



APP FOREST CONSERVATION POLICY

PROGRESS REPORT
MARCH 2019



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Looking back on the six years since we first implemented our Forest Conservation Policy (FCP), I am filled with pride.

We made a firm commitment to embark on a journey of improvement in areas of natural forest protection, peatland management, social engagement and sustainable sourcing, and along the way making sure that we always put people first.

We are acutely aware that this journey is a marathon, not a sprint - there is still much to do before the finish line comes into view. We have stumbled along the way, but we are not running alone. It is a global race, with sustainability the end goal.

I learnt at last year's Consumer Goods Forum – an organization that represents over 400 companies – that there are less than 6% of companies that has made sustainability commitments who could reliably say they were on track to meet our collective commitment of halting deforestation by 2020.

The global context is gloomy and no cause for celebration, but it has reinforced my belief that we are indeed on the right track, and inspired me to be bolder in reporting on how our collective commitments can be achieved even on the frontlines of the climate crisis.

And it is with pride that I report that we have gained considerable experience in addressing many of these challenges, and enjoyed early achievements. This was reinforced by a carbon impact calculation that was conducted in 2018 by Ata Marie.

The report that utilized the Indonesian National Carbon Accounting System (INCAS) methodology that is acknowledged by the



Intergovernmental Panel on Climate Change (IPCC), found that APP's FCP implementation has resulted in significant projected carbon avoidance.

That is clear indication that we are on the right track, and we are pleased to report further positive updates:

- In 2018, we have maintained a natural forest cover loss of just 0.1% - a milestone first achieved in 2017 – with the implementation of near-real time satellite monitoring powered by RADARSAT2 technology.

- Biodiversity is an important facet of APP's commitment to zero deforestation, and to that end, we have continued to maintain our record of zero casualties from human-wildlife conflict and have conducted wildlife population studies to understand the movements of elephants, tigers and orangutans through our supplier concessions. Our efforts extended to the repopulation of 10 species of rare local trees.

- We have been working on peatland zoning design after three rounds of Light Detection and Ranging (LiDAR) mapping. The data from the LiDAR mapping has contributed to the identification of critical peat domes and peat areas to be protected.

- We have stayed consistent in our dispute management efforts, with a 49% rate of resolution.

- Our Integrated Forestry & Farming System (IFFS) community engagement program has been rolled out in 284 villages. We have also kept to the spirit of empowering women in rural communities, through encouraging active participation of women's groups in IFFS villages.

- We have continued to ensure that 100% of our products are sourced from plantation fibres and certified materials. All of our pulpwood suppliers in Indonesia are certified under Indonesia's mandatory Wood Legality Assurance System (TLAS/SVLK). Of those, 91% are also certified under the IFCC-PEFC Sustainable Forest Management standard.

- We continue to implement our Supplier Evaluation Risk Assessment (SERA) process to ensure our supply chain is in line with the FCP.

We are proud of the progress that we have made within our own concessions, but we are only part of a greater effort critical to global sustainability goals.

It is clear that the only way to truly halt deforestation globally is to adopt a landscape approach, otherwise islands of sustainable supply will be engulfed by barren sea of deforestation.

APP will continue to work with stakeholders – both locally and internationally– with this end goal in mind. Through the Belantara foundation that launched in 2015, we have aided restoration

FOREWORD

¹ See Section 6 for summary of progress to date

activities beyond the borders of our supplier concessions, and have implemented forest protection and restoration programs. APP has also joined the Mangrove Ecosystem Restoration Alliances (MERA), an organisation that aims to rehabilitate and protect mangrove ecosystems.

The journey may be long and challenging, but more than remaining constant, our commitment to the transformation of our business has grown stronger. This report is evidence of our conviction.

The progress we have made has been possible only because you, our friends and partners who remain steadfast in your support of these lofty goals. Thank you, and we hope that you will continue to accompany us as we redouble our efforts to build a progressively better APP.



