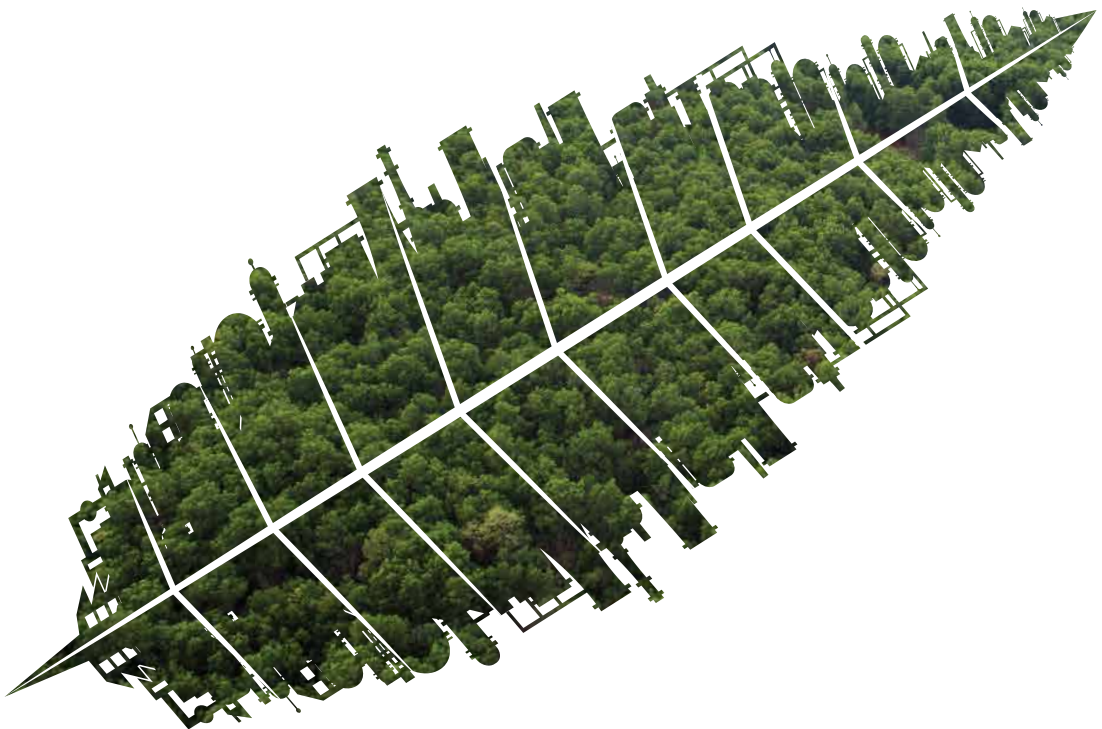APP

USE OUR PAPER, WE PLANT MORE TREES.

SUSTAINABILITY
REPORT **2016**

CONTACT US

We welcome your thoughts on our report:

**Please send your feedback to
sustainability@app.co.id**

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⦿⦿ http://www.flickr.com/photos/asiapulppaper/

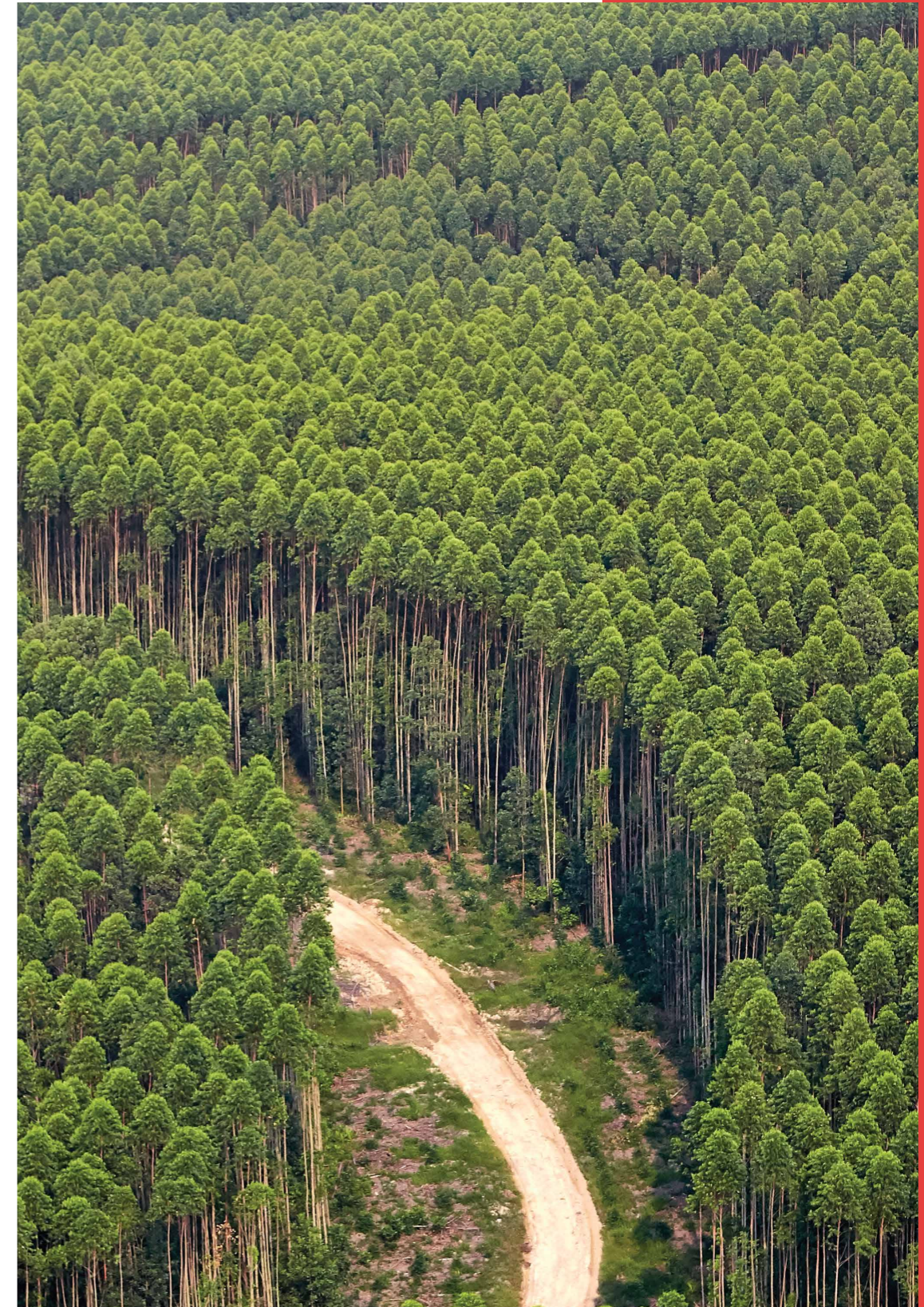ⓥ http://vimeo.com/user4811621

External frameworks

The content and quality Standards of this report is guided
by the Global Reporting Initiative (GRI) Standards.
The report had been externally assured to the internationally
recognised AA1000(AS) and meets the requirements
of Core Level. Our intention is to continue to seek external
assurance for future sustainability reports and respond
as appropriate to any areas of improvement identified
in the assurance statements.

SUSTAINABILITY REPORT **2016**

CONTENTS

2016 marked a year of organisational transformation, as we made clear progress to improve the efficiency of our organisation and deliver sustainable growth. The transformation programme spanned the entire business, with a sharpened focus on production efficiency at our mills. This process resulted in right-sizing our workforce by 11% across our mills.

The past year was also the first full year of our revised mill sustainability KPI approach. I am pleased to see the positive impact this has created, notably the improvements in energy use and carbon intensity. A further three mills obtained ISO 50001 energy management certification and we also initiated a safety culture development programme to drive a behaviour change in our employees and their approach to safety best practices. This year, I look forward to our new OKI pulp mill demonstrating the highest efficiencies and safety standards amongst our group of mills as a result of its latest technology in pulp production.

I am especially proud to note that the group's key achievements in 2016 included the completion of our Integrated Sustainable Forest Management Plans (ISFMPs). Taking a landscape approach, which included inputs from all stakeholders, the ISFMPs have required a significant investment in time and resources. We believe it is critical for the future, I must admit it has not been without challenge, particularly when trying to meet the needs of such a diverse range of stakeholders each with their own priorities.

We are now focussed on professional and personal development and coaching amongst our mill management, ensuring we are equipping ourselves with the talent we need

to sustain our business over the long term. Over 4,000 employees have passed through our leadership school. We have also developed an in-house marketing and sales, energy and pulp production, and paper school to provide continuous learning for our people.

Restructuring our conservation teams has empowered them to be directly involved in the concession level activities to increase the impact of our projects. We continue to focus on orangutan, elephant and tiger conservation, as these act as 'umbrella species' that will support other wildlife if they are protected. We are also active in supporting the Government of Indonesia's biodiversity goals and species protection plans, which align with our own environment and sustainability commitments.

Our work in peatland management continues to push new boundaries. The second phase of LiDar mapping has also provided a more comprehensive understanding of the current topography and hydrology of our concessions, to effect better peatland management and best practices.

Global stakeholders value responsible operations and expect APP to play an important role in driving collaboration to address the multi-pronged challenges of sustainable development. APP is deeply involved in the global movement behind sustainable forestry, and our credibility to engage at this level is testament to many years of hard work in promoting dialogue and partnership. APP continues to welcome open dialogue and shared learning with all stakeholders; the private sector, NGOs, government and finance institutions, to collectively achieve our shared goal of zero deforestation, protection of natural forest and equitable economic growth.

Linda Wijaya

CHAIRMAN'S STATEMENT

Statement from
the Director of Sustainability
& Stakeholder Engagement

Trust, transparency, and consistency are essential in building confidence and collaboration. In my new role as Director of Sustainability, I would like to emphasize APP's commitment in continuing the implementation of our Forest Conservation Policy and Vision 2020 Roadmap.

2016 was a year of increasing momentum and pace of change for APP together with our stakeholders. The Indonesian government has ratified the Paris Agreement on climate change while also encouraging industry to increase involvement in local communities.

APP launched the Integrated Forestry and Farming System (IFFS) or Desa Makmur Peduli Api (DMPA) for the local community at the end of 2015 in COP 21 Paris. We commenced with its implementation in 2016. We understand that the key to success in forest protection is community empowerment. Hence, it is our aim to develop smallholders by supporting them with the right tools and suitable training, while also working to engage, educate, and fund projects that support agro-forestry and reduce economic dependence on the forest. APP's IFFS now covers 66 villages with the ultimate aim of supporting 500 villages. The total fund committed towards this program is US$10 million in 5 years up to 2020.

This programme is innovative and ambitious. In my opinion, to achieve our goals, we need to drive a change in mindset as to how we measure impact and success, ensuring any investments achieve their goals of forestry protection, balancing social and economy aspects. APP is of the opinion that the most effective and efficient way to achieve a true landscape approach for conservation is through the Belantara Foundation. A multi-stakeholder approach is required where all stakeholders play a role; from pulp to palm oil, coffee to agro-forestry.

It was a privilege to be invited to be part of COP22 in Marrakech and contribute to various discussions and roundtables to share APP's progress, experiences and challenges in supporting Indonesia's national commitment on climate change including contributions towards to the national strategy for GHG reductions.

I am proud that APP's Forest Conservation Policy (FCP) has delivered a real change of mindset with local stakeholders, resulting in wide ranging positive impacts from our initiatives. We have completed the ISFMPs for all regions and are looking forward to seeing these plans put into action throughout 2017.

Significant improvement in fire management include improving the management system within our supply chain, centralizing fire monitoring system, conducting capacity building with international standard, and using new high technology thermal cameras for fire detection. APP and its suppliers have invested US$20m directly into fire prevention, training 2700 fire fighters, developing and agreeing one single operating procedure across all 38 concessions as well as installing a dedicated fire situation room with Incident Command System at our head office in Jakarta.

The Stakeholder Advisory Forum is a platform that APP developed, enabling us to listen, update and respond to our stakeholders' concern. We look forward to continuing this platform in 2017 to promote constructive dialogue between APP and our diverse global stakeholders.

APP's Vision 2020 Roadmap continues to focus our minds towards the most pertinent social and environmental goals, while taking into consideration the important aspect of economy. We are proud to see a positive impact

on performance at our mill operations. Despite no significant capex investment in 2016, we have delivered a 7% reduction in energy intensity and a 2% reduction in carbon intensity compared to a 2012 baseline, predominantly through incremental operational improvement. As 2020 approaches, we will begin to consult stakeholders in revising our commitments and targets that will take us beyond 2020.

Our new OKI mill will be a showcase for efficient pulp production based on the latest technology. I restate the commitment that APP will not deviate from our clear commitments on deforestation once the mill becomes operational. Our current fibre supply is sufficient to support our planned growth and will further benefit from the efficiency and yield improvements we are making across our supply chain.

With sharpened focus towards sustainable forestry, we are optimistic that the commercial drivers required to make zero deforestation a reality will become more critical. We need all influential stakeholders, particularly customers, brand owners, and financial institutions to collaborate and integrate these commitments into their decision making. We must work hard to understand the real impact of community investment and shift focus towards responsible development. Forest protection must be one of the successful outcomes, rather than the only goal.

Elim Sritaba

STRATEGY

SECTION 1

ABOUT US

As one of the world's largest pulp and paper companies, Asia Pulp and Paper Group (APP) is responsible for delivering quality products to meet the growing global demand for paper, tissue, and packaging. On any given day, our products find their way into the hands of consumers in various branded forms from all over the world.

Started in 1972 with Tjiwi Kimia producing caustic soda, now we run operations across Indonesia and China[1] with an annual combined pulp, paper, packaging product and converting capacity of over 19 million tonnes per annum. Today, APP markets its products in more than 120 countries across six continents.

Over the years, we have expanded our operations significantly through the acquisition and expansion of several of our pulp and paper mills. It's our commitment to customer satisfaction that enables us to grow our share in paper sales worldwide and broaden our presence through offices in many countries. We believe 'tradition and modernity go hand in hand', which means we value long term relationships as part of our Eastern traditions, while we also are eager to embrace the modern values of innovation and efficiency.

OUR VISION

Our vision is to become a leading and respected global pulp-and-paper company that provides superior values to our customers, community, employees and shareholders - responsibly and sustainably.

We value:

- Our employees who are integral to APP's success
- The environment, as we depend on it to ensure we can run our operations sustainably
- Our customers and suppliers who keep our business going at both ends of the supply chain
- Our shareholders, and the community at large to whom we are accountable for all that we do
- The principles of good governance as we continue to build a sustainable business

APP INDONESIA – KEY FIGURES

	2016	2015	2014
Employees	30,749	38,159	38,380
Production Volume	9,877,000 tonnes	9,453,000 tonnes	9,081,750 tonnes
Revenue	$5,572m	$5,641m	$5,570m

[1] Not in scope of this report. See About This Report section on page 57

FINANCIAL PERFORMANCE (IN 000 USD)

	2016	2015	2014
Operating costs[2]	4,155,160	4,390,695	4,390,872
Community investments	13,350	3,347	3,134
Payments to providers of capital	241,172	233,398	241,360
Employee compensation	351,097	272,922	289,738
Retained earnings	1,381,384	1,052,099	801,649
Payments to governments	30,868	9,151	9,772

OUR PRODUCTS

From a humble beginning, APP has emerged into an industry leader with an integrated pulp, paper and packaging grade capacity in Indonesia of more than 10 million tonnes per year. As APP expands, the company has taken steps to reinforce and build on its regional market position through the introduction of higher quality products and enhancements, investments in new technology as well as improving our processes and productivity.

As a paper products company, sustainability is intrinsically linked to the products we sell. Based on responsibly sourced recyclable and renewable fibre, applying innovative design and manufactured in well managed mills we directly support our customers' sustainability goals.

To view our latest products categories and brands, see the Our Products section of our website.

- All brands
- Packaging
- Paper
- Tissue

As part of our continued effort to ensure our customers are satisfied by our products and services we carry out an annual global survey through our sales and marketing function. In 2016 we engaged a third party customer satisfaction agency to conduct focussed surveys in three key markets, recognising that market specific customer assessments would provide us with more valuable feedback. Each sales region was provided with the analysis and required to address the areas identified for improvement.

PRODUCT CERTIFICATION

To demonstrate legal compliance, meet regulatory requirements and provide our customers with the reassurance that our mills and supply chain are managing economic, environmental and social impacts we apply a wide range of product certification.

	Indah Kiat Perawang	Indah Kiat Serang	Indah Kiat Tangerang	Pindo Deli Karawang	Pindo Deli Perawang	Lontar Papyrus	Tjiwi Kimia	Ekamas Fortuna	Univenus Perawang
Quality	ISO 9001	ISO 9001	ISO 9001	ISO 9001	ISO 9001	ISO 9001	ISO 9001	ISO 9001	ISO 9001
	ISO 9706		ISO 9706	ISO 9706			ISO 9706		
	Halal	Halal	Halal	Halal	Halal	Halal	Halal		Halal
Product Quality				Ecolabel – EU Standard	Environmental Choice - New Zealand Ecolabel		US Ecolabel		
	Ecolabel – Indonesian Standard			Ecolabel – Indonesian Standard			Ecolabel – Indonesian Standard		
				Green Mark – Taiwan Ecolabel Standard			Green Seal		
	SNI 7274:2008			SNI 7274:2008					SNI Tissue
PROPER	Blue	N/A[3]	N/A[4]	Blue (PD1) Green (PD2)	N/A[5]	N/A[4]	Blue	Blue	N/A[5]
Environment	ISO 14001	ISO 14001	ISO 14001	ISO 14001	ISO 14001	ISO 14001	ISO 14001	ISO 14001	
	ISO50001	ISO 50001	ISO50001	ISO50001	ISO50001	ISO50001	ISO50001		
Health & Safety	SMK3	SMK3	SMK3	SMK3	SMK3	SMK3	SMK3	SMK3	
	OHSAS 18001	OHSAS 18001	OHSAS 18001	OHSAS 18001	OHSAS 18001	OHSAS 18001	OHSAS 18001	OHSAS 18001	
Chain of Custody	PEFC	PEFC	PEFC	PEFC	PEFC	PEFC	PEFC		PEFC
	LEI			LEI	LEI	LEI	LEI		
	SVLK	SVLK	SVLK	SVLK	SVLK	SVLK	SVLK	SVLK	SVLK
	RoHS	RoHS	RoHS	RoHS			RoHS		
	REACH/SVHC Screening	REACH	SVHC Screening	SVHC Screening	SVHC Screening				
Product Specific		Food Packaging Direct Contact – FDA USA		Food Grade Paper/Board – FDA USA & Germany Recommendation XXXVI	Food Contact Safety Grade for Paper & Paperboard – FDA USA & Germany Recommendation XXXVI		Food Grade Paper/Board – FDA USA & Germany Recommendation XXXVI		
	ASTM and EN71 Part 3 & 9	ASTM and EN71 Part 1, 2, 3, 9	EN71 Part 3	Robinson Test					
		ISO 22000		ISO 22000					
		ISPM (Phytosanitary)	ISPM (Phytosanitary)	ISPM (Phytosanitary)	ISPM (Phytosanitary)		ISPM (Phytosanitary)		
Others				ISO 17025					
	AEO (Authorized Economic Operator)	AEO (Authorized Economic Operator)	AEO (Authorized Economic Operator)	AEO (Authorized Economic Operator)	AEO (Authorized Economic Operator)	AEO (Authorized Economic Operator)			

As our products are sold globally, we have a range of market specific certifications for our products not listed above. To find out more about additional certification we can offer please contact sustainability@app.co.id or your local sales office. To read more about product certification that relates to the sourcing of our fibre material, see page 32.

OUR MILLS

Indah Kiat Perawang

Employees : 7,302
Production capacity : 2,593,021 tonnes pulp/year
3,347,448 tonnes paper/year
754,000 tonnes converted products/year
Production lines : 4 pulp lines, 9 paper machines
Key products : LBKP (pulp), wood free printing, writing, copier and coated papers

Indah Kiat Pulp & Paper Perawang Mill is strategically located in Perawang, on the island of Sumatra. With the Siak River as a major transportation link, the mill also benefits from local plantations for raw materials. The mill uses renewable biofuel, a waste product from the pulping process for 59% of its energy needs. In 2016 the mill developed a community microfinance model to support local SMEs in establishing businesses based on sustainable agricultural practices.

Pindo Deli Perawang

Employees : 1,960
Production capacity : 913,000 tonnes of tissue/year
Production lines : 22 tissue machines and 25 tissue converting machines
Key products : tissue and converted tissue products

Located in Riau Province, Pindo Deli Perawang focuses on the production of tissue for the converting market. The mill was awarded certification against the New Zealand Ecolabelling Trust, a significant achievement in an important market region. Not only because of its rigorous requirements to ensure the product minimum environmental impact, but also because the scheme is a part of Global Ecolabelling Network (GEN), which means that the acknowledgement as less harmful product is recognized in other markets outside New Zealand.

Univenus Perawang

Employees : 42
Production capacity : 36,000 tonnes tissue/year
Production line : 1 tissue machine
Key product : tissue

Univenus Perawang is a small tissue mill. It is located adjacent to Indah Kiat Perawang and Pindo Deli Perawang, importing energy and water from the former.

Lontar Papyrus

Employees : 1,814
Production capacity : 3,652,000 tonnes pulp/year
1,420,000 tonnes tissue/year
Production lines : 2 pulp lines, 6 tissue machines
Key products : LBKP (pulp) and tissue

One of the world's largest vertically integrated pulp and tissues mills, Lontar Papyrus exports its products around the world, from China to Taiwan, South Korea, Japan, Southeast Asia, extending to the Middle East, Africa, and Europe. The mill was established in 1992, starting production of pulp in 1994 and tissue in 1998. As an integrated mill, Lontar Papyrus can use waste products from the pulping process as an energy source, providing 73% of the mills requirements in 2016. In support of APP's Group wide commitment to the UN CEO Water Mandate the mill has supported a local school in developing a business selling drinking water to the local community.

Indah Kiat Serang

Employees : 4,315
Production capacity : 1,655,000 tonnes paper/year
713,500 tonnes converted products/year
Production lines : 6 paper machines
Key products : coated boxboards, test linerboards, corrugating medium, corrugated cartons

Indah Kiat Serang is one of the biggest paper packaging companies located in Serang, Banten Province, Indonesia. The 550-hectare facility is strategically located near a port and is unique amongst APP's mills, sourcing 79% of its raw material from post-consumer waste, which is supplemented by virgin fibre to improve the strength of the paper products. Working together with the local community, 100,000 mangrove trees were planted since 2010. The programme aims to improve local environmental conditions and raise awareness of climate change.

Indah Kiat Tangerang

Employees : 1,112
Production capacity : 160,000 tonnes paper/year
Production lines : 3 paper machines
Key products : coloured printing, writing and copier, computer and duplicator paper

Indah Kiat Tangerang specialises in the production of coloured paper grades and is now one of the world's largest in this product segment. Its raw material sourcing includes both pre-consumer waste and purchased pulp and it exports

85% of its products to a global client base. In 2016, the mill received the National Energy Efficiency Award recognises excellence in energy efficiency and management in Indonesia.

Pindo Deli Karawang

Employees : 4,725
Production capacity : 2,290,000 tonnes paper/year
1,188,500 tonnes converted products/year
157,000 tonnes tissue/year
Production lines : 10 paper machines, 2 tissue machines, 1 chipboard machine
Key Products : writing, printing, copier, pre-print and other premium wood-free papers, cast-coated paper, paperboards, carbon-less, thermal and art paper and tissue.

Comprised of three mills, Pindo Deli Karawang produces paper from purchased pulp. Products produced include paper, tissue and packaging products largely for export. For the fourth consecutive year, one mill has achieved Green PROPER status in recognition for its approach to environmental management and performance.

