINES for the IDENTIFICATION of High Conservation Values in Indonesia (HCV Toolkit - Indonesia) https://hcvnetwork.org/wp-content/uploads/2018/05/2009Toolkit_HCVFs_Indonesia.pdf

[8] FSC guidelines for the implementation of the right to free, prior and informed consent (FPIC). Version 1, 30 October 2012. https://ic.fsc.org/guides-manuals.343.htm

Based on the above-mentioned milestones, and considering the FSC rules and criteria, the year 1999 is set as the FSC "HCV baseline year" for HCVs 1-4 for concessions where operations started before 1999. For HCVs 5-6, the "HCV baseline year" is 2003, as this is the year when Proforest developed the HCV Toolkits for the 6 HCV categories.

For concessions where operations started after 1999, the "HCV baseline year" for HCVs 1-4 is the year before the first planting year for each concession. For concessions where operations started after 2003, the "HCV baseline year" for HCVs 5-6 is the year before the first planting.

Table 2 provides an overview of the baseline year defined for each concession and HCV category in this analysis.

Table 2: Overview of concessions with contrasting baseline and analysis year[9] (FFC, 2020)

TID	Company ID	Sector	Area (ha)	First Planting year	Baseline year Forest conversion	Baseline year HCV 1-4	Baseline year HCV 5 and 6	Year of HCV assessment
0	RAP	BAS	24998.36	1993	1994	1999	2003	2015
1	RAP	CER	30182.61	1996	1995	1999	2003	2015
2	RAP	LGB	6738.96	1995	1994	1999	2003	2015
3	RAP	LON	10421.38	1994	1994	1999	2003	2015
4	RAP	LOS	14144.14	1993	1994	1999	2003	2015
5	RAP	MDU	23557.64	1998	1997	1999	2003	2015
6	RAP	MRE	30452.55	2010	2009	2009	2009	2010
7	RAP	MRW	13822.89	2009	2008	2008	2008	2010
8	RAP	PPD	34436.37	2011	2010	2010	2010	2014
9	RAP	TEE	19648.43	1995	1994	1999	2003	2015
10	RAP	TEW	20006.74	1993	1994	1999	2003	2015
11	RAP	TSB	11367.90	2011	2010	2010	2010	2010
12	RAP	UKU	15696.61	1994	1994	1999	2003	2015
13	RAP	PEN	86204.68	1999	1998	1999	2003	2015
14	ALI	TSK	4799.79	2004	2003	2003	2003	None
15	BBS	PER	13586.87	2004	2003	2003	2003	2005
16	BPM	TSK	5735.08	2004	2003	2003	2003	None
17	BRM	SJG	28551.41	2001	2000	2000	2003	2007
18	CSS	PER	15410.09	2004	2003	2003	2003	2005
19	EIR	SRG	9821.55	2006	2005	2005	2005	2006
20	ELD	SRY	10199.72	1999	1998	1999	2003	None
21	HJY	TSK	5060.55	2006	2005	2005	2005	2006

[9] Table 2 shows: Unique Identification number (TID), Managing company (COMPANY), sector located in (SECTOR), size (AREA), first year of operation (Planting year), baselines for HCV proxy analysis (baseline HCV1-4; baseline HCV 5,6), year of HCV assessment by owner (HCV assessment by owner), areas, baseline year of forest conversion, HCVs 1,2,3,4 and HCVs 5,6.

TID	Company ID	Sector	Area (ha)	First Planting year	Baseline year Forest conversion	Baseline year HCV 1-4	Baseline year HCV 5 and 6	Year of HCV assessment
22	MKS	MER	14829.26	2004	2003	2003	2003	2005
23	MLI	TSK	3443.02	2005	2004	2004	2004	None
24	MTS	MER	7644.27	2004	2003	2003	2003	2005
25	NPM	LGB	4309.44	2002	2001	2001	2003	None
26	NSR	NGD	22885.26	1996	1995	1999	2003	None
27	NWR	NGD	26113.09	1995	1994	1999	2003	None
28	PLB	SLJ	2240.78	2000	1999	1999	2003	None
29	PRT	SRG	32343.11	2006	2005	2005	2005	2006
30	RLZ	LBJ	12248.20	1991	1994	1999	2003	None
31	RLZ	SLJ	8945.20	1996	1995	1999	2003	None
32	RMP	MER	8075.18	2004	2003	2003	2003	2005
33	RPI	SLJ	14525.88	1994	1994	1999	2003	None
34	SAT	TSK	4640.46	2005	2004	2004	2004	None
35	SAU	TSK	14141.12	2003	2002	2002	2003	None
36	SBI	SBI	5320.24	1996	1995	1999	2003	None
37	SRA	RSG	19045.17	2009	2008	2008	2008	2007
38	SRL	GRG	41412.80	2008	2007	2007	2007	2007
39	SRL	RPT	39002.62	2009	2008	2008	2008	2007
40	SRL	SKB	25323.40	1988	1994	1999	2003	None
41	SRS	BYS	49632.89	2009	2008	2008	2008	2007
42	SSI	SRY	19269.01	2004	2003	2003	2003	2006
43	SSL	PLS	16208.69	1996	1995	1999	2003	None
44	SSL	PLU	19060.78	1996	1995	1999	2003	None
45	SSL	PPR	9640.80	1996	1995	1999	2003	None
46	TNG	TSK	1640.80	2002	2001	2001	2003	None
47	WBL	NGD	8026.49	1992	1994	1999	2003	None
48	MDK	TSK	14882.20	2006	2005	2005	2005	2005
49	BDB	LBO	6232.34	2005	2004	2004	2004	2005

5. Quantification of the total forest area converted and potential HCV damage/loss

5.1 Objectives and Scope

The first objective of this analysis is to quantify the forest conversion in APRIL's and its Supply Partners' concessions since 1994. The quantification of conversion is identified in the analysis through land cover changes within the concession boundaries. The methodology for this analysis includes:

- a quantification of forest cover changes within APRIL's and Supply Partners' concessions; and

- an overview of whether these changes in forest cover are reversible or irreversible.

The second objective of this analysis is to estimate the probability of presence of HCVs (and the potential HCV loss and/or damage occurred) within APRIL's and its Supply Partners' concession boundaries in the time period 1999 to 2019.

The total area of interest can be divided, according to APRIL's land use classifications, as follows:

- APRIL activity areas (plantations): 545,689.86 ha
- Non-plantation areas:
  - Conservation: 245,628.14 ha
  - Other areas: 76,406.95 ha

Encroachment and illegal logging activities within concession boundaries

It is well known that encroachment and illegal activities by third parties occurring within companies' concession boundaries are challenges that affect many forestry companies across the world[10].

It is thus possible that within APRIL's or APRIL's Supply Partners' concessions, certain areas where land cover change has been identified correspond with encroachment or illegal activities by third parties, occurring without the consent or authorization of the company. The encroachment and illegal activities by third parties reported by APRIL within their concession boundaries appear in form of the following land classifications: boundary overlap, formal agriculture, illegal agriculture, settlement areas and areas that need dispute resolution. All of these are part of the 'Other areas' specified above (76,406.95 ha).

For the purpose of this analysis, FSC's position on the challenges around encroachment and illegal activities is as follows:

> In the quantification, responsibility for conversion will be considered for conversion actions for which the forest enterprise is *directly* responsible. Encroachment and illegal activities

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[10] Making forest concessions in the tropics work to achieve the 2030 Agenda: Voluntary guidelines.
http://www.fao.org/forestry/46348-01f3c79fdbca80c72eaf3f1ee5b6f83fb.pdf

conducted by third parties occurring with the concession boundaries subject to analysis are excluded from the conversion quantification. Nevertheless, the forest enterprise is responsible for remediation in those areas converted within its forest management unit even if the company is not firsthand responsible for the specific conversion activity.

5.2 Forest Conversion Quantification: Methodology

The quantification of forest conversion conducted in this exercise has been determined through an analysis of land cover change occurring within the concession boundaries that have led to forest cover change.

5.2.1 Land cover classes

The following Land Cover Classes (LCCs) were chosen as outputs from image classifications using Landsat imagery:

- **Dense forest:** area that is covered by natural woody vegetation which has a closed canopy; majority of the area covered by a tree layer.
- **Sparse forest:** area covered by degraded woody vegetation. The canopy is open, allowing light penetration. This category includes plantations, shrubs and grasses.
- **Non-forest:** area that is covered by no significant plant or vegetation cover. This includes exposed soil, sand, rocks and water. Also included is cloud cover.

5.2.2 Analysis

Satellite imagery was obtained from various sources; Landsat TM, Landsat ETM and Landsat OLI were used for the analysis. To address the issue of heavy cloud cover in the tropics (see also the sub-chapter on limitations), a widely used approach was employed, which compiles all available satellite images of the year of interest to generate a composite with the best annual value of the respective pixel.

A Maximum Likelihood Classification was run for the calculated composites. The result is a classified image in which spectral reflectance of the image is transformed and aggregated to land cover classes. For the classification approach, the classes 'Dense forest', 'Sparse forest' and 'Non-forest' were used.

To ensure a consistent quality of the resulting classifications, all 50 LCCs - one for each concession - were compared visually with the best image data of the same year.

5.2.3 Calculation of land cover change/transitions

To determine the land cover change between the two points in time, the difference in land cover in the baseline year and in 2019 was calculated. It is also determined by the changes across the three different landcover types (Dense forest, Sparse forest, Non-forest).

The analysis of LCCs in 2019 was only conducted within the non-plantation areas (i.e. 'Conservation areas' and 'Other areas'). The class 'APRIL activity area' was not analyzed in 2019 as the geospatial data provided by APRIL showed no natural forest on the LCCs.

5.3 Forest Conversion Quantification: Limitations

This section details the limitations of the analysis that might affect the accuracy of the results:

- Low temporal resolution

The medium resolution of Landsat is applicable for forest research, but bears problems regarding data availability, as sensors of 30x30 meters do not cross areas of interest frequently enough. This limit becomes apparent in years where coverage of the area of interest is so low (due to lack of saved scenes) that no usable image could be found.

- Cloud cover

Cloud cover and quality issues (such as the faulty ScanLine Corrector on the Landsat 7 Satellite) lead to data loss - especially in the tropics.

- 2003 and 2005 Landsat dataset issue

The above-mentioned issues affect the availability of usable imageries of two baseline years: 2003 and 2005.

- Lack of accuracy assessment

No accuracy assessment was performed as part of the APRIL baseline analysis, as this was out of the scope of this assessment.

These limitations are widely known and affect all similar approaches, the Global Forest Watch (GFW) indicates for their published data that *"Recent data for Landsat-derived land cover and forest change in the 1990s had error rates of 21 percent and 17 percent, respectively"*[11]. For the present study, the margin of error of the land cover classification can be considered as amounting to 20%. This error is however solely an estimation since no accuracy assessment with ground-truthing was conducted.

5.4 Forest Conversion Quantification: Results

Table 1 shows the land cover transitions concerning 'dense forest' cover in the baseline year which resulted to total forest cover change.

'Forest cover change' is defined as the transition from 'Dense forest' cover to 'Sparse forest' cover (understood as forest *degradation*) and/or the transition from 'Dense forest' cover to 'Non-forest' cover (understood as forest *loss*). 'Forest cover change' constitutes a subclass of land cover change.

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[11] https://blog.globalforestwatch.org/data-and-research/how-accurate-is-accurate-enough-examining-the-glad-global-tree-cover-change-data-part-2/

Table 1 Total forest cover change within APRIL's and Supply Partners' concessions (FFC, 2020)

		Irreversible forest cover change	**Reversible** forest cover change	
		Plantation areas	Non-plantation areas	
	Total		Conservation	Other areas
	Area (ha)	Area (ha)	Area (ha)	Area (ha)
Dense Forest to Non-forest (Forest loss)	454,968.52	435,877.08	15,619.38	3,472.05
Dense forest to Sparse forest (Forest degradation)	76,381.79	0.00	47,537.04	28,844.75
Total forest cover change [12]	531,350.31	435,877.08	63,156.42	32,316.80

The baseline analysis shows a total of 531,350.31 ha of forest cover change within APRIL's and APRIL's Supply Partners' concessions since 1994, of which 435,877.08 ha correspond with irreversible forest conversion.

5.5 Estimation of probability of presence of HCVs: Objective and Scope

The objective of this analysis is to provide baseline information on the retrospective estimation of the probability of existence of HCVs in the past 20 years (1999-2019) within the concession boundaries of APRIL and its Supply Partners. This analysis also provides an overview of the areas where HCVs are estimated to have been potentially damaged and/or lost. This analysis, however, does *not* constitute an HCV assessment.

