GROWING A SUSTAINABLE FUTURE



ENVIRONMENTAL, SOCIAL AND ECONOMIC SUSTAINABILITY REPORT FOR APP INDONESIA

2010/2011







CONTACT US

WE WELCOME YOUR THOUGHTS ON OUR REPORT:

PLEASE SEND YOUR FEEDBACK TO environment@app.co.id



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http://vimeo.com/user4811621

External frameworks

The content and quality of this report is guided by the Global Reporting Initiative (GRI) Sustainable Development Reporting Guidelines (version 3.1). The report had been externally assured to the internationally recognised AA1000(AS) and meets the requirements of GRI Application Level A+. 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. From the recommendations provided in the 2008/2009 Sustainability Report we have improved our data collection process by standardising the sustainability information we collect from our mills. This data is what we use to populate our sustainability reports. An area we continue to work to improve is the uniformity of data definitions. We have also increased our disclosure on measures taken by our pulpwood suppliers to address or avoid community conflict in line with Sustainable Forest Management Principles, along with other initiatives that aim to create sustainable relationships between concession holders and surrounding communities.

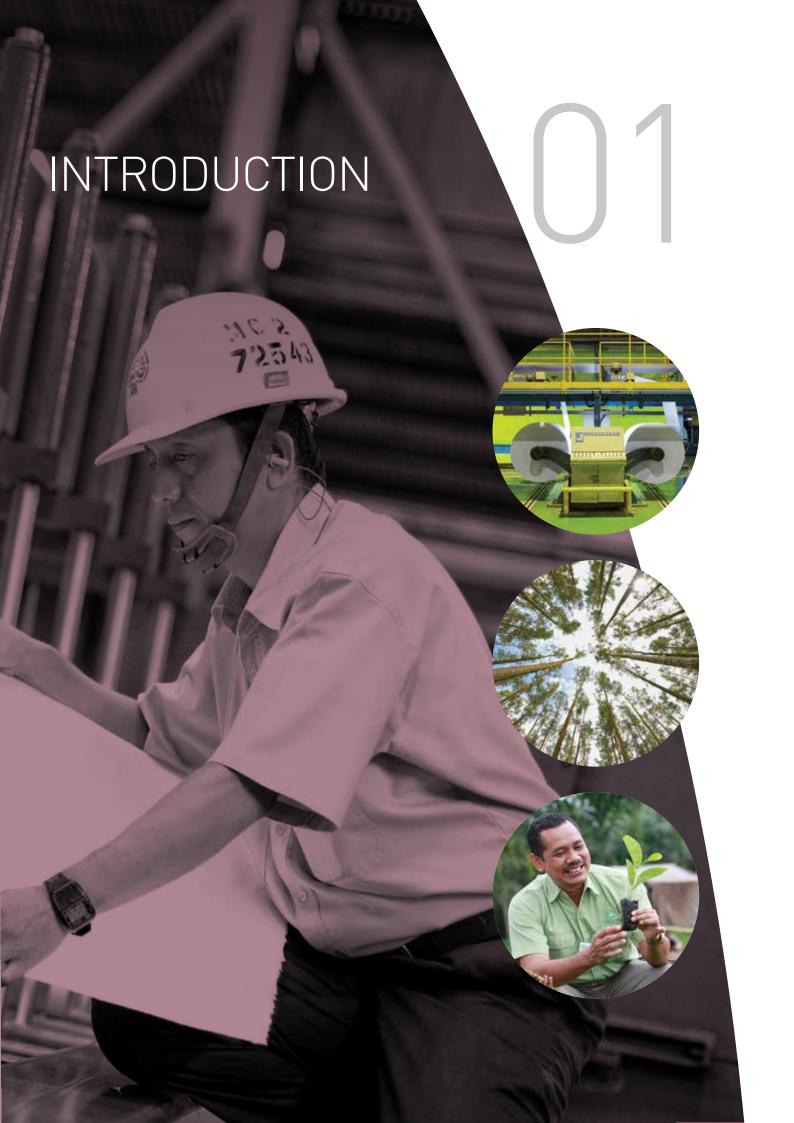
The assurance statement covering this report content is presented on page 137



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WHAT THIS REPORT COVERS

Welcome to our fourth Sustainability Report, summarising our key activities and data for the period 1st January 2010 to 31st December 2011. The report covers all major APP operations in Indonesia: two integrated pulp and paper mills and five paper mills.

Due to the importance stakeholders attribute to APP's wood sourcing practices the report also includes descriptions of operational activities of APP's two main pulpwood suppliers PT Arara Abadi and PT Wirakara Sakti. There are no significant changes in scope, boundary or data measurement methods from previous reports.