Tjiwi Kimia

Employees : 8,800
Production capacity : 1,806,550 tonnes paper/year
425,000 tonnes converted products/year
Production lines : 13 paper machines
Key products : printing, writing, copier, carbon-less, exercise books, writing pads, envelopes, computer forms, gift wrapping paper and shopping bags.

Tjiwi Kimia is located in Sidoarjo, near Surabaya in East Java. The mill which started as a caustic soda plant, now boasts many state-of-the-art paper and converting machines, making it one of the world's largest stationery manufacturers. The mill commenced production in 1978 with an annual paper production capacity of 12,000 tons. Today the mill produces value-added products such as coated art, cast coated, specialty paper, carbonless paper and huge range of school and office stationery. Exercise books, pads, spirals, hardback books, drawing books, shopping bags, stationery, envelopes, continuous forms, file folders and others make up the range of converted stationery products. The mill uses approximately 80,000 tonnes of post-consumer waste as a raw material for fine paper and stationary products and achieved ISO 50001 energy management certification in 2016. In a commitment to local CSR, the mill supported six local learning centres that can be accessed by the local community free of charge.

Ekamas Fortuna

Employees : 679
Production capacity : 323, 080 tonnes converted products/year
Production lines : 2 paper machines
Key products : corrugated medium, wrapping papers, chipboard, core board Kraft liner, paper core, paper tube, paper sheet and heavy board

Ekamas Fortuna is situated in East Java, producing base and converted paper that utilises post-consumer waste as a raw material. Products are largely sold to the Indonesian domestic market, with 10% exported to more than 10 countries worldwide. A zero waste to landfill site, the mill recycles and reuses all waste streams either on site or via licensed third parties.
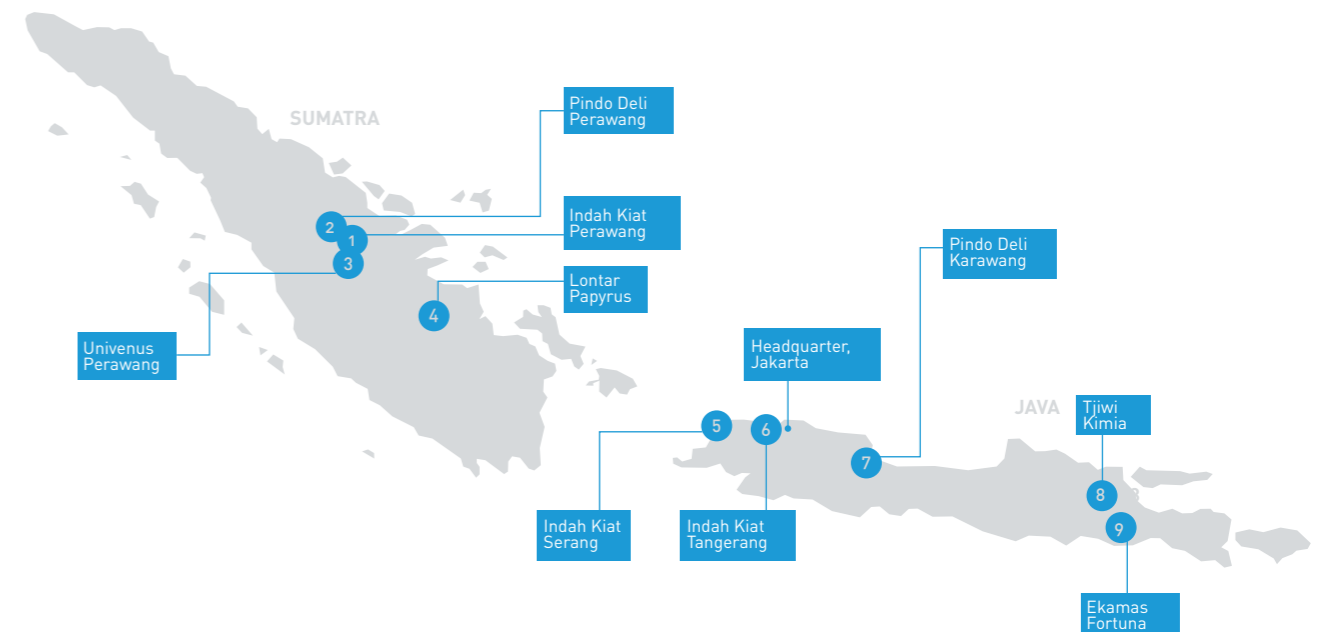
SUSTAINABILITY ROADMAP: VISION 2020

APP's Sustainability Roadmap Vision 2020 is our comprehensive sustainability strategy to monitor and manage ten key impact areas of our business and wider supply chain. Originally launched in 2012 we developed our strategy using stakeholder input and drawing upon global standards and frameworks to determine a series of commitments under each impact area. In 2013 we recognised that Vision 2020 alone was not enough to meet our zero deforestation commitments, so we established our Forest Conservation Policy (FCP) to complement our roadmap.

SUSTAINABILITY ROADMAP VISION 2020

APP
USE OUR PAPER, WE PLANT MORE TREES.

CLIMATE CHANGE

EMISSIONS

SOLID WASTE

WATER MANAGEMENT

REFORESTATION

FIBRE SOURCING

CONSERVATION & BIODIVERSITY

EMPLOYEE WELFARE

COMMUNITY EMPOWERMENT

HUMAN RIGHTS & INDIGENOUS PEOPLE

Vision 2020 element	Incorporated into Forest Conservation Policy	Target		Progress in 2016
Fibre Sourcing	✓	100% independent third party verification for pulpwood legality	Achieved	Accelerated progress and achieved by end 2012
		100% sustainable plantation wood for pulp by 2015	Achieved	All conversion of natural forest was halted in 2013
		100% Sustainable Forest Management (SFM) certified pulpwood	Achieved	99 %
		Maintain a sustainable proportion of recovered fibre in addition to renewable virgin fibre	On track	In 2016 34% of our fibre was from recycled sources
		Develop and implement Integrated Sustainable Forest Management Plans (ISFMPs)	On track	ISFMPs are now completed for all 38 pulpwood suppliers' concessions. In 2017 we will begin the final implementation stage (see page 24)
Reforestation	✓	Support the national target to preserve designated protected and conservation areas	On track	APP continued our commitment through supporting the protection and restoration of natural forest in ten priority landscapes in Sumatra & Kalimantan (see page 31)
Conservation & biodiversity	✓	Zero Fibre from non-production areas of High Conservation Value Forest[6]	On track	Following the completion of IFSMPs across all concessions, no fibre is sourced from areas designated for protection (see page 27)
		Support the national target to increase by 10% the population of 25 specified endangered species	On track	Dedicated conservation programmes focussed on 'umbrella species' of Orangutan, Elephant and Tiger conservation continue, with the support of NGOs and conservation specialists. (see page 31)
Human Rights & Indigenous People	✓	Adopt international guidelines for the protection of indigenous people's customary rights in the forest	Achieved	Free Prior Informed Consent (FPIC) model was applied successfully in the development of OKI pulp mill and built into our Standard Operating Procedures for all new developments
Community Empowerment	✓	Increase welfare of indigenous & local communities and maintain good relations	On track	Expanded the scope of programs and resource allocation with Desa Makmur Peduli Api (DMPA) programme aiming to benefit 500 villages in the next five years. 66 villages were included into the programme in 2016 (see page 46)
Climate Change	✓	Implement Peatland Best Practice Management Programme	On track	ISFMPs are now completed for all 38 pulpwood suppliers' concessions. LiDAR mapping, canal blocking, peat retirement and alternative species programmes introduced. In 2017 we will begin the final implementation stage (see page 25)
Emissions	✓	10% reduction in carbon intensity by 2020, based on 2012 baseline	Behind	Carbon intensity has decreased 2% in 2016 compared to 2012
		10% reduction in energy intensity by 2020, based on 2012 baseline	On track	Energy intensity decreased 7% in 2016 compared to 2012
		10% below national and/or regional limits for annual SOx and NOx	On track	All mills achieved in 2016
Water Management	✓	Achieve 10% reduction in water intensity by 2020, based on 2013 baseline	On track	Water intensity decreased 15% in 2016 compared to 2013
		10% below national and/or regional limits for COD and BOD	On track	All mills achieved in 2016
		Improve management of water use in line with the UN Global Compact CEO Water Mandate Programme	On track	Water footprint completed in all mills
Solid Waste		25% reduction in solid waste to landfill, based on 2010 baseline	Ahead	17% reduction achieved in 2016, compared to 2010
Employee Welfare		Zero employee and contractor fatalities, major fire incidents and traffic accidents on site	Behind	Not achieved in 2016

[6] Updated target. Following the completion of Integrated Sustainable Forest Management Plans, some areas designated for forest production are used as a source of fibre where the plans allow for conservation to be achieved alongside production.

STAKEHOLDER ENGAGEMENT

With a diverse range of stakeholders, together with complex operations and supply chains, APP must provide multiple channels to engage and respond to our stakeholders. Communications channels range from informing stakeholders, for example, through our website, social media, media briefings and press releases; to more interactive and focussed channels, such as working groups, focus group discussion as well as our Stakeholder Advisory Forum, (see page 17) which was designed to specifically address issues related to our Forest Conservation Policy. We also have in place grievance mechanisms and channels that enable stakeholders to raise concerns.

The Stakeholder Advisory Forum (SAF), which is held twice a year in Jakarta, forms a critical part of our stakeholder outreach and feedback mechanisms, with stakeholders being updated on progress of the implementation of our FCP, while also providing them with the opportunity to raise issues with us directly. Typically the forum includes representation from our suppliers, customers, NGOs, government representatives and trade associations.

In response to stakeholder feedback, we developed a questionnaire for participants to complete prior to attending the independently facilitated forum to enable issues to be raised independently

and without due influence from APP. You can read more about this forum, learn how to get involved and read the details from previous events on our monitoring dashboard.

APP recognises that the SAF will not meet all individual stakeholder needs and may not be an accessible forum particularly for those stakeholders based outside of Jakarta. To overcome this challenge, we engaged a team of consultants to roll out social working groups in Riau, Jambi and South Sumatra, providing a mechanism to identify and address regional issues at a local level.

Improvements to our SAF process demonstrates the ways in which we are continuously improving our approach to stakeholder engagement, driven by feedback from stakeholders and the experience we have gained through developing these communications channels.

We identify stakeholders as any group whom express an interest in APP's operations and/or our impacts. The following table highlights our key stakeholder groups, the way in which we engage with each of them and key issues they expressed an interest in during 2016.

Stakeholder	Examples of engagement mechanism	Frequency	Key issues raised
Local communities, including those of our pulpwood suppliers	Direct outreach from local CSR teams, communication forums between mills and local community representatives, FPIC processes, conflict management	Day to day Annually and case by case as required	Employment opportunities Community CSR programmes Mills environmental impacts Indirect economic impacts
Employees	Satisfaction surveys, i-suggest portal, bipartite meetings	Annually and case by case as required	Health and safety Diversity and equal opportunities Business ethics
Contractors	Direct engagement by mill procurement teams	Case by case as required	Health and safety Business ethics
Media	Media briefings, press releases, FCP update events, mill visits	Case by case as required	Forest management practices Mill CSR programmes
Customers	Direct engagement by global sales team and Stakeholder Engagement team, FCP monitoring dashboard	Day to day and case by case as required	Forest management practices Third party certification and labelling Product carbon intensity
Suppliers	Direct engagement by Sinar Mas Forestry Procurement function for non-forestry related products and services	Day to day and case by case as required	Forest management practices Third party certification Supplier assessments
NGOs	Focussed Discussion Groups, FCP update meetings and events, conflict resolution efforts, FCP monitoring dashboard	Day to day and case by case as required	Forest management practices Human rights Conflict resolution
Government	Direct engagement with APP Sustainability and Stakeholder Engagement team Engagement through associations such as Indonesia Pulp & Paper Association	Case by case as required	Pulpwood supplier management Compliance Environmental performance Economic impacts
All	Focussed Discussion Groups, Stakeholder Advisory Forum, social media, direct engagement with APP Sustainability and Stakeholder Engagement team	Social media and direct engagement on day to day basis. Formal forums twice per year	

We respond to our stakeholders in a variety of ways and in response to their needs. We address most of our issues through our Vision 2020 Roadmap, annual Sustainability Reporting and our website, including the separate FCP monitoring dashboard. When specific issues arise or stakeholders require a dedicated response we handle these on a case by case basis through our global stakeholder engagement team. We are also active on the global stage, seeking to share best practice and contribute towards global forestry issues and take an active role in events such as COP 22 in Marrakech. We are a member of the United Nations Global Compact – Indonesia Global Compact Network (IGCN), Indonesia Business Council for Sustainable Development (IBCSD), Indonesia Pulp and Paper Association (APKI) and The Sustainability Consortium.

MATERIALITY

APP follows the GRI Standards reporting framework in defining and prioritising the material issues for our stakeholders. In 2016 we reviewed our materiality analysis conducted in 2015 which included independently facilitated stakeholder workshops in Head Office and in five mills. We updated our materiality matrix by analysing the issues raised by our stakeholders across various platforms (see page 17) and considering global trends in sustainability. As part of the move to the revised 2015 ISO 9001 and 14001 standards we mapped risks at a mill level and fed this analyses into our revised matrix too. We also introduced tracking of our website traffic to provide insight into which issues are of most interest to our readers.

Two specific issues relevant for 2016 were added in recognition of the interest expressed by stakeholders; the development of OKI mill (see page 30) and our programme of workforce reduction (see page 54). Issues with a low materiality threshold are not represented in the matrix consequently not reported upon. Typically these relate to very specific stakeholder interests which we respond to directly on a case by case basis.

IMPORTANCE TO EXTERNAL STAKEHOLDERS

	LOW	MEDIUM	HIGH
HIGH		Carbon emissions	Community engagement / Environmental management / Water use & discharge / Waste / Sustainable fibre sourcing / Human rights / Forest fires
MEDIUM		Energy use / Indirect economic impacts / Transport / Biodiversity / Marketing / Other air emissions / Corporate governance / Noise / Economic performance & impact / Conflict resolution / Product labelling & certification	Health & Safety / Diversity and equal opportunities / Transparency
LOW	Business ethics / Talent retention / Anti - corruption / Governance / Local recruitment	Employee welfare / R&D	

IMPORTANCE TO APP

GOVERNANCE

Sustainability Governance

Committed to Good Corporate Governance, APP's approach to managing and monitoring our impacts has matured and developed over recent years, in line with the development of our sustainability strategy and changing expectations of our stakeholders. Our approach is based on the principles of transparency, accountability, responsibility, independency and fairness.

APP's CEO holds ultimate responsibility for the management and delivery of APP's sustainability strategy, the Vision 2020 Roadmap. Elim Sritaba, Director of Sustainability and Stakeholder Engagement reports directly to the CEO and is responsible for day to day management and stakeholder engagement.

Each mill within our group are a separate legal entity (see page 20) with their own governance structure. Sinar Mas Forestry belongs to the same parent company as APP and is responsible for the management of supply of wood fibre to all APP mills.
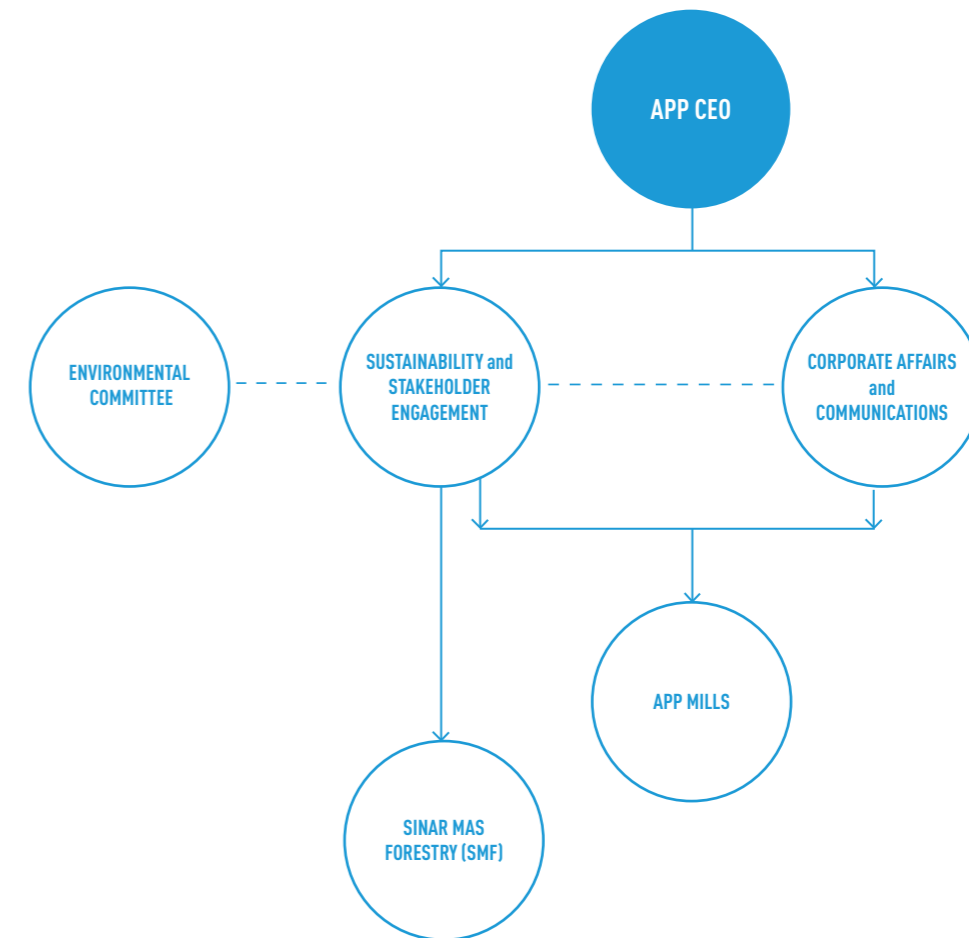
APP's Environmental Committee, headed by the Director of Sustainability and Stakeholder Engagement provides the mechanism to continuously monitor the progress against Vision 2020 goals, with a focus on environmental goals. Closely linked to the mill KPI scorecard (see page 35), mill management are continuously appraised and supported, driving continuous improvement throughout the group. Wider responsibility of the committee includes ensuring compliance with environmental legislation, building capacity to meet global standards for environmental management and recommending investments in new technology.

APP Transformation House is a programme overseen by the CEO office established to drive continuous improvement in all areas of our business. Now in its second full year of implementation it continues to evolve in response to business needs. We increased our focus on employee development, for example through the APP academy (see page 52), increasing diversity of top management both in terms of gender and geographic background, and employee and customer satisfaction.

Policies that support us by guiding employees and setting out clear expectations to our stakeholders underpin our Vision 2020 commitments include:
• Corporate Social Responsibility Policy
• Environmental Stewardship Policy
• Forest Conservation Policy
• Responsible Fibre Procurement Policy
• Procurement Policy on Chemical Substances and Articles
• Employee Welfare Policy
For a full list of company policies please refer to the Policies & Reports section of our website

Mill Governance

At a mill level APP operates a two-tier board system. The Board of Commissioners holds ultimate responsibility for the delivery and management of economic, environmental and social performance. The group focuses on setting company policy, decision-making and reviewing major business disclosures. The nomination process f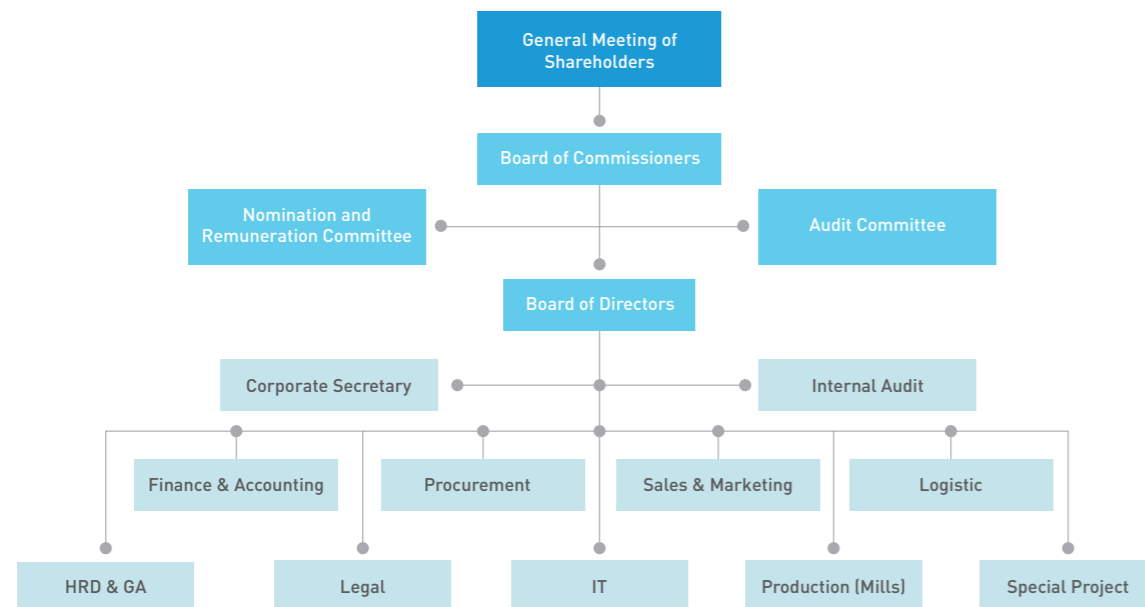or the Board of Commissioners are conducted through the General Meeting of Shareholders and voted upon by shareholders. In line with Indonesian regulation, at least 30% of the Board of Commissioners' are independent from the company.

The Nomination and Remuneration Committee support the Board of Commissioners in conducting performance evaluation of the Board of Commissioners and Directors, making recommendations for additional training as required and recommend nominations to the boards. Salaries are not reported, as per Indonesian capital market regulations. (see our Annual Reports)

The Independent Audit Committee (IAC), with an independent chair, oversees internal auditing, establish action plans based on the results of audits and progress monitoring. The committee hold monthly meetings and reports quarterly directly to the Board of Commissioners. The Internal Audit team are responsible for conducting the audits, overseen by the IAC. Their focus areas adopt in response to business needs, in 2016 these included preventing misconduct and ensuring our comprehensive Group-wide Standard Operating Procedures are followed correctly.

Managing Risks

Our group wide approach is based on ISO 31000: 2009 Risk Management Principle and Guidelines. APP's risk model is constantly updated as we identify environmental and social risks, particularly in response to local legislation and regulations that have the potential to impact our business.

2016 saw a significant improvement in our approach to risk management. Our process for risk identification, analysis, evaluation and response is now much more compressive. We faced several challenges, namely changing the mindset of our workforce for whom previously saw risk management as an additional form of audit.

In line with our risk management policy, our aim is to build resilience and ensure risks faced by APP are well managed and where appropriate aligned with our Vision 2020 Roadmap goals and commitments. In the long term our vision is to embed a risk culture across our organisation, making all employees aware and empowered to identify risk as part of their day to day activities and ensure senior management are equipped with the insight to make informed decisions.

Governing Body / Board / Audit Committee

Senior Management

1st Line of Defense

| Management Controls | Internal Control Measures |

2nd Line of Defense

Financial Control
Security
Risk Management
Quality
Inspection
Compliance

3rd Line of Defense

Internal Audit

External Audit

Regulator

Own and Manage Risks

Oversee Risks

Independent Assurance

(Adapted from ECIIA/FERMA Guidance on the 8th EU Company Law Directive, article 41)

The Board of Commissioners has the responsibility of risk oversight, ensuring our approach to risk management is effectively managed. The Board of Directors is responsible for the implementation of our risk management approach at a strategic level. Business unit and mill management focus on risk at an operational level and project managers focus on day to day operational risk.