As described in the previous chapter 4: *Scope,* this analysis will estimate the probability of presence of HCVs through the retrospective assessment of proxies[13] within APRIL's and its Supply Partners' concessions in the time period 1999 to 2019 for HCVs 1-4, and 2003 to 2019 for HCVs 5-6. In 20 concessions, no HCV assessments have been carried out by the independent consultants commissioned by APRIL and its Supply Partners.

5.5.1 Data provided by APRIL

FFC notes that APRIL and its Supply Partners have conducted HCV assessments for 30 of its concessions since 2005 and have identified HCVs in the management of their operations.

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[12] Some of the forest cover changes identified within the 'Conservation' and 'Other areas' categories, have been reported by APRIL as being caused by encroachment and illegal activities by third parties. These areas reported as encroached have not been deducted from the total forest cover change.

[13] For a definition of "proxies", see the glossary at the end of this summary.

Reports for those 30 concessions where an HCV assessment has been carried out are public and accessible on APRIL's website[14]. These assessments, however, were not used as data inputs in this analysis.

5.5.2 Guidelines and Normative Frameworks applied for the analysis

As of today, there is no normative framework or guideline available for conducting retrospective HCV assessments and estimations of HCV loss. However, there are a number of documents that provide good guidance on how to define a methodology to assess the probability of presence of HCVs retrospectively. The main common guidance used in the present analysis is:

- Bahasa Indonesia version of the 2003 HCV toolkit; 2010-2019
- Revised Indonesian HCV toolkit (Indonesian national toolkit) 2008/2009; 2013-2019.
- FSC P&Cs V.5; 2015-2019: the HCVRN Common Guidance on Identification of HCVs (2014).
- High Conservation Value Guidance for Forest Managers. FSC-GUI-30-009 V1-0 EN

In addition to these commonly used guidance and normative frameworks, FFC also used as normative framework in this retrospective analysis (as well as for the entire baseline analysis) the FSC Policy for Association (PfA) (FSC-POL-01-004).

5.5.3 Retrospective Analysis

In contrast to the conventionally used 'Precautionary approach' for the identification and assessment of HCVs assessments (providing information for a defined time period), this study provides a retrospective analysis/estimation for a defined reference year (the baseline year).

The Precautionary approach stipulates that if an HCV is likely to be present, based on the information collected in relation to robust and adequate indicators (even when no clear evidence is available), it must be assumed that such HCV is present. On the contrary, evidence on the clear *absence* of HCV must be provided as basis for a conclusion that HCV is not present. The aim is thus, according to HCVRN, to "err on the safe side".

In order for the results to be as robust and credible as possible, FSC has requested the HCV Resource Network (HCVRN) to identify current best practice and guidance in conducting retrospective estimations of HCV loss which has been referenced by FFC in this baseline analysis methodology. As part of the guidance provided by HCVRN on how to conduct retrospective assessments, HCVRN recommended for a 'conservative approach' to be followed, which means that where absolute accuracy is not possible, changes should be underestimated rather than exaggerated.

Since this analysis is conducted in a retrospective manner, technically and strictly speaking this analysis is an estimation rather than an assessment.

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[14] https://sustainability.aprilasia.com/en/

When conducting this retrospective estimation of the probability of presence of HCVs, based on advice and guidance from HCVRN, FFC used proxies as reference indicators of the likelihood of presence of HCVs. An important aspect of retrospective assessments is that they rely to the extent possible on contemporary data and information sources directly linked to the existence of HCVs at a particular point in time.

HCV proxies were mapped based on different datasets between the baseline of the analysis and the year of already existing HCV assessments. This estimation is carried out using a broad range of secondary geospatial data and makes use of GIS analysis, these provided information on:

a) Area based statistics of forest cover;
b) Topographical analysis;
c) Information on key habitats and protection status;
d) Land use;
e) Information on cultural values

Data on these variables was either directly gathered or generated from a variety of secondary sources. Field data or ground truthing control points were not collected or available from other sources.

Data was acquired from external, highly credible sources. None of the data was further verified by FFC as verification was not within the scope of this baseline analysis.

5.6 Estimation of probability of presence of HCVs: Methodology

HCV proxies (as indicators for the mapping of areas where there is a likelihood of presence of HCVs) were used in this analysis. These proxies are generated using data obtained from multiple sources and different timeframes.

Mapping of HCV proxies

In contrast to a conventional HCV assessment, this retrospective estimation is based on proxies indicating a likelihood of HCV presence. These proxies are generated from data from a variety of sources listed below. With an extensive GIS analysis, the spatial data is matched to the concession areas of the study area. Within the concession area, the area is assessed in terms of size and distribution. Multiple indicators are overlapped to generate the area within the concession with a high likelihood of presence of HCVs.

Table 2 Data sources used to map the proxies indicating a likelihood of existing HCVs (FFC, 2020)

	Layer	Year	Method
HCV1	The World Database on Protected Areas (WDPA)	2020	The limits of World Database on Protected Areas (WDPA) shapefile is used to map HCV1.1 proxy
	Key species IUCN- Tiger and Elephant	2008 and 2015	The iconic species are selected from the mammal shapefile provided by IUCN. The iconic species selected are: Tiger, Elephant and Orangutan. These areas will be used to map potential HCV 1.2 proxy

	Kawasan lindung (Protected area) - Tata Ruang	1999-2010	The Kawasan Lindung (protected area) are selected from the Tata Ruang shapefile. The Kawasan Lindung will be used to map potential HCV1.1 proxy
HCV2	Dense forest cover	Baseline	The dense forest cover for the specific baseline year of each concession was carried out[15]. The dense forest with a core is bigger than 20000 ha is considered as HCV2.1 proxy.
	IFL2000	2000	The limits of IFL2000 shapefile is used to map HCV2.1 proxy. Concessions that have a baseline year HCV after 2000 are not included.
	IFL2013	2013	The limits of IFL2013 shapefile is used to map HCV2.1 proxy Concessions that have a baseline year HCV after 2013 are not included.
HCV 4	RePPProT	2010	The Peat swamps, lakes and mangroves are selected from the RePPProT to map HCV4.1 proxy.
	Catchment in riparian area	Contemporary data	The hydrology network is mapped using the topography data. A 30-meter buffer from each bank is considered as HCV4.1 proxy
	Erosion	Contemporary data	The slope information is carried out using the topography data. The threshold to map HCV4.2 with the slope is 30 degrees. All the slope areas with higher slope than 30 degrees are considered as HCV4.2 proxy
HCV 5-6	Cultural heritage	2019	A buffer of 1km from the coordinates of cultural heritage is carried out. The areas inside of the radius are considered as HCV5-6
	Indigenous land, not acknowledged by government	2015	A buffer of 1km from the coordinates of Indigenous land, not acknowledged by government is carried out. The areas inside of the radius are considered as HCV5-6

Potential HCV damage/loss by third parties

In general terms, organizations/companies are responsible for any potential HCV loss occurring from the time that they were issued the concessions. However, in certain instances, HCV losses within the concession boundaries could be driven by third parties outside the organization.

As this baseline analysis aims to estimate the potential HCV loss or damage resulting from forest operations in which APRIL and its Supply Partners were involved, only areas identified as irreversible forest conversion (within APRIL plantations) have been considered in the estimation of the HCV

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[15] The methodology in detail can be seen in the previous section on *quantification of the total area converted since 1994*

damaged or lost. This methodology, in which only potential HCV loss inside of the APRIL commercial plantation limits is quantified, is aligned with the 'conservative approach' followed for this study. This approach was proposed by the HCVRN.

Potential losses or damages of HCV will be estimated by subtracting the plantations area from the HCV proxies mapped during this exercise. As explained in the scope of this analysis, plantations before 1999 were not counted.

5.7 Probability of presence of HCVs: Limitations

This analysis was conducted in a retrospective manner, thus addressing situations where any changes have already happened. This entails significant challenges: a lack of availability of (updated) data, a lack of widely acknowledged suitable methodologies and guidelines as well as a lack of comparability. Thus, caution is needed when interpreting the results of the estimation, as the time of evaluation often does not correspond with the time of the source used for the analysis.

Moreover, noting that there is no normative framework or guideline available for HCV retrospective analysis, FSC has requested the HCVRN to identify the current best practices and guidance in conducting retrospective HCV estimations which has been referenced by FFC in this baseline analysis methodology. Overall, a 'conservative approach' to the analysis was suggested, which means that where absolute accuracy is not possible, change should rather be underestimated than exaggerated.

Furthermore, HCVRN recommends the use of proxies as reference indicators of the likelihood of presence of HCVs. This analysis makes use of available data from various sources and assumes the presence of HCVs in the past, heavily relying on proxies indicating the probability of presence of HCVs. This entails that the results of this analysis have a certain level of uncertainty and should be interpreted considering this. As the proxies indicate possibility of presence of HCVs, consequently the loss and/or damage of probable HCVs should only be interpreted as a potential HCV loss and/or damage.

In addition to the missing ground data (as to be collected through field verification), it was not possible in the scope of this analysis to validate the accuracy and validity of the secondary data used in the analysis (as it is considered good practice for the development of HCV assessment reports). Some of the data provided was concluded not to be usable without field verification, as it could have caused an overestimation of the presence of HCVs. For example, data used from IUCN or RePPProT was not created following highly accurate mapping procedures and was instead presented with a very low spatial resolution.

HCVRN suggests that existing HCV assessments are to be considered as the starting point for this assignment. However, another limitation which could not be addressed within the scope of this work is the fact that several concessions currently lack HCV assessment reports and/or there are different years of analysis of the existing ones. Information from such reports would have been a good information basis to retrospectively estimate potential HCVs in the past and to understand the trajectory of development, had these been available.

Where land cover has changed drastically and where natural ecosystems have been converted, formerly present HCVs may often not only be reduced in area but even lost completely, although some HCVs may persist despite changes in land cover. The estimation of potential HCV loss has been done assuming that there are no HCV areas within the plantation areas. Although this assumption is to some extent validated by the fact that APRIL did not identify any HCV areas within any of the plantation boundaries, it is nevertheless an assumption – and a reason why, as previously explained, the results of this analysis should be interpreted as an estimation. FFC acknowledges that in certain circumstances HCVs might still be found within the concession boundaries, even after the development of the plantations.

It should be noted that due to lack of temporal data regarding the sources of HCV proxies, the analysis of potential HCV loss was not conducted by comparing HCV proxies from the baseline vs HCV proxies of 2019. Instead, the HCV proxies are collected from different time periods (starting with the baseline year for the HCVs). The land use map (including HCV areas) mapped by APRIL is dated 2019. The analysis has been conducted under the assumption that currently, there is no probability of presence of HCVs within the plantation areas (with the exception of HCV 4). Therefore, the potential losses of HCVs since the baseline year are calculated by intersecting the HCV proxies and the commercial plantation areas. The decision to select only the plantation areas is aligned with the 'conservative approach' concept.

Following this conservative approach, some of the HCV categories (HCV1.3, HCV1.4, HCV2.2, HCV2.3, HCV3 and HCV4.3) could not be assessed due to the lack of data related to certain categories and poor quality of data related to certain proxies of HCV presence.

Based on the above limitations, this analysis can only cover the identification and estimation of the potential presence of HCVs in the APRIL and Supply Partners' concession. The results could indicate potential HCV loss and/or damage, but there are limitations to undoubtedly ascertaining such conclusions This will be further be addressed and qualified in the ensuing ending disassociation process.

5.8 Estimation of potential damage/loss of HCVs: Results

In the following sections, the results regarding the estimation of potential HCV damage/loss – based on the proxies – for each HCV category are presented.

It should be noted that the estimation of potential HCV loss or damage is to be further qualified in the FSC ending disassociation process to determine the quality of restoration and conservation. Moreover, the scope of the HCV proxies and potential HCV losses or damages are different: The HCV proxies are estimated in this analysis for the entire concessions' area. In contrast, the HCV loss or damage estimated in this analysis is calculated considering only areas of plantations. The decision to select only the plantation areas is aligned with the 'conservative approach' concept recommended by HCVRN.

However, assuming that HCV are lost when there is an intersection between HCV proxy and forest plantation might not be necessarily correct, especially in the case of forest plantations located on peat swamp areas (HCV4). The reason for this is that it cannot be confirmed that forest plantation lead to a direct loss of HCV 4 - as peatlands may still be providing some level of ecosystem service even after the establishment of the plantations. For this particular case, the impacts have therefore been categorized as HCV 'damage' rather than 'loss'.