The layout of this report takes an integrated approach, covering the main issues relevant to APP and providing coverage of each mill as appropriate. The change in reporting style from our 2008/2009 report published in 2010 is intended to make communications clearer to stakeholders on how APP is addressing each key sustainability issue across all operations. APP's intention is to switch to an annual sustainability report cycle, starting in 2013 with the publication of the 2012 Sustainability Report.

REPORT SCOPE AND BOUNDARY

Purinusa Ekapersada is the brand holder of APP, which is a trade name that covers the following six operating companies.

- ightarrow PT. Lontar Papyrus Pulp & Paper Industry
- → PT. Indah Kiat Pulp & Paper Tbk
- → PT. Pindo Deli Pulp And Paper Mills
- → PT. Pabrik Kertas Tjiwi Kimia Tbk
- ightarrow PT. Ekamas Fortuna
- → PT. Univenus

The scope of the report covers pulp and paper manufacturing facilities of the above operating companies, excluding PT Univenus and facilities that only convert paper products.

Indah Kiat and Tjiwi Kimia are publically listed and trade on the Jakarta and Surabaya Stock Exchanges. Where applicable we make reference to APP's economic performance through our published Annual Report and Accounts.

The report covers the three sustainability pillars that form the baseline of APP sustainability initiatives; economic, social and environment. In this report you will learn about achievements at our mills, key highlights and challenges, information on fibre supply, a consolidated report of operational performance and governance arrangements. The content selected for inclusion in this report reflects the issues which are of interest to our stakeholders, informed by our stakeholder engagement activities described in this report.

For updates, press releases and previous reports please visit our website **www.asiapulppaper.com** and **www.rainforestrealities.com**, a portal where people tell their own stories about life in the forest.

A NOTE ON DATA

We collect production data from seven sites in Indonesia that manufacture pulp and paper. This data is sourced from our operational environmental reporting system, our human resources function, legal affairs and our finance reporting system.

See page 149 for diagram





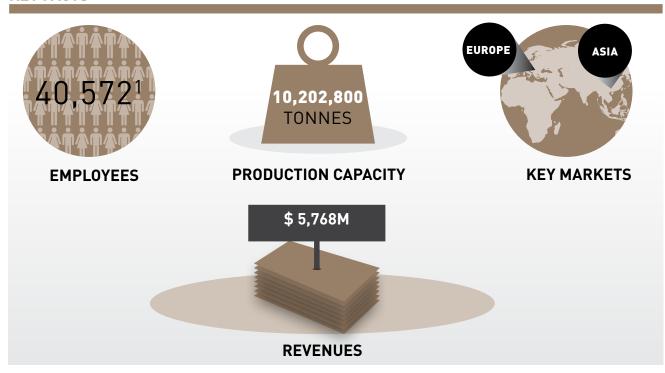
WHO WE ARE

APP is one of the world's largest vertically-integrated pulp and paper producers. Our combined pulp, paper and packaging capacity in Indonesia amounts to more than ten million tonnes. Composed of seven pulp and paper mills on both Java and Sumatra, APP Indonesia is headquartered in Jakarta.

APP sources its pulpwood through local pulpwood suppliers PT. Arara Abadi and PT. Wirakarya Sakti These are two of its major suppliers who manage the majority of the supply of pulpwood to APP pulp mills. Fibre is also imported from external suppliers and recycled material sourced globally.

We work closely with all our suppliers to achieve high standards of management and traceability of our raw materials. Our principal operations are in Indonesia, and we market our products in around 120 countries on six continents.

KEY FACTS



KEY BRANDS/PRODUCTS:





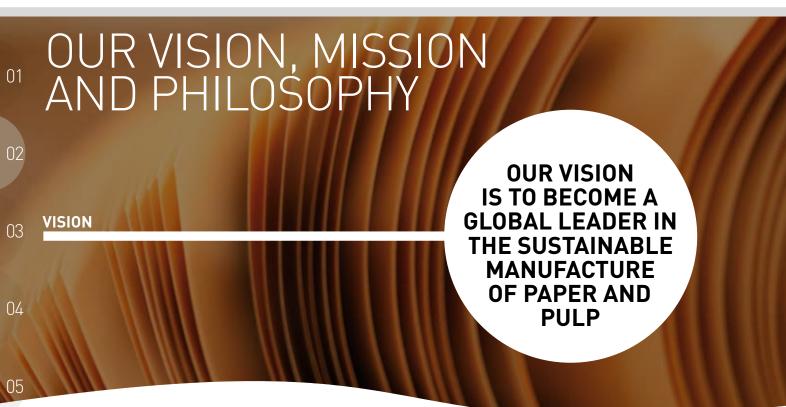






¹ Direct employees





MISSION



INCREASE GLOBAL MARKET SHARE



USE CUTTING-EDGE TECHNOLOGY IN THE DEVELOPMENT OF NEW PRODUCTS AND MILL EFFICIENCY



IMPROVE THE CAPACITY OF OUR PEOPLE, PRINCIPALLY THROUGH TRAINING



REALISE ENVIRONMENTAL, SOCIAL AND ECONOMIC SUSTAINABILITY OF ALL APP OPERATIONS

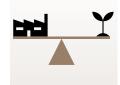
OUR PHILOSOPHY



WE ARE NOT ONLY ACCOUNTABLE TO OUR SHAREHOLDERS, BUT ALSO TO THE COMMUNITY



HUMAN RESOURCES ARE CRUCIAL TO OUR SUCCESS



WE BALANCE THE
NEEDS OF THE
ENVIRONMENT
WITH THE
NEEDS OF APP
TO SUSTAIN
OPERATIONS



CUSTOMER NEEDS
ARE MET AS A
RESULT OF THE
DILIGENCE AND
SKILLS OF OUR
EMPLOYEES



WE APPLY THE PRINCIPLES OF GOOD GOVERNANCE TO BUILD A SUSTAINABLE BUSINESS



GETTING YOUR BEARINGS

APP IS A TRADE NAME FOR A GROUP OF PULP AND PAPER MANUFACTURING COMPANIES OPERATING IN INDONESIA:

PT. LONTAR PAPYRUS PULP & PAPER INDUSTRY

PT. INDAH KIAT PULP & PAPER TBK* (OPERATES THREE MILLS)

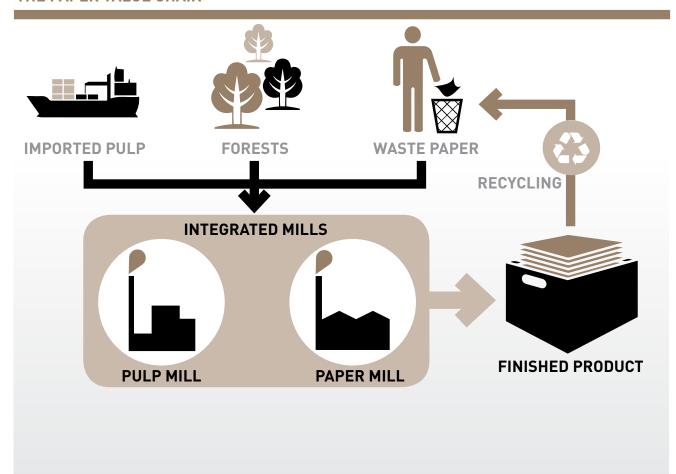
PT. PINDO DELI PULP AND PAPER MILLS (OPERATES TWO MILLS)

PT. PABRIK KERTAS TJIWI KIMIA TBK*

PT. EKAMAS FORTUNA

*Indah Kiat and Tjiwi Kimia Tbk are publically listed and trade on the Jakarta and Surabaya Stock Exchanges.

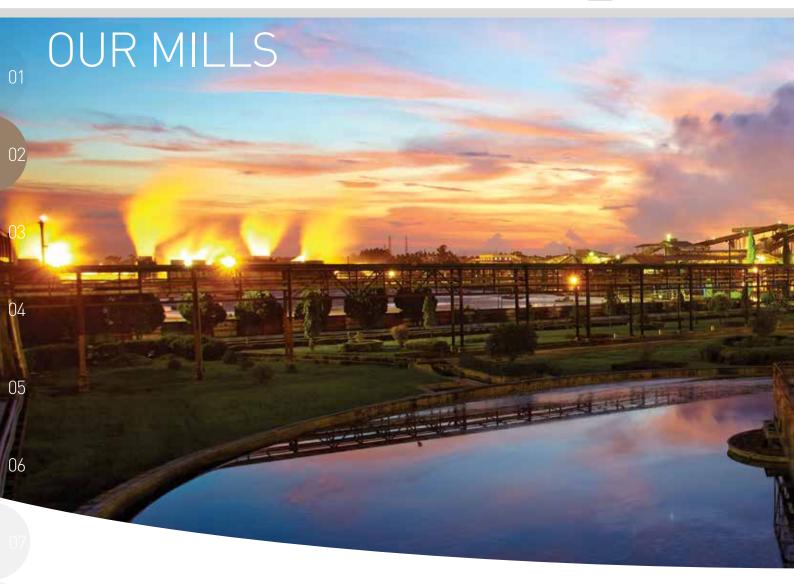
THE PAPER VALUE CHAIN



The global paper value chain has the opportunity to be inherently sustainable. Sustainably managed fibre is used to manufacture paper at mills with high environmental standards.

The paper rolls and sheets are then converted to products which our customers use and preferably recycle where the infrastructure allows. APP adds value by converting wood fibre into high quality saleable products to meet our customers' demands.