General Meeting of Shareholders
Board of Commissioners
Nomination and Remuneration Committee
Audit Committee
Board of Directors
Corporate Secretary
Internal Audit
Finance & Accounting
Procurement
Sales & Marketing
Logistic
HRD & GA
Legal
IT
Production (Mills)
Special Project

SECTION **2**
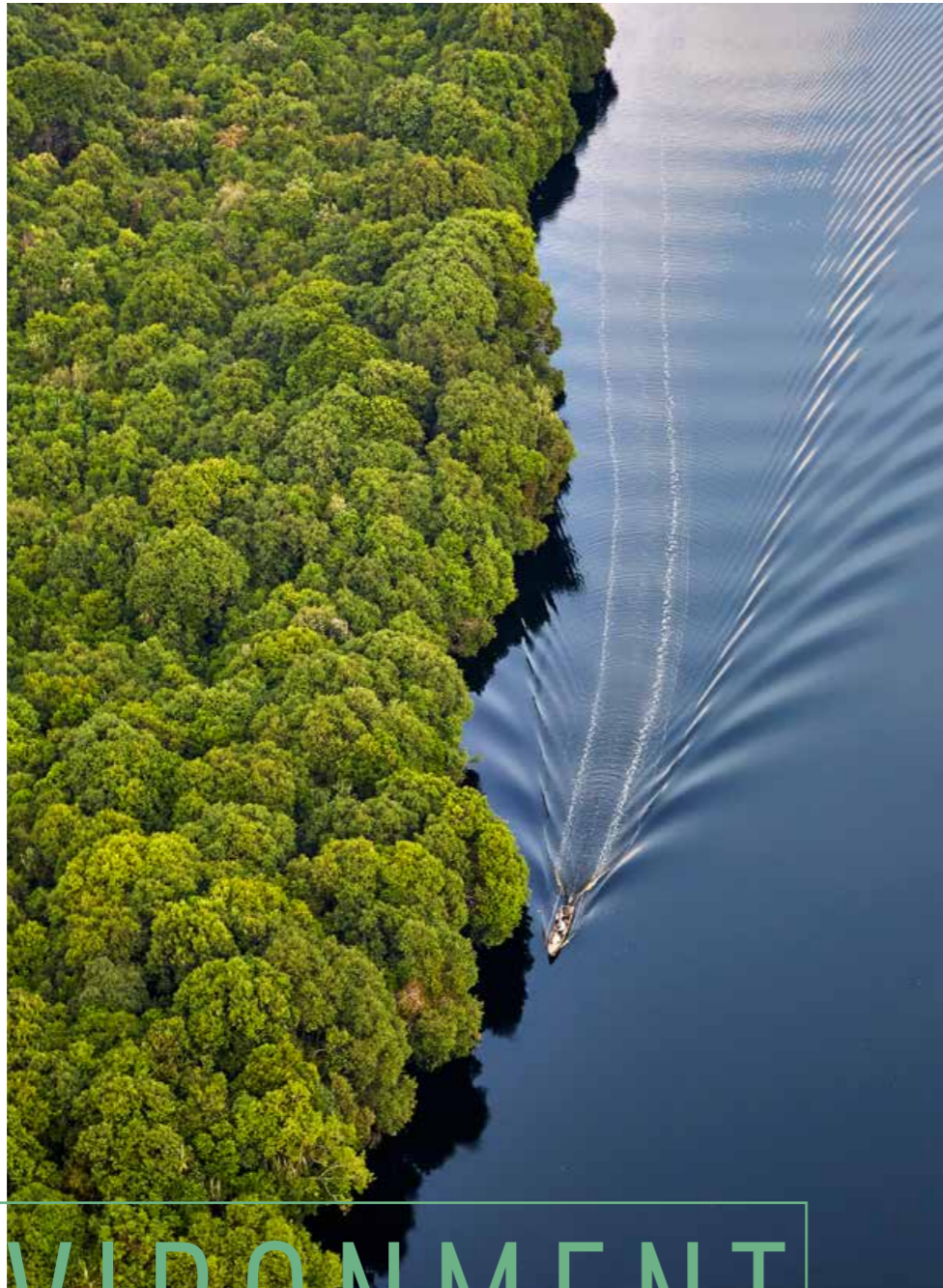
ENVIRONMENT

APP'S PULPWOOD SUPPLIERS

100% of fibre sourced for the pulp mills within the APP Group originates from plantations in Indonesia. In 2016 our pulpwood suppliers managed 38 concessions (areas of forestry designated for plantation development) in Indonesia. Nine concessions are directly owned by APP, 29 are partners who supply through Sinar Mas Forestry (SMF). We also purchase imported pulp from external third party suppliers. This section of our report explains the ways in which we manage and support our pulpwood suppliers to ensure sustainable forest management of our pulpwood supply.

Sourcing fibre in Indonesia presents several inherent challenges, some unique to the forest products sector, while others are common to other industries such as agriculture and mining. Overlapping concession boundaries, lack of a clear and agreed forest boundary map, illegal logging and forest fires

within some of the world's most delicate and critical ecosystems presents a significant challenge, but also a globally significant opportunity when managed sustainably.

A lot of our activities and approaches we have developed are groundbreaking, particularly where we are addressing issues where no precedent has been set. APP are committed to constantly tackling all issues transparently and correcting our course of action as we learn from each stage of our journey.

Our Stakeholder Advisory Forum (SAF) forms a critical part of our stakeholder feedback mechanism, enabling our stakeholders the opportunity to raise issues with us directly and has been hugely beneficial to us in 2016. You can read more about this forum, learn how to get involved and read the details from previous events on our monitoring dashboard.

Pulpwood

Local

Imported

Recycled

APP's Pulpwood Suppliers

Pulp Mill

Pulp

Paper Mill

Power Generator Facilities

Converting Facilities

Associated Chemical Production

Finished Products
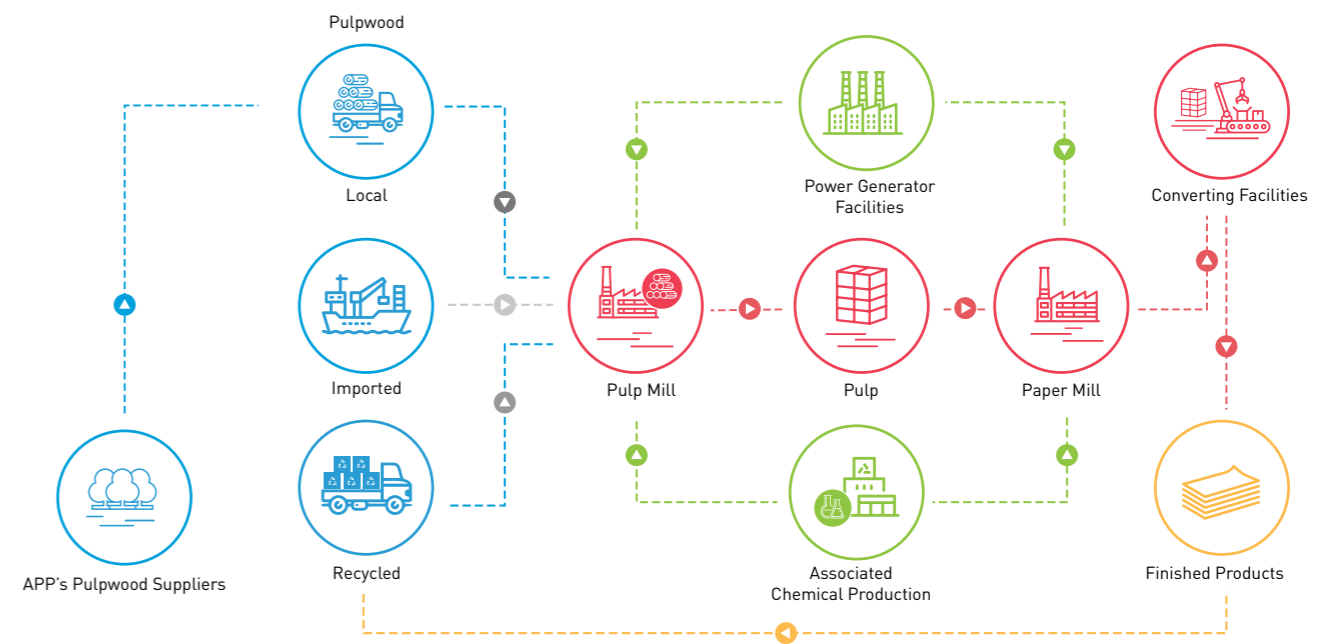
APP's Supply Chain

FOREST CONSERVATION POLICY (FCP)

Launched in 2013, APP's Forest Conservation Policy (FCP) forms the central strategy for managing and monitoring our pulpwood suppliers. Now in its 4th year of implementation we have adopted and adapted our approach as we learned from each step. We worked hard in 2016 to improve the FCP implementation further, moving away from being goal focussed to the principles of the policy being built into our daily operations.

Four core policy commitments of the FCP

1. APP and its suppliers will only develop areas that are not forested, as identified through independent HCV and HCS assessments

2. APP will support the Government of Indonesia's low emission development goal and its target to reduce greenhouse gas emissions

3. To avoid and resolve social conflicts across its supply chain APP will actively seek and incorporate input and feedback from a wide range of stakeholders, including civil society

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

All suppliers are monitored for compliance with the FCP. Our association procedure sets clear guidelines for new suppliers. Any breaches are immediately investigated and addres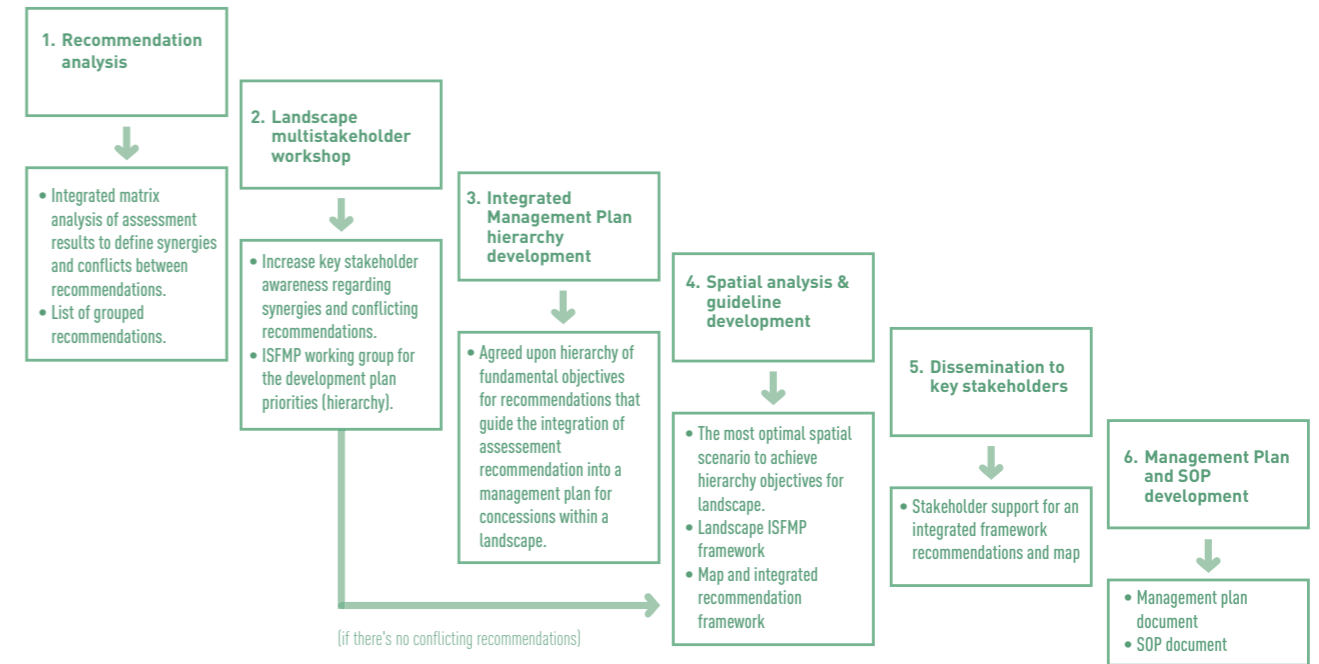sed as required. Non-conformance is not accepted and would result in the supplier being delisted if the response to address the issue is inadequate. No suppliers were delisted in 2016. The Forest Trust (TFT), a non-profit partner independently monitors implementation of our FCP, with updates provided via our monitoring dashboard, which is available here.

INTEGRATED SUSTAINABLE FOREST MANAGEMENT PLANS

Integrated Sustainable Forest Management Plans (ISFMP) represent all the key components of the FCP, consolidated to form landscape level management plans that set long term forest management goals for all forestry concessions. Launched as a concept in 2015 a significant achievement for APP and our pulpwood suppliers in 2016 was the completion of all ISFMP's, which are now in place for all 38 pulpwood suppliers. The plans incorporate the findings from HCV and HCS assessments, social impact assessments, our work to date on peatland best practice management to comprehensively cover forest conservation and management, covering siviculture, harvesting, environmental management, and identification and protection of rare and endangered species of fauna and flora.

In development of each ISFMP we went through a process of reconciling inputs from all the various studies: HCV, HCS, social, and productivity. By undertaking such a comprehensive assessment, it would be expected to identify some conflicts in recommendation in certain areas, for example the result from HCS study recommend the conservation of a certain area while the result from social study recommend that community be allowed to develop it for agriculture. In each case, we worked collaboratively by engaging stakeholders at regional and local levels to reach an outcome that allowed us to move forward.

Diagram of Process

1. Recommendation analysis
- Integrated matrix analysis of assessment results to define synergies and conflicts between recommendations.
- List of grouped recommendations.

2. Landscape multistakeholder workshop
- Increase key stakeholder awareness regarding synergies and conflicting recommendations.
- ISFMP working group for the development plan priorities (hierarchy).

3. Integrated Management Plan hierarchy development
- Agreed upon hierarchy of fundamental objectives for recommendations that guide the integration of assessment recommendation into a management plan for concessions within a landscape.

4. Spatial analysis & guideline development
- The most optimal spatial scenario to achieve hierarchy objectives for landscape.
- Landscape ISFMP framework
- Map and integrated recommendation framework

5. Dissemination to key stakeholders
- Stakeholder support for an integrated framework recommendations and map

6. Management Plan and SOP development
- Management plan document
- SOP document

(if there's no conflicting recommendations)

The final step will be to then develop a new land zonation and tailored action plans with the aim to disseminate all ISFMP's to all stakeholders in 2017. We will also work to develop a monitoring and independent observation process.

To check the latest status of our ISFMP please refer to our monitoring dashboard.

High Conservation Value (HCV)

High Conservation Value forests are areas of forest with high biodiversity values that must be managed carefully to ensure their protection. In 2015 we completed HCV assessments across all our concessions, the results of which fed into our ISFMP's (see page 24)

Pre-assessment process

Review credentials and select the HCV assessment team ▸ Assign assessment team members ▸ Secondary data collection & desktop HCP assessment ▸ Pre-assessment public consultation on national/regional level

Assessment and post assessment process

Final HCV Report ◂ Report peer review ◂ Post assessment public consultation HCV result ◂ HCV draft Report ◂ HCV assessment field / primary data collection
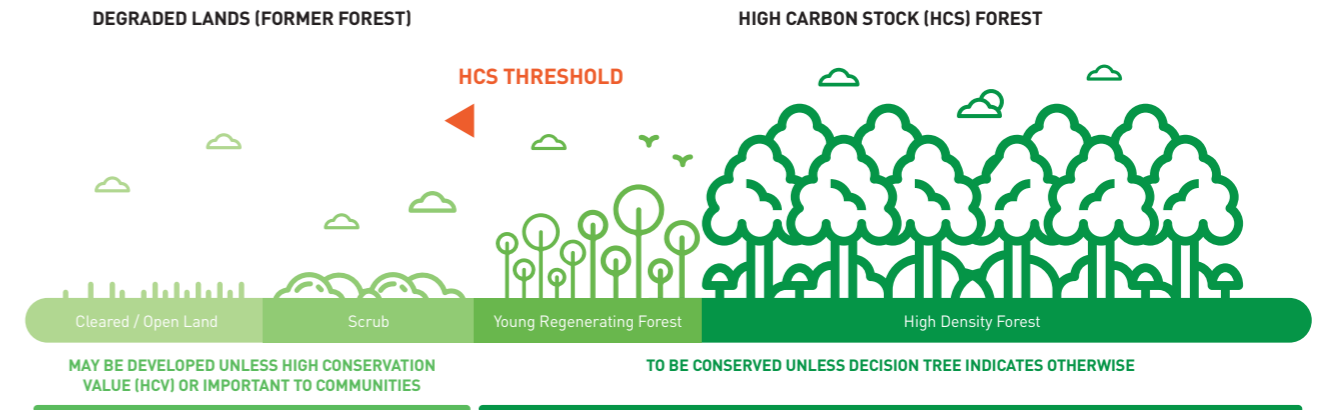
HCV assessment process

High Carbon Stock

Understanding the different types of land cover within each concession is essential information on which to base sustainable forest management of a concession area. We follow internationally agreed definitions to categorise our land area as follows;

- High Density Forest
- Young Regenerating Forest
- Scrub
- Cleared/Open Land

The threshold for which conservation activities are prioritised over development is within the Young Regenerating Category of forests, defined as forests that are degraded but recovering to their natural conditions. APP has worked with NGO's, technical consultants and other forest commodity companies to establish a HCS Approach Steering Group, who jointly published a HCS Toolkit to share a common methodology for undertaking HCS assessments. More details of the toolkit and process, including a summary of all HCS assessments conducted in APP's pulpwood suppliers can be found on our monitoring dashboard.

DEGRADED LANDS (FORMER FOREST)   **HIGH CARBON STOCK (HCS) FOREST**

HCS THRESHOLD

| Cleared / Open Land | Scrub | Young Regenerating Forest | High Density Forest |

MAY BE DEVELOPED UNLESS HIGH CONSERVATION VALUE (HCV) OR IMPORTANT TO COMMUNITIES   **TO BE CONSERVED UNLESS DECISION TREE INDICATES OTHERWISE**

Following the completion of the HCS assessments our work continues in related areas. We have engaged the carbon experts Ata Marie to develop a carbon model 2000-2040. Our intention is to combine the results of this study with data from peatland management work to produce a clear account of our contributions towards the Indonesia commitment to reduce emissions 29% by 2030.

To support our FCP commitment to protect natural forest, we initiated a six-month trial programme in collaboration with Sinar Mas Forestry to monitor forest cover changes across 3.5m ha of Jambi and South Riau forest areas and biospheres. We intend to fly over every month, collecting high resolution imagery which will identify changes during each period and enable us to have a more accurate and up to date map of forest cover. The initial results will be reported in mid-2017 and next steps communicated.

Peatland Management

Approximately 50% of APP's pulpwood suppliers' concessions are located in peatland areas, presenting a delicate ecosystem that must be carefully managed to limit carbon emissions and ensure sustainable forest practices are developed and maintained.

Recognising that these landscapes required a unique approach, APP established a Peat Expert Team (PET),

which in 2014, comprised of Wageningen University in the Netherlands, Deltares and Euroconsult Mott MacDonald to develop Peatland Best Practice Management (PBPM). The team had undertaken a three-month study to identify the key issues and what information was currently available, which fed into the second phase of the programme that began in 2015 and remains ongoing.

Peatland Best Practice Management – phase two activities

1. Mapping and assessment of peatland cover – understanding water table depth, land cover and fire risks
2. Peat dome mapping – using LIDAR technology to carry our elevation mapping, peat thickness studies and carbon stock management
3. Subsidence and emissions projection and monitoring – developing surface subsidence modelling and relevant standard operating procedures for pulpwood suppliers
4. Water management for peat ecosystem conservations – analysing water tables, rainfall data and combining with field survey data to development water management plans and guidance for pulpwood suppliers
5. Investigating into current and future flood risks – investigating tidal dynamics, mapping flood risks and pilot water management intervention methods
6. Design of methods and pilots for flood-tolerant alternative crops -research into alternative species
7. Design of methods and pilots for rehabilitation of peatland ecosystem to a natural state
8. Principle definition and zoning – initial assessment of conservation priorities and peatland concession zoning plan

To successfully implement and manage peatland forestry, hydrology must be fully understood. It is critical in maintaining the required level of the water table, ensuring 'below ground' carbon is not released into the atmosphere and integral to effective fire prevention too. Constructing and maintaining dams and water channels is vital to enable us to manage water levels in peatland areas. In April 2016, APP completed the development of 5,372 perimeter canal blockings.

In West Kalimantan we have introduced a network of tubes, sunk through the peat level into the mineral subsoil to monitor water levels and measure subsidence. Although effective, this approach will take time to implement in other areas, which we are now working to do.

As a more efficient solution, we have been investigating how LiDAR technology could be used to monitor water levels. A feasibility study is now being undertaken to test the accuracy of the data. Ultimately our aim is to establish an operational database for spatial and temporal monitoring of peatland areas, which would feed into an overall Operational Water Management System (OWMS), with the potential to further integrate into our Fire Management System (see page 34).

Research and development plays an important role in improving long term sustainability of our fibres supply chain. Our pulpwood suppliers have developed an alternative species R&D programme, developing tree species that are more adapted to the changing climate, or are less prone to damage in areas that have a high potential of flooding.

Forestry Social Issues

Community development programmes, clear and transparent conflict resolution to conflict and commitments towards Free, Prior and Informed Consent (FPIC) form a critical pillar of responsible forest management and are built into our FCP. Our agroforestry programme (IFFS), launched at the end of 2015 signified a shift towards decoupling economic growth from deforestation. You can read more about our programme on page 46 of this report in the community programmes section.

Conflict Resolution

Social conflict mapping has been concluded across all pulpwood suppliers' concessions. Based on the conflict mapping, APP has developed action plans in each concession identifying the activities necessary and the projected dates to move forward with resolution of conflicts. Several of these conflicts have been resolved and action plans are being implemented for others. APP already incorporated the performance on the implementation of the action plan into Key Performance Indicator (KPIs) of staff and managers.

LiDAR, which stands for Light Detection and Ranging, is a remote sensing technology deployed by aircraft to measure distance and record images to generate precise, three-dimensional information about the shape of the Earth and its surface characteristics.

In 2015 we launched the technology on our pulpwood suppliers' concessions. The LiDar data captured covered area of around 4.5 million hectare as it includes the peat landscape outside of our suppliers' concession boundaries. In 2016, we expanded this technology, increasing the resolution and area of coverage to deepen our understanding in developing best practice approaches to peatland management. Digital terrain module can incorporate forecasts of peat subsidence and sea level rise – to predict flooding, which informs where canal blocking is needed. We expect this to be completed by mid-2017. We carried out the latest mapping in partnership with other forest commodity companies and NGO's based in South Sumatra who will all benefit from the increased accuracy of the terrain that the mapping will produce.
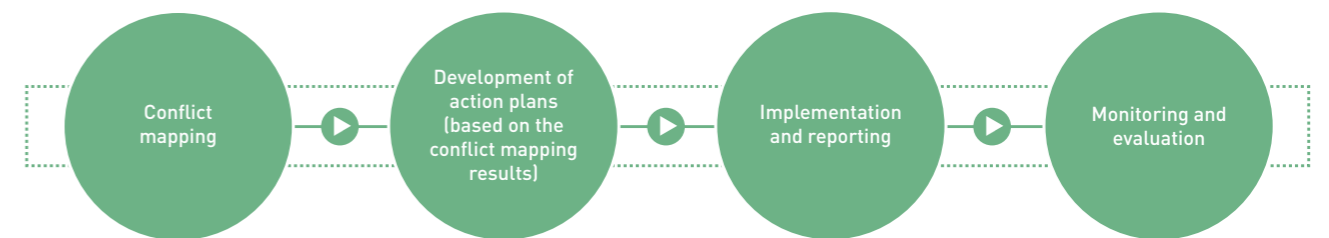

Conflict mapping → Development of action plans (based on the conflict mapping results) → Implementation and reporting → Monitoring and evaluation

Conflict resolution process

Conflict Update

	2016 update
Kesuma Village	Stakeholder meeting has been conducted and an action plan developed, including commitments to review historic mapping of area and conduct further field assessments alongside the head of the communities involved.
Riding Village	A land use conflict that dates to before APP's pulpwood supplier began operations in the area that led to resistance from local community in plantation development. Using a third party as mediator, a draft agreement has now been established, following a period of co-operation the local community and APP and we expect to reach an agreement in early 2017.
Khalifa Hasan Basri	Several stakeholder consultations completed, several meetings with Khalifa Hasan Basri completed and commitments verbally agreed.