The results of this retrospective analysis should be understood as a reflection of the potential existence and loss of HCV related proxies. The resulting figures highlight the ecological importance of the area of study area as well as the magnitude of the HCVs potentially lost resulting from the establishment of the plantations by APRIL and its Supply Partners.

Result for HCV1 proxies and HCV1 loss
The estimation of probability of HCV 1 presence is dominated by the input proxy 'tiger habitat'; most of the identified area is based on this attribute. In total, 582,902.35 hectares are likely to be HCV 1.

The 'protected area' (Tata Ruang Kawasan Lindung) dataset shows existing overlaps in 16 concessions, summing up to over 2,313.82 hectares - with a high variation from less than two hectares to an outstanding 480 hectares per concession. Almost all concessions can be considered as potential tiger habitat, meanwhile only 15 concessions can be flagged as potential elephant habitat.

Table 3 Overview of HCV1 proxy variables and their absolute size (FFC, 2020)

HCV	Input data	Area in ha
HCV 1.1	Tata Ruang - Kawasan Lindung	142,467.25
HCV 1.1	Protected area	2,313.82
HCV 1.2	HCV 1 - Elephas maximus	100,075.91
HCV 1.2	HCV 1 - Panthera tigris	392,129.52
HCV 1.2	HCV1 - Panthera tigris & Elephas maximus	48,638.15
	Total	582,902.35

Potential HCV 1 proxy loss
In total, 303,834.95 hectares with probability of presence of HCV 1 have likely been lost. A potential loss was mapped for all concessions which had a share of proxies linked to HCV1. Noteworthy is that some activities leading to a loss of HCV1 have been carried out in area protected by national or international status. The Tata Ruang area shows a significantly high stability, as a relatively small proportion of its big size has been lost over the years. On the contrary, more than half of both potential elephant and tiger habitat were irreversibly lost due to activities in the mapped concessions.

Table 4 Overview of total potential losses of HCV1 proxy variables (FFC, 2020)

HCV	Layer	Area ha
HCV 1.1	Tata Ruang	3,236.99
HCV 1.1	Protected	146.61
HCV 1.2	HCV 1 - Elephas maximus	46,904.30

HCV 1.2	HCV 1 - Panthera tigris	221,084.98
HCV 1.2	HCV1 - Panthera tigris & Elephas maximus	35,449.87
	Total	303,834.95

Results for HCV 2 proxies and HCV 2 loss

In stark contrast to HCV 1, core areas of critical size or Intact Forest Landscapes (IFLs) (HCV2) are distributed unevenly across the concessions. Patches of HCV2 proxies (areas with probability of presence of HCV 2) were only found in 11 concessions, summing up to a total area of 269,939 hectares. Large forest patches, mapped in a land cover classification by FFC, make up most of the area compared to the other proxies from external sources, in terms of both size and abundance. With only one occurrence, the IFL2000 data accounted for the least observations. Table 5 below shows that although IFL proxies do not play a role in all concessions, they are of significant proportion in concessions where they occur.

Table 5 Absolute and relative size of area with HCV2 linked proxies per concession (FFC, 2020)

TID	Dense forest core >20000 (ha)	IFL2000 area (ha)	IFL2000 & 2013 area (ha)	TOTAL area (ha)	Percentage of total area of the concession
6	25,552			25,552	84%
8	20,853			20,853	61%
13	78,536			78,536	91%
16			1,942	1,942	34%
17		3,739		3,739	13%
21			2,319	2,319	46%
29	27,215			27,215	84%
38	24,336			24,336	59%
39	35,468			35,468	91%
41	44,933			44,933	91%
48			5,047	5,047	34%
TOTAL	256,893	3,739	9,308	269,939	

Potential HCV 2 proxy loss

The results of this analysis show the likelihood that IFLs have been reduced in 8 of the concessions. The total estimated area of HCV 2 potentially lost sums up to 158,696 hectares the fifty concession, except for two concessions where the potential HCV 2 loss identified are significantly smaller (concession 17) and bigger (concession 13) respectively. Table 6 shows that only two out of three mapped proxies for IFL experienced potential HCV 2 losses. IFL2000&2013 data was not affected by human activities. In three out of 11 concessions, no IFL loss was detected. In 7 concessions, the loss of dense forest patches accounts with 157,172.05 hectares mainly for the losses of area which could be considered as HCV2.1 area (Dense forest core>20000ha).

Table 6 Absolute and relative size of area of potential loss with HCV2 linked proxies per concession (FFC, 2020)

TID	Dense forest core > 20000 area (ha)	IFL2000 area (ha)	TOTAL area (ha)	Percentage of the total area of the concession
6	14,719.02		14,719.02	48%
8	13,779.40		13,779.40	40%
13	57,267.46		57,267.46	66%
17		1,524.24	1,524.24	5%
29	10,385.03		10,385.03	32%
38	13,126.16		13,126.16	32%
39	17,966.51		17,966.51	46%
41	29,928.47		29,928.47	60%
TOTAL	157,172.05	1,524.24	158,696.29	

Results for HCV 4 proxies and HCV 4 damage/loss

Out of all HCV proxies used in this study, the ones indicating the probability of presence HCV 4 are the ones most evenly distributed across the concessions. HCV 4 is the only HCV category for which a probability of presence has been detected in all 50 concessions. This can be explained by the uniform nature of the proxy (topographical characteristics) and the underlying dataset (digital elevation model). With all concessions entailing hydrological drainages and experiencing some topography resulting in risk of erosion, the HCV4 proxies still cover less area than the ones suggesting an existence of HCV1. With almost 450 thousand hectares, the RePPProt indicator is the most influential proxy for this HCV likeliness.

Table 7 Overview of HCV4 proxies and their absolute size (FFC, 2020)

HCV	Layer	Area ha
HCV4.1	Riparian Catchment	90,526.63
HCV4.1	RePPProt	446,653.84
HCV4.2	Erosion	2,173.03
	Total	537,561.66

Potential HCV 4 proxy damage/loss

Despite its stable input factors, the presence of HCV 4 experienced a decline in its size of 311,569.2 hectares. Again, the indicators provided by the RePPProt dataset account for a disproportionally high share of area with potential HCV loss. After the possibly experienced loss or damage of HCV4 proxies, only 3 concessions have a similar high proportion of area with probability of presence of HCV4 (with HCV 4 proxies).

Table 8 Overview of potential loss of HCV4 proxy variables and their absolute size (FFC, 2020)

HCV	Layer	HCV loss (ha)	HCV damage (ha)	HCV loss and HCV damage (ha)
HCV4.1	Riparian Catchment	36,946.7		36,946.7
HCV4.1	RePPProt- Lakes	75.5		75.5
	RePPProt- Mangroves flats	404.4		404.4
	RePPProt- Peat swamps		273,451.7	273,451.7
HCV4.2	Erosion	691.0		691.0
	Total	**38,117.5**	**273,451.7**	**311,569.2**

Results for HCV 5&6

In stark contrast to HCV 4, cultural heritage sites (HCVs 5&6) could only be mapped in three concessions. However, these results need to be interpreted under the understanding that there was a significant limitation in the availability of reliable data sources related to these HCVs.

Table 9 Overview of HCV5-6 proxies variables and their absolute size (FFC, 2020)

TID	HCV56	Area ha
1	HCV 5&6 - cultural heritage	93.29
30	HCV 5&6 - cultural heritage	197.64
15	HCV 5&6 - Indigenous not acknowledged	311.37
		602.30

Being of already outstanding small size, the culturally important area was further reduced by two thirds of its size.

Table 10 Overview of loss of HCV5-6 proxies variables and their absolute size (FFC, 2020)

TID	HCV56	Area ha
1	HCV 5&6 - cultural heritage	66.69
30	HCV 5&6 - cultural heritage	84.46
15	HCV 5&6-Indigenous not acknowledged	251.64
		402.79

6. Quantification of the total number of communities since 1994

6.1 Objectives and Scope

The objective of this section is to quantify the total number of communities located within APRIL's and its Supply Partners' concession boundaries.

To achieve this goal, the analysis was conducted by mapping out the 'settlements' and 'buildings' within the boundaries for each concession over a time span from 1994 to 2019, using remote sensing data and GIS analysis.

6.2 Methodology

Figure 1 is a graphical representation of the process followed to locate settlements and buildings over the identified period for each concession.

Figure 1: Methodology workflow (FFC, 2020)
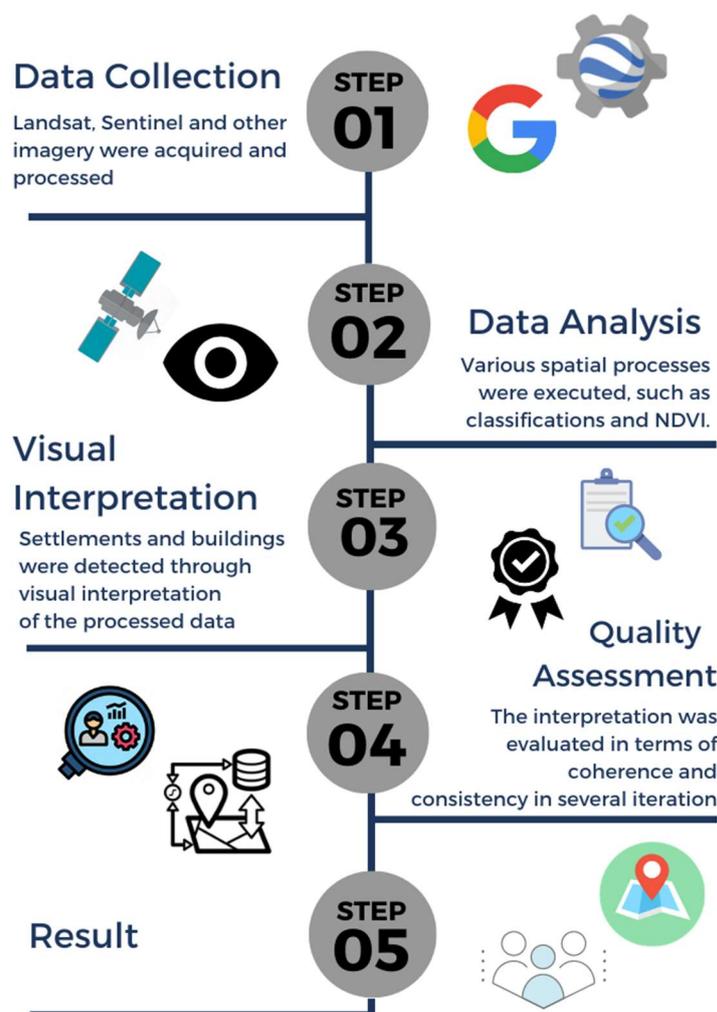
The settlements and buildings were mapped and categorized according to three confidence levels, whereas category 1 includes blurry elements that cannot be recognized as a permanent feature in

subsequent years; category 2 includes elements that can be visually detected and recognized as a permanent feature in subsequent years; and category 3 entails elements that are easily recognizable (clear patterns, shapes) and also recognized in subsequent years.

The methodology initially planned for this assessment included a step of cross-checking the results of the quantification analysis with census information by the Indonesian Government (as to assess the reliability of the results by FFC). However, after reviewing the census data available, FFC concluded that the available governmental demographic information was not usable for a comparison with the results of the analysis for two reasons: the census data was not geo-referenced and the scale at which the governmental data was developed did not match the scale used by FFC (information available at regional level rather than village or subdistrict level). For this reason, a complete comparison of the results of the FFC analysis with the governmental data is not included in this report.

6.3 Limitations

When developing this analysis, FFC encountered a series of limitations which inevitably have an impact on the accuracy of the results presented in this report:

- The sources of information and high-resolution satellite imagery used for this analysis were limited.
- The spatial and temporal resolution of the available data do not provide sufficient information to detect and identify the object accurately.
- Field verification has not been part of the scope of this analysis.
- It is difficult to differentiate between the various settlement types due to low quality and spatial resolution of the dataset as compared to recent years where the quality/resolution is considerably higher.
- Due to the lack of secondary information, the differentiation between buildings used by residents or by APRIL is a challenging exercise. FFC reviewed official sources of demographic information (village distribution, census, etc.). However, due to the considerable difference regarding scale and period, it was not possible to correlate these sources with the results. Therefore, such data was not utilized in this analysis. The data provided by APRIL on the location of APRIL's buildings/infrastructure improved the analysis in terms of reliability of the results regarding the identification of the location of APRIL's infrastructure. Based on the existing information, the analysts could not confirm that the reported buildings indeed form part of APRIL's business activities. For this reason, those buildings have not been deducted from the total quantification of human constructions counted.