Elim Sritaba
Director of Sustainability & Stakeholder Engagement
March 2019



FCP ACHIEVEMENTS

 **Zero** Conversion of natural forest by APP pulpwood suppliers

 **100%** Pulpwood supply from plantation

 **0.14%** Forest cover loss in protected areas in 2018

 **0.07%** Concession areas impacted by fire in 2018

 **49%** Land disputes resolved as of December 2018

 **284** Villages implementing IFFS program as of December 2018

 **Zero** Casualties from human-wildlife conflict since 2013

FCP PROGRESS TIMELINE

2013

1. Launch APP Forest Conservation Policy
2. APP mills stopped receiving natural forest woods
3. HCV, HCS, Social assessment start
4. Conflict Mapping
5. Growth and Yield study
6. Senyerang Conflict resolved (1st Pilot)
7. Independent Observer Moratorium formed and started
8. FCP Monitoring Dashboard launch

2014

1. Rainforest Alliance Assessment on FCP implementation progress
2. Deltares (Peat Expert) engaged, work started on developing peat management plan
3. APP released Procedure for Association for its existing and potential suppliers
4. Launched commitment to support forest protection and restoration outside concessions

2015

1. HCV and HCS assessment completed in all suppliers
2. Updated FCP Implementation Plan 2015 based on RA assessment
3. 1st LiDAR Mapping completed
4. Retirement of 7,000 ha of productive plantation on peat
5. Integrated Forestry & Farming System (IFFS) program launched in COP21
6. Landscape masterplan completed
7. Stakeholder Advisory Forum for FCP progress update
8. Belantara Foundation launched in COP21
9. PSPI / Datuk Rajo Melayu conflict resolved (2nd Pilot)

2016

1. ISFMP completed for all suppliers Rolled out of Integrated Fire Management strategy
2. Research for alternative species for peatland started
3. IFFS program implemented in 80 villages
4. Jurisdictional approach with South Sumatra and West Kalimantan province

2017

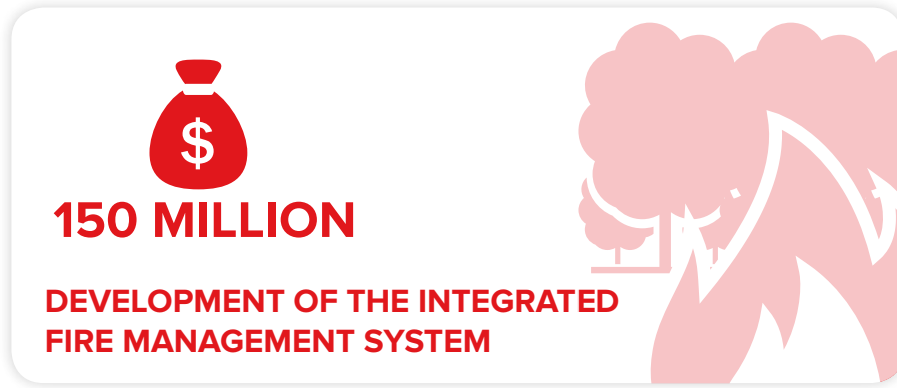
1. Utilizing high technology to monitor forest cover (MDA)
2. 2nd LiDAR mapping completed
3. Riding conflict resolved
4. Regional Social Working Group (SWGR) established
5. IFFS implemented in 146 villages

2018

1. SMART Patrol pilot monitoring program
2. Launched Collaborative Conservation Management
3. Joined the Mangrove Ecosystem Restoration Alliance (MERA)
4. Partnership with the Martha Tilaar Group on women empowerment
5. IFFS program has been rolled out in 284 villages, benefitting 16,807 households
6. 2-weeks public consultation added in SERA process