Third party forest clearance is a huge challenge in Indonesia and we are working hard to lower the risk through our IFFS programme, in addition to improving security practices. We have revised our security organisation with the aim of improving community engagement and forest security. In conjunction, a community based security concept have been developed and discussed among APP supplier and security vendors and we are planning to implement this in one district as part of a trial with the support of human rights experts and additional training.

FPIC at OKI Mill

Together with TFT, APP initiated the Free Prior Informed Consent (FPIC) process with local communities around the site of development in South Sumatra in 2015. We carried out a land tenure study and mapped all communities whose lands were likely to be impacted by development. APP then began a socialisation process with the eight villages identified as potentially being impacted and two villages (Jadi Mulya and Bukit Batu), and 1 hamlet (Sungai Rasau) have legitimate claims over land and resources in the area. APP will now apply the full FPIC approach through to resolution and provide regular updates via our monitoring dashboard.

Sustainable Fibre Supply to OKI Mill

A concern raised amongst our stakeholders relates to the new OKI Pulp Mill in South Sumatra. APP remain committed to our FCP commitments and will not comprise upon these. We asked TFT to carry out an independent assessment which confirmed APP can meet the needs of the mill and that our projections of improving yield from our forestry operations transportation and pulp production are based on robust assumptions. To read more on the OKI Mill and view the independent assessment please see our FCP Monitoring website here.

BIODIVERSITY & CONSERVATION

APP are committed to supporting the Indonesian national target of increasing the population of 25 specific endangered species in Indonesia by 10%. Sustainable forest management supports this to an extent, but we go one step further with species that are at specific risk for human conflict. All concessions have been assessed for biodiversity risks as part of the HCV assessment that were completed in 2015. Every six months an updated monitoring exercise is completed.

Project	2016 update
Orangutan conservation in the Kutai landscape, East Kalimantan	Focussing on areas where orangutan habitats and forest plantation concession overlapped, the project was initially established in 2011 and continues today. In 2016 seven orangutans were rescued and relocated to Kutai National Park and steps taken to increase the coverage of connecting wildlife corridors between national parks.
Human-tiger conflict mitigation within APP pulpwood suppliers' concessions	Concentrated on areas of overlap between Sumatran tiger habitat and forest plantation concession in Sumatra, this programme focusses on improving education & awareness of tiger conservation and avoiding conflict. In 2016 over 600 field employees at our pulpwood suppliers, 400 contractors and 120 community members were trained. A 40 person strong taskforce was formed including members from Lontar Papyrus. In 2017 we intend to establish a tiger proof enclosure for livestock.
Human-elephant conflict mitigation in Bukit Tigapuluh landscape	Elephant herds require a large area for their long-term survival, but expansion of human activities into elephant habitat can create a potential for conflict. In 2016 APP supported the NGO, BKSDA Jambi, in relocating one of conflict elephant to its forested habitat. Three teams of human-elephant conflict mitigation in Bukit Tigapuluh, Giam Siak Kecil and Padang Sugihan landscapes were established. We also planted the areas determined as elephant feeding stations with suitable food plants.
Ramin conservation	Ramin trees are rare in their natural habitat of peat swamp forests in Sumatra and Kalimantan because of uncontrolled exploitation between 1970 to 1980s. Ramin is also a species that is difficult to propagate naturally. APP collaborated with FORDA Yogyakarta to explore genetic diversity, develop macro and micro propagation technique through shoot cutting and tissue culture. A ramin demonstration plot was also established to enhance research capabilities.

Landscape Conservation

Announced in 2014, APP committed to support the conservation and restoration of 1m hectares of rainforest in Indonesia, the concept was based upon matching the approximately one million hectares of established plantation across APP and suppliers' concessions, with an equivalent area of protected forest. We identified ten landscapes in which to implement the programme, adopting a landscape approach to conservation that looks beyond our own concession boundaries to consider other opportunities and threats and bring other stakeholders on board with our commitment. With assistance from Conservation Education and Environmental Education Foundation (YAPEKA) along with other stakeholders, a master plan for our landscape conservation commitment has been finalised. It is now used as a roadmap for guiding conservation activities by APP and its conservation partners within each landscape. Five priority landscapes for which action is most urgent and in which our chances of success are highest. These are:

• Kubu (East Kalimantan province)
• Giam Siak Kecil - Bukit Batu (Riau province)
• Bukit Tigapuluh (Jambi province)
• Berbak Sembilang (South Sumatra province)
• Dangku (South Sumatra province)

Belantara Foundation

The Belantara Foundation is an Indonesian based not-for-profit organisation established as implementation partner for APP's conservation commitment. It aims to enable investments, coordinate and stimulate collaborate between the private sector, governments, NGOs and local communities to achieve landscape management across ten areas, covering forest restoration, species conservation, community development and sustainable agriculture.

APP co-founded the Belantara Foundation in 2015 and is fully supportive of other organisations contributing and making financial commitments. In 2016 an evaluation committee was established to evaluate investment proposals from technical and scientific aspects and provides recommendations to the Board of Trustees on whether the proposal is feasible. The focus of 2017 is to obtain additional financial and technical partners, develop clear targets of impacts and commit publicly to a range of KPIs. We will develop and work towards targets that are focussed on measuring added value in terms of hectares protected, welfare improvements and income levels improving, and not only reporting sums invested.

The foundation also worked hard in 2016 to define the term landscape approach more precisely, which was critical in moving forward in providing clear investment outcomes. This approach to conservation is designed to offer a long-term solution that is only possible when stakeholders collaborate, otherwise the scale of natural protection and community development will not be achievable.

"The Belantara Foundation is not simply corporate philanthropy or a PR exercise. Our goal is to demonstrate that if we manage landscapes collaboratively we will do it more efficiently and effectively than we can alone"

Agus Sari, CEO Belantara Foundation

Project Highlights

- Conservation in the Berbak peat dome in South Sumatra, this REDD+ project will blend funds from the foundation with verified carbon credits
- Community based mangrove restoration in South Sumatra
- Protection and restoration of protected forest in West Kalimantan with partner YAPEKA, incorporating community development within three villages located within the protected forest area
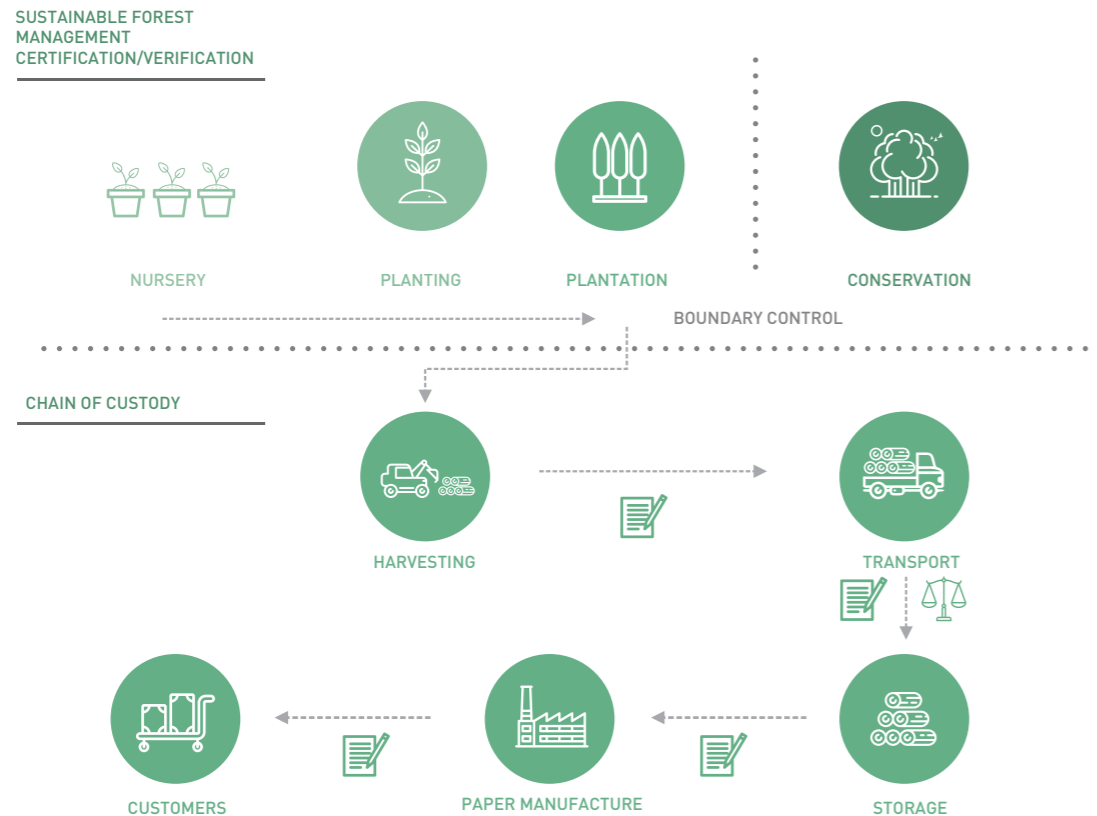
The objectives of the Belantara Foundation activities are closely aligned with Indonesia's provincial government plans for sustainable development. In West Kalimantan, a Green Growth plan was established in 2016, setting out the clear ambition that natural resources should be preserved for the benefit of the local communities. A Memorandum of Understanding has been signed between the government, APP and Belantara Foundation, formally acknowledging our collaborative efforts and commitments. Similarly, in South Sumatra, a collaboration has been established between APP and the provincial government that targets a reduction in forest fire risk, enables peat mapping and community development.

THIRD PARTY CERTIFICATION

To ensure our sustainable forest management practices and traceability systems are robust, APP uses a range of third party certifications from both national and globally recognised schemes. Chain of Custody (CoC) certification provides assurance that the fibre used in our products is ultimately traceable back to source. Sustainable Forest Management (SFM) certification provides independent confirmation that the forest is managed in a responsible and sustainable manner.

SVLK (Timber Legality Verification System) is an Indonesian scheme held by all APP mills. In 2016 this standard was revised to remove the requirement for our customers to carry out their own due diligence of fibre traceability back to source, the certification is now sufficient to cover this requirement. In response to Forest Law Enforcement, Governance and Trade (FLEGT) licensing requirements, a new coding system has been developed to meet the requirements for imported fibre based products into the EU.

SUSTAINABLE FOREST MANAGEMENT CERTIFICATION/VERIFICATION

NURSERY PLANTING PLANTATION CONSERVATION

BOUNDARY CONTROL

CHAIN OF CUSTODY

HARVESTING TRANSPORT

CUSTOMERS PAPER MANUFACTURE STORAGE

The Indonesian Forestry Certification Cooperation (IFCC) has grown considerably in 2016, up to 58% from 12% in 2015, with 21 pulpwood suppliers now certified and our aim is to achieve a further 4 in 2017. LEI SFM certification has remained consistent from 2015, maintaining coverage of 83%. We are on track to meet our target of all suppliers being third party certified by 2020. Our discussions with FSC (Forest Stewardship Council) continues as we work towards a roadmap of re-association with the certification standard. Following a period of global stakeholder consultation, we expect this to result in an action plan being drawn up and for APP to commit to these actions during 2017. In 2017, we will carry out assessment in 15 concessions to identify and put plans in place to address areas for improvement to address FSC requirements.

We carry out regular internal audits to ensure mills are meeting the requirements the various third party certifications standards. These requirements are also built into pulpwood supplier scorecards, helping us to prioritise and address gaps for each standard.

Total Plantation area	Ha	2,587,224
IFCC Certified		58
LEI SFM Certified		83
PHPL-VLK Certified	%	99
VLK Verified		1
Total certified SVLK scheme		99

Pulpwood Supplier Assessments

APP's FCP is focussed on suppliers in Indonesia. To meet production requirements and remain responsive to the global fibre market, APP sources fibre from other suppliers. We have developed a Responsible Fibre Procurement and Purchasing Policy (RFPPP) to ensure these suppliers are aware of our requirements and that they too meeting in accordance to sustainable forest practices. You can view our RFPPP here. A Supplier Evaluation and Risk Assessment (SERA) is used for potential new suppliers and used as an annual evaluation tool for all suppliers.

A Supplier Evaluation and Risk Assessment framework	Supplier validation
	Contract of fibre supply
	Incoming material verification
	Supplier annual evaluation

Results from the risk assessment are used to categorise potential suppliers by level of risk. If a potential supplier is categorised as "significant risk", they will be required to implement corrective actions to bring them into compliance within an agreed period, before they can become a supplier to APP. Currently, six new companies are in the process of being assessed as a as new supplier.

Pulpwood Supplier Scorecard

APP, with the support of TFT, has developed a Sustainable Forest Management (SFM) Supplier Scorecard which we are using to assess the performance of our suppliers against the RFPPP and the FCP commitments. The scorecard combines the criteria of several national and internationally recognised forest management certification systems.

Suppliers are continually assessed through a combination of field visits and regular performance reporting via online data management software. The resulting 'live' scorecard allows APP/ Sinar Mas Forestry managers to monitor supplier performance daily, to identify gaps in supplier performance, and to monitor the progress of action plans to close these gaps. They are also vital in supporting development of third party certification.

All APP suppliers in Indonesia are now using, and being assessed against, the scorecard which has been designed to assess:
- ISFMP completed and in place
- Plantations are established in appropriate areas using best available SFM techniques
- Environmental impacts are identified and mitigated
- Local communities are respected
- Basic rights, including minimum wage, age and freedom of expression are respected
- Health and safety management is established and effective
- Chain of custody processes are in place
- Management systems are in place that refer to national and global certification standards

INTEGRATED FIRE MANAGEMENT

2015 witnessed some of the worst forest fires experienced in Indonesia. The environmental and economic impact was severe and long lasting. APP is committed to improving our preparedness for a future event of similar scale and has invested heavily in this area over the past two years, during which we have seen a shift towards prevention of fire through education and community focus. Although climatic conditions do play a major role in determining fire risk, illegal encroachment and the traditional slash and burn forest clearance practices are also major causes of fire. APP have a strict 'No Burn Policy' which we strictly enforce across all pulpwood suppliers. Burning as a method of forest clearance is not economically viable and offers no advantage for industrial players like APP.

Prevention

Rapid response

INTEGRATED FIRE MANAGEMENT

Preparation

Early detection

Integrated Forest & Farming System (IFFS)
MPA incentives
Prevention planning
Water management

Traning
Situation room
Patrol routes
Fire-fighter standby

Infra-red detection cameras
Satellite trial
Increased ground patrol
Fire towers
Integrated Fire Information IT System

Suppression strategy
Online fire reporting
Incident room
Water bombing aircraft

In 2016, APP introduced a new approach to Integrated Fire Management, investing heavily in equipment, training and above all, a shift in focus towards fire prevention.

Our Integrated Forestry and Farming System (IFFS) forms a critical part of our fire strategy by reducing threats to the forest by supporting local communities to develop alternative livelihoods, thus, reducing dependency on forests and one of the driving forces behind fires – land clearance. The construction of dams and canals to raise and better control the water table level, as part of our approach to Peatland Management also reduces the risk of fire in peatland forests. Community Fire Awareness (MPA) actively engages community members to take part in fire prevention control. To understand the various levels of fire risk across our concessions, fire threat mapping draws on fire history data, hot spot history and conflict mapping.

A system of clear command and responsibility, known as Incident Command System (ICS) has been established, drawing upon advice from international experts in fire management. In a critical step, from May 2016 we now have one single Standard Operating Procedure across all 38 pulpwood suppliers. We have established a Situation Room Centre (SRC) in Jakarta, providing early detection continuously across all our pulpwood suppliers' concession, using satellite data

supplemented by on the ground verification. We can also draw upon imaging equipment installed on observation towers. Data from SRC guides the patrol routes in real time. Hotspots are tracked up to 5 km outside of concession areas.
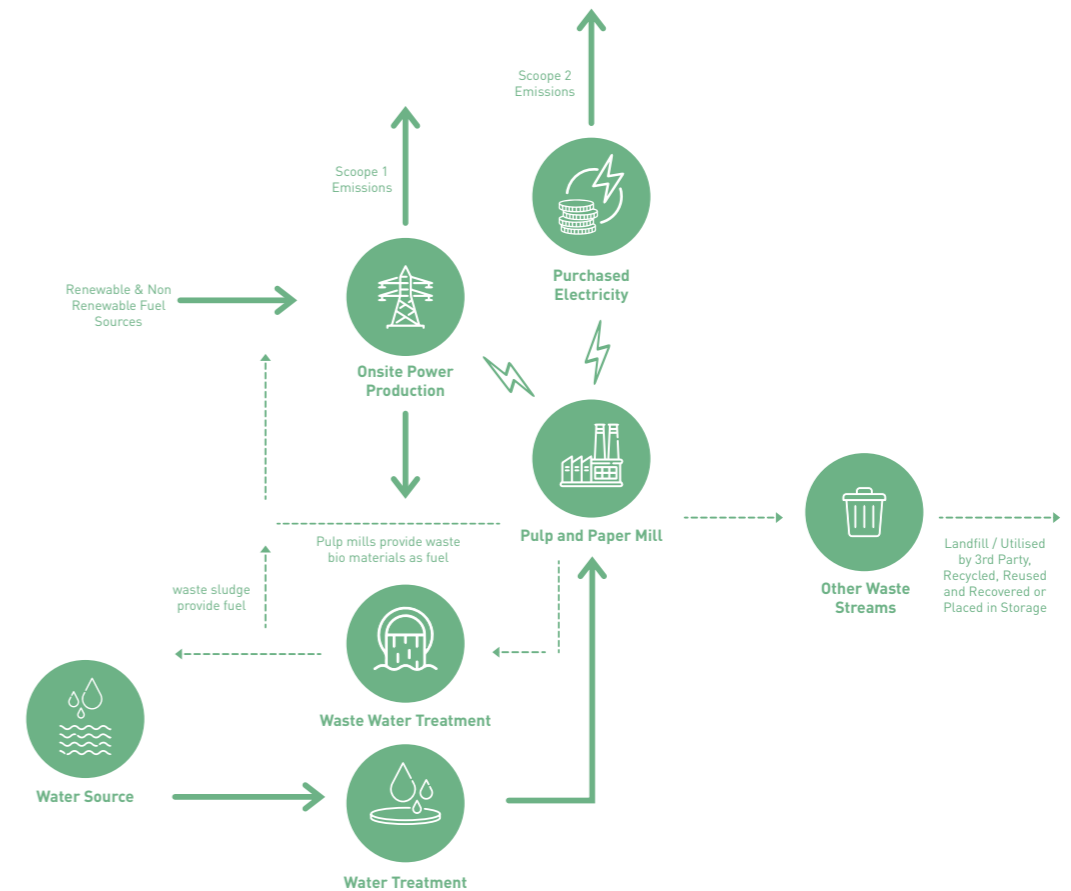
If a hot spot is detected and confirmed, 2,700 certified firefighters are on call across 266 monitoring posts. In areas that are difficult to reach helicopters can be deployed to drop water on the fire from above. In 2016, we deployed our fleet of six helicopters carried out over 2,000 water drops.

2016 highlights:
- **2,700 trained & certified fire fighters**
- **2,000 members of the local fire fighting council (Masyarakat Peduli Api/MPA)**
- **6 units helicopters**
- **80 fire spotting towers**
- **266 monitoring posts**
- **160 fire water trucks**
- **500 unit of patrol transportation**
- **1,150 water pumps**

In 2017, we plan to introduce infra-red detection cameras to improve accuracy and investigate cameras equipped satellite technology available.

MILLS' ENVIRONMENTAL PERFORMANCE

APP's Vision 2020 Roadmap not only covers our pulpwood suppliers, it extends to include clear environmental commitments for our mills, focussed on our energy, carbon, water and waste environmental footprints. Aiming to achieve the highest standard of global environmental efficiency we are continuously investing in new equipment, process improvements and encourage continuous behavioural change to drive efficiency across all our operations.

Scoope 2 Emissions

Scoope 1 Emissions

Purchased Electricity

Renewable & Non Renewable Fuel Sources

Onsite Power Production

Pulp and Paper Mill

Other Waste Streams

Landfill / Utilised by 3rd Party, Recycled, Reused and Recovered or Placed in Storage

Pulp mills provide waste bio materials as fuel

waste sludge provide fuel

Waste Water Treatment

Water Source

Water Treatment

We combine national environmental guidelines with international environmental standards, supported by a revised KPI monitoring system to ensure compliance and drive performance improvements.

PROPER is an environmental and social assessment scheme launched by Indonesia's Ministry of Environment and Forestry in 1996 to enhance national environmental standards. Following the enrollment at Tjiwi Kimia in 2016, all our mills are members of the scheme, and we strive for the highest rating for each mill. Applying the revised 2015 ISO 9001 & 14001 certification standard has sharpened our focus and ensure we are meeting the same standards as our global competitors. We successfully implemented the Energy Management Standard ISO 50001 in 7 mills, which has contributed towards group wide efficiency improvements. We experienced no significant environmental incidents such as leaks or spills requiring notification to the relevant regulatory authorities.

For a full list of PROPER rating and certification standards held by each mill, please refer to page 11.

2016 was the first full year of implementation of APP's mill scorecard, an integrated internal monitoring and auditing platform which covers not only performance towards Vision 2020 Roadmap targets, but also adherence to sustainability standards that includes ISO 14001, ISO 50001, ISO 14064 (for carbon reporting), ISO 26000, the UN CEO Water Mandate and PROPER. The scorecard provides a basis for not only monitoring performance but also identifying gaps, areas for improvements and supporting investment decisions. Responsible for co-ordinating environmental improvement programmes, including CAPEX recommendations and monitoring performance across all environmental impacts, the Environmental Committee is led by a combination of Sustainability and Stakeholder Engagement Division and Corporate Affairs and Communication Division.

Energy & Carbon Emissions

Our group wide target is to reduce energy and carbon emissions 10% by 2020, against a 2012 baseline.

The unique energy profile of each mill is determined by a multitude of factors, predominantly the type of product produced and the equipment installed. We influence the energy efficiency in two ways; through direct investment in new equipment with lower power demands and driving behavioural change through more efficient processes and approaches to the way we operate. Driven by mill management, our production teams are constantly looking for better ways of working, drawing upon global best practice and lessons shared from other APP mills. In 2016, we realised the benefits of previous years' investments in energy efficiency in addition to incremental improvements during 2016 to achieve a decrease in energy intensity by 7%.

Indah Kiat Perawang, Pindo Deli Perawang, and Tjiwia Kimia achieved ISO 50001 energy management certification in 2016, bringing the total number of mills to maintain this certification to seven. As well as achieving certification and external recognition other benefits include building employee awareness & capacity building, and increased energy efficiency of 2, 8 and 9% respectively compared to 2015.