6.4 Results

The number of buildings and settlements identified within APRIL and APRIL's Supply Partners' concessions since 1994 are shown in figure 2. By 2019, the total quantified number of buildings and settlements within APRIL and its Supply Partners concessions was 515.
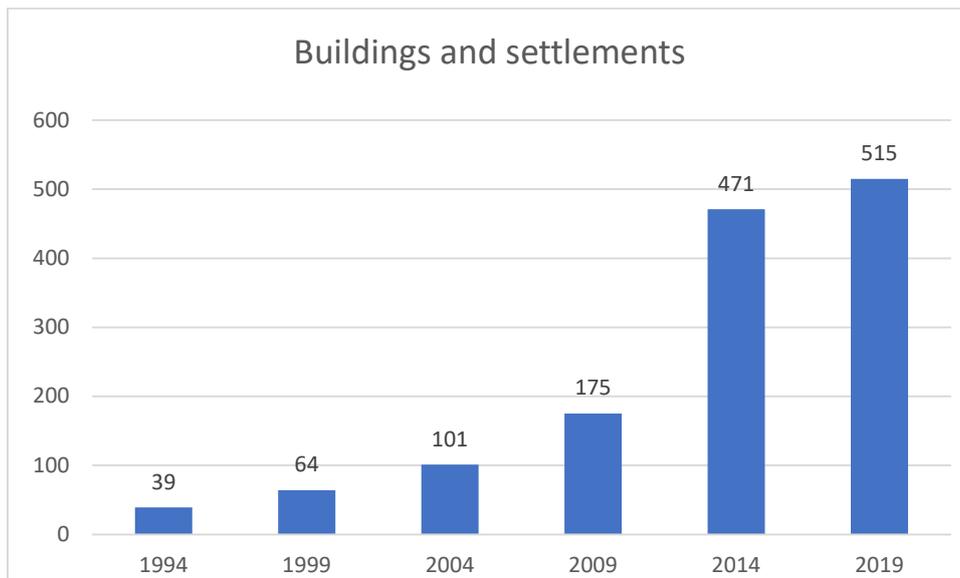
7. Research and quantification of allegations of potential violations of the FSC PfA and identification of potential system improvements, mitigation and remediation actions by APRIL

7.1 Objectives and scope

This chapter's objectives are twofold: first, it is to identify and quantify allegations of potential violations and 'significant cases' (*primary output* of the analysis) as well as to provide a landscape of 'allegations' in the concessions of APRIL and its long-term Supply Partners (*secondary output*). Second, it is to highlight the system improvements, mitigation and remedy actions undertaken by APRIL.

The research and quantification of 'allegations' will be conducted in relation to the six 'unacceptable activities' defined in the FSC PfA[16].

It should be clarified that the allegations described in this report often could be understood to link to *more than one* unacceptable activity under the PfA.

7.2 Methodology

The methodology for conducting the identification and quantification of allegations of potential PfA violations as well as the identification of significant cases, and the subsequent quantification of system improvements, mitigation and remediation actions will follow the below steps:

- **Step 1:** Review and analysis of documentation
- **Step 2:** Identification/quantification of 'allegations'
- **Step 3:** Identification/quantification of 'significant cases' (allegations of potential PfA violations and/or controversial activities) (assessment and weighting of documentation to identify instances where the documentation analysis points to a robust allegation of potential violations of the PfA and/or controversial activity)
- **Step 4:** Identification of potential system improvements, mitigation and/or remediation actions by APRIL.

7.2.1 Step 1: Review and analysis of documentation

As an initial step for conducting this analysis, FFC collected data in relation to APRIL's operations during the onsite visit to APRIL's operations in Kerinci, Indonesia, in January 2020, as well as off-site following various data requests to APRIL.

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[16] Find these six unacceptable activities in the glossary at the end of this summary.

The review and analysis of this documentation led to the identification and quantification of allegations.

When screening the documentation, and as one of the factors to be considered when defining whether allegations are based on substantiated information, the specific source and the robustness of the documentation were considered, thus classifying information sources according to the below categories, amongst others:

a) Independent third-party documentation (e.g. CB auditing reports), as well as official government documentation (*considered as 'substantiated information' without further triangulation*);

b) Second party reports from the Stakeholder Advisory Committee constitute a significant source of information but require further triangulation to be considered as 'substantiated information');

c) Documentation such as declarations of firsthand observations, transcripts of stakeholder interviews, video footage, photographs and other sources of information provided by interested or affected stakeholders (*constitute a significant source of information, but require further triangulation to be considered as 'substantiated information'*);

d) Corporate documentation provided by APRIL (*internal organizational documentation; requires triangulation to be considered as 'substantiated information'*);

e) Press releases and push communication (*requires triangulation to be considered as 'substantiated information'*);

7.2.2 Step 2: Identification/quantification of allegations

Due to the great magnitude of data to be reviewed and analyzed, the team developed a system for processing the significant amount of documentation and to transform it into a more condensed version, providing an organized and concise summary of the data to be used as basis for the analysis.

The identification of allegations of potential violations of the PfA (and/ or controversial activities) was performed for the six unacceptable activities under the FSC PfA.

7.2.3 Step 3: Identification/quantification of 'significant cases'

When determining whether an allegation is to be considered a potential violation or 'significant case', FFC evaluated and weighed the evidence at hand, based on the following criteria, amongst others:

- The source by which the case was identified - robustness and credibility of the source;
- Whether the case has been identified by different sources (triangulation of allegations: cross-referencing/cross-checking of information);

- Whether the allegation is comprised of substantive information;
- The veracity/authenticity of the documentation;

7.2.4 Step 4: Identification of potential system improvements, mitigation and/or remediation actions by APRIL

The analysis in Step 4 is to identify the activities implemented by APRIL since 2013 that can be categorized as 'system improvements', 'mitigation' and 'remediation actions'.

7.3 Limitations

There were limiting factors identified throughout the analysis:

- **No differentiation between 'active' and 'closed' cases possible:** Due to the amount and type of information available, it has not been possible to determine whether allegations of potential violations of the PfA are currently 'active' or 'inactive'. For this reason, all allegations in this report will be referred to as 'allegations' (without further differentiation).

- **Lack of detailed information about allegations:** In multiple cases, the sources of information do not provide further specific information related to the allegations. This often includes a lack of details regarding content of the specific cases, location, date when the events allegedly took place, or the names and details of involved actors/communities.

7.4 Results

The desk review was conducted by examining 603 documents relevant for the baseline analysis. A total of 138 allegations were identified. By applying the criteria explained in *Step 3 Quantification of significant cases* above, of these 138 allegations, 13 were classified as 'significant cases' because a sufficient level of information was collected to back up the allegation. Of the 13 significant cases, 6 significant cases were related to the direct involvement by APRIL and its Supply Partners (see Table 1 below).

In addition, a substantive number of allegations (124) relates to claims that do not necessarily fall under the six unacceptable categories of the FSC PfA, but may nevertheless be or become relevant when defining the ending disassociation process for the company. Of the said 124 cases, 98 significant cases were identified to be linked to the involvement by APRIL and its Supply Partners. These cases of land tenure conflicts are included in this report for transparency but, again, do not necessarily indicate APRIL's involvement in a potential violation of the PfA.

FFC also identified a number of controversial activities[17] by third parties within the concessions of APRIL and APRIL's Supply Partners (see Table 2 below). Although these findings are outside the initial scope of the analysis, FFC determined that such findings may be relevant when it comes to establishing a Roadmap for the company and has therefore included these findings in a separate section of the report. 8 cases point to such potentially controversial issues involving third parties outside APRIL (e.g. communities).

The allegations quantified and described in the below subsections of the report present the landscape of allegations in relation to APRIL's and its Supply Partner's concessions and are based on the latest information available to FFC. The findings of allegations presented below do not equate with active dispute cases. Given the time period under the scope of this analysis, it is likely that certain allegations presented below have been addressed by APRIL and its Supply Partners since the time when the allegation was initially raised.

Furthermore, FFC identified a set of system improvements, mitigation and remediation actions which have been successfully implemented by APRIL since 2013 (see the last section of this report). It is likely that certain system improvement measures implemented by APRIL have contributed to addressing some of the allegations below described.

Table 1 Quantification of 'allegations' raised against APRIL, Supply Partners (2013-2019) (FFC, 2020)

N°	Unacceptable activity under the FSC PfA	Responsible party	Number of Cases (allegations)							Total Cases
			2013	2014	2015	2016	2017	2018	2019	
1.	Illegal logging or the trade in illegal wood or forest products	APRIL and Supply Partners	0	0	0	0	1	0	0	1
2.	Violation of traditional and human rights in forestry operations	APRIL and Supply Partners	0	0	0	0	0	0	0	0
3.	Destruction of high conservation values in forestry operations	APRIL and Supply Partners	1	1	0	0	1	0	0	3

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[17] Such activities do not present a violation of the PfA, but may nevertheless be considered "controversial". They include issues like illegal logging or land tenure conflicts.

No	Activity	Responsible Party	2013	2014	2015	2016	2017	2018	2019	Total Cases
4.	Significant conversion of forests to plantations or non-forest use	APRIL and Supply Partners	0	1	1	0	0	0	0	2
5.	Introduction of genetically modified organisms in forestry operations	APRIL and Supply Partners	0	0	0	0	0	0	0	0
6.	Violation of any of the ILO Core Conventions	APRIL and Supply Partners	0	0	0	0	0	0	0	0

No	Other activities that *may relate* with PFA	Responsible Party	Number of Cases (allegations)							Total Cases
			2013	2014	2015	2016	2017	2018	2019	
1	Land tenure conflicts	APRIL and Supply Partners	2	5	0	18	1	0	72	98
									Total Cases	**104**

Table 2 Quantification of 'allegations' beyond the FSC PfA; controversial activities raised against third parties/community (2013-2019) (FFC, 2020)

Nº	Controversial issues involving third parties	Responsible party	Number of Cases (allegations)							Total Cases
			2013	2014	2015	2016	2017	2018	2019	
1.	Illegal logging or the trade in illegal wood or forest products	Third party	0	0	0	0	1	0	0	1
2.	Violation of traditional and human rights in forestry operations	Third party	0	0	0	0	0	0	0	0
3.	Destruction of high conservation	Third party	1	0	0	0	0	0	0	1

#										
	values in forestry operations									
4.	Significant conversion of forests to plantations or non-forest use	Third party	0	1	1	1	2	1	0	6
5.	Introduction of genetically modified organisms in forestry operations	Third party	0	0	0	0	0	0	0	0
6	Violation of any of the ILO Core Conventions	Third party	0	0	0	0	0	0	0	0
7.	Land tenure conflicts	Third party	0	1	0	21	3	1	0	26
									Total Cases	**34**

Allegations of *'Illegal logging or the trade in illegal wood or forest products'* by APRIL

The below provides a description of the allegations of *'Illegal logging or the trade in illegal wood or forest products'* identified and quantified in Step 2 of the methodology.

One case of 'allegation' with APRIL's involvement (including APRIL's Supply Partners) was identified with regards to this potential violation.

No allegations of involvement in *'Illegal logging or the trade in illegal wood or forest products'* by APRIL and its Supply Partners were identified in the years 2013, 2014, 2015, 2016, 2018 and 2019.

Allegation raised in 2017 against APRIL

❖ **Case in PT.SRL:**

o **Number of cases and location**: There is one case of illegal logging reported in the concession SRL block IV Rupat area of PT.SRL.

o **Issue:** Rainforest Alliance[1] reports in its APRIL FSC CW Gap Analysis, dated November 2017, one case of illegal logging in the PT.SRL concession area and around the conservation area on Serapung island.

- o **Information source:** Tolerating unauthorized logging in a company's licensed area is considered illegal logging, violating chapter 48 of the Indonesian Forestry Law. The construction of canals in conservation areas is considered illegal according to the Indonesia Forestry Regulation (Indonesia government regulation N°71, 2014) regarding Protection and Management of Peat Ecosystem[2].

- o **Assessment:** Significant case

Allegations of *'Violation of traditional and human rights in forestry operations'* by APRIL

No cases of allegations of 'Violation of traditional and human rights in forestry operations' pointing to involvement by APRIL in the years 2013-2019 were identified.