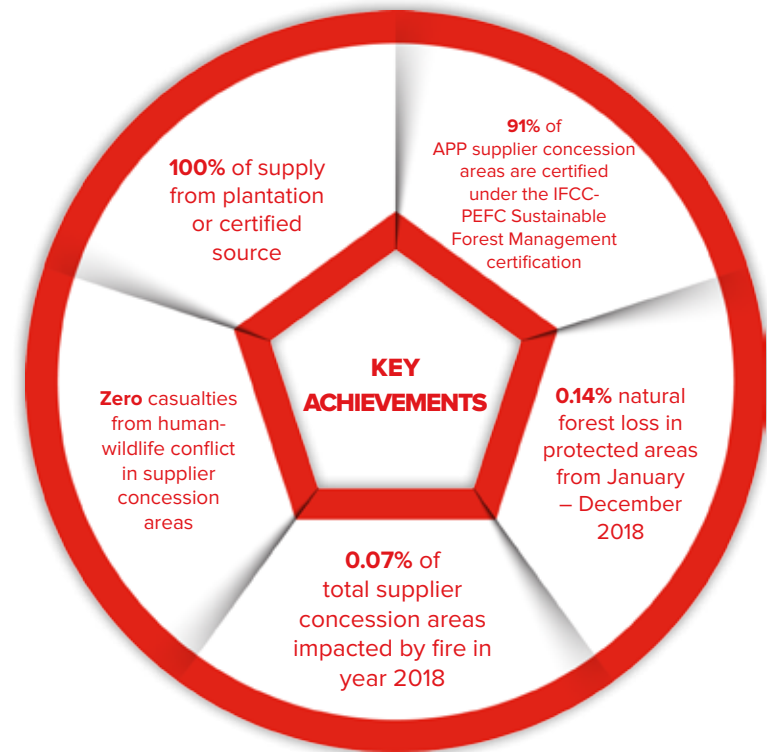


FCP INVESTMENT IN NUMBERS



POLICY COMMITMENT 1: PROTECTION OF NATURAL FOREST

APP and our suppliers will only develop areas that are not forested, as identified through independent High Conservation Value (HCV) and High Carbon Stock (HCA) assessments.





Wood Supply

Part of our contribution towards keeping climate change efforts on track is ensuring a sustainable supply of raw material from plantations. Since 2013, APP has maintained 100% pulpwood supply from either plantation fiber or certified materials. To improve the availability of certified materials from local sources, we continue to drive the adoption of Sustainable Forest Management (SFM) certification for our suppliers. As of December 2018, 91% of our supplier concession areas have been certified under the IFCC-PEFC Sustainable Forest Management (SFM) standard.

Natural Forest Protection

The forest alert system, powered by RADARSAT2 technologies, provides APP with the ability to spot forest cover changes in near-real time. The system, provided by McDonald, Dewittler and Associates (MDA), has proven particularly useful for spotting and responding to changes in hard-to-reach forested areas that are normally difficult to monitor from the ground. This has enabled us to respond more quickly to cases of forest cover change, and thereby curbing the spread of forest loss. In cases where forest cover loss is the result of community encroachment or land disputes, APP's social and security division has continued to lead the search for a resolution.

Between January to December 2018, only 0.14% of the total protected area within APP's supplier concessions experienced natural forest loss. The two main contributing elements were natural causes - wind and flooding - with illegal logging and encroachment also a factor. APP is encouraged by this achievement, and will continue to implement initiative to reduce the forest cover loss in its protected areas.

We piloted the Collaborative Conservation Management (CCM) concept last year in a Riau district which witnessed considerably high forest cover loss, in a move aimed at addressing the issue of third-party deforestation. The CCM concept aims to foster a collaborative effort in forest protection amongst stakeholders. In 2019, APP plans to implement the CCM concept in one district in South Sumatra, and another district in East Kalimantan, both of which still facing issue of significant forest cover loss.

The CCM will be complemented by the implementation of SMART patrol, a tool developed by a consortium of global NGOs that provides a systematic way to record findings during patrol. It then combines and analyzes findings in order to improve the forest management plan. SMART patrol has been piloted in parallel with the CCM, in a district in South Sumatra's Musi Banyuasin region since June 2018. And there has already been an encouraging result. Since the roll out of SMART patrol in the pilot site through to December 2018, no forest cover loss has been detected in the area.

Restoration Inside Concession

In 2018, APP started work on a restoration strategy for degraded areas within its pulpwood suppliers' conservation areas. The completed restoration strategy will be unique to each area, based on its specific vegetation composition.