Modified boiler equipment, the latest multi-cyclone flue gas system and redesign of the vacuum systems on both paper machines installed at our Ekamas Fortuna mill has provided significant energy savings (307 MWh in 2016) and reduced coal intensity by 3%. Following an investment in 2015, renewable energy in the form of waste methane gas is now utilised from the mills waste water treatment plant. In its first full year of operation, 622 MW of energy was generated, improving mill energy self-sufficiency.

National Energy Efficiency Award by the Ministry of Energy and Mineral Resources recognises excellence in energy efficiency and energy management in Indonesia. Indah Kiat Tangerang won the energy management for industrial innovation in recognition of the mills steam and condensate system modifications, achieving a 15% improvement in efficiency from 2014.

APP ENERGY INTENSITY
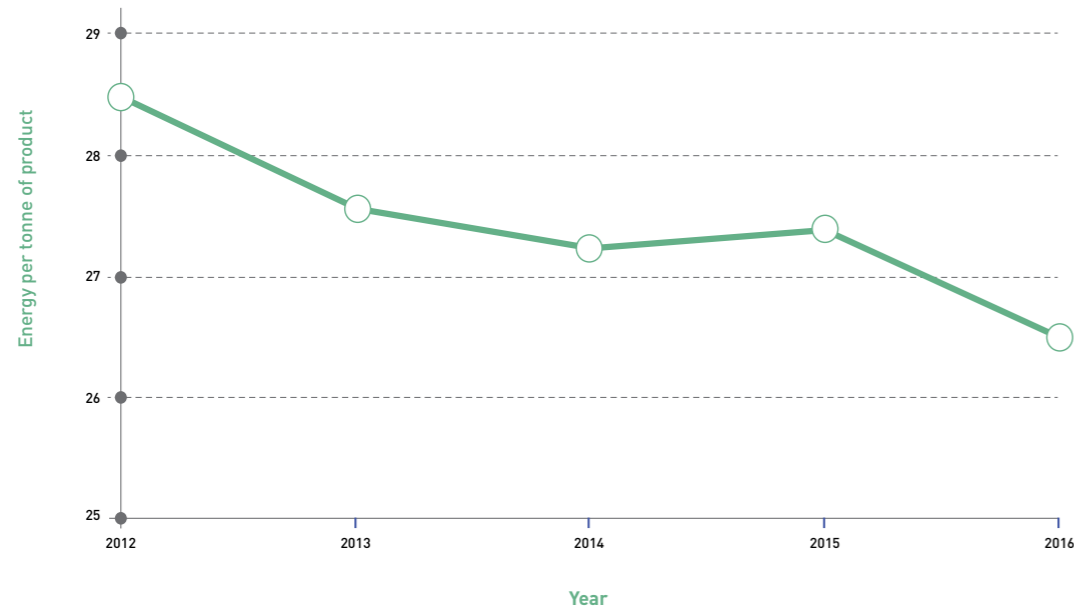
APP are committed to supporting Indonesia's national carbon reduction target through reducing the carbon intensity of our pulp and paper mills. We support transparent disclosure of our carbon emissions data, in 2016 APP achieved a Carbon Disclosure Project (CDP) score higher than the industry average, regional average and all company average. A mill level carbon footprint tool, based on WBCSD methodology, enables us to continuously monitor emissions and focus improvements where the impact is greatest. We are now in the process of developing a tool to disclose carbon intensity at a product level in response to increasing customer requirements for detail at this level.

APP Mills Consolidated GHG Emissions		2016	2015	2014
Scope 1	tCO$_2$e	10,528,852	10,645,165	10,371,326
Scope 2	tCO$_2$e	1,276,976	1,011,538	1,055,166
Intensity	tCO$_2$e/t	1.35	1.39	1.37

Carbon emissions of our mills, and in turn, APP products, are closely related to the energy profile of the producing mill, influenced by the local fuel availability (predominantly coal and natural gas) and availability of the local grid network to provide additional energy to complement on site power generation. While we are limited in the influence we can have on the national grid energy mix, we can take measured steps where on-site power generation is supplied by increasing the proportion of renewable fuels consumed and switching to less carbon intensive fuels where renewables are not a viable option.

Our integrated pulp mills Lontar Papyrus and Indah Kiat Perawang utilise wood based biofuel, a waste product from harvesting, wood preparation and pulp production

as a major source of fuel. In 2016 our proportion of biomass based fuel remained consistent with previous years – our challenge now is to increase the availability of this fuel from other sources and increase the efficiency of our processes to yield higher quantities of biofuel.

For our paper mills without pulp manufacturing facilities to provide a source of renewable fuels, alternative solutions have been identified. One option has been to utilise biogas, emitted from waste water treatment operations. Indah Kiat Serang successfully decreased the amount of non-renewable fuel consumed in favour of increasing biogas consumption, reducing carbon intensity of the 5% in absolute terms in 2016 compared to the previous year.

	Unit	2016	2015	2014
Energy generated from renewable sources	GJ	107,894,176	105,745,891	100,764,018
	%	47	46	46

We do not calculate employee commuting and business travel (scope 3 emissions) in our greenhouse gas calculation, since it is estimated that the number will be insignificant compared to the emissions from our manufacturing activity. Instead, we focus our efforts on reducing greenhouse gas emissions within APP's manufacturing process, where the bulk of our emissions are generated.

Water

Water is an essential input for our pulp and paper making operations. As is typical in the pulp and paper industry, our mills are located within proximity to natural water sources to provide sufficient water to meet our production needs. We focus on efficient use of water throughout our processes, maximising recycling streams to minimise fresh water uptake and closely monitor the quality of water we return to the natural source, via our waste water treatment facilities.

	Unit	2016	2015	2014
Water withdrawn from source	m³	221,369,805	234,641,177	243,258,925
Reuse/recycled	%	19	22	19
Consumed water intensity	m³/t	23	25	24

In 2016 APP took a significant step forward in reducing water intensity across our mills. We decreased water intensity by 15% when compared to the 2013 baseline, against a Vision 2020 Roadmap target of 10%. Our absolute water withdrawal from source decreased 6% in 2016 compared to 2015.

As a member of the UN Global Compact CEO Water Mandate Programme APP is committed to reducing our water footprint and sharing best practice within our group of mills and within the wider business community, particularly in Indonesia. We have completed detailed water footprint assessments in eight mills, providing the level of detail we require to identify and address areas for improvement and to focus investments for the highest impact.

Pindo Deli Karawang initiated a project to recycle treated effluent back to raw water treatment. The challenging project involved improving the quality of treated water in order to increase water reuse, reducing fresh water requirements from the local water source. The net benefit was a 36% reduction in water intensity in 2016 compared to the previous year. Lontar Papyrus was also able to reduce water intensity

13% over the same period. Effluent water was used for log washing, a preparation process prior to pulping and backwash water used for certain boiler processes. Reusing water for these processes reduced fresh water requirements and improved overall water intensity for the mill.

In addition to the amount of water withdrawn and consumed by our processes, we also measure the level of solids (known as Total Suspended Solids, or TSS) and BOD and COD levels (Biochemical Oxygen Demand and Chemical Oxygen Demand), which measure organic pollutant levels. Our goal is to maintain levels at least 10% below national and/or regional limits for water quality. Online measurements are taken at our waste water treatment facilities before water is released back to the original source, in addition to physical laboratory testing on site and regular independent third party analysis.

Through our water foot print and monitoring activities, we have identified areas in which we can improve fibre recovery, predominantly through improving screening and waste water treatment equipment. Such improvements represent a win-win, improving the quality of waste water with reduced suspended solids and reducing the amount of fibre in waste streams.

Waste

APP are committed to reducing solid waste, diverting waste from landfill and employing the highest standards for waste handling. Our most significant waste streams are ash residue created from onsite power production process and sludge waste from pulp and paper making process, typically collected during the waste water treatment stage.

	Unit	2016	2015	2014
Total waste	tonnes	1,290,435	1,225,526	1,222,995
Landfilled waste	tonnes	417,898	279,168	369,606
Waste intensity	t/t	0.13	0.13	0.13

Since establishing our Vision 2020 Roadmap goal of 25% reduction in solid waste to landfill, based on 2010 baseline, we have achieved 17% at the end of 2016. We experienced an increase in landfilled waste in 2016 compared to the previous year as a result of increased coal consumption at Indah Kiat Perawang. Due to the remote location of the mill, to meet the productions energy requirements power must be generated on site. Higher coal usage, due to challenges in the availability of other fuels creates additional coal fly ash, a waste product from burning. We recognise the challenge of delivering continued improvement to meet this goal, the most significant being the licenses required to divert waste to third parties and the availability of suitable local third parties to handle our waste materials. In recent years, we have invested in improving on site waste handling facilities at our mills, creating more space for waste segregation and additional facilities to pre-process waste materials.

For our integrated pulp and paper mills, waste generated from the process of producing pulp and forest harvesting operations can be used as a fuel source for on-site power generation. Black liquor, bark and other residue directly replace fossil fuels, reducing the carbon intensity of our mills. During 2016 our integrated mills utilised over 8 million tonnes of this waste by-product.

Indah Kiat Tangerang is a zero-landfill mill, with all waste streams recycled on site or sent to a third party for further processing. Sludge recovered from the waste water treatment plant provides a base material for chip board and pallet covers, in addition to providing as a complimentary fuel for the boiler, thus, reducing the use of fossil fuels for onsite power production. Ekamas Fortuna also runs a zero waste to landfill site. Sludge is recycled into lower grade papers for industrial uses, such as shoe sole production.

Supplier Compliance Audit

In recognition that APP's focus on supply chain sustainability has been primarily centred on the fibre supply chain we began to expand coverage to other products and services in 2016. We developed a tool to assess suppliers' sustainability performance, drawing upon various international standard including ISO 9001, ISO 14001, ISO 50001, business ethics frameworks and health and safety standards.

PEOPLE AND COMMUNITY

SECTION 3

OUR COMMUNITIES

Our community programmes can be separated into three very distinct areas, defined by our operations and the needs of the communities in which our operations have their greatest impact.

Our mill programmes are run locally by our dedicated mill CSR teams, tailored to the needs of the local community requirements within the areas we operate. Forestry community programmes are developed and managed in tight collaboration with our fibre suppliers, designed to integrate into wider sustainable forest management plans and enhance forest protection. The third set of programmes are led at a group level and are strategically designed to support the wider sustainable development goals of APP and Indonesia.

In 2016, we worked hard to increase the number of people who receive benefits from social program through increased effectiveness of programs planning and implementation

with our partners and supporters. Our approach to forestry community projects, in particular, changed considerably in 2016 as we shifted focus towards tightly integrating community projects with forest protection with a more participatory approach.

All APP mills and all 38 fibre concessions have undertaken individual social impact assessments. We ensure each mill has integrated their programmes with local government planning to maximise positive impact. The results also provide an input into the social requirements for PROPER Green standard (see page 35). Indah Kiat Perawang and Lontar Papyrus are located within the same area as our forestry suppliers, so in 2016 we worked hard to ensure the two plans were aligned and complimentary. We also stepped up the intensity of consultation with our stakeholders, documenting issues as they were raised, verifying programme results more precisely and being more prioritised in our approach.

MILLS' CSR PROGRAMMES

Guided by our group level Sustainability and Stakeholder Engagement team, our mills are free to design and implement their own CSR programmes in response to local needs. Our diverse operations mean a common approach is not possible, each mill must carefully consider the local population, economics and the challenges unique to their situation and respond accordingly.

Each mill develops a five-year strategic CSR plan, informed by social impact assessments integrated with government data and planning policies. On an annual basis, each CSR projects is planned - within the context of the five-year strategy - implemented and evaluated against a clear set of indicators. Recommendations for improvement are fed back into both the five year strategy and annual planning process as required.

All mill CSR programmes align with SDGs, with a focus towards goals SDG 1 (No poverty), SDG 3 (Good health and wellbeing), SDG 4 (Quality of education) and SDG 6 (Clean water and sanitation).

Indah Kiat Serang developed a circular economy concept that focused on improving the quality of education

available to the local community through utilisation of a major waste stream. The mill CSR team identified poor quality infrastructure and furniture was negatively impacting the quality of education amongst schools within the mills vicinity. Working in collaboration with local government and village authorities a scheme was developed to use waste wood containers from the mill to build desks and chairs. Carpentry training, equipment and facilities were provided to establish the programme. Since the project began in 2012, 2,680 students have benefited from new desks and chairs, youth employment opportunities have been provided and the schools no longer must allocate budget for furniture, enabling them to allocate this budget elsewhere. The mill also benefits in a similar way; reduced waste handling costs increase the budget available for other CSR programmes.

Lontar Papyrus has also focussed on supporting local educational needs. The mill has enabled a local school to become financially self-sufficient and cover the buildings running costs through a business selling water to the local community. Water is collected from the school well, processed through a UV light system and then sold as safe drinking water. The future is to expand the business into selling bottled water, establish a savings and loans business through a financial cooperative and a motorcycle repair business.

Mill CSR Highlights

1 NO POVERTY

- Collaborating with Department of Agriculture and farming groups, Indah Kiat Serang provided improved water pumps to local farmers, increasing the quality of their harvest, time required to irrigate land and improving harvest yield 60%.

- Indah Kiat Perawang developed a microfinance model to provide support to local SMEs and provided training in sustainable agricultural practices. The goal was to reduce unused productive land, encourage farming for food crops that support the local community and can provide a faster seed to harvest time and stimulate interest in growing fruit plants that are not season dependant such as guava and papaya.

- Soft loans, where debt is repayable once the organisation has become established and at low interest rates are provided by Indah Kiat Perawang. In addition to financial support, mentoring and training is provided to help establish and run a fish breeding community organisation. The income, of around IDR 6M a month is twice the local minimum wage and supports diversification into other practices to further supplement the income, such as rearing goat livestock.

- The animal husbandry programme is a long-established initiative at Indah Kiat Perawang. A joint project involving the mill, local government and the Agricultural Office

of Tualang provides an additional source of income for 14 people, typically IDR 1m per month. Recognised by the government as a project that can be successfully scaled up, additional assistance is being provided to expand the programme in Riau province.

- We supported the development of a catfish fishery, empowering the community and youth groups through securing a means of income in the communities neighbouring the Indah Kiat Tangerang. The mill supported the infrastructure development, while the government provided technical support and training. Fish are sold to restaurants and employees of the mill.

"The project has provided me with much needed additional income, by the second harvest this was providing IDR 600,000 profit, which I expect to increase again with the third harvest".
Mr. Sayuti, local farmer

- Training was provided at the Rumah Pintar adjacent to our Tjiwi Kimia mill for mothers who were accompanying their children at the Rumah Pintar, teaching handicraft skills. Handbags and key chains are produced and sold online and through local stores, providing an additional IDR 1m income.

3 GOOD HEALTH AND WELL-BEING

- Medical centres are situated on-site at all our mills, providing healthcare facilities to both employees and their families through community health centres and infant healthcare centres. Services provided include disease immunisation, vitamin dispensing and training on nutrition, infant and maternal health monitoring

- To address the lack of access to healthcare in remote communities, Lontar Papyrus cooperates with local health clinics to provide a floating clinic service. In addition to medical advice, the service also dispenses medicine

5 GENDER EQUALITY

- Dedicated training for women farmers group provides educational support, facilities and start up loans. 17 farmers are currently enrolled in the programme which provides an additional income of IDR 4m per month

6 CLEAN WATER AND SANITATION

- Indonesia's dry season can create a challenge for communities who rely on wells as their primary water source. Indah Kiat Serang worked with local communities to build 10 water wells during 2016, benefiting 4000 people. Since the project began in 2012 over 30,000 people have had their access to clean water improved. A similar programme is also supported by our Tjiwi Kimia mill.

- The community living around the Pengabuan River relies upon this water source to provide both drinking and sanitation needs. To build wells to provide water would require depths of 300 metres, which is a technical challenge. Lontar Papyrus, in collaboration with the government drilled wells and built an infrastructure of pipes and water tanks. The programme stimulated one local group to establish a business selling clean water, further enhancing local economic empowerment.

11 SUSTAINABLE CITIES AND COMMUNITIES

- As one of the closest communities to the Indah Kiat Perawang mill, Kampung Pinang Sebatang was negatively impacted by the construction of a new road bridge, meaning the village was no longer a focal point for ferry crossings. To limit the economic impact and drive visitors back to the area, a city park was developed, including a jogging track and children's play area.

13 CLIMATE ACTION

- A delicate coastal ecosystem, to the north of the Indah Kiat Serang, faces an ever-increasing risk of coastal erosion. A programme of mangrove planting and conservation, covering 10 ha and 100,000 trees, has been established to restore sand levels and enhance natural protection and boundaries. Despite the long-term nature of the programme, benefits are already being realised. Sea life has started to return to the area, including seaweed which once established can be sustainably farmed and sold by the local community for additional income

- Our Indah Kiat Tangerang mill supported the local community in developing a temporary waste disposal area, and encouraging communities to dispose of waste responsibly, reducing negative impacts from poorly discarded waste material such as flooding and spread of diseases.

GROUP-LEVEL CSR

At a group level, APP actively supports a range of partnerships to provide community based programmes specifically addressing some of Indonesia's sustainability challenges. Our support includes financial donations, active engagement and using our scale to facilitate the sharing of best practice.

UNESCO funded water and waste pilot community project, in association with Habitat for Humanity Indonesia (HfHI) and Indonesian Institute of Sciences (LIPI)

The Pari Island to the North West of Jakarta suffers from limited water supply and is prone to extreme weather and rising sea levels. The island also lacks a reliable and safe waste handling infrastructure. A pilot study in the area was initiated to assess; can improving community participation and enhancing awareness through capacities building on water management using innovative technology improve the access to water? If so how can it be scaled up to larger communities with similar challenges?

Initiated through funding secured through UNESCO's IFIT (Indonesia Funds in Trust) and in partnership with the Indonesia Global Compact Network (IGCN), Habitat for Humanity Indonesia (HfHI) and Indonesian Institute of Sciences (LIPI) were selected as delivery partners. As Chair of the IGCN's Indonesia Water Mandate Working Group, APP provided co-funding and technical support for the project.

In the initial stages of the project the aims and outcomes were explained to the community, an essential step to build trust and demonstrate how the outcomes will positively impact their quality of life. Interactive training sessions were held on WASH (Water, Sanitation and Hygiene) to promote good practice.

A child friendly session was also held in the form of storytelling to engage a younger audience. Events to raise awareness in the best technical solutions for water management in small island communities was provided by leading experts in this field. Applications that included biopore holes, infiltration wells, SIMBAT (Deposits and Artificial Well for Groundwater), vegetative and rainwater harvesting. Practical guidance on plant species that are less water intensive, such as breadfruit and bamboo was also provided. Waste management training demonstrated some of the most innovative technologies available, including organic waste compacters were shown, explaining the type of waste it can process, how to use the equipment and what the by-products can be used for.

In 2017 the project will continue with training and look to further engage community on the benefits of technology and how to ensure tourism (the island's main income) is responsible and secured. The long-term vision is to create an alternative strategy for water and waste resource management on the island, and to raise awareness of these critical sustainability issues with visitors to the island.

APP and Indonesia Global Compact Network (IGCN)

In support of wider global UN commitments, including the SDGs and APP's role within the UN CEO Water Mandate, we actively support the IGCN through their work in Indonesia.

We commemorated World Water Day 2016 through a multi-stakeholder initiative involving the Ministry of Environment and Forestry, other IGCN members, water supply companies and a local NGO Gerakan Ciliwung Bersih. The programme was focussed around the Ciliwung river bank and the community living around it, with the aim of improving water quality, promoting tree planting to prevent bank erosion and provided training on eco-tourism. We also supported an event held by the Universitas Indonesia and UNESCO, promoting our water programmes in addition to those of our fellow IGCN members and explained our role in the Indonesia Water Mandate Working Group.

"APP are clearly committed to supporting the Indonesia Global Compact Network, taking an active involvement amongst members in supporting programmes that address the UNGC 10 principles." Josephine Satyono, IGCN Executive Director

APP and Habitat for Humanity

Established in 1976, Habitat for Humanity is a not-for-profit organisation dedicated to addressing poor living conditions by building simple and affordable homes. APP has partnered with Habitat for Humanity Indonesia since 2011. Since it was founded in 1997, the organisation has supported over 45,000 families, improving their access to safe secure housing, educational facilities, water, day to day hygiene and disaster relief.

How does APP support Habitat for Humanity Indonesia?

Following the devastating earthquake in the Aceh province of Indonesia, APP supported Habitat for Humanity Indonesia in providing immediate disaster relief. In the emergency and initial recovery phase we focussed on securing access to water, providing clean water tanks to 10 villages, ensuring 8000 people had access to clean water. Clearing kits were distributed, containing the equipment required to clear damage houses. Generators, fuel and cabling were supplied to assist in the rebuilding efforts, in addition to guidance on how to rebuild housing to a standard that would be more earthquake resistant. Our support was not only physical, as physiological support was provided to children affected by the disaster and evacuation training was also provided.

Other highlights

- Across four villages neighbouring the Indah Kiat Perawang mill, we focus on improving access to clean water, promoting self-sufficiency and improving awareness in good hygiene practices. 185 bio sand filters and a well were constructed to provide a clean and safe water source. WASH training for 131 people was provided and public sanitation facilities were built to improve hygiene. To improve living standards and resistance to weather, 99 houses were renovated with new roofs.
- Three clean water and sanitation facilities were built in Karawang, in addition to 89 people were provided with WASH training. The community school was also renovated.
- The Ragas Mesigit community, located in close proximity to our Indah Kiat Serang mill, historically used the local river for drinking and sanitation purposes. Water and sanitation facilities were constructed and hygiene training provided.

Muara Bengkal Village in Riau

Situated next to a concession, the village is partially within the concession area, which raises the risk of land conflict. Of the 185 households, 148 rely on agriculture as their main source of income. The IFFS programme is focussing on paddy cultivation, horticulture, farming and vocational skill (to support transportation).

Pinang Sebatang Barat Village in Riau

The community is identified as being at higher risk of fire and encroachment, being situated partially within a concession. 135 of the 1,250 households rely on farming as their main source of income, the IFFS programme is focusing on horticulture, farming and vocational skills.

Supporting Indonesia Free of Plastic Waste 2020

Reducing plastic waste has been identified as one of the critical steps in reducing the country's waste. APP supports the initiative in two ways; through driving awareness in reducing and recycling, as well as promoting the re-use of plastics as demonstrated by our handicraft programmes.

Working with the Indonesian Environmental Scientist Association (IESA), we will run awareness raising workshops on Serang, Tangerang and Malang, open to mill employees and local communities. We will aim to promote best practice, highlight the community benefits of a plastic waste bank to provide additional financial income. Our longer-term goal is to establish plastic waste banks across all APP mills, both to provide the recycling infrastructure but also drive awareness in the local community. A policy paper, recommending how the programme could be enhanced further will be developed and submitted to the Ministry of Environment and Forestry.

APP announced a partnership with CIFOR and ICRAF in Brunei at the Asia-Pacific Rainforest Summit to develop a model for implementation of IFFS, depending on the characteristics of villages involved. The first step will be to create a typology of the villages, using information from 500 villages within APP concessions. The aim will be to classify these into 5 or 6 different types, and to design an effective approach for implementation of IFFS according to these village types. Variables include soil types, community size, natural resources and other economic and environmental variables. The model will be made freely available to other parties and will formally commence in 2017, with initial results expected in early 2018.

To read more about how community programmes support our wider commitments towards sustainable forest practices, see APP's Pulpwood Suppliers section on page 23.