Allegations of *'Destruction of High Conservation Values in forestry operations'* by APRIL

No allegations of involvement in 'Destruction of High Conservation Value in forestry operations' by APRIL and its Supply Partners were identified in the years 2015, 2016, 2018 and 2019. However, there were allegations raised in 2013, 2014 and 2017.

Allegations raised in 2013 against APRIL

- ❖ **Case in Pulau Padang:**

  - o **Location:** Concession area of PT. RAPP at Pulau Padang.

  - o **Issue:** Allegation that HCV areas located within the concession had been reduced by around 1,600 ha by 8 October 2013. Allegations also point at drainage canals illicitly constructed.

  - o **Information source:** Reported by Eyes on the Forest (EoF)[3], the Stakeholder Advisory Committee (SAC), KPMG in its field inspection[4] report (September 2014) and by the SAC[5] (December 2014).

  - o **Assessment:** Significant case

Allegations raised in 2014 against APRIL

- ❖ **Case in RAPP Pulau Padang:**

  - o **Number of cases and location:** One case of illegal activities in an HCV area in Pulau Padang reported (Southern part of RAPP Pulau Padang concession).

  - o **Issue:** The allegation claims that drainage canals have been illicitly constructed by RAPP in an HCV area in Pulau Padang. Allegations of direct observation of forest clearing activities between June and October 2014 are raised (stacking of newly cut round wood,

construction of drainage canals and the transportation of illegal round wood to APRIL's pulp mill in Pangkalan Kerinci). Around 21,000 ha of natural forest are claimed to be lost due to the reported illegal activities. Itis also reported that some of the forest clearance was carried out by local people, but no proof of this was found in the data analyzed. This case was reported by EoF to the Ministry of Forestry and SAC.

- o **Information source:** SAC meeting documentation[6], KPMG field inspection reports[4], as well as EoF report[3].

- o **Assessment:** Significant case

Allegations raised in 2017 against APRIL

- ❖ **Case of illegal acacia development in PT.RAPP Pelalawan:**

  - o **Number of cases and location:** One case of illegal activities of acacia development in the protection area of HCV peatland by RAPP Pelalawan (RAPP Pelalawan) on Kampar peninsula.

  - o **Issue:** Allegation of illegal activities regarding the planting of acacia tree species in a protected HCV peatland area. In March 2017, APRIL was requested by the Ministry of Environment and Forestry under revised peatland regulations[7] to close canals at seven specific points and to remove Acacia trees from approximately 600 hectares of newly planted peatland in the Pelalawan sector.

  - o **Information source:** KPMG assurance interim report[8]. As this is a third-party information source, the case is graded as 'significant'.

  - o **Assessment:** Significant case

Allegations of *'Significant conversion of forests to plantations or non-forest use'* by APRIL

The section below describes the alleged cases of '*Significant conversio*n *of forest to plantations or non-forest use'.* It also includes allegations of conversion where the area affected by the conversion is below the 10,000 Ha threshold[18].

No allegations of involvement in '*Significant Conversion of forest to plantations or non-forest use*' by APRIL and its Supply Partners were identified in the years 2013, 2017, 2018 and 2019. However, there were allegations in 2014, 2015 and 2016.

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[18] According to FSC-POL-01-004 V2-0 EN: "*Failure of the 10,000 ha threshold does not lead to disassociation per se, but will lead to a case by case investigation by an independent Complaints Panel. In judging the case, the Panel will take into account the local circumstances, the scale of the operation and plans for continued conversion.*"

Allegations raised in 2014 against APRIL

- o **Number of cases and Location:** One case in PT.SRL Concession Block IV Rupat.

- o **Issue:** Allegation of loss of natural forest caused by encroachment and subsequent conversion to palm oil plantations[9]. Of the total concession area covering 38,224 ha, 15,891.66 ha of natural forest are claimed to have been converted to acacia plantation. 7,793.07 ha are claimed to have been subject to illegal encroachment activities and the destruction of natural forest by the adjacent communities. Oil palm plantations are estimated to cover an area of 1,232 ha.

- o **Information source:** This data stems from the two organizations WWF Indonesia and JPIK Riau (Independent Forestry Monitoring Network, see endnote).

- o **Assessment:** Significant case

Allegations raised in 2015 against APRIL

- o **Number of cases and Location:** One case reported in relation to various APRIL subdivisions, namely PT.SRL block IV Rupat Island.

- o **Issue:** Allegations of conversion of natural forest to acacia plantation by PT.SRL which have been reported to the Riau police department. The loss of natural forest is due to multiple fire incidents affecting the various subdivisions.

- o **Information source:** Reported by EoF and Jikalahari and substantiated by several sources. The case was addressed by the Riau police department in September 2015.

- o **Assessment:** Significant case

Results of Step 3: Identification of 'significant cases' (potential violations of the FSC PfA)
Step 3 of the analysis consisted of evaluating how many of those allegations are based on 'substantiated information' and therefore should be classified as a 'significant cases'.

Table 3 Significant cases (details) with APRIL's involvement (FFC, 2020)

Concession name	APRIL firsthand involvement
SRL block IV Rupat	Illegal logging (PfA 1)
RAPP Pulau Padang	Destruction of HCV area (PfA 3)
RAPP Pulau Padang	Destruction of HCV area (PfA 3)
RAPP Pelalawan	Opening new block plantation on HCV area (PfA 3)

Sumatera Riang Lestari block IV Rupat	Forest Conversion to acacia plantation (PfA 4)
Sumatera Riang Lestari block IV, Rupat	Conversion to acacia plantation (PfA 4)
Total	**6**

Allegations of activities beyond the FSC Policy for Association: Involvement by APRIL and APRIL's Supply Partners

This section describes allegations related to potential land tenure conflicts (considered to be beyond the scope of the FSC PfA). These cases do not necessarily correspond to a potential 'violation of traditional and human rights'. However, this information may become relevant with regards to the FSC ending disassociation process - even though they do not per se constitute a violation of the PfA.

Allegations raised in 2013 against APRIL

- o **Number of cases and location**: Two cases of land tenure conflict with PT.RAPP are reported for the state of Pulau Padang (concession RAPP Pulau Padang).

- o **Issue:** Land tenure conflict[10] between APRIL and the neighboring villages of Bagan Melibur and Lukit emerged when two out of 14 villages challenged APRIL's plans to develop this specific concession area. The villages, adjacent to APRIL's concession areas, demanded the revocation of APRIL's license as they accused the company of destroying the island's peatland ecosystem and furthermore claimed that the land was taken without ensuring Free Prior and Informed Consent (FPIC[11]). Allegations about a second land tenure conflict between communities and APRIL reported that hundreds of people from a total of six villages around the PT.RAPP concession protested against APRIL's logging operation RAPP Pulau Padang.

- o **Information source:** Eyes on the Forest (EoF), The Forest Dialogue (TFD) and SAC.

- o **Assessment:** Significant case

Allegations raised in 2014 against APRIL

- ❖ **Case of Land tenure conflict at Pulau Padang:**

- o **Number of cases and location**: Four cases of land tenure conflict between APRIL and the communities living within its forestry concessions or neighboring these (Pulau Padang in the concession area of PT.SRL, block IV in the villages Pergam, Hutan Panjang, Bagan Sinembah and Bangko Pusako).

- o **Issue:** The land tenure conflict[12] is ongoing since 2013, since two villages chose not to engage with APRIL. Allegations point to land been cleared in the territory close to Pulau Padang village prior to APRIL's satisfactory completion of the process for the development of the HCV assessment and peer-review process by HCVRN. Furthermore, the report also states that no satisfactory FPIC process was conducted by APRIL prior to clearing the land.

The same issues are reported for Bagan Melibur village[13]. The reports state that PT.RAPP cleared forest inside of the villages' administrative zone, and violating the conflict resolution agreement with Bagan Melibur by starting to operate before a conflict resolution was found.

- o **Information source:** SAC report[6], reported by Riau local NGOs

- o **Assessment:** Significant case

❖ **Case of Land tenure conflict at PT. Sumatera Riang Lestari:**

- o **Number of cases and location**: Four cases in PT.Sumatera Riang Lestari (SRL) block IV Rupat, involving the villages Darul Anam, Cingam, Pergam, Batupanjang, Sukarjo Mesim, Terkul and PT.SRL.

- o **Issue:** The allegations of land tenure conflicts in PT. Sumatera Riang Lestari (SRL) block IV Rupat relate to boundary disputes between the villages Darul Anam, Cingam, Pergam, Batupanjang, Sukarjo Mesim, Terkul and PT.SRL. It is claimed that APRIL did not conduct participatory mapping following stakeholder engagement processes in line with the FPIC principle to define and agree on the boundaries of the concessions of its forestry operations with the neighboring communities. Due to the alleged lack of stakeholder engagement and subsequent lack of agreement by the community, villagers have continued with their agricultural activities within the concession boundaries defined by APRIL. Such agricultural activities by the communities have been considered encroachment by the company.

Allegations raised in 2017 against APRIL

- o **Location:** Multiple individual land claims[14] to PT.RAPP Pulau Padang.

- o **Issue:** Allegations claim the existence of a land tenure conflict of considerable magnitude reported in the form of 593 individual disputes affecting a total area of around 16,128 ha. The disputes appear to be unresolved. The conflicts at Bagan Melibur with PT. RAPP Pulau Padang are claimed to remain unresolved due to a disagreement in relation to the concession boundaries. The dispute covers three areas involving nine landowners in RAPP Pulau Padang. No evidence was found that an agreement has been reached between the parties on how and when the disputes should be settled. This case has been ongoing for four years.

- o **Information source:** KPMG assessment report (2017, 2018) and the CW Gap Analysis report by Rainforest Alliance.

- o **Assessment:** Significant case

Allegations raised in 2019 against APRIL

- o **Number of cases and location:** 72 cases[15] of active conflicts between villages or communities and APRIL in Riau province.

- o **Issue:** The conflicts are related to land disputes, livelihood, violence and disputes about compensations. 59 of the cases are related to land tenure issues. The exact area involved by the social conflicts is known only in some cases (41 out of 72) and amounts to 62,249 ha, involving 20 concessions of APRIL and its Supply Partners.

- o **Information source and Assessment:** These allegations are substantiated as the data source[15] provides the name, size and location of the areas of conflicts.

- o **Assessment:** Significant case

The following table shows an overview all allegations/significant cases with APRIL's involvement which do not fall under the PfA (land disputes).

Table 4: Allegations/ Significant cases with APRIL's involvement which do not fall under the PfA (land disputes) (FFC, 2020)

Code	Concession name	Nº of cases	Case description
2013,TID8,RAP.PPD	RAPP Pulau Padang	2	Land tenure conflict of boundaries
2014,TID8,RAP.PPD	RAPP Pulau Padang	1	Conflict resolution agreement not followed
2014,TID39,SRL.RPT	Sumatera Riang Lestari block IV, Rupat	4	Land tenure conflict of boundary
2016,RAP	Several	18	Land tenure conflict
2017,TID8,RAP.PPD	RAPP Pulau Padang	1	Land disputes of boundary
2019,RAP	RAPP and Supply Partners	72	Customary land and boundary disputes, Livelihood, land disputes, criminalization, Land grabbing of customary land, fee of land rent violence, use of intimidation, Canal development, damage caused by company infrastructure, local recruitment
	Total	**98**	

Assessment of potentially controversial activities, involvement by third parties
When conducting this analysis, FFC also identified several allegations of potentially controversial activities by third parties within the concessions of APRIL and APRIL's Supply Partners.

This section describes the cases which point to involvement by third parties (E.g. communities). These findings fall outside the initial scope of the baseline analysis. However, they may still be relevant for establishing a baseline for the company and regarding the FSC ending disassociation process. Therefore, they are included in this report.

Table 5: Quantification of 'allegations' beyond FSC PfA; involvement by third parties (2013-2019) (FFC, 2020)

Nº	Allegations of controversial activities by third parties	Number of Cases (allegations)							Total Cases
		2013	2014	2015	2016	2017	2018	2019	
1.	Illegal logging or the trade in illegal wood or forest products	0	0	0	0	1	0	0	1
2.	Violation of traditional and human rights in forestry operations	0	0	0	0	0	0	0	0
3.	Destruction of high conservation values in forestry operations	1	0	0	0	0	0	0	1
4.	Significant conversion of forests to plantations or non-forest use	0	1	1	1	2	1	0	6
5.	Introduction of genetically modified organisms in forestry operations	0	0	0	0	0	0	0	0
6	Violation of any of the ILO Core Conventions	0	0	0	0	0	0	0	0
	Total cases								8

Identification of potentially controversial activities ('significant cases') with third party involvement

The table below provides a quantification of the 'significant cases' of potentially controversial activities by third parties.