There are three main soil types that were taken into account – mineral soil, marine clay and peat – in planning. Working together with P3SEKPI (a research center under the Ministry of Environment and Forestry), we completed the restoration strategy and standard operating procedure (SOP) for the mineral and marine clay in all operation areas, as well as established permanent sampling plots to monitor the growth of the vegetation in the restoration areas.

In 2018 APP has started restoration in 5,000 hectares. APP expect the restoration work to reach up to 30,000 hectares within 2019.





Integrated Fire Management

Forest and land fires continue to be a substantial threat to our business and to our effort to protect the environment. Rolled out in 2016, APP's Integrated Fire Management (IFM) strategy seeks to address these fires. The IFM consists of four main pillars – Prevention, Preparedness, Early Detection and Rapid Response.

In the first three years of the IFM implementation, the majority of our focus has been on the latter three pillars. This includes preparations such as the provisioning of equipment and helicopters, capacity building of the fire fighter team, and the implementation of the Incident Command System. APP has also been building our early detection capabilities, which include trialing

several technologies that are able to identify fires with higher confidence and reliability. These actions have enabled us to respond more quickly and effectively to incidents, while fires are still small and easier to manage.

The fourth aspect - prevention - is mostly addressed through the Integrated Forestry and Farming System, part of APP's Social Engagement policy commitment. We also carried out prevention efforts through education and engagement with community fire patrol groups.

Anticipating the dry season in 2019, we have prepared an extensive set of activities to strengthen and sharpen our preparedness,



as well as early detection and rapid response capabilities. Prevention remains a crucial aspect, and APP will expand our engagement, education and awareness program which will be implemented in all villages in and around our supplier concession areas. Closer coordination between the Fire Management team and the Security and Social team as well as local government and local communities will be done to ensure all parties are aligned and working cohesively to reduce the risk of forest fire.

Wildlife Conservation

APP continues to maintain our record of zero casualties from human-wildlife conflicts within supplier concession areas in 2018. Consistent education was critical to success, as well as delivering training to forestry staff, contractors, and communities. Done in collaboration with experts and local governments, these efforts were focused on mitigating human-wildlife conflict.

APP has attempted to map populations of three key animal species – Sumatran tiger, Sumatran elephant, and Bornean orangutan – in supplier concession areas, a move aimed at addressing stakeholder concerns of wildlife presence in these areas. This was done through patrols, distribution surveys and monitoring through camera traps.

Based on internal data collected through camera traps and direct sightings, 46 Sumatran

tigers, 201 Sumatran elephants, and 70 Bornean orangutans have been identified as consistently using APP supplier concession areas as habitats and corridors. Amongst them, the Sumatran tiger and Sumatran elephant share an area of approximately 20% of total APP's supplier concession areas across Sumatra, while the Bornean orangutan uses an area of more than 9% of APP suppliers concession areas in East Kalimantan.

Various activities are planned for 2019 to support these key animal species that reside within the landscapes we operate in. Throughout 2019, APP will be participating in an island-wide Sumatran tiger distribution survey led by the SINTAS Foundation, in a multi-stakeholder effort to support the government's National Tiger Recovery Program. We will also support Jambi province efforts in building an Essential Ecosystem Area, which will be used as elephant corridors. The Jambi project will also survey elephant populations and build feeding pockets to reduce the risk of conflict between elephants and local communities.

Indigenous Tree Species Conservation

Since 2013, APP and our pulpwood suppliers have worked on planting four endangered or vulnerable local tree species in 46 populations. These efforts consisted of cultivating these four rare indigenous species (Ramin, Balangeran, Gaharu and Ulin) in an effort to rehabilitate the area, as well as to conserve these species in

the wild. At the end of 2017, through a series of focus group discussions involving external stakeholders, we expanded our list to include ten indigenous species to focus on, across our various conservation efforts.

In 2019, APP plans to target five species for repopulation throughout our supplier operation lands. We will also embark on updating the existing map of these tree species across supplier concession areas, working in partnerships with external experts, including research and development agencies under the Ministry of Environment and Forestry.