FORESTRY COMMUNITY PROGRAMMES

Launched during COP21 in 2015, the Integrated Forestry and Farming System (IFFS), also referred to as Desa Makmur Peduli Api (DMPA) has been designed to address encroachment, illegal logging and the risk of fires by including communities in initiatives that protect and rehabilitate natural forests, either directly or indirectly through a broad range of projects that drive community empowerment and reduce the community's dependency and pressure on forest land.

IFFS forms a critical component of ISFMP, promotes strengthening community relationships, address land disputes and land use conflicts, promotes forest protection and forest fire prevention, improve the local economy and improve food security. The aim is to cover 500 villages in 2020, investing up to $2m per year in the programme.

In 2016, APP rolled out the programme to 66 villages and plan to continue with 134 villages during 2017.

The villages have been selected based on the risk of forest encroachment, fire and social conflict. Our challenge is working in some more remote communities far away from government stakeholders and administration. To address some of these challenges we will recruit village facilitators and work on developing monitoring and evaluation process and work to improve stakeholder engagement. We must also work to establish the financial mechanisms required to channel investments, establishing community level institutions responsible for managing funds and overseeing agroforestry activities.

BUSINESS ETHICS

At APP we believe that upholding the highest ethical standards and integrity is key to all aspects of our operations and critical to our long term sustainability. We strive to act honestly and encourage employees to treat each other, our customers, suppliers, partners and communities fairly and with dignity.

APP's Business Code of Conduct was updated in 2016 and distributed in printed format across all our operations. The comprehensive document includes sections on employee diversity and non-discrimination, human rights, workplace safety and our Environment, Energy and Health Safety Policy. The code also sets out guidance on business practices, including gifts and entertainment (including instructions on how to use our Gift and Entertainment registering portal), political activity, conflicts of interest and money laundering. Separate sections dedicated to dealing with business partners, third parties and shareholders set out specific approaches for the parts of our business at greater risk of non-compliance.

As part of the roll-out of the new document, we carried out Business Code of Conduct training through a series of roadshows, covering all mills. We conducted bespoke training for specific functions too, covering outsourcing and security functions, Head Office, global sales offices and suppliers. 80% of our top management team and shareholders have also received dedicated training in 2016. The aim of this comprehensive training programme was to raise awareness of the revised code and work towards creating an open environment where all employees feel empowered to raise questions and concerns as part of their day to day work. We take every opportunity to remind employeesthrough messaging in the workplace and it is a compulsory part of induction training for all new employees.

Ethics Call Centre

The Ethics Call Centre provides a central point of contact for employees and external stakeholders alike to confidentially raise concerns. Issues can be raised by email, a dedicated website or phoneline. The reporting channel is featured on posters throughout our offices, on screen savers and on our company intranet to raise awareness and provide continuous reminders. We also include messaging on business cards, raising awareness of the channel to external stakeholders. We reinforce the message

to all employees that cases are handled confidently and retaliation is completely unacceptable and action will be taken against any employee who breaches this rule.

In 2016, we verified 138 cases through our whistleblower programme, 58% were reported internally, 29% externally and 13% anonymously. At the end of 2016, 67 cases resulted a formal written warning and 15 resulted in the dismissal of an employee. 30% of the cases were carried forward to 2017.

HUMAN RIGHTS

At APP we recognise aspects of our operations and that of our pulpwood suppliers present a risk of human rights violations. We actively address this risk, taking guidance from the United Nation's Guiding Principles on Business and Human Rights and the International Labour Organisation (ILO) in taking responsibility for identifying and mitigating these risks.

APP Policies explain our commitments, procedures and expectations on human rights

- APP Corporate Social Responsibility Policy sets out our overall commitment to human rights

- APP Employee Welfare Policy sets out how we respect and protect our employees' human rights, as well as our responsibility towards contractors

- APP Responsible Fibre Procurement & Processing Policy explains our commitment on wood legality and compliance by our fibre suppliers

- APP Forest Conservation Policy includes our grievance mechanisms through which stakeholders can raise concerns related to our fibre supply

Human rights issues in Indonesia are complex and multifaceted. APP carried out a group wide risk assessment in 2013 which identified the greatest risks relating to human rights lie within our supply chain, particularly the operations of our pulpwood suppliers. In some cases, we face issues where no precedent has been set, and no framework or experience is available so we must work to collaborate with our stakeholders to resolve issues and move forward.

We recognise the rights of indigenous peoples to occupy and use their land and we fully support and follow the principles of Free, Prior, and Informed Consent (FPIC). The development of our new OKI pulp mill in South Sumatra represents a significant investment for APP and we worked closely with the local community & NGOs to follow FPIC processes in the development of the mill site. We conducted workshops and held public consultations from the mill's planning stages through to site construction and production.

In our established forestry concessions, our service agreement was revised in 2015 to include human rights compliance. Our focus now is on improving monitoring procedures through a supplier scorecard system that draws upon sustainable forest management certification schemes such as FSC, PEFC and SVLK to include human rights indicators. We have made significant improvements but recognise more work is to be done. For details of policies and procedures introduced in 2016 around third party security contractors within our supply chain see APP's Pulpwood Suppliers section of this report.

We are committed to doing business transparently and disclosing grievances and our response through our FCP monitoring dashboard. Where appropriate we engage the support of independent third parties to facilitate this process and provide reports through the dashboard.

The greatest risks of child, forced or compulsory labour exist within our supply chain, particularly within our pulpwood suppliers. Ensuring our operations and those of our suppliers are free from child labour is part of our human rights commitment. The minimum age for employment at our mills is 18, and our Employee Welfare Policy includes specific child labour clauses.

For APP's own employees, we consider our focus areas to include the right to collective bargaining, health and safety, diversity and equality. You can read more about our approach to these issues in the Our People section of this report.

Business and Human Rights Implementation with Oxfam and Local NGO

Tightly aligned with our conflict management approach, explained in APP's Pulpwood Suppliers section of this report, APP recognised the need to identify and address the root cause of conflict within communities near APP and our pulpwood suppliers operations. Land use conflicts are the most common, hence the extensive focus APP has applied to developing their Free Prior and Informed Consent (FPIC) model. We chose our new OKI mill development as a pilot site, working closely with a local NGO and Oxfam to achieve our objectives, share best practice and ensure the approach we developed was scalable elsewhere in Indonesia.

"Through its policies, in particular its commitment to implement free, prior and informed consent (FPIC) in its own operations and those of its suppliers, APP has set an important benchmark against which it can be held to account by itself and its stakeholders."

Dini Widiastuti, Economic Justice Programme Director for Oxfam in Indonesia

Business & Human Rights Working Group

APP is playing an active role in the Business and Human Rights Working Group (B&HRWG), initiated by Indonesia Global Compact Network (IGCN). The group was established to promote equitable business and human rights respect within organisations and support Indonesia companies adopt the relevant global frameworks. APP is committed to sharing best practice with other organisations and using the opportunity to actively collaborate and achieve our shared goals.
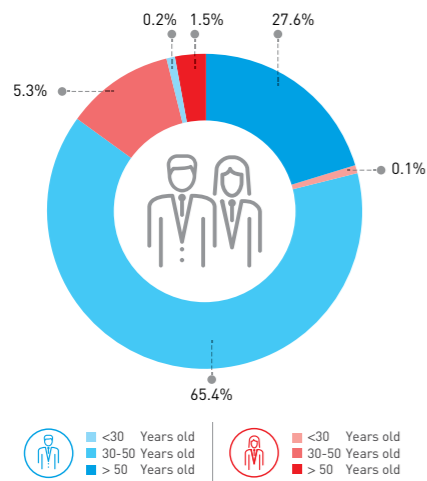
OUR PEOPLE

APP's ambition is to create value to society through the employment opportunities we provide, creating the opportunities for all individuals to prosper and succeed. We believe each employee should enjoy their work, feel empowered to develop their skills, understand how their role is meaningful for the wider organization, feel financial compensation is appropriate and respond positively to developing a long-term career at APP. A safe and productive workforce is critical to the long-term sustainability of APP. Ensuring every employee, contractor and visitor to our sites returns home safe is our number one priority. Safety remains our focus and 2016 has seen several critical improvements that seek to address underlying safety culture across our mills.
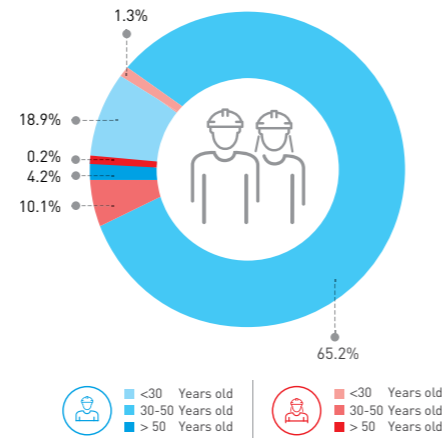
Our Workforce at a Glance

	2016	2015	2014	2013
Total	30,749	38,159	38,380	40,072
Male	27,234	33,371	33,457	34,774
Female	3,515	4,788	4,923	5,298

Management Composition in 2016

0.2% 1.5% 27.6%
5.3%
0.1%
65.4%

	<30 Years old		<30 Years old
	30-50 Years old		30-50 Years old
	> 50 Years old		> 50 Years old

Non Management Composition in 2016

1.3%
18.9%
0.2%
4.2%
10.1%
65.2%

	<30 Years old		<30 Years old
	30-50 Years old		30-50 Years old
	> 50 Years old		> 50 Years old

APP's Welfare Policy sets out our management approach to workplace discrimination, health and safety, medical facilities for employees, training and education, human rights and commitments to support contractors and suppliers, covering the details you will read about in this section of the report. All employees have the right to join labour unions and collectively bargain terms of conditions of employment. We respect this right and actively support such organisations as a valid channel for our management teams to engage employees and addresses issues of concern. In 2016, 90% of our employees belonged to a labour union.

In terms of overall employee satisfaction, we worked hard in 2016 to clarify job roles and responsibilities across APP. We believe this is critical to long term job satisfaction, invoking a sense of purpose and pride in the job, acquiring a competitive advantage and building a company that is attractive to prospective employees. All employees receive annual performance and career development reviews, a process that has become more comprehensive since becoming part of APP's Transformation House programme (see page 20). We are already seeing results, our employee engagement survey showed a 15% increase in overall satisfaction at the end of 2016.

Equal Rights for All Employees

APP provides a fair and equal workplace for all employees, we are committed to ensuring all employees are treated equally irrespective of gender and race. We provide reporting channels and mechanism to report any concerns. There were no confirmed cases of discrimination in 2016.

Equal pay and benefits, including annual leave, medical benefits and pension provision are a critical part of long term employee satisfaction and employee retention. Each of our mills pays a salary equal to or greater than the locally determined minimum wage, irrespective of gender.

Gender diversity proved a challenge in 2016 due to the workforce reduction programme. The number of females in all levels of the organisation was 11%, down from 13% in 2016. However, we increased the diversity at management level with 7% of our roles filled by females, up from 6% in 2016.

We maintain the commitment to improve gender diversity across our organisation, recognising the inherent limitations that at an operational level the physical nature of work we provide is less attractive to female employees.

New Employee Hires & Turnover

New employee hiring rates decreased in 2016 and turnover rates increased due to the headcount reduction programme in place across the organisation (see page 54).

		Unit	2016	2015	2014
New employee hires	Total	%	3	4	4
	Male		3	5	3
	Female		2	2	2
Turnover	Total	%	27	7	7
	Male		26	7	7
	Female		39	5	9

APP faces two challenges in recruiting new employees. On one hand, we aim to recruit locally as a priority to benefit the local community, yet we must also ensure for technical manufacturing roles that we recruit those with relevant skills and experience. Therefore, our approach is to favour local candidates in cases there they have equal competence and experience. The same approach applies to recruiting for senior roles, although this presents a significant challenge and the majority are recruited nationally or internationally to meet our skills and experience requirements.

Through offering attractive benefits we create a workplace that both retains and attracts new employees. As well as attractive remuneration, employees benefit from paid leave, parental leave, sabbatical leave, health insurance, pensions and career development opportunities. We also provide an incentive plan for outstanding achievement linked to our continual efforts to retain talented employees. Some benefits are provided to permanent employees only and this varies by location. Talent retention remains an area of focus for us, particularly at our mills that are in remote rural regions. We provide daily allowances to employees working at mills outside of their local vicinity and provide a scholarship programme linkedto the Academy of Pulp and Paper Technology (ATPK) to attract talented young employees to employment at our mills.

Training

One key output of the APP Transformation House programme (see page 20) has been a compressive review and restructure of our approach to training. We have improved the diversity of training on offer, standardised training across our mills in areas where the content is common and developed our own in-house academy. In 2016 we provided 32 hours of training per employee, up from 17 hours in 2015.

2016 was the first full year of implementation of the APP Academy, a group wide training and development programme designed to build a world class workforce, retain talent and deliver long term results for our organisation. One aim was to harmonise training across the group and support the standardisation of Standard Operating Procedures's across all mills and build the capability of our employees. We have developed internal certification too, awarding over 300 in 2016. The academy comprises of three distinct tracks, with over 2,100 participants throughout the year.

- Marketing and sales school, 589 trained
- Energy and pulp production, 892 trained
- Paper production, 751 people trained

A separate leadership programmes for divisional management to supervisor level continues. 4,300 employees passed through this programme in 2016. Amongst these we have identified career talent and have developed a bespoke approach for these individuals.

In 2017 we have committed to expand the diversity of training to continue to develop a capable, productive, motivated and engaged workforce. Our existing programmes will expand, adding an additional maintenance school to the APP Academy. We will also begin to trial innovative methods of training delivery, including e-learning.

We actively recruit new employees from several academies in Indonesia with specialist pulp and paper qualifications. We also target chemical and mechanical engineer graduates for whom we offer specialist training in pulp and paper technology. At any one time we have between 40 and 60 scholarships students enrolled.

Occupational Health and Safety

2016 saw the full year of implementation of our revised management approach to Health and Safety, introduced in 2015. Each mill established a safety function reporting directly to the mill manager who in turn was made accountable to the CEO and senior management for Health and Safety performance. We believe this change has made a positive impact on performance and enabled us to refocus our attention on improving underlying safety culture across our organisation. We have invested in training and improving infrastructure. We continue to develop our approach and not stand still and will now work towards standardising H&S reporting and conducting safety leadership training.

		2016	2015	2014
Injury rate	M	4	3	11
	F	2	1	2
Lost day rate	M	36	77	180
	F	24	10	31
Fatalities	M	3	4	8
	F	0	0	0
Absentee rate[7]	M	1%	0.12	0.02
	F	1%		
Frequency rate[8]		18	13	17
Severity rate		17	35	81
Lost day rate		35		
Occupational disease rate		0	0	0

APP suffered 3 fatalities in 2016. At Indah Kiat Perawang one employee fell into a paper machine. At Indah Kiat Serang a contractor was hit by a forklift truck and at Tjiwi Kimia a contractor fell from height. In all cases a full investigation was carried out and corrective actions put in place. In response to the incident at Indah Kiat Perawang we took the decision to no longer allow temporary transfer employees from other mills to carry out high risk tasks.

All mills are OHSAS 18001 certified, the leading global standard in Occupational Health and Safety (OHS) certification. All mills are also SMK3 certified, the mandatory OHS management system in Indonesia, following Ekamas Fortuna receiving accreditation in 2016.

Developed in 2016, our internal APP OHS Management System incorporates key improvement roadmaps tailored to each mill. By having a clearly defined management system in place to identify and control health and safety risks, we can minimize risks to our workforce, contractors and visitors. The OHS Management System will enable each mill to put in place processes for continually reviewing and improving OHS.

We ran a Safety Culture Programme in 2016 with a focus on housekeeping improvement and better incident management, including reporting and incident classification. We believe that safety culture is critical and something we must get right for performance to continue to improve. Our annual APP OHS Conference was held at Indah Kiat Perawang this year, bringing together all Safety Managers from around the company to report on performance and share experiences and best practices. Active at all our mills is a joint safety committee, representing the whole workforce and providing one mechanism for concerns to be raised and safety messages communicated.

From the beginning of 2016 we made the decision to bring contractor safety under the responsibility of APP. We took this step in a response to the number of contractor incidents not showing the long-term improvements that APP is delivering for our own employees. We require all contractors to have specialist health and safety training and if required, certification for specific high risk activities. OHSAS 18001 certification for third party contractors over a set commercial value is another step we took to increase the quality of safety.

Trade unions form an integral part of our engagement with employees and we actively engage with these organisations to ensure issues are raised and dealt with effectively.

[7] Absentee rate reported in line with GRI Standard requirement from 2016, including sick leave, lost day due to accident and absence without leave
[8] Includes lost time accidents only

Last year the main issue raised was related to the availability and quality of Personal Protective Equipment (PPE). Providing a more immediate communications channel, HSE Alert (or HSEA) provides the ability to share incidents, incident reports, remedial actions and other revenant experiences between mills.

Medical centres are situated on-site at all our mills, providing healthcare facilities to both employees and their families. Compulsory annual health check-ups including screening for occupational diseases are provided through these facilities. APP provides awareness raising sessions in collaboration with local government on medical issues including HIV/ AIDS, dengue fever and malaria through clinics for employees, their families and the surrounding community.

2017 activity plan

- Roll out Fire and Explosion Risk Assessment, Vendor Management Assessment and Safety Leadership Diagnostic program at all Mills

- Roll-out Leading and Lagging reporting across all mills

- Develop KPIs to measure safety culture and behaviour

- Improve behavioural safety through behaviour based safety (BBS) program.

- Develop safety data management system

- Continue to improve safety standard operating procedure

Headcount Reduction

To improve the long term financial stability of APP, we ran a programme of workforce reduction through 2016, affecting 10,000 employees across our organisation. We took this difficult decision to improve the productivity of our workforce and address the sudden skills gap we anticipated with an aging workforce, symptomatic of our organisation that grew rapidly in the 1980's. Taking a tailored approach at each location we identified employees approaching retirement age and provided enhanced pension arrangements. Other employees affected were offered financial severance packages. The headcount reduction programme was supported by retraining programmes, including mindset training, guidance on financial planning

and vocational training based on local employment opportunities.

At Indah Kiat Perawang, 380 people took part in such training. We partnered with a local training partner and worked closely with the mills labour union to ensure their concerns were addressed. At Tjiwi Kimia we involved the labour unions and developed a training programme which integrated into the mills local CSR strategy. Employees were trained by ex-employees who had successfully found other employment, covering topics such as entrepreneurship and practical guidance on how to establish culinary, retail or online businesses.
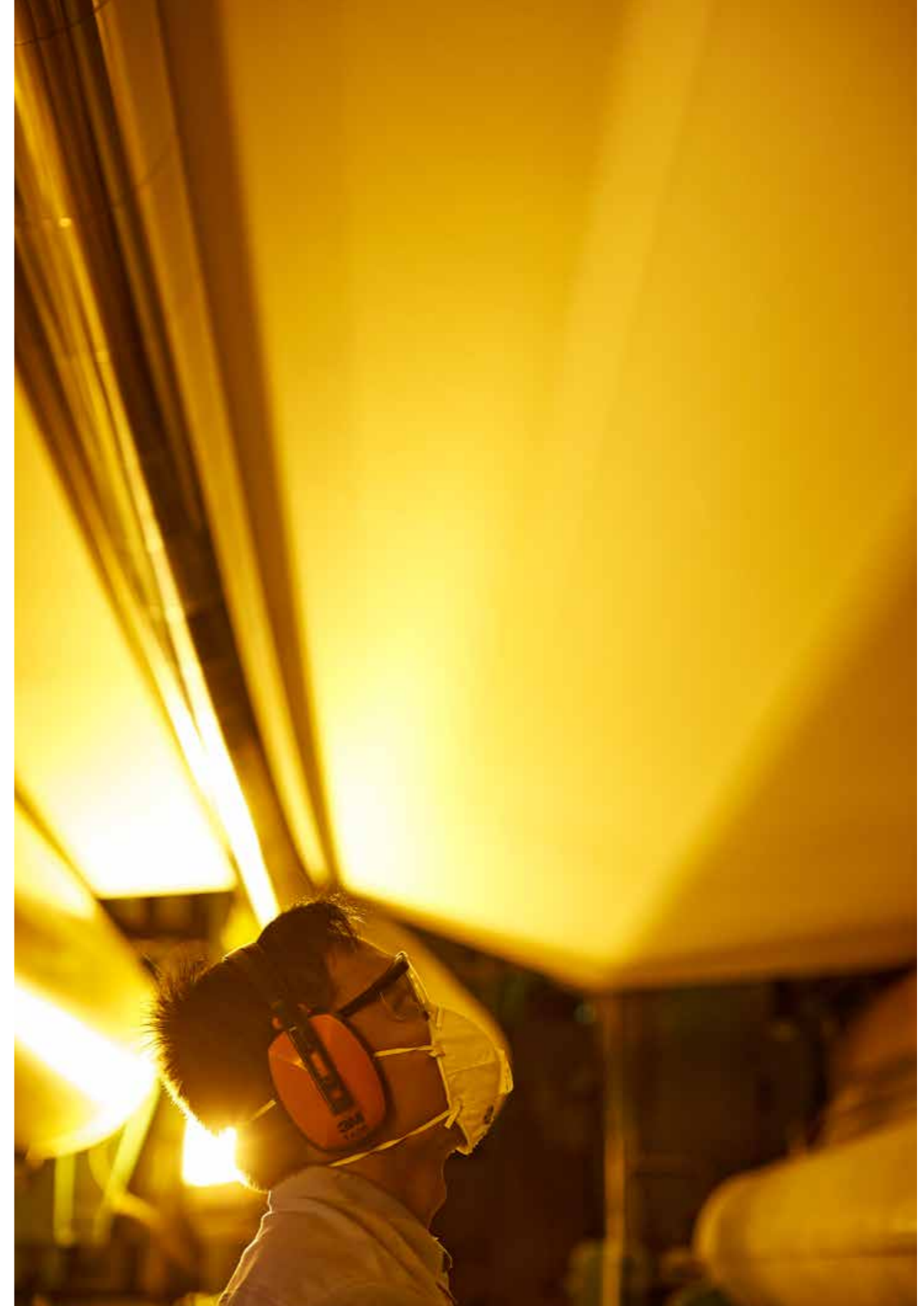
SECTION 4

ABOUT THIS REPORT

ABOUT THIS REPORT

Asia Pulp and Paper's Sustainability Report 2016, published in September 2016, communicates a summary of our approach and performance against our Sustainability Roadmap: Vision 2020 and, within the roadmap, our Forest Conservation Policy (FCP) commitments. The contents of this report should be read alongside the information provided in the sustainability section of the APP website. Relevant links are provided throughout this report.

This report continues our commitment to annual sustainability reporting. Our most recent report, the 2015 Sustainability Report, was published in September 2016.

REPORT SCOPE AND BOUNDARY

Unless stated otherwise, information in this report relates to the calendar year 2016. Started in 2016 we reported mill production capacity based on quoted capacity in relevant legal documentation (business permits).

APP is a brand name under which our products are sold. Purinusa Ekapersada is the brand holder of APP. The scope of the report covers APP pulp and paper manufacturing operations in Indonesia.

The following operational facilities are within scope of this report.

Legal Entity	Mill
PT Indah Kiat Pulp & Paper Tbk	Indah Kiat Perawang
	Indah Kiat Serang
	Indah Kiat Tangerang
PT Pabrik Kertas Tjiwi Kimia Tbk	Tjiwi Kimia
PT Pindo Deli Pulp and Paper Mills	Pindo Deli Karawang (mill 1, 2 and 3⁹)
	Pindo Deli Perawang
PT Lontar Papyrus Pulp and Paper Industry	Lontar Papyrus
PT Ekamas Fortuna	Ekamas Fortuna
PT The Univenus	Univenus Perawang

Sites which do not manufacture pulp or paper and head office are excluded from the report. APP will consider reporting on these functions in future reports. Due to organisational structure and differing stakeholder priorities, APP China publishes a separate Sustainability Report which can be viewed here.