Table 6: Significant cases beyond FSC PfA: significant cases of potentially controversial activities with involvement of third parties during 2013-2019 (FFC, 2020)

No	Allegations of controversial activities by third parties	Number of significant cases by year							Total Cases
		2013	2014	2015	2016	2017	2018	2019	
1.	Illegal logging or the trade in illegal	0	0	0	0	1	0	0	1

#									
	wood or forest products								
2.	Violation of traditional and human rights in forestry operations	0	0	0	0	0	0	0	0
3.	Destruction of high conservation values in forestry operations	1	0	0	0	0	0	0	1
4.	Significant conversion of forests to plantations or non-forest use	0	1	1	0	2	1	0	5
5.	Introduction of genetically modified organisms in forestry operations	0	0	0	0	0	0	0	0
6.	Violation of any of the ILO Core Conventions	0	0	0	0	0	0	0	0
7.	Land disputes of livelihood	0	1	0	0	0	0	0	1
8.	Land tenure conflicts	0	0	0	0	2	1	0	3
Total Significant Cases									11

Identification of any potential system improvements and/or mitigation and remediation actions

The findings indicate that APRIL has been - in the period 2013-2019 - developing its systems, management and operations towards improving its operations environmentally and socially, and investing efforts towards social remedy (in the form of implementation of initiatives in the field of stakeholder engagement including local communities).

❖ **System improvements**

As a result of the baseline analysis, FFC noted that APRIL and its Supply Partners have implemented since 2013 a series of policies, procedures, practices and measures in relation to preventing re-occurrence of unacceptable activities under the FSC PfA.

These measures have been categorized as 'system improvements' as they point towards progress and/or achievements reached by APRIL and/or its long term Supply Partners towards implementing measures and actions that prevent, address and mitigate risks of being involved in unacceptable activity as defined under the FSC Policy for Association. A summary of the key 'system improvements' identified in this baseline analysis is provided below.

- o **Development of management and monitoring of HCV area**

Although not covering all its concession areas, APRIL has nevertheless invested efforts in the past years towards the identification and mapping of HCVs within the concession areas. A key step in the process of identification of HCVs has been the development of HCV assessments through third party independent consultancies for 30 out of 50 of their concessions (including concessions such as PT. SRL Block IV Rupat, PT. Triomas FDI and PT. RAPP Pulau Padang, among others).

Through the development of the HCV Assessments, APRIL identified the existing HCVs within its management operations, therefore taking steps towards the conservation, management, and monitoring of HCVs within its concessions. It furthermore took steps towards preventing and combating forest conversion and tackling HCV destruction caused by forest conversion (in the areas where HCVs are identified).

- o **Land Cover Change monitoring system**

APRIL established the LCC monitoring system operating across its Supply Partners and open market suppliers. The main objective of APRIL's LCC monitoring system is to detect and calculate any deforestation, illegal logging, encroachment, forest fires across all of APRIL's own concessions as well as their direct Supply Partners' concessions.

KPMG verified the implementation of this system in 2916, as part of its third-party verification of APRIL's implementation of its commitments and targets under APRIL Sustainable Forest Management Policy (SFMP 2.0).

This establishment of this system aims to improve plantation management and preventing any potential involvement in activities related to 'illegal logging or the trade in illegal wood of forest products'. It therefore prevents and mitigates APRIL's and its Supply Partners potential involvement in unacceptable activities under the FSC PfA.

- o **Procedures on grievance mechanism and land dispute resolution**

In August 2016 APRIL published its [Grievance Resolution Procedure](16) and the related Grievance Submission Form[17].

The Grievance Resolution Procedure recognizes the FPIC principle as starting point. If a grievance is confirmed, an Action Plan is designed by the company in consultation with concerned parties to resolve/settle it, and proper implementation is subsequently monitored.

The Grievance Submission Form contains the contact details of individuals or the organization of the complainer, supporting evidence of the issue, detail of the issue, action that has been taken (if available), follow-up, and a clear statement of agreeing to the Grievance Resolution process.

The development and implementation of a grievance mechanism constitutes a tangible step aiming to addressing the existing conflicts between communities and APRIL's and its Supply Partners.

o **Peatland management**

APRIL established in 2015 an Independent Peat Expert Working Group (IPEWG). The role of this working group is to help APRIL fulfil the commitments related to its peatland operations set out in its SFMP 2.0. The IPEWG developed in June 2017 version 3.2 of a "Peatland Roadmap"[18].

The "Peatland Roadmap" consist of three main components: Building science-based understanding and minimizing impacts; responsible peatland operations; developing a vision for peatland landscapes.

o **Procedures on ecosystem management and monitoring**

In the past years, APRIL has developed and implemented a series of Standard Operating Procedures (SOPs) which constitute relevant steps in the context of ecosystem management and monitoring:

- SOP for Designation, Management, and Monitoring of Protected Area
- SOP for Management and Monitoring of Protected Flora Species
- SOP for Management and Monitoring of Wildlife Species
- SOP for Wildlife Data Form
- SOP for Wildlife Data Table

o **Species and ecosystem management guidelines**

In the context of the species and ecosystem management guidelines, APRIL has taken steps in the implementation of the EIA Implementation Reports (including PT. RAPP 2013[19] and 2019 of PT. RAPP Pulau Padang[20] and PT. RAPP Pelalawan[21], among others).

By implementing the measures and actions reflected in these reports, PT. RAPP complies with the legal obligation to develop the EIA Implementation Report. By developing the EIA Implementation Report, PT RAPP has met the Indonesian governmental requirements (Government Regulation No.

7/1999 concerning Flora and Fauna Species Preservation; Government Regulation No. 45/2005 concerning Forest Protection; Ministry of Environment and Forestry Decree No. 106/2018 concerning Protected Flora and Fauna Species).

Compliance with forestry laws and regulations also constitute a step by organizations towards preventing and mitigating any involvement in unacceptable activities under the FSC PfA.

- o **Development of APRIL's landscape-level conservation management plans**

APRIL has also taken a further step in relation to HCV conservation and management, by developing its landscape level plans[22].

The main objective of the landscape level plans is to address long-term conservation goals in terms of increasing the amount of conservation area to at least match the area developed for the establishment of APRIL's plantations, to protect the ecosystem functions and to conserve the native biodiversity.

By implementing the recommendation from HCV Assessments, PT. RAPP demonstrates efforts towards incorporating the HCV approach in peat management and its forestry operations.

- o **Policy and governance of sustainable forest management**

APRIL's Sustainable Forest Management Policy (SFMP) 2.0 was published in June 2015.

A significant improvement of APRIL's SFMP 2.0 in relation to the previous version is the scope of the policy which is now covering all of APRIL's Supply Partners and supply chains (as opposed to a much more limited scope of SFMP 1.0). In addition, SFMP 2.0 also incorporated new elements in terms of social and environmental responsibility such as: specific targets on the reduction of the carbon footprint, the respect to indigenous peoples' and communities' rights and the establishment of the Stakeholder Advisory Committee (SAC) to ensure transparency in the process of implementation of the targets defined under the SFMP. A key improvement resulting from the implementation of SFMP 2.0 is the establishment of the Stakeholder Advisory Committee (SAC), which is the independent board that oversees the implementation of the targets and commitments under SFMP 2.0.

According to the findings by the CDP[23] in September 2019, the policy embeds APRIL's commitments of zero deforestation, responsible peatland management, conservation and restoration, community empowerment and engagement, as well as third party verification and transparency.

- o **Development of ecosystem restoration**

The establishment of APRIL's RER for the maintenance and protection of RTE (rare, threatened, endangered) of species on Kampar Peninsula, is also a significant step by APRIL towards forest conservation and restoration.
The development of RER is aimed at preventing illegal logging, destruction and conversion carried out by other parties in the concession area, especially the protected area of PT. RAPP and Supply Partners in Kampar Peninsula and Pulau Padang. In addition, there is an effort to revitalize ecosystem functions, especially the peat ecosystem in the Kampar Peninsula and Pulau Padang

o **Fire prevention and fire suppression**

As steps towards preventing potential involvement in unacceptable activities under the PfA, specifically in the potential involvement in unacceptable activities regarding forest conversion and destruction of HCVs caused by forest fires, APRIL has set up Goal VIII point d in SFMP 2.0 which states that APRIL has a 'strict "No Burn" policy and will follow the National legal requirement addressing impact of fires.

APRIL has also established the Fire Free Village Program (Annual Report 2016 - 2017) created with close engagement with local communities.

Moreover, APRIL has implemented an identification of fire-prone areas, increased the intensity of patrols, and tries to prevent any potential fire events by optimizing the role of the Fire Aware Community (Masyarakat Peduli Api) program.

❖ **Mitigation actions**

The analysis showed that APRIL and its Supply Partners have in place a series of procedures, practices, and measures in relation to mitigating the potential involvement in unacceptable activities of FSC PfA. These measures range from environmental and social management as well as monitoring actions to various approaches towards enhanced stakeholder involvement.

The identified 'mitigation actions' summarized below correspond with actions undertaken to minimize, and/or prevent reoccurrence of any damage, harm and/or destruction caused by APRIL's and/or its long-term Supply Partners' forest management operations resulting from their direct or indirect involvement in any of the unacceptable activities of the FSC PfA.

o **Community development and empowerment**

PT. RAPP has implemented a Community Development program with the purpose of promoting the development and prosperity of the neighboring community. The objectives of this program are:

- Promote the development of communities (where the basic income and capital of the community increases, the community is more educated, social relations and community wellbeing is improved and a comfortable and healthy environment is achieved);

- Improved communication and relation between the company and the communities.

o **Development of HCV management and boundary demarcation**

The activities carried out by APRIL for boundary demarcation include: preparation of SOP for boundary plan activities, dissemination of boundary activity plans, boundary measurements, installation of boundary markers, and mapping of HCV areas that have been demarcated in the field.

o **Stakeholder engagement**

In the past years APRIL has implemented several actions and measures towards improving its stakeholder relations, as well as towards addressing the existing land tenure disputes. Some of the main actions taken on this front include:

- Implementation of the FPIC process and conflict resolution with the local communities;
- Implementation of the mapping of rightsholders at Kampar Peninsula and of the land claimers regarding concession boundary disputes;
- Proactively support local communities through four main projects managed by APRIL[24]: a social infrastructure project, an education scholarship project, the Integrated Farming System (IFS) training project and the Fire Free Village Program (FFVP);
- Proactiveness in ensuring that workers are hired from local communities where the work takes places.
- Coming to joint agreements with community representatives in the form of Memorandums of Understanding (MoU) that are mutually beneficial (win-win solutions).
- Conducting a stakeholder consultation process in relation to its operational plan involving the neighboring communities.

o **Procedures to resolve land tenure conflict**

As mentioned in the System Improvement section, APRIL has implemented a series of SOPs with the objective, among other to address and resolve grievances, including land tenure conflicts.

Furthermore, APRIL has implemented the recommendations of the HCV Assessment reports (for PT. RAPP Pulau Padang) related to land tenure conflict mitigation.

o **Peatland management and monitoring**

In addition to the above-mentioned measures, the additional actions related to peatland management have been implemented by APRIL:

- If based on surveys the peat peak areas are found, the area is allocated as a local peat protection area. It is prohibited to re-cultivate after harvesting and if it is identified damaged, recovery must be carried out in accordance with statutory provisions;

- Controlling subsidence rates and its measurement in order to maintain the peat area as a place for carbon and water conservation, if conditions of low water table have high potential for peatland subsidence. Management is carried out which includes water quality and water table management, maintain water table in staple and livelihood plantation or protection area, periodic canal block monitoring at the peat dome area for immediate treatment if a leak is found;

- Soil fertility monitoring to obtain recommendations for plant species and fertilization treatment.

RAPP has conducted land use planning that set the area within 1.5 km from the river as protection area.

- o **Measures for occupational health and safety**

PT. RAPP has implemented and obtained an OHSAS 18001 certificate. This includes implementing a Health and Safety System.

❖ **Remediation actions**

APRIL and Supply Partners' have in place several practices and measures that have been categorized as 'Remediation actions': These correspond with actions undertaken by APRIL and/or its Supply Partners in order to address the damage, harm and/or destruction caused by APRIL's and/or its Supply Partner's forest management operations resulting from their direct or indirect involvement in any of the unacceptable activities of the FSC PfA.