Landscape approach Conservation

Working hand in hand with other stakeholders to tackle to the common issue of deforestation, in 2015 we launched the Belantara Foundation as a grant-making institution that funds activities that support forest protection and restoration beyond our supplier concession areas.

By the end of 2018, Belantara has approved to fund a variety of programs covering a total of more than 660,000 hectares, which include forest protection programs, forest restoration and programs on social forestry.

Separately, in 2018 APP has also joined the Mangrove Ecosystem Restoration Alliances (MERA), a multi-stakeholder platform initiated by Yayasan Konservasi Alam Nusantara (YKAN), the local arm of The Nature Conservancy. APP commits to support the program to rehabilitate and protect mangrove ecosystems along the northern coast of Jakarta.



**POLICY COMMITMENT 2:
BEST PRACTICE
PEATLAND MANAGEMENT**

APP will support the Government of Indonesia’s low emission development goals and its target to reduce the emission of greenhouse gases.



APP remains firmly committed to support the Government of Indonesia’s goals on sustainable peatland management. As part of sustainable peatland management, we must first map out the distribution and topography of the peat landscape where our pulpwood suppliers are

operating. This mapping is done using Light Detection and Ranging (LiDAR) technology, and the first round of mapping was completed in 2015. In 2017, APP undertook a second LiDAR mapping exercise with a tighter grid and higher resolution in order to understand the hydrological

condition of the peatland landscape, so that water management zoning and design could be improved. A third round of LiDAR mapping was completed in 2018 to understand the water level conditions during dry seasons.

The information collected from LiDAR mapping feeds into our best practice peatland management plan. To date, the plan has included the retirement of 7,000 hectares of productive plantation for conservation purposes and the building over 5,000 perimeter canal blocks to raise water level in natural forests bordering pulpwood plantation areas. It has also witnessed the development of a Canal Water Depth (CWD) map, and the creation of an Operational Water Management System (OWMS) to collect and monitor water level data across peatlands within APP supplier concession areas.

Based on the LiDAR mapping result - with the support of peat and hydrology experts, Deltares - we have been able to identify critical peat domes and peat areas that need to be protected. Armed with this information, APP and Deltares

have been working to design peatland zoning across supplier concession areas to determine areas that have to be protected as water storage areas, areas that will serve as buffer zones, and others that will be maintained as production forest.

For areas that will be used as a buffer zone - where water levels will be high - APP has been researching alternative species that can grow well on peat and also utilized for production purposes. Trials on the 12 alternative species that have been identified continue, with the research team observing the growth and survival rate of 8 tree species that have been planted in the trial planting areas.

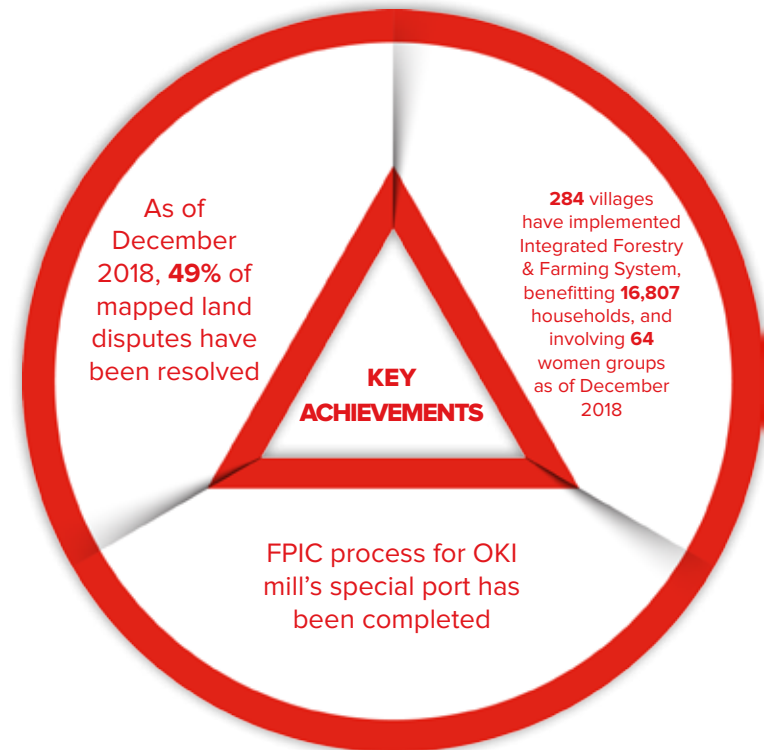
There are challenges in finding more tree families to be used for research, mostly caused by the very short and limited fruiting season of these tree species and difficulty in accessing the areas to collect the tree seedlings. Further explorations to collect more tree families continue in various forest areas in Sumatra and Kalimantan.