One of the highest priority issues for our stakeholders is the activities of APP pulpwood suppliers. Sinar Mas Forestry is the management team that represents APP pulpwood suppliers, currently covering 33 pulpwood suppliers who between them manage 38 concessions (forest management units based on government forest concession licenses).

Despite not being under APP's direct ownership (although we have shared ownership in six of our suppliers), we have a responsibility to manage and monitor their activities, therefore details of our approach are included in the scope of this report for the benefit of communicating these issues to our stakeholders transparently.

Another area of interest for our stakeholders in 2016 was the development PT OKI Pulp & Paper Mills (known as OKI). Although not yet fully operational we have reported on the areas of concert for our stakeholders; maintaining our FCP commitments once the mill is operational and our approach to Free Prior and Informed Consent (FPIC) in developing the mill site. Our intention is to report fully on OKI mill in our 2017 Sustainability Report.

⁹2016 was the first year full year data was available for inclusion in the report.

DEFINING REPORT CONTENT

The content and quality of this report is guided by the latest Global Reporting Initiative Standards (GRI Standards). We apply the guidelines and associated indicators to ensure we report against our relevant economic, social and environmental impacts and mitigation activities. We have assessed the main impacts in relation to the GRI Standards material topics and how they relate to APP and our supply chain as follows.

APP issue area	GRI Standards topic	Impact boundary		
		APP suppliers	APP own operations	APP customers
Carbon emissions	Emissions	V	V	
Community engagement	Local communities	V	V	
Environmental management	Effluents and Waste, Emissions, Energy, Environmental Compliance, Materials	V	V	
Water use & discharge	Effluents and Waste		V	
Waste	Effluents and Waste		V	
Sustainable fibre sourcing	Biodiversity, Emissions, Environmental Compliance, Human Rights Assessment, Indirect economic impacts, Local communities, Rights of Indigenous Peoples, Supplier Environmental Assessment, Supplier Social Assessment, Water, Security Practices, Child Labor, Forced or Compulsory Labor, Supplier Social Assessment, Procurement Practices	V		
Human Rights	Human Rights Assessment	V	V	
Forest fires	Additional non GRI topic, addressed in dedicated Integrated Fire Management section	V		
Energy use	Energy		V	
Indirect economic impacts	Indirect Economic Impacts	V	V	
Transport	Emissions		V	
Biodiversity	Biodiversity	V		
Marketing	Marketing and Labeling			V

APP issue area	GRI Standards topic	Impact boundary		
		APP suppliers	APP own operations	APP customers
Other air emissions	Emissions		V	
Corporate governance	General disclosures		V	
Noise	Environmental Compliance		V	
Conflict resolution	Rights of Indigenous Peoples, Human Rights Assessment	V		
Product labelling & certification	Marketing and Labeling			V
Health & Safety	Occupational Health and Safety		V	
Diversity and equal opportunites	Diversity and Equal Opportunity, Non-discrimination, Market Presence		V	
Transparency	Additional non GRI topic, addressed in Business Ethics section	V	V	V
Economic performance & impact	Economic Performance, Market Presence		V	
Talent retention	Employment		V	
Anti-corruption	Anti-corruption		V	
Governance	General disclosures		V	
Local recruitment	Employment		V	
R&D	Additional non GRI topic, addressed through descriptions of growth & yield improvement programme	V		
Business ethics	Anti-competitive Behavior		V	
Employee welfare	Freedom of Association and Collective Bargaining, Labor/Management Relations		V	

This report also serves as our Communication on Progress (COP), as part of our commitment to the UN Global Compact, its ten principles and additionally the CEO Water Mandate.

This report has been prepared in accordance with the GRI Standards: Core option and has been externally assured to the internationally recognised AA1000 (AS) 2008 standard. We continue to use independent external assurance of our report to ensure credibility and the accuracy of our data and claims. The assurance statement covering this report is presented on page 75.

If you have any questions or feedback on this report we would be pleased to hear from you.

sustainability@app.co.id

GROUP ENVIRONMENTAL DATA TABLE

			2016	2015	2014
Production	Pulp	tonnes	3,879,000	3,783,000	3,606,000
	Paper[1]		3,050,000	2,927,000	4,927,750
	Stationery		206,000	202,000	189,000
	Tissue[2]		602,000	421,000	366,000
	Packaging		2,139,000	2,120,000	-
	Total (excl chemicals)		9,876,000	9,453,000	9,088,750
	Chemicals		2,413,491	2,426,536	1,819,936
	Total		**12,289,491**	**11,879,536**	**10,908,686**
Materials	Total raw material for pulp	tonnes	14,527,448	14,940,156	14,776,456
	Total raw material for chemicals		3,020,961	5,023,787	3,777,487
	Total raw material for paper		4,981,583	4,872,709	4,545,298
	Total raw material packaging		267,407	135,318	158,411
Energy	Coal	GJ	103,035,123	102,141,191	100,705,720
	Diesel Oil		254,897	606,277	715,372
	Industrial Diesel Oil		77,866	65,214	32,142
	Marine Fuel Oil		186,178	202,579	104,488
	Gas		16,439,479	17,817,451	17,771,724
	Total non renewable (direct)		**119,993,543**	**120,832,711**	**119,329,448**
	Bark		24,769,435	21,925,752	33,967,199
	Black Liquor		80,579,899	81,831,431	65,245,030
	Sawdust		257,618	216,442	222,393
	Palmshell or Crushed Palm Shell		113,822	197,269	123,258
	WWT Sludge		723,720	676,624	1,135,871
	Biogas		79,367	84,394	70,245
	Empty fruit bunches (tankos)		212,722	234,398	23
	Total renewable (direct)		**107,894,176**	**105,620,644**	**100,764,018**
	Purchased electricity		7,544,696	6,491,174	4,096,733
	Total energy consumption		**231,179,764**	**232,944,529**	**224,190,199**
	Energy intensity	GJ/t	27	27	27
Carbon[3]	Scope 1*	tCO₂e	10,528,854	10,664,469	10,488,246
	Scope 2*		1,276,976	1,156,518	1,102,739
	Biomass		10,808,641	10,538,677	10,275,009
	Carbon intensity	tCO₂e/t	1.35	1.40	1.39
Water	Total water withdrawn by source	m³	221,369,805	234,641,177	243,258,925
	Percentage water recycled	%	19	22	19
	Effluent discharge to river	m³	193,951,948	203,330,278	199,093,214

			2016	2015	2014
Waste	Landfill		417,898	279,166	369,606
	Utilised by licensed third party		165,001	373,502	238,819
	Recycled		422,530	527,865	401,518
	Incinerated[4]		0	0	34,932
	Temporary storage		11,341	14,005	3,508
	Total hazardous waste	tonnes	**1,015,920**	**1,190,869**	**1,048,382**
	Landfill		0	4,703	0
	Utilised by licensed third party		185,062	22,497	88,983
	Recycled		0	7,062	80,328
	Temporary storage		89,807	7,350	5,303
	Total non hazardous waste		**274,869**	**41,612**	**174,614**
Others	ODS Emissions	tonnes	46	45	52
Environmental expenditure	Waste disposal, emissions treatment, and remediation costs	US $	26,421,928	21,204,901	31,988,955
	Prevention and environmental management costs	US $	7,636,645	8,568,848	11,196,958

[1] Paper production in 2014 already included packaging (not recorded separately)
[2] Tissue production in 2014 was revised to include Univenus Perawang
[3] Data calculation based on Intergovernmental Panel on Climate Change (IPCC) and World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD) - Greenhouse Gas (GHG) Protocol methodology
* Data 2014 & 2015 revised following updated IPCC 2013 standard and emission factor for electricity from national grid
[4] Started in 2015 we include incinerated into one category with recycled

MILL ENVIRONMENTAL DATA TABLE

			Indah Kiat Perawang			Indah Kiat Serang			Indah Kiat Tangerang		
			2016	2015	2014	2016	2015	2014	2016	2015	2014
Water emissions	pH	mg/l	6.7	7.4	7.4	7.8	7.6	7.5	7.3	7.6	7.3
	TSS		66.2	78.0	75.5	30.7	26.7	24.4	6.7	7.7	10.9
	BOD		55.1	75.5	76.2	43.3	45.6	36.6	11.8	12.6	16.9
	COD		200.6	289.0	288.1	151.3	141.4	109.4	47.9	43.8	68.8
	AOX		7.2	7.0	8.0	N/A	N/A	N/A	N/A	N/A	N/A
Air emissions	NO_2	mg/Nm³	139.1	139.5	103.3	305.6	598.9	523.1	109.4	3.3	126.8
	SO_2		210.1	200.1	291.7	268.6	224.5	266.1	27.5	49.8	91.3
	ClO_2		23.3	17.4	17.2	N/A	N/A	N/A	N/A	N/A	N/A
	HCl		2.8	2.9	5.0	0.0	0.0	0.0	N/A	N/A	N/A
	Cl_2		4.8	4.1	4.1	N/A	N/A	N/A	N/A	N/A	N/A
	Opacity		< 20	< 20	< 20	< 20	15.0	12.5	< 20	< 20	< 20
	TRS		9.7	11.9	16.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total Particulate		111.7	111.3	113.2	21.9	28.9	44.6	86.1	7.8	47.7
Air emissions load[5]	NO_2	kg/t	9.82			1.24			0.38		
	SO_2		1.18			0.83			2.61		
Others	Distance to protected area	km	Tesso Nilo National Park (50)			Halimun Mountain National Park (40)			Rawa Danau Tukung Gede Conservation Area (20)		
	Local water source		Siak River			Ciujung River			Cisadane River		

			Univenus Perawang			Tjiwi Kimia			Ekamas Fortuna		
			2016	2015	2014	2016	2015	2014	2016	2015	2014
Water emissions	pH	mg/l	Discharge via Indah Kiat Perawang			7.3	7.3	7.3	7.7	7.6	7.5
	TSS					9.8	10.2	8.6	25.3	19.0	20.9
	BOD					15.4	15.6	19.2	26.0	19.5	14.4
	COD					38.3	38.5	47.2	97.5	59.1	81.8
	AOX					0.0	0.0	0.0	N/A	N/A	N/A
Air emissions	NO_2	mg/Nm³	Discharge via Indah Kiat Perawang			150.8	38.7	232.0	53.4	42.8	28.0
	SO_2					313.5	65.1	128.0	309.8	210.5	330.6
	ClO_2					N/A	N/A	N/A	N/A	N/A	N/A
	HCl					1.8	2.8	1.2	N/A	N/A	N/A
	Cl_2					0.3	2.4	0.0	N/A	N/A	N/A
	Opacity					< 20	< 10	3.0	< 20	1.6	1.6
	TRS					0.0	0.0	0.0	0.0	0.0	0.0
	Total Particulate					46.0	19.9	178.0	43.0	82.2	24.5
Air emissions load[5]	NO_2	kg/t				2.33			0.76		
	SO_2					9.98			3.98		
Others	Distance to protected area	km	Tesso Nilo National Park (50)			Bromo Tengger Semeru National Park (80)			Pulau Sempu Nature Reserve (30)		
	Local water source		Siak River			Brantas River			Lesti River		

			Lontar Papyrus			Pindo Deli Karawang			Pindo Deli Perawang		
			2016	2015	2014	2016	2015	2014	2016	2015	2014
Water emissions	pH	mg/l	7.4	7.1	7.0	7.3	6.6	7.2	Discharge via Indah Kiat Perawang		
	TSS		36.3	26.8	55.2	15.7	16.0	43.2			
	BOD		74.1	41.0	66.6	11.8	17.4	43.0			
	COD		254.0	94.8	251.3	48.9	59.2	99.7			
	AOX		5.4	11.0	0.0	0.1	0.0	0.0			
Air emissions	NO_2	mg/Nm³	54.8	139.2	206.9	116.6	107.0	142.4	Discharge via Indah Kiat Perawang		
	SO_2		57.5	57.6	71.9	30.7	34.3	45.5			
	ClO_2		4.5	7.2	0.7	N/A	N/A	N/A			
	HCl		1.8	0.1	0.1	0.2	0.3	0.3			
	Cl_2		4.0	3.3	0.6	0.0	0.0	0.3			
	Opacity		10.8	15.1	16.7	< 20	13.9	< 10			
	TRS		18.0	13.3	2.4	0.0	< 10	0.0			
	Total Particulate		120.8	112.4	120.0	12.1	7.8	14.2			
Air emissions load[5]	NO_2	kg/t	3.25			10.58					
	SO_2		3.00			3.40					
Others	Distance to protected area	km	Bukit Tigapuluh National Park (30)			Nature Reserve of Tangkuban Perahu Mountain (40)			Tesso Nilo National Park (50)		
	Local water source		Pengabuan River			Citarum River			Siak River		

[5] As a result of sustainability database improvement, started in 2016 we reported air emission load.

MILL SOCIAL DATA TABLE

Indah Kiat Perawang / Indah Kiat Serang

			Indah Kiat Perawang						Indah Kiat Serang					
			Male			Female			Male			Female		
			<30	30-50	>50	<30	30-50	>50	<30	30-50	>50	<30	30-50	>50
Employee	New employee	#	157	47	9	4	0	0	112	12	0	10	0	0
	Rate of new employee	%	9.7	1.0	1.8	7.3	0.0	0.0	7.9	0.5	0.0	14.5	0.0	0.0
	Employee turnover	#	498	929	330	9	295	24	465	509	120	24	64	2
	Rate of employee turnover	%	23.5	16.2	40.3	14.1	48.4	57.1	24.8	17.3	31.6	25.8	32.5	13.3
	Fatality	#		1			0			0			0	
	Frequency rate [6]			25.3			4.0			23.3			0.0	
	Severity rate [6]			468.4			0.0			57.7			0.0	
Health & Safety	Injury rate [7]			5.1			0.8			4.7			0.0	
	Occupational disease rate			0.0			0.0			0.0			0.0	
	Lost day rate			93.7			0.0			11.5			0.0	
	Absentee rate [8]	%		1.0			1.8			1.1			1.1	

Indah Kiat Tangerang / Lontar Papyrus

			Indah Kiat Tangerang						Lontar Papyrus					
			Male			Female			Male			Female		
			<30	30-50	>50	<30	30-50	>50	<30	30-50	>50	<30	30-50	>50
Employee	New employee	#	15	2	0	5	0	0	29	2	2	1	0	0
	Rate of new employee	%	6.0	0.3	0.0	8.1	0.0	0.0	6.6	0.2	1.9	7.1	0.0	0.0
	Employee turnover	#	24	36	13	14	11	4	116	240	56	7	14	0
	Rate of employee turnover	%	8.8	5.8	16.9	18.4	6.9	33.3	20.8	16.6	35.0	33.3	23.7	0.0
	Fatality	#		0			0			0			0	
	Frequency rate [6]			16.6			6.1			16.7			0.0	
	Severity rate [6]			7.0			0.0			21.4			0.0	
Health & Safety	Injury rate [7]			3.3			1.2			3.3			0.0	
	Occupational disease rate			0.0			0.0			0.0			0.0	
	Lost day rate			1.4			0.0			4.3			0.0	
	Absentee rate [8]	%		1.8			2.2			0.9			1.0	

Pindo Deli Karawang / Pindo Deli Perawang

			Pindo Deli Karawang						Pindo Deli Perawang					
			Male			Female			Male			Female		
			<30	30-50	>50	<30	30-50	>50	<30	30-50	>50	<30	30-50	>50
Employee	New employee	#	77	33	5	19	2	0	2	2	2	0	0	0
	Rate of new employee	%	17.4	0.9	1.5	22.1	0.8	0.0	0.2	0.2	8.0	0.0	0.0	0.0
	Employee turnover	#	63	820	192	15	152	5	118	66	9	4	4	0
	Rate of employee turnover	%	12.5	18.5	35.9	14.9	39.1	33.3	10.7	6.8	26.5	14.3	14.8	0.0
	Fatality	#		0			0			0			0	
	Frequency rate [6]			16.6			6.1			16.7			0.0	
	Severity rate [6]			7.0			0.0			21.4			0.0	
Health & Safety	Injury rate [7]			3.3			1.2			3.3			0.0	
	Occupational disease rate			0.0			0.0			0.0			0.0	
	Lost day rate			1.4			0.0			4.3			0.0	
	Absentee rate [8]	%		1.8			2.2			0.9			1.0	

Univenus Perawang / Tjiwi Kimia

			Univenus Perawang						Tjiwi Kimia					
			Male			Female			Male			Female		
			<30	30-50	>50	<30	30-50	>50	<30	30-50	>50	<30	30-50	>50
Employee	New employee	#	0	0	0	0	0	0	176	55	4	19	3	0
	Rate of new employee	%	0.0	0.0	0.0	0.0	0.0	0.0	43.7	0.9	1.8	27.5	0.1	0.0
	Employee turnover	#	2	3	0	0	0	0	42	1,400	432	22	576	86
	Rate of employee turnover	%	20.0	8.6	0.0	0.0	0.0	0.0	9.4	19.0	65.9	24.2	21.3	86.0
	Fatality	#		0			0			1			0	
	Frequency rate [6]			0.0			0.0			22.7			15.0	
	Severity rate [6]			0.0			0.0			227.3			199.0	
Health & Safety	Injury rate [7]			0.0			0.0			4.6			3.0	
	Occupational disease rate			0.0			0.0			0.0			0.0	
	Lost day rate			0.0			0.0			46.0			39.8	
	Absentee rate [8]	%		0.0			0.0			0.3			0.3	

Ekamas Fortuna

			Ekamas Fortuna					
			Male			Female		
			<30	30-50	>50	<30	30-50	>50
Employee	New employee	#	0	2	0	0	0	0
	Rate of new employee	%	0.0	0.4	0.0	0.0	0.0	0.0
	Employee turnover	#	0	17	61	1	2	0
	Rate of employee turnover	%	0.0	3.1	40.9	8.3	6.3	0.0
	Fatality	#		0			0	
	Frequency rate [6]			66.7			0.0	
	Severity rate [6]			177.4			0.0	
Health & Safety	Injury rate [7]			13.3			0.0	
	Occupational disease rate			0.0			0.0	
	Lost day rate			35.5			0.0	
	Absentee rate [8]	%		1.8			0.9	

[6] Frequency rate & Severity rate are calculated based on Government of Indonesia's regulation (Kep 84 BW Year 1998)

Frequency rate   =   (number of accidents x 1,000,000)/manhours
Severity rate   =   (number of lost days x 1,000,000)/manhours

[7] Injury rate is calculated based on OSHA's regulation

Injury rate   =   (number of injury x 200,000)/manhours

[8] Started in 2016 to follow GRI Standards, we recorded absentee rate including sick leave (inpatient & outpatient), working accident leave, and absent with out leave

GRI INDEX

Disclosure Number	Disclosure Title	Section (page)	Notes
102	**GENERAL DISCLOSURES**		
	ORGANIZATIONAL PROFILE		
102-1	Name of the organization	About this Report (57)	
102-2	Activities, brands, products, and services	About Us (10)	
102-3	Location of headquarters	Our Mills (13)	
102-4	Location of operations	Our Mills (12)	
102-5	Ownership and legal form	Report Scope and Boundary (57)	
102-6	Markets served	About Us (9)	
102-7	Scale of the organization	About Us (9)	
102-8	Information on employees and other workers	Our People (50)	
102-9	Supply chain	APP's Pulpwood Suppliers (23)	
102-10	Significant changes to the organization and its supply chain	GRI Index (66)	Pindo Deli Karawang Mill 3 was added to the scope of reporting. 2016 was the first year full year data was available for inclusion in the report.
102-11	Precautionary principle or approach	Sustainability Roadmap Vision 2020 (14)	
102-12	External initiatives	About Us (11), Sustainability Roadmap Vision 2020 (15)	
102-13	Membership of associations	Stakeholder Engagement (17)	
	STRATEGY		
102-14	Statement from senior decision-maker	Chairman's Statement (4)	
102-15	Key impacts, risks, and opportunities	Sustainability Roadmap Vision 2020 (14)	
	ETHICS AND INTEGRITY		
102-16	Values, principles, standards, and norms of behaviour	Governance (20)	
102-17	Mechanisms for advice and concerns about ethics	Business Ethics (48)	
	GOVERNANCE		
102-18	Governance structure	Governance (19, 20)	
102-19	Delegating authority	Governance (19, 20)	
102-20	Executive-level responsibility for economic, environmental, and social topics	Governance (19)	
102-21	Consulting stakeholders on economic, environmental, and social topics	Stakeholder Engagement (16)	
102-22	Composition of the highest governance body and its committees	Governance (19-21)	Refer to Annual Reports
102-23	Chair of the highest governance body	Governance (19)	
102-24	Nominating and selecting the highest governance body	Governance (21)	Refer to Annual Reports
102-25	Conflicts of interest	Governance (21), Business Ethics (47)	
102-26	Role of highest governance body in setting purpose, values, and strategy	Governance (21)	
102-28	Evaluating the highest governance body's performance	Governance (19, 20)	
102-29	Identifying and managing economic, environmental, and social impacts	Governance (19)	
102-30	Effectiveness of risk management processes	Governance (21)	
102-31	Review of economic, environmental, and social topics	Governance (19)	
102-32	Highest governance body's role in sustainability reporting	Governance (19)	
102-33	Communicating critical concerns	Governance (19)	

Disclosure Number	Disclosure Title	Section (page)	Notes
102-34	Nature and total number of critical concerns	GRI Index (66)	Details not disclosed due to confidentiality. Total number of concerns are reported through our Ethics Call Centre data (48)
102-35	Remuneration policies	Governance (21)	Refer to Annual Reports
102-36	Process for determining remuneration	Governance (21)	Refer to Annual Reports
	STAKEHOLDER ENGAGEMENT		
102-40	List of stakeholder groups	Stakeholder Engagement (17)	
102-41	Collective bargaining agreements	Our People (49)	
102-42	Identifying and selecting stakeholders	Stakeholder Engagement (16-17)	
102-43	Approach to stakeholder engagement	Stakeholder Engagement (16-17)	
102-44	Key topics and concerns raised	Stakeholder Engagement (16-17)	
	REPORTING PRACTICE		
102-45	Entities included in the consolidated financial statements	About this Report (57)	
102-46	Defining report content and topic Boundaries	About this Report (57)	
102-47	List of material topics	Materiality (18), About this Report (57)	
102-48	Restatements of information	GRI Index (66-72)	
102-49	Changes in reporting	Materiality (18), GRI Index (66-72)	
102-50	Reporting period	About this Report (57)	
102-51	Date of most recent report	About this Report (57)	
102-52	Reporting cycle	About this Report (57)	
102-53	Contact point for questions regarding the report	Defining Report Content (59)	
102-54	Claims of reporting in accordance with the GRI Standards	Defining Report Content (59)	
102-55	GRI content index	GRI Index (66)	
102-56	External assurance	Assurance Statement (75)	
	MANAGEMENT APPROACH		
103-1	Explanation of the material topic and its Boundary	Defining Report Content (58)	
201	**ECONOMIC PERFORMANCE**		
	Management approach disclosure		Refer to Annual Reports for Indonesia market specific management approach
201-1	Direct economic value generated and distributed	About Us (10)	Increase of tax payment in 2016 was due to asset re-evaluation
201-2	Financial implications and other risks and opportunities due to climate change	GRI Index (67)	Refer to Annual Reports
201-3	Defined benefit plan obligations and other retirement plans	GRI Index (67)	Refer to Annual Reports
201-4	Financial assistance received from government	GRI Index (67)	Refer to Annual Reports
202	**MARKET PRESENCE**		
	Management approach disclosure		