- o **Forest gain within non-plantation areas**

As a result of the baseline analysis, FFC identified that the reversible forest cover change in the assessed 'Conservation' category corresponds with 63,156.42 ha and in the 'Other areas' category with 32,316.80 ha. Within both of these categories, some of the forest cover change have been reported by APRIL as being caused by encroachment and illegal activities by third parties.

However, there may have been some forest gain due to active reforestation or natural regeneration. This reduces the value of net deforestation to 517,965 ha. Based on land cover change analysis, it was identified that there are transitions from sparse to dense forest and from non-forest to dense forest within the 'Conservation' and 'Other Areas'.

8. Overall Conclusions

The objective of the baseline analysis was to establish a complete, objective and comprehensive baseline data to be used as input for the development of the FSC ending disassociation process.

As a result of conducting this baseline analysis, FFC gathered detailed data related to the establishment of APRIL's and its Supply Partner's concessions (quantification of conversion, estimation of potential damage/loss of HCVs, quantification of buildings/settlements). The analysis also provides an overview of the landscape of allegations raised against APRIL since 2013. The baseline has also identified a series of improvement action measures implemented by APRIL since 2013.

Due to the limitations described, it is recommended that the figures and results of the land cover transitions presented from this analysis are interpreted as an estimation.

The main conclusions of this baseline analysis are:

a) The baseline analysis shows a total of **531,350.31 ha of forest cover change** within APRIL's and APRIL's Supply Partners' concessions since 1994. The irreversible transition of forest cover change from dense forest to commercial plantations covers an area of **435,877.08 ha** in total, which **equates with irreversible forest conversion**. The reversible forest cover change in the areas managed for conservation amounts to 63,156.42 ha and in 'Other areas' to 32,316.80 ha.

b) The **probability of the presence of HCVs within the concession boundaries based on proxies** are: **582,902.35 ha** (66% of the total area) **as HCV1; 269,939.02 ha** (30.47% of the total area) **as HCV2; 537,561.66 ha** (61 % of the total area) **as HCV4; and 602.30 ha** (0.07% of the total area) as HCVs 5-6. Note that this accounts for overlapping presence of values across the study area.
Regarding the **estimated HCV loss or damage within the plantation areas, 303,834.95 ha** (34% of the total area) were estimated as **potential loss of HCV1; 158,696.29 ha** (17.91% % of the total area) as **potential loss of HCV2; 310,551.86 ha** (35 % of the total area) as **potential loss or damage of HCV4**; and **402.79 ha** (0.05% of the total area) **as potential loss of HCVs 5-6**. When the overlapping of HCV categories is considered in the quantification, then 715,083.12 ha (80.72% of the total area) are classified as potential presence of HCV.

When the **union of HCV categories** is considered in the quantification, then **715,083.12 ha** (80.72% of the total area) are classified as **potential presence of HCV**.
When the union of **HCV categories is intersected with APRIL activity area**, there is a total of **404,810.13 ha** (45.69% of the total concession area subject to this study) of **estimated loss or damage to HCVs within the plantation areas** since the baseline year. These results should be understood as an estimation of probability of presence (rather than an assessment).

However, **these findings are not necessarily indicating a violation of the FSC PfA** (regarding the amount of the above-mentioned 404,810.13 ha of potential HCV loss), but rather indicate a probability of HCV loss or damage in the estimated amount. This is to be further qualified in the ensuing the FSC ending disassociation process, aiming to determine the quality of

restoration and conservation. Despite the methodological and technical limitations when conducting this analysis, the estimation shows potential HCV damage and loss within APRIL's and APRIL's Supply Partners' concessions in the time period 1999 to 2019.

c) An **increase in the number of settlements and buildings** within the time period of the analysis was observed for all concessions (i.e. from 39 in 1994 to 515 in 2019). It should be highlighted that as a result of this analysis, the analysts did **not observe the movement or removal of any human settlements and buildings** located within APRIL's or APRIL's Supply Partners' forest management concessions during the timeframe analyzed.

d) A total of **138 'allegations'** were identified in relation to the operations by APRIL and its Supply Partners as well as with regards to third party involvement. Among these, 13 were considered to be 'significant cases'. **Of these 13 significant cases, 6 pointed to the involvement of APRIL and its Supply Partners**.

   The baseline analysis also identified **124 cases of potential land tenure conflicts** in the assessed period. FFC acknowledges that land tenure conflicts do not constitute a violation of the FSC PfA per se.

e) Meanwhile, APRIL has undertaken **system improvements, mitigation and remediation actions** aimed at ensuring compliance with the FSC PfA since the complaint was filed in 2013.

These conclusions, as well as all the information presented in the above sections of this report, is to be used by FSC as input data in the next phase of the ending disassociation process with APRIL.

9. Glossary: Definitions / List of abbreviations

9.1 Chapter 5: Quantification of the total area converted and HCV damage

- **Forest conversion:** "*Rapid or gradual removal of natural forest, semi-natural forest or other wooded ecosystems such as woodlands and savannahs to meet other land needs, such as plantations (e.g. pulp wood, oil palm or coffee), agriculture, pasture, urban settlements, industry or mining. This process is usually irreversible.*" (source: Policy for the Association of Organizations with FSC (FSC-POL-01-004)).

- **Forest types**
  - **Dense forest:** Land that is covered by natural woody vegetation which has a closed canopy; majority of the area covered by a tree layer.
  - **Sparse forest:** Land covered by degraded woody vegetation. The canopy is open, allowing light penetration. This category includes plantations, shrubs and grasses.
  - **Non-forest:** Land that is covered by no significant plant or vegetation cover. This includes exposed soil, sand, rocks and water.

  - Forest cover change is defined as the transition from 'Dense forest' cover to 'Sparse forest' cover (understood as forest *degradation*) and/or the transition from 'Dense forest' cover to 'Non-forest' cover (understood as forest *loss*). 'Forest cover change' constitutes a subclass of land cover change.
  - Conversely, **forest cover gain** can be defined as the transition from sparse forest to dense forest, and from non-forest to sparse or dense forest.

- **Natural Forest:** "*A forest area with many of the principal characteristics and key elements of native ecosystems, such as complexity, structure and biological diversity, including soil characteristics, flora and fauna, in which all or almost all the trees are native species, not classified as plantations. 'Natural forest' includes the following categories:*
  - *Forest affected by harvesting or other disturbances, in which trees are being or have been regenerated by a combination of natural and artificial regeneration with species typical of natural forests in that site, and where many of the above-ground and below-ground characteristics of the natural forest are still present. In boreal and north temperate forests which are naturally composed of only one or few tree species, a combination of natural and artificial regeneration to regenerate forest of the same native species, with most of the principal characteristics and key elements of native ecosystems of that site, is not by itself considered as conversion to plantations.*
  - *Natural forests which are maintained by traditional silvicultural practices including natural or assisted natural regeneration.*
  - *Well-developed secondary or colonizing forest of native species which has regenerated in non-forest areas.*
  - *The definition of 'natural forest' may include areas described as wooded ecosystems, woodland and savanna.*" (source: FSC International Generic Indicators (FSC-STD-60-004 V2-0 EN))

- **HCV**: The HCV Resource Network[19] defines 'High Conservation Values' (HCV) as "biological, ecological, social or cultural values of outstanding significance at the national, regional or global level or of critical importance at the local level. All natural habitats possess inherent conservation values, including the presence of rare or endemic species, provision of ecosystem services, sacred sites, or resources harvested by local residents."

  Overall, there are six categories of such HCVs:

  o **HCV 1 Species diversity**: Concentrations of biological diversity including endemic species, and rare, threatened, or endangered species, that are significant at global, regional or national levels. External and accessible data on species richness, rare and endangered species. Information about (RTE or endemic), or habitat critical to the survival of these species will be an HCV area.

  o **HCV 2 Landscape-level ecosystems and mosaics**: Large landscape-level ecosystems, ecosystem mosaics and Intact Forest Landscapes (IFL), that are significant at global, regional or national levels, and that contain viable populations of the great majority of the naturally occurring species in natural patterns of distribution and abundance. HCV 2.1 (Large Natural Landscapes with Capacity to Maintain Natural Ecological Processes and Dynamics) will be determined by the calculated patch sizes, as "the definition of a landscape with a core area is a forest block (or other natural landscape mosaic) with an internal core >20,000 ha surrounded by a natural vegetation buffer of at least 3 km from the forest edge". HCV 2.2 (Areas that Contain Two or More Contiguous Ecosystems) will be assessed by values of diversity and connectivity, as these criteria is explicitly focusing on species movement and migration.

  o **HCV 3 Ecosystems and habitats**: Rare, threatened, or endangered ecosystems, habitats or refugia. Ecosystems are a "dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit". Habitat is the place or type of site where a population or organism occurs (and is therefore essential for species level management). Ecological refugia: Isolated areas which are sheltered from current changes (e.g. human threats or climatic events), and where plants and animals typical of a region may survive; and Evolutionary refugia: areas where certain types or suites of organisms persisted during a period when climatic events (e.g. glaciations) greatly reduced habitable areas elsewhere. Such refugia often support high overall species richness and significant numbers of endemic species.

  o **HCV 4 Ecosystem services**: Basic ecosystem services in critical situations, including protection of water catchments and control of erosion of vulnerable soils and slopes. HCV 4.1 (Areas or Ecosystems Important for the Provision of Water and Prevention of Floods for downstream Communities) will be mapped by using watershed data derived

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[19] HCV Resource Network: https://hcvnetwork.org/how-it-works/

from topography and hydrological stream data. Impact will be derived from population datasets or village locations, as well as infrastructure. Wetland type land covers like swamps or peatlands, will be given special attention. HCV 4.2 Areas Important for the Prevention of Erosion and Sedimentation Will be calculated using slope, rainfall, vegetation and soil cover. Human impact on vegetation and soil conservation are the only direct measures affecting this indicator in positive or negative way. HCV 4.3 Areas that Function as Natural Barriers to the Spread of Forest or Ground Fire will be represented by a map showing fire prone and areas preventing fire expansion, mainly intact naturally forests and wetlands.

- o **HCV 5 Community needs**: Sites and resources fundamental for satisfying the basic necessities of local communities or indigenous peoples (for livelihoods, health, nutrition, water, etc...), identified through engagement with these communities or indigenous peoples.

- o **HCV 6 Cultural values**: Sites, resources, habitats and landscapes of global or national cultural, archaeological or historical significance, and/or of critical cultural, ecological, economic or religious/sacred importance for the traditional cultures of local communities or indigenous peoples, identified through engagement with these local communities or indigenous peoples.

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- **Proxy:** The retrospective analysis of HCVs and the estimation of the probability of their occurrence results in many grey areas which do not generally allow for clear statements. For this reason, the present report refers to so-called "proxies", also with reference to the HCVRN common guidance and Indonesian toolkit. However, it should be noted that no explicit definition of the term "proxy" has been established in the field of forestry or in direct reference to the evaluation of high conservation values.

  In general, the concept of using proxies should be understood as "a figure that can be used to represent the value of something in a calculation". Proxy data from a similar geographic area, company, facility and/or time can thus be used instead of data from the unit being studied, if there are no resources for conducting a full study or if data gaps exist in actual data (see here).

  Therefore, for the present study, a compilation and analysis of trustworthy secondary data have been compiled in order to identify pre-existing information (social, cultural, economic, biodiversity, biophysical etc.) and combine this information with processed satellite images. The second goal was to identify the impacts on potential HCV areas located in APRIL's or its Supply Partners' concessions.

  When using the term proxy, it should be explicitly pointed out that this cannot reflect the retrospective reality. Rather, by intersecting different methodologies, a value has been developed which is considered to be *close* to reality.

9.2 Chapter 6: Quantification of the total number of communities since 1994

Note: The terms 'buildings' and 'settlements' have been defined and developed by FFC. The terms do not correspond with official terminology used in Indonesian demographic land demarcation.

- **Settlements:** Settlements were defined as agglomerations of more than 3 houses in the proximity to a road. Using visual interpretation, three types of settlements could be identified in the location and distribution of settlements over the identified time period for each concession.

The following kinds of settlements were identified:

Disperse settlement	Linear settlement	Compact settlement

Figure 1: Distribution and form of kind of settlement: Disperse, Linear and Compact. (FFC, 2020)

- **Buildings:** Individual buildings identified within the concessions (which are often also not distinctly visible in the satellite imagery on which this analysis was based), with proximity to roads and other infrastructure. The identification and classification of buildings were mainly associated with human activities occurring in/nearby both residential or industrial infrastructure.