³ Parameters still to be defined pending Government of Indonesia regulation. Current regulation sets a threshold of 3m (300cm), over which would be considered as 'deep peat'

POLICY COMMITMENT 3: SOCIAL ENGAGEMENT

To avoid and resolve disputes across our supply chain, APP actively seeks input and feedback from a wide range of stakeholders, including civil society, to implement a set of principles that include Free, Prior and Informed Consent (FPIC), responsible resolution of conflicts, and community empowerment.



Dispute Resolution

Land disputes continue to present challenges to APP's dispute resolution efforts as competing land claims and historical issues have considerable impact on the progress of the resolution process. In order to implement correct dispute resolution strategies, we must ensure correct and accurate classification of disputes.

Based on input from stakeholders, APP revisited the dispute typologies that have been developed at the beginning of FCP implementation, and in consultation with social experts and the field team, refined the original eight typologies to just six. These are: (1) villages inside concessions, (2) indigenous people, (3) communities utilizing forest resources for livelihood, (4) speculators, (5) non-procedural concession use, and (6) overlapping permits. These new typologies were shared with stakeholders for further input during the 7th Stakeholder Advisory Forum in October 2018.

The Regional Social Working Group (RSWG) continues to be held in Riau, Jambi and South Sumatra. While dynamics vary between the three regions, each RSWG continues to discuss disputes that are being tabled in the working groups in order to share best practices and seek alternative solutions. The dynamics in RSWG highlight the importance of trust building in resolving disputes, and this is something that we and our suppliers strive to continuously improve.

As of December 2018, dispute resolution figures has increased to 49%. In 2019 APP plans to focus on resolving disputes that fall under the first typology – villages inside concessions – to ensure that village boundaries are clear and agreed on by all parties.

Integrated Forestry & Farming System (IFFS)

Local communities are key in efforts to tackle deforestation. Understanding that deforestation committed by communities are often driven by economic needs, APP launched the Integrated Forestry & Farming System (IFFS) in 2015. The IFFS - known as Desa Makmur Peduli Api (DMPA) in Bahasa Indonesia - aims to provide communities with alternatives to improve their livelihood through climate-smart agro-ecological practices, with the ultimate aim to reduce their dependence on forest land.

As of December 2018, the IFFS program has been rolled out in 284 villages, benefitting more than 16,807 households. In the spirit of empowering women in rural communities, the IFFS program encourages the involvement of women's groups in its agro-ecology program, and thus far 64 groups have been active participants in the IFFS program.

Under the IFFS program, village-level cooperatives use the initial seed funding to facilitate a microcredit system amongst village beneficiaries. This allows the cooperative to roll over funds from successful projects, so that more community members can benefit from the program.

Current IFFS programs range from funding and knowledge transfers in fruits and horticulture farming; to breeding of livestock such as cows, goats, chickens and ducks; as well as rice farming, aquaculture and fisheries, to name a few.

While not all projects under IFFS have been successful, in the three years since the first IFFS was launched, several village-level cooperatives have been able to make a profit, enabling the microcredit program to include more beneficiaries.



To drive further success amongst the participants of the IFFS program, APP established a center of excellence in Riau, where successful IFFS farmers share their experience and knowledge with other participants. These local champions also coach other farmers, nudging them towards success.