Disclosure Number	Disclosure Title	Section (page)	Notes
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	Our People (51)	
202-2	Proportion of senior management hired from the local community	GRI Index (67)	0.3% in 2016
203	**INDIRECT ECONOMIC IMPACTS**		
	Management approach disclosure	Our Communities (41)	Mills' CSR programmes, Integrated Forestry & Farming System
203-1	Infrastructure investments and services supported	Our Communities (41-45)	
203-2	Significant indirect economic impacts	Our Communities (41-45)	
204	**PROCUREMENT PRACTICES**		
	Management approach disclosure		
204-1	Proportion of spending on local suppliers	GRI Index (68)	
	ANTI-CORRUPTION		
205	Management approach disclosure	Business Ethics (47)	
205-1	Operations assessed for risks related to corruption	Business Ethics (47)	In 2013 we assessed all of APP's mills for risks relating to corruption, the risks identified were used to develop the APP Business Code of Conduct.
205-2	Communication and training about anti-corruption policies and procedures	Business Ethics (47)	
205-3	Confirmed incidents of corruption and actions taken	Business Ethics (47)	
206	**ANTI-COMPETITIVE BEHAVIOR**		
	Management approach disclosure	Business Ethics (47)	Refer to Annual Reports
206-1	Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	GRI Index (68)	None in reporting period
301	**MATERIALS**		
	Management approach disclosure		• Chain of custody procedures • APP Responsible Fibre Procurement & Processing Policy • Vision 2020 goals and targets
301-1	Materials used by weight or volume	Data Tables (60)	
301-2	Recycled input materials used	Data Tables (60)	
302	**ENERGY**		• APP Environment Stewardship Policy • Vision 2020 goals and targets
	Management approach disclosure		
302-1	Energy consumption within the organization	Data Tables (60)	
302-2	Energy consumption outside of the organization	Data Tables (60)	
302-3	Energy intensity	Mills' Environmental Performance (36)	
302-4	Reduction of energy consumption	Mills' Environmental Performance (36)	
303	**WATER**		
	Management approach disclosure	Mills' Environmental Performance (38)	• APP Environment Stewardship Policy • Vision 2020 goals and targets

Disclosure Number	Disclosure Title	Section (page)	Notes
303-1	Water withdrawal by source	Data Tables (60)	
303-2	Water sources significantly affected by withdrawal of water	Data Tables (60)	
303-3	Water recycled and reused	Mills' Environmental Performance (38)	
304	**BIODIVERSITY**		
	Management approach disclosure	Forest Conservation Policy (24, 26), Biodiversity & Conservation (30-31)	• APP Forest Conservation Policy (FCP) • Vision 2020 goals and targets
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Forest Conservation Policy (24, 26), Biodiversity & Conservation (30-31)	
304-2	Significant impacts of activities, products, and services on biodiversity	Forest Conservation Policy (24, 26), Biodiversity & Conservation (30-31)	
304-3	Habitats protected or restored	Forest Conservation Policy (24, 26), Biodiversity & Conservation (30-31)	
305	**EMISSIONS**		
	Management approach disclosure		• APP Environment Stewardship Policy • Vision 2020 goals and targets
305-1	Direct (Scope 1) GHG emissions	Mills' Environmental Performance (37)	
305-2	Energy indirect (Scope 2) GHG emissions	Mills' Environmental Performance (37)	
305-4	GHG emissions intensity	Mills' Environmental Performance (37)	
305-5	Reduction of GHG emissions	Mills' Environmental Performance (37)	
305-6	Emissions of ozone-depleting substances (ODS)	Data Tables (61)	
305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	Data Tables (62)	
306	**EFFLUENTS AND WASTE**		
	Management approach disclosure	Mills' Environmental Performance (39)	• APP Environment Stewardship Policy • Vision 2020 goals and targets"
306-1	Water discharge by quality and destination	Data Tables (60)	
306-2	Waste by type and disposal method	Data Tables (60)	
306-3	Significant spills	Mills' Environmental Performance (35)	
306-5	Water bodies affected by water discharges and/or runoff	Data Tables (60)	
307	**ENVIRONMENTAL COMPLIANCE**	Mills' Environmental Performance (35)	
	Management approach disclosure		• PROPER • Vision 2020 goals and targets • APP Environment Stewardship Policy
307-1	Non-compliance with environmental laws and regulations	GRI Index (69)	None in reporting period
308	**SUPPLIER ENVIRONMENTAL ASSESSMENT**		
	Management approach disclosure	Third Party Certification (33)	• APP Forest Conservation Policy (FCP) • Vision 2020 goals and targets • Supplier Evaluation and Risk Assessment (SERA)
308-1	New suppliers that were screened using environmental criteria	Third Party Certification (33)	
308-2	Negative environmental impacts in the supply chain and actions taken	Third Party Certification (33)	

Disclosure Number	Disclosure Title	Section (page)	Notes
401	**EMPLOYMENT**		
	Management approach disclosure	Our People (50)	
401-1	New employee hires and employee turnover	Our People (51)	
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Our People (51)	
402	**LABOR/MANAGEMENT RELATIONS**		
	Management approach disclosure	Our People (50)	
402-1	Minimum notice periods regarding operational changes	GRI Index (69)	In the event of operational changes, APP allows a minimum of seven days' notice, as per Government of Indonesia regulation
403	**OCCUPATIONAL HEALTH AND SAFETY**		
	Management approach disclosure	Our People (53)	• APP OHS Management System • APP Employee Welfare Policy • Ethics Call Centre • Vision 2020 Roadmap
403-1	Workers representation in formal joint management–worker health and safety committees	Our People (53)	
403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	Our People (53)	
403-4	Health and safety topics covered in formal agreements with trade unions	Our People (53)	
404	**TRAINING AND EDUCATION**		
	Management approach disclosure	Our People (52)	• APP Employee Welfare Policy
404-1	Average hours of training per year per employee	Our People (52)	
404-2	Programs for upgrading employee skills and transition assistance programs	Our People (52)	
404-3	Percentage of employees receiving regular performance and career development reviews	Our People (50)	
405	**DIVERSITY AND EQUAL OPPORTUNITY**		
	Management approach disclosure	Our People (50)	• APP Employee Welfare Policy • APP Business Code of Conduct
405-1	Diversity of governance bodies and employees		For details of governance bodies refer to Annual Reports
405-2	Ratio of basic salary and remuneration of women to men	Our People (51)	
406	**NON-DISCRIMINATION**		
	Management approach disclosure	Our People (50)	
406-1	Incidents of discrimination and corrective actions taken	Our People (51)	
407	**FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING**		
	Management approach disclosure		• APP Employee Welfare Policy • APP Business Code of Conduct
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Third Party Certification (33), Our People (50)	

Disclosure Number	Disclosure Title	Section (page)	Notes
408	**CHILD LABOR**		
	Management approach disclosure	Human Rights (48-49)	• APP Responsible Fibre Procurement & Processing Policy • APP Employee Welfare Policy
408-1	Operations and suppliers at significant risk for incidents of child labor	Human Rights (48-49)	
409	**FORCED OR COMPULSORY LABOR**		
	Management approach disclosure	Human Rights (48-49)	• APP Responsible Fibre Procurement & Processing Policy • APP Employee Welfare Policy"
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Human Rights (48-49)	
410	**SECURITY PRACTICES**		
	Management approach disclosure	Integrated Sustainable Forest Management Plans (30)	• APP Responsible Fibre Procurement & Processing Policy • APP Employee Welfare Policy
410-1	Security personnel trained in human rights policies or procedures	Integrated Sustainable Forest Management Plans (30)	
411	**RIGHTS OF INDIGENOUS PEOPLE**		
	Management approach disclosure	Human Rights (48-49)	• APP Corporate Social Responsibility Policy • APP Employee Welfare Policy • APP Responsible Fibre Procurement & Processing Policy • APP Forest Conservation Policy • Vision 2020 Roadmap
411-1	Incidents of violations involving rights of indigenous peoples	Integrated Sustainable Forest Management Plans (29-30)	
412	**HUMAN RIGHTS ASSESSMENT**		
	Management approach disclosure	Human Rights (48-49)	• APP Corporate Social Responsibility Policy • APP Employee Welfare Policy • APP Responsible Fibre Procurement & Processing Policy • APP Forest Conservation Policy • Vision 2020 Roadmap
412-1	Operations that have been subject to human rights reviews or impact assessments	Human Rights (48-49)	
412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	Human Rights (48-49)	
413	**LOCAL COMMUNITIES**		
	Management approach disclosure	Our People (41-49)	• APP Corporate Social Responsibility Policy • APP Responsible Fibre Procurement & Processing Policy • APP Forest Conservation Policy • Vision 2020 Roadmap
413-1	Operations with local community engagement, impact assessments, and development programs	Our People (41-49)	
413-2	Operations with significant actual and potential negative impacts on local communities	Our People (41-49)	

Disclosure Number	Disclosure Title	Section (page)	Notes
414	**SUPPLIER SOCIAL ASSESSMENT**		
	Management approach disclosure	Our People (41-49)	• APP Corporate Social Responsibility Policy • APP Responsible Fibre Procurement & Processing Policy • APP Forest Conservation Policy • Vision 2020 Roadmap
414-2	Negative social impacts in the supply chain and actions taken	Our People (41-49)	
415	**PUBLIC POLICY**		
	Management approach disclosure	Business Ethics (47)	APP Business Code of Conduct
415-1	Political contributions	GRI Index (71)	None in reporting period
416	**CUSTOMER HEALTH AND SAFETY**		
	Management approach disclosure	About Us (11)	Various global product certification schemes
416-1	Assessment of the health and safety impacts of product and service categories	About Us (11)	
417	**MARKETING AND LABELING**		
	Management approach disclosure		Various global product certification schemes
417-1	Requirements for product and service information and labelling	About Us	
417-2	Incidents of non-compliance concerning product and service information and labelling	GRI Index (72)	None in reporting period
419	**SOCIOECONOMIC COMPLIANCE**		
	Management approach disclosure	Business Ethics (47)	APP Business Code of Conduct
419-1	Non-compliance with laws and regulations in the social and economic area	GRI Index (72)	None in reporting period

UNGC INDEX

			Section (page)
UNGC Communications on Progress	**Human Rights**	Principle 1 : Businesses should support and respect the protection of internationally proclaimed human rights;	Human Rights (48-49)
		Principle 2 : make sure that they are not complicit in human rights abuses.	Human Rights (48-49)
	Labour	Principle 3 : Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	Human Rights (48-49)
		Principle 4 : the elimination of all forms of forced and compulsory labour;	Human Rights (48-49)
		Principle 5 : the effective abolition of child labour; and	Human Rights (48-49)
		Principle 6 : the elimination of discrimination in respect of employment and occupation	Our People (50)
	Environment	Principle 7 : Businesses should support a precautionary approach to environmental challenges;	Sustainability Roadmap: Vision 2020 (14)
		Principle 8 : undertake initiatives to promote greater environmental responsibility; and	Sustainability Roadmap: Vision 2020 (14)
		Principle 9 : encourage the development and diffusion of environmentally friendly technologies.	Mills Environmental Performance (35)
	Anti-Corruption	Principle 10 : Businesses should work against corruption in all its forms, including extortion and bribery.	Business Ethics (47)

			Section (page)
CEO Water Mandate Index	**Direct Operations**	• Conduct a comprehensive water-use assessment to understand the extent to which the company uses water in the direct production of goods and services. • Set targets for our operations related to water conservation and waste-water treatment, framed in a corporate cleaner production and consumption strategy. • Seek to invest in and use new technologies to achieve these goals. • Raise awareness of water sustainability within corporate culture. • Include water sustainability considerations in business decision-making – e.g., facility-siting, due diligence, and production processes	Mills Environmental Performance (35, 38)
	Supply Chain and Watershed Management	• Encourage suppliers to improve their water conservation, quality monitoring, waste-water treatment, and recycling practices. • Build capacities to analyze and respond to watershed risk. • Encourage and facilitate suppliers in conducting assessments of water usage and impacts. • Share water sustainability practices – established and emerging – with suppliers. • Encourage major suppliers to report regularly on progress achieved related to goals.	Integrated Sustainable Forest Management Plans (27, 28), Integrated Fire Management (34)

			Section (page)
UNGC CEO Water Mandate	**Collective Action**	• Build closer ties with civil society organizations, especially at the regional and local levels. • Work with national, regional and local governments and public authorities to address water sustainability issues and policies, as well as with relevant international institutions – e.g., the UNEP Global Programme of Action. • Encourage development and use of new technologies, including efficient irrigation methods, new plant varieties, drought resistance, water efficiency and salt tolerance. • Be actively involved in the UN Global Compact's Country Networks. • Support the work of existing water initiatives involving the private sector – e.g., the Global Water Challenge; UNICEF's Water, Environment and Sanitation Program; IFRC Water and Sanitation Program; the World Economic Forum Water Initiative – and collaborate with other relevant UN bodies and intergovernmental organizations – e.g., the World Health Organization, the Organisation for Economic Co-operation and Development, and the World Bank Group.	Mills' CSR Programmes (42), Mill CSR Highlights (43-44), Group level CSR (44)
	Public Policy	• Contribute inputs and recommendations in the formulation of government regulation and in the creation of market mechanisms in ways that drive the water sustainability agenda. • Exercise "business statesmanship" by being advocates for water sustainability in global and local policy discussions, clearly presenting the role and responsibility of the private sector in supporting integrated water resource management. • Partner with governments, businesses, civil society and other stakeholders – for example specialized institutes such as the Stockholm International Water Institute, UNEP Collaborating Centre on Water and Environment, and UNESCO's Institute for Water Education – to advance the body of knowledge, intelligence and tools. • Join and/or support special policy-oriented bodies and associated frameworks – e.g., UNEP's Water Policy and Strategy; UNDP's Water Governance Programme.	Integrated Sustainable Forest Management Plans (27-28) Integrated Fire Management (34) Mills' CSR Programmes (42-44) Group-level CSR (44)
	Community Engagement	• Endeavor to understand the water and sanitation challenges in the communities where we operate and how our businesses impact those challenges. • Be active members of the local community, and encourage or provide support to local government, groups and initiatives seeking to advance the water and sanitation agendas. • Undertake water-resource education and awareness campaigns in partnership with local stakeholders. • Work with public authorities and their agents to support – when appropriate – the development of adequate water infrastructure, including water and sanitation delivery systems.	Mills' CSR Programmes (42-44), Group-level CSR (44)
	Transparency	Include a description of actions and investments undertaken in relation to The CEO Water Mandate in our annual Communications on Progress for the UN Global Compact, making reference to relevant performance indicators such as the water indicators found in the Global Reporting Initiative (GRI) Guidelines. • Publish and share our water strategies (including targets and results as well as areas for improvement) in relevant corporate reports, using – where appropriate – the water indicators found in the GRI Guidelines. • Be transparent in dealings and conversations with governments and other public authorities on water issues.	Mills Environmental Performance (35, 38)

ASSURANCE STATEMENT

SGS REPORT ON SUSTAINABILITY ACTIVITIES IN THE APP INDONESIA SUSTAINABILITY REPORT 2016

NATURE AND SCOPE OF THE ASSURANCE/ VERIFICATION

SGS Indonesia was commissioned by Asia Pulp & Paper Indonesia ('APP Indonesia') to conduct independent assurance of the APP Indonesia Sustainability Report 2016 issued in October 2017 ('the Report').

The scope of the assurance, based on the SGS Sustainability Report Assurance methodology, included APP Indonesia's pulp & paper operations in Indonesia and the associated text, statements, graphs and data in accompanying tables, contained in the Report.

The information in the Report for APP Indonesia and its presentation are the responsibility of the directors or governing body and management of APP Indonesia. SGS Indonesia has not been involved in the preparation of any of the material included in the Report for APP Indonesia. However during the audit process the text of the Report was revised to reflect some of SGS Indonesia's findings.

Our responsibility is to express an opinion on the text, data, graphs and statements within the scope of assurance set out below with the intention to inform all APP Indonesia's stakeholders.

The SGS Group has developed a set of protocols for the Assurance of Sustainability Reports based on current best practice guidance provided by the Global Reporting Initiative and the AA1000 Assurance Standard (2008). These protocols allow for different options for assurance depending on the reporting history and capabilities of the Reporting Organization. The Report has been assured at a moderate level of scrutiny using SGS protocols for:

• evaluation of the veracity of report content;
• a Type 2 evaluation of report content and supporting management systems against the AA1000 Accountability Principles (2008) using the AA1000 Assurance Standard (2008). The specified data included the environmental and social performance of APP Indonesia's mills
• report evaluation against the relevant Global Reporting Initiative Sustainability Reporting Standards 2016

The assurance comprised a combination of pre-assurance research, interviews with relevant accountable managers and employees at APP Indonesia's headquarters in Jakarta, and visits to three operating facilities: PT Lontar Papyrus Pulp & Paper Industry in Jambi, PT Pabrik Kertas Tjiwi Kimia Tbk in Mojokerto and PT Indah Kiat Pulp & Paper Tbk, Serang mill in Banten. In addition, the assurance team carried out a review

of supporting documents and records. The following external bodies and stakeholders were also interviewed:

• Community beneficiaries of the mills' CSR programmes
• The Deltares peat and water consultancy
• The Forest Trust
• Habitat for Humanity Indonesia
• Indonesia Global Compact Network
• The Belantara Foundation.

The Financial data drawn directly from independently audited financial accounts have not been checked back to source as part of this assurance process.

STATEMENT OF INDEPENDENCE AND COMPETENCE

The SGS Group of companies is the world leader in inspection, testing and verification, operating in more than 140 countries and providing services including management systems and service certification; quality, environmental, social and ethical auditing and training; and environmental, social and sustainability report assurance. SGS Indonesia affirms its independence from APP Indonesia, being free from bias and conflicts of interest with the organisation, its subsidiaries and stakeholders.

The assurance team was assembled based on their knowledge, experience and qualifications for this assignment, and included auditors registered with the Programme for the Endorsement of Forest Certification (PEFC) or the Forest Stewardship Council (FSC) as auditors and with the International Register of Certificated Auditors (IRCA) as Environmental Management System (EMS) Lead Auditor, Quality Management System (QMS) Lead Auditor or Occupational Health and Safety Assessment Series (OHSAS) Lead Auditor. Some members of the assurance team have completed the IRCA Corporate Responsibility Training Programme and have experience of auditing Forestry, Pulp and Paper operations. The team also included experienced sustainability report assurers with significant international experience of the development or use of the AA1000 AS and GRI standards including their use in assurance.

VERIFICATION/ ASSURANCE OPINION

On the basis of the methodology described and the verification work performed, we are satisfied that the information and data contained within the Report is reliable and provides a fair and balanced representation of APP Indonesia's sustainability activities in 2016.

The assurance team is of the opinion that the Report may be used by APP Indonesia's stakeholders and we believe that the organization has chosen an appropriate level of assurance for this stage in their reporting.

AA1000 ACCOUNTABILITY PRINCIPLES (2008) CONCLUSIONS, FINDINGS AND RECOMMENDATIONS

Materiality

In line with the GRI Standards framework, APP has updated the process on which its sustainability report is based. The report covers many of the significant issues facing APP, including the protection of biodiverse forested areas and the interests of communities affected by APP plantations.

In doing so, APP takes responsibility not only for is direct impacts but also the most significant of its suppliers. The report also covers APP's direct impacts such as employee conditions and the environmental performance of its paper and pulp mills.

Stakeholder Inclusiveness

Stakeholders have been involved in the materiality process. In general, the inclusion of stakeholders both local and international within the governance of sustainability is extensively integrated through the Forest Conservation Policy process. This includes working with NGOs and with local communities to resolve conflicting interests over land between different groups and the reconciliation of community needs with those of APP's business. International expertise has been used to address major environmental issues

A wide range of stakeholders is actively consulted in the course of business. Nevertheless, there are some key stakeholders that still do not receive sufficient coverage in the report. This group includes customers and government.

Sustainability Context

While APP's approach to sustainability is in general commendable, the reporting of its performance should be set against global boundaries. In particular, the scale of its impact on forests, including the significance of the 500 villages selected for the agroforestry initiative should be set against the size of its overall concessions and the extent of Indonesia's forests.

Completeness

The report provides a comprehensive account of APP's approach to and performance against its Forest Conservation Policy and other material areas including its suppliers' performance. Significant issues covered include employee relationships and direct environmental performance.

Balance

The report presents a balanced view of APP's impacts. This includes both the positive attainments (such as zero deforestation) and negative impacts, such as environmental performance and conflicts over land rights.

Comparability

The report is comparable to previous year's reports. There is very little benchmarking information in the report.

Accuracy

While there were no significant problems in the accuracy of the data, a number of inaccuracies were identified in environmental, HR and health & safety data points relating to the mill datasets that were reviewed.

Timeliness

The report contains timely information in relation to the period reported on. However the report is likely to be published more than 7 months after the reporting year has finished.

Clarity

The report was clearly written. However it is only available in the English language, which may not be accessible to many stakeholders. Moreover the complex language used will not be comprehensible to key sections of stakeholders.

Reliability

The information in the report appears to be reliable. The data has been externally verified. This included visits to three sites, two of which were not the same as those visited for assurance purposes last year.

GLOBAL REPORTING INITIATIVE SUSTAINABILITY REPORTING STANDARDS (2016) CONCLUSIONS, FINDINGS AND RECOMMENDATIONS

In our opinion, the APP Indonesia Sustainability Report 2016 is presented in accordance with the Core option for Global Reporting Initiative Sustainability Reporting Standards 2016 and fulfills all the required content and quality criteria.

Recommendations

APP Indonesia has made significant progress on its sustainability journey in the last three years but recognises that there is still a lot of work ahead. Interviews with stakeholders suggest that progress so far is viewed as positive. However, APP Indonesia's goal of establishing leadership in addressing the complex issues it faces will be demonstrated by continuing to

maintain the Vision 2020 commitment and further developing its accountability over the coming years.

The following opportunities have been identified for future reporting cycles to support continued improvement in APP Indonesia's sustainability reporting.

1. There is an urgent need for longer term planning – e.g. the development of a 'Vision 2030'.
2. Zero waste to landfill targets should be set over an appropriate timescale.
3. New KPIs should be developed that help to align the interests of production and the environment.
4. The capacity of the Mills for implementing their CSR programs as part of the 5 year CSR plan should be adequately supported
5. APP should work towards setting science-based targets.
6. The accessibility of the report for all groups of stakeholders should be considered.
7. The reporting process in future years should ensure that the protocols used to evaluate indicators are documented and their alignment to GRI protocols is clear.

GREENHOUSE GAS EMISSIONS

SGS has evaluated the GHG emissions performance data reported as CO_2 equivalent emissions using the reliability (Type 2) principle along with moderate level of assurance to establish conformance with the requirements of WRI and WBCSD 'GHG Protocol Corporate Accounting and Reporting Standard'. SGS' approach was risk-based, drawing on an understanding of the risks associated with modeling GHG emission information and the controls in place to mitigate those risks. Data and information supporting the CO_2 equivalent inventory were historical in nature and proven by evidence or traceable assumptions.

- Total GHG Emissions   : 11,805,828 tCO2e
- Scope 1 (Direct) GHG Emissions   : 10,528,852 tCO2e
- Scope 2 (Energy Indirect) GHG Emissions : 1,276,976 tCO2e (location & market-based method)

SGS concludes with moderate assurance that, there is no evidence that the presented CO_2 equivalent inventory is not materially correct and is not a fair representation of the CO_2 equivalent data and information, and has not been prepared following the requirements of WBCSD 'GHG Protocol Corporate Accounting and Reporting Standard'.

Signed:
For and on behalf of PT SGS Indonesia

Shashibhushan Jogani
Managing Director
October 2017

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APP

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SUPPORTS RESPONSIBLE FOREST MANAGEMENT