9.3 Chapter 7: Quantification of allegations of continued or ongoing violations of the FSC PfA and identification of potential system improvements, mitigation and/or remediation actions

- **Allegation:** Claims or accusations raised by any third party or stakeholder in relation to APRIL's (or APRIL's Supply Partners) about the potential violation of the FSC Policy for Association (FSC-POL-01-004) within the time period from 2013-2019 leading to an environmental and/ or social harm which continues at present. 'Allegations' are identified and quantified in this analysis in Step 2 of the methodology below described.

- **Significant cases:** Instances of potential (continued and ongoing) violations of the FSC Policy for Association (FSC-POL-01-004) where substantiated information has been found pointing to actions by APRIL (or APRIL's Supply Partners) intended or unintended, through direct or indirect involvement, which have led to reported environmental or social harm. Substantiated

information consists of a robust set of documentation, without serious concerns regarding the veracity/authenticity, obtained from reliable sources. 'Significant cases' are identified and quantified in this analysis in Step 3 of the methodology below described. This analysis also classifies as 'significant cases' instances where the reported controversial actions have been undertaken, not by APRIL and/or its Supply Partners, but by other third parties within APRIL's and/or APRIL's Supply Partners' concession boundaries. Controversial activities conducted by third parties outside the APRIL fall outside the scope of the FSC Policy for Association as they do not constitute 'direct' nor 'indirect involvement'.

- **Substantiated Information**: In this report, 'substantiated information' refers to information that can either be considered credible/reliable due to its origin or source, or for which credibility can be confirmed via triangulation.

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Six unacceptable activities according to the FSC PfA

1. **Destruction of high conservation values:** *Significant damage of the attributes that constitute high conservation values in a way that they no longer exist or cannot be repaired* (source: FSC Policy for Association (FSC-POL-01-004)).

2. **Forest Conversion:** *Rapid or gradual removal of natural forest, semi-natural forest or other wooded ecosystems such as woodlands and savannahs to meet other land needs, such as plantations (e.g. pulp wood, oil palm or coffee), agriculture, pasture, urban settlements, industry or mining. This process is usually irreversible* (source: FSC Policy for Association (FSC-POL-01-004)).

3. **Significant conversion:** *Conversion is considered significant in any case of:*
   o *Conversion of High Conservation Value Forests*
   o *Conversion of more than 10% of the forest areas under the organization's responsibility in the past 5 years*
   o *Conversion of more than 10,000 ha of forests under the organization's responsibility in the past 5 years*.
   NOTE: Failure of the 10,000 ha threshold does not lead to disassociation per se, but will lead to a case by case investigation by an independent Complaints Panel. In judging the case, the Panel will take into account the local circumstances, the scale of the operation and plans for continued conversion.

   NOTE: For the purposes of this policy, the establishment of ancillary infrastructure necessary to implement the objectives of responsible forest management (forest roads, skid trails, log landings, etc) is not considered conversion (source: FSC Policy for Association (FSC-POL-01-004)).

4. **Human rights:** *Rights as established by the [Universal Declaration of Human Rights of the United Nations](#) (source: FSC Policy for Association (FSC-POL-01-004)).*

5. **Illegal Logging:** *Harvesting of timber in violation of any laws applicable in that location or jurisdiction including, but not limited to, laws related to the acquisition of harvesting rights from the rightful owner, the harvesting methods used and the payment of all relevant fees and royalties (source: FSC Policy for Association (FSC-POL-01-004)).*

6. **ILO Declaration on Fundamental Principles and Rights at Work:** *Adopted in 1998, the Declaration commits Member States to respect and promote principles and rights in four categories, whether or not they have ratified the relevant Conventions. These categories are: freedom of association and the effective recognition of the right to collective bargaining, the elimination of forced or compulsory labor, the abolition of child labour and the elimination of discrimination in respect of employment and occupation. For more information, please access: http://www.ilo.org/declaration* (source: FSC Policy for Association (FSC-POL-01-004)).

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- **Involvement**
  - *Direct involvement: Situations in which the associated organization or individual is firsthand responsible for the unacceptable activities.*
  - *Indirect involvement: Situations in which the associated organization or individual, with a minimum ownership or voting power of 51%, is involved as a parent or sister company, subsidiary, shareholder or Board of Directors to an organization directly involved in unacceptable activities. Indirect involvement also includes activities performed by subcontractors when acting on behalf of the associated organization or individual* (source: FSC Policy for Association (FSC-POL-01-004)).

- **Traditional rights:** *Rights which result from a long series of habitual or customary actions, constantly repeated, which have, by such repetition and by uninterrupted acquiescence, acquired the force of a law within a geographical or sociological unit. Also known as customary rights (FSC Principles and Criteria). It also encompasses the rights of Indigenous and Tribal Peoples as established by the ILO Convention 169* (source: FSC Policy for Association (FSC-POL-01-004)).

- **Mitigation action**: Actions undertaken to minimize, and/or prevent reoccurrence of any damage, harm and/or destruction caused by APRIL's and/or its long-term Supply Partners' forest management operations resulting from their direct or indirect involvement in any of the unacceptable activities of the FSC Policy for Association (FSC-POL-01-004), as identified in the baseline analysis, particularly those identified in the services *quantification of the total converted area, quantification of destruction of HCVs*, and *quantification of continued allegations*.

- **Remediation action**: Actions undertaken by APRIL and/or its suppliers in order to address the damage, harm and/or destruction caused by APRIL's and/or its Supply Partner's forest management operations resulting from their direct or indirect involvement in any of the unacceptable activities of the FSC Policy for Association (FSC-POL-01-004), as identified in the baseline analysis.

- **System improvement**: Any progress and/or achievement reached by APRIL and/or its long term Supply Partners towards implementing measures and actions that prevent, address and mitigate risks of being involved in unacceptable activity as defined under the FSC Policy for Association, therefore demonstrating alignment of its operations with the FSC Policy for Association as well as indicating an improved social and environmental performance by APRIL). Third party assessments will be used as key evidence to identify 'system improvements' (such as KPMG, the Independent Peat Expert Working Group (IPEWG), Indonesian Forestry Certification Cooperation (IFCC), the FSC readiness assessment 2017).

9.4 List of abbreviations

AMDAL = *Analisis Mengenai Dampak Lingkungan*, Environmental Impact Assessment
APRIL = Asia Pacific Resources International Holdings, the Pulp and Paper company in RGE
BPS = *Badan Pusat Statistik*, Center of Statistical Agency
PfA = Policy for the Association of Organizations with FSC (FSC-POL-01-004 V2-0)
CB = Certification Body
CITES = Convention on International Trade in Endangered Species
EIT = Essa Indah Timber, business unit of APRIL's Supply Partner
SRL = Sumatera Riang Lestari, business unit of APRIL's Supply Partner
RRL = Rimba Rokan Lestari, business unit of APRIL's Supply Partner
EoF = Eyes on The Forest
Estate = Working area of PT RAPP
FDI = Forestry Development Indonesia
FFC = Forest Finest Consulting, consulting firm
FMPSK = *Forum Masyarakat Penyelamat Semenanjung Kampar*, Kampar Peninsula Rescue Society Forum
FPIC = Free, Prior and Informed Consent
FSC = Forest Stewardship Council
GFW = Global Forest Watch
GIS = Geographic Information System
HCV = High Conservation Value
HCVRN = High Conservation Value Resource Network
IFCC = Indonesian Forestry Certification Cooperation
ILO = International Labor Organization
IPEWG = Independent Peat Expert Working Group
IUCN = International Union for Conservation of Nature
JIKALAHARI = *Jaringan Kerja Penyelamat Hutan Riau*, Riau Forest Rescue Network

JPIK = *Jaringan Pemantau Independen Kehutanan*, Forestry Independent Monitoring Network

KLHS = *Kajian Lingkungan Hidup Strategis*, Strategic Environmental Studies

KPMG = Klynveld Peat Marwick Goerdeler

KUD = *Koperasi Unit Desa*, Village Unit Small Holder

LLC = Land Cover Classes

MHW = Mixed Hard Wood

MoF = Ministry of Forestry Republic of Indonesia

MoEF = Ministry of Environmental and Forestry Republic of Indonesia

NDVI = Normalized Difference Vegetation Index

NGO = Non-Governmental Organization

PfA = FSC's Policy of Association for organizations

PIMS = Production Information Management System

PT = Perusahaan Terbatas, Limited Company

RAPP = Riau Andalan Pulp and Paper, business unit of APRIL

IHM = Itci Hutani Manunggal, business unit of APRIL's Supply Partner

RER = Restorasi Ekosistem Riau (Ecosystem Restoration project in Riau region, Indonesia, by APRIL)

RGE = Royal Golden Eagle, Singapore-based parent company of APRIL

RKL = Rencana Pengelolaan Lingkungan, Environmental Management Plan

RPL = Rencana Pemantauan Lingkungan, Environmental Monitoring Plan

RRL = Rimba Rokan Lestari, APRIL's Supply Partner

SAC = Stakeholder Advisory Committee

SFMP = Sustainable Forestry Management Policy

SOP = Standard Operating Procedure

SRL = Sumatera Riang Lestari, APRIL's Supply Partner

SVLK = *Sistem Verifikasi Legalitas Kayu,* Timber Legality Verification System

TID = ID number code developed by GIS software

TFD = The Forest Dialogue

TLAS = Timber Legality Assurance System

UNEP = United Nations Environment Programme

UNEP-WCMC = United Nations Environment Programme World Conservation Monitoring Centre

USGS = United States Geological Survey

WWF = World Wide Fund for Nature

[1] Page 31, APRIL FSC CW Gap Analysis FINAL report 11 Nov 2017

[2] Indonesia government regulation N°71, 2014 regarding Protection and Management of Peat Ecosystem: http://www.jdih.kemenkeu.go.id/fullText/2014/71TAHUN2014PP.HTM

[3] Page 2 and 6, https://www.eyesontheforest.or.id/uploads/default/report/Eyes-on-the-Forest-Investigative-Report-APRIL-RGE-Continues-Deforestation-November-2014.pdf

[4] Page 22, KPMG Specified Auditing Procedures of SFMP 1.0, 2015, https://www.docdroid.net/q7nk/kpmg-audit-of-april-policy.pdf

[5] 3rd SAC Meeting Report 8-10 Dec 2014.pdf

[6] Page 2, 3rd SAC Meeting Report 8-10 Dec 2014.pdf

[7] Indonesia government regulation, PP No.57/2016

[8] page 12, 2017 SFMP 2.0 Assurance Interim Report.pdf

[9] page 2, 4, 5, 19, 20 Monitoring report on TLAS/SVLK certificate holders' performance in concessions of PT Triomas FDI, nd PT SRL. This is a joint publication of WWF Indonesia and JPIK Riau of June 2015, https://eyesontheforest.or.id/uploads/default/report/30_Juni_2015.pdf

[10] Page 50, Social conflict in Pulau Padang. 2. Case Study on FPIC.pdf

[11] For more information on the FPIC approach, see FAO: Free Prior and Informed Consent An indigenous peoples' right and a good practice for local communities: http://www.fao.org/3/a-i6190e.pdf

[12] Page 2, 2nd SAC Meeting Report 12-14 August 2014.pdf

[13] Page 9, http://www.mongabay.co.id/wp-content/uploads/2016/02/Laporan-SFMP-APRIL-Jikalahari.pdf

[14] Page 14, 2017 APRIL SFMP 2.0 Action Plan Report - KPMG Assessment.pdf

[15] Page 22, 24; Table 5. Active conflicts related to APRIL / RGE Supply Partners in Riau, North Sumatra and West Kalimantan, their distribution by province and villages, and the type of conflict https://environmentalpaper.org/wp-content/uploads/2019/09/APRIL-social-conflicts-mapping.pdf

[16] http://sustainability.aprilasia.com/wp-content/uploads/2019/09/SOP-Grievance-Resolution-Procedure.pdf

[17] 2. AGRO-SFM-001-FM Grievance Submission Form.pdf

[18] APRIL-IPEWG Peatland Roadmap.pdf http://sustainability.aprilasia.com/en/april-ipewg-peatland-roadmap/

[19] Laporan RKL-RPL Semester II-2013_revise2.doc (APRIL internal file)

[20] PPD_new.doc (APRIL internal file)

[21] Pelalawan_new.doc (APRIL internal file)

[22] https://sustainability.aprilasia.com/en/pt-rapp-pulau-padang/

[23] APRIL CDP Forest Questionnaire 2019.pdf

[24] http://sustainability.aprilasia.com/en/proactive-support-of-local-communities/