Free, Prior and Informed Consent (FPIC)

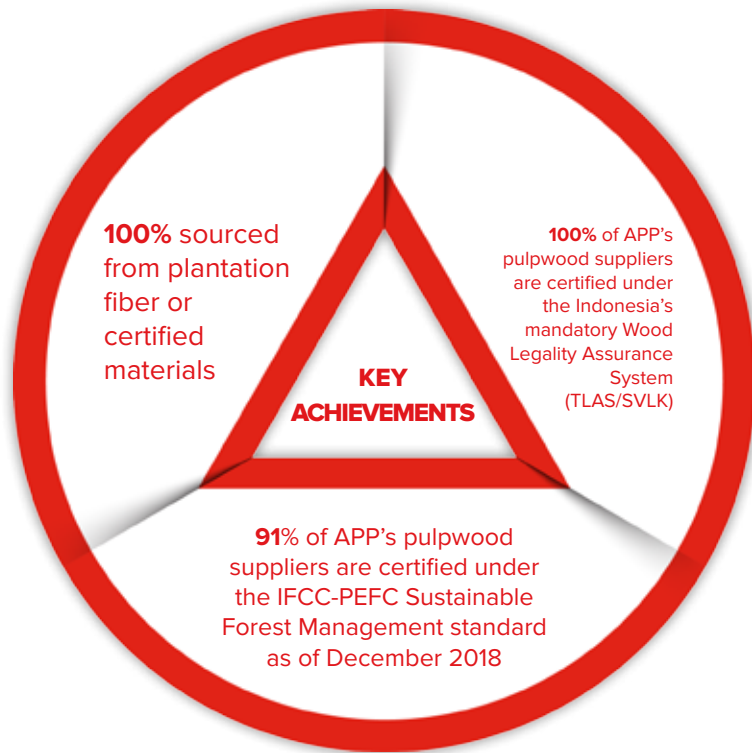
The FCP requires APP to gain consent from local communities prior to starting new development activities. This is done by implementing FPIC principles in development activities that impact neighboring communities.

We have recently completed FPIC process for the development of a jetty at PT. OKI Pulp & Paper Mills. The FPIC was conducted in two villages near the proposed location of the jetty, and also with a community of fishermen whose traditional stilt houses may be impacted.

The FPIC process consists of socialization, public consultation, and the acquisition of approval from impacted communities. At the end of the FPIC process, those communities consented to jetty development plans, with compensation made through the implementation of community development programs that address community needs. The fishermen communities in the area have also agreed on compensation and willing to relocate.

POLICY COMMITMENT 4: SUSTAINABLE FIBRE SUPPLY & SOURCING

APP sources fibre from all around the world and develops measures to ensure that this sourcing supports responsible forest management.



To ensure that APP's supply chain is free from deforestation, all of our pulpwood suppliers must comply with the FCP and the Responsible Fiber Procurement and Processing Policy (RFPPP). To assess our suppliers' compliance to these policies and to anticipate potential risks, we implemented the Supplier Evaluation & Risk

Assessment (SERA) with all our current suppliers as well as potential ones. The SERA was developed in line with the national and global standard on forest certification.

APP's SERA comprises 12 indicators against which the suppliers are assessed. Chief of these

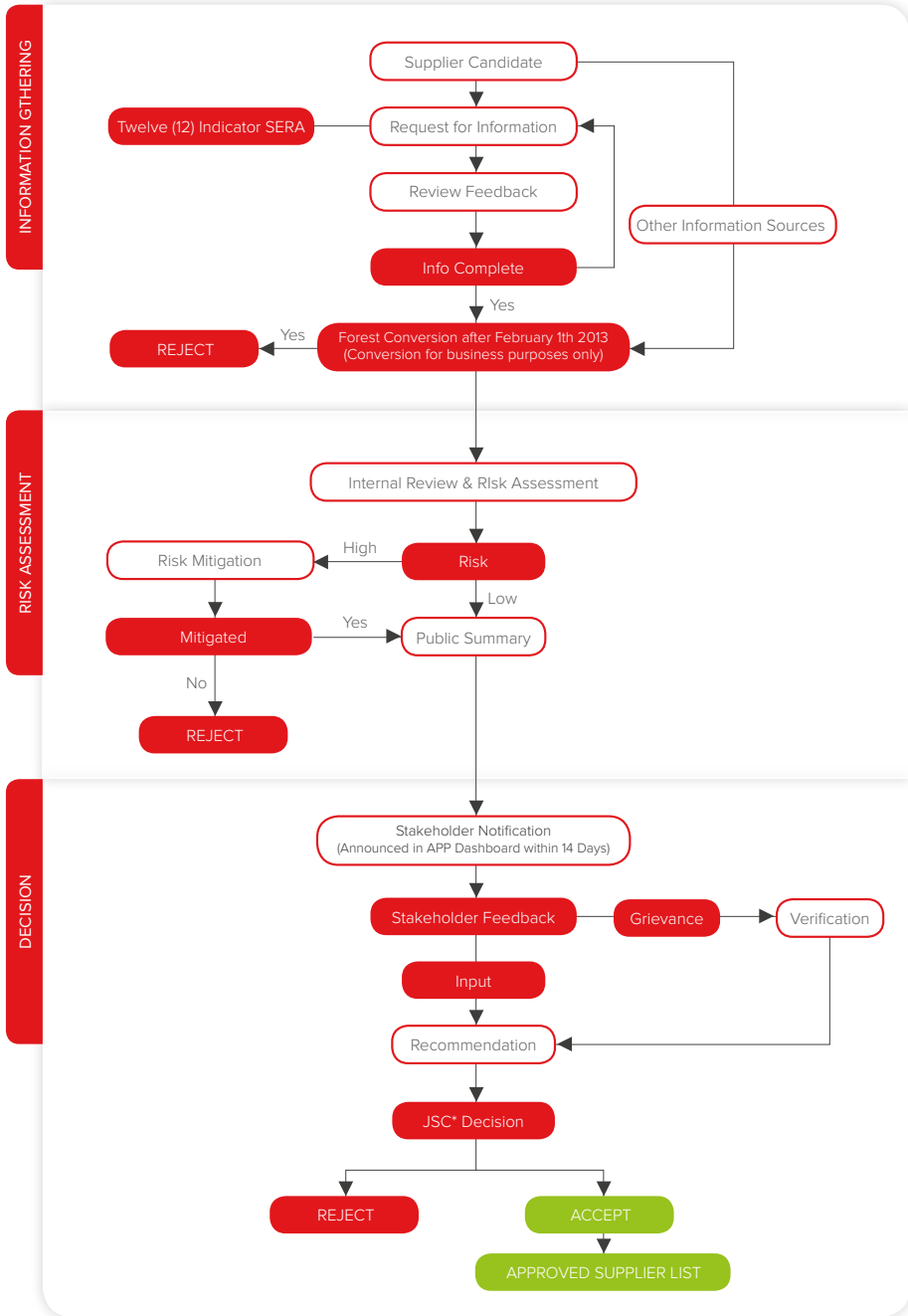


indicators is the requirement that our pulpwood suppliers must not be involved in natural forest conversion since 1 February 2013. Results from the risk assessment are used to categorize potential suppliers as being a "significant risk" or a "negligible risk". If a potential supplier is categorized as "significant risk", they will be required to implement corrective actions (CARs) to bring them into compliance within an agreed period of time. Only if this is done will they be accepted as an APP supplier. We screen existing suppliers on an annual basis and make public any change in supplier list on our FCP Monitoring Dashboard.

Our SERA was updated in 2018 after a public consultation process, which took place at Stakeholder Advisory Forum 7 in October 2018. The scope of the SERA was clarified to assess the supplier and its related businesses within the pulpwood industry. Separately, a 14-day public notification period for new suppliers, which has been trialed since March 2018, was formalized in the updated SERA procedure.

In 2018, we have accepted 16 new pulpwood companies as one-time suppliers and 3 pulpwood companies as continuous suppliers. All purchase of wood or pulp from international markets are checked to ensure their compliance to both the FCP and the RFPPP.

GRAPHIC OF SERA PROCESS



* JSC: A committee that makes the final decision of the SERA process. JSC consists of APP, represent by the SSE Division Head, Procurement Division Head, Forestry Division Head, and Managing Director.