Our mills vary in terms of their production requirements and their outputs.

Two of our seven production facilities, Indah Kiat Perawang and Lontar Papyrus, are integrated pulp and paper mills, where a proportion of the pulp produced on-site is manufactured into paper products, while the rest is transported to other APP mills in the group.

The remaining mills are paper manufacturing facilities which use virgin pulp from local hardwood pulp from Indah Kiat Perawang and Lontar Papyrus), imported (hardwood and softwood pulp) sources and recycled waste paper.

The majority of APP mills generate their own electricity. For Indah Kiat Perawang and Lontar Papyrus mills this is due to the current unavailability of infrastructure and for other mills it is due to the unstable supply of electricity. Similar conditions also apply for chemical supply. The relative remoteness of both our pulp mills in Sumatra means that the majority of pulping chemicals must be produced on-site. The surplus generated is sold to mills within the group as well as to external parties. While this impacts our environmental performance with higher energy requirements it also provides APP with a greater control in managing the environmental impacts of our operations.

APP Sustainability Report 2010/2011





OUR PAPER PRODUCTS FALL INTO NINE CATEGORIES:



Our mills generated total sales revenues of \$5,581m and \$5,768m in 2010 and 2011 respectively, representing an increase of 3% in a challenging economic environment.

02



OUR MILLS

01 INDAH KIAT PERAWANG

Employees: 9,470 Production capacity in 2011: 2,800,000 tonne of pulp and 2,200,000 tonne of paper product Production lines: 4 pulp production lines and 6 paper machines Key Pulp product: LBKP pulp Key Paper product: wood-free printing, writing, copier and on-machine coated papers, sold as rolls and cut sheets

Starting production in 1984, this integrated pulp and paper mill is located in a rural region of Riau Province, Sumatra. The mill sources it's fibre from pulpwood concessions in Sumatra and Kalimantan. It uses around 35% of the pulp it produces while the rest is supplied to other APP mills. Due to the remote location, the mill generates its own energy with three co-generation plants that consumes both fossil fuels and renewable bio-fuel. Renewable sources make up 73% of the mills fuel requires for production.

SUMATERA 02 **02 LONTAR PAPYRUS** Employees: 2,804 Production lines: 2 Pulp machine **03 INDAH KIAT SERANG** lines and 1 paper machine (6 paper Employees: 5,777 machines are being built) Production capacity: 1,130,000 tonnes (pulp), 75,000 tonnes (tissue) Production capacity: 1,570,000 tonnes Production lines: 6 paper machines Key products: coated boxboards, test

Key products: bleached hardwood kraft pulp and tissue

Developed in 1994, this integrated mill produces predominantly pulp which is sold to other APP mills in Java. A small amount of pulp, representing 4% of the mills total, is used to produce tissue rolls which are sent to Pindo Deli Mill and other converters to be converted into cut-size products and sold nationally and overseas. Renewable energy sources make up 78% of the mills fuel sources, mainly from the use of black liquor which is recovered from the pulp production process.

linerboards, corrugating medium, corrugated carton box, and folding box (printing)

Located 60km west of Jakarta, the Serang Mill started production in 1990. Selling predominately to the Indonesia market, the mill and 80% of its raw material is made up of post-consumer waste which is supplemented by virgin fibre to give the products the required strength properties. The energy generated onsite provides for most of the mills' needs. In 2011 the

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04 INDAH KIAT TANGERANG

Employees: 1,167

Production capacity in 2011: 105,000 tonnes Production lines: 3 paper machines

Key products: coloured printing, writing and copier, computer and duplicator

paper, sold as rolls and sheets

Established in 1976 and the smallest mill in the group. Tangerang Mill is located mill is now one of the largest producers of coloured paper in the world in this niche market. It uses both purchased pulp and pre consumer waste as the raw

05 PINDO DELI KARAWANG MILLS

Employees: 6,750

Production lines: 12 paper machines Production capacity: 985,000 tonnes Key products: roll and sheeted paper products including writing, printing, copier, pre-print and other premium wood-free papers, cast-coated paper, paperboards, carbon-less, thermal and art paper and tissue

These two mills, established in 1976 and 1997 respectively, occupy two sites from purchased pulp and pre-consumer waste, largely for export. The mills produce a wide range of products including paper, tissue and packaging products. An extensive list of product specific certifications support the range of products sold such as ISO 22000 for food hygiene and ISO 9706 for permanent acid free papers suitable for archiving

HEADQUARTERS, JAKARTA JAVA 05 03 04

06 TJIWI KIMIA

Employees: 12,096

Production lines: 12 paper machines Production capacity: 1,134,000 tonnes

Key products: printing, writing, copier, carbon-less, such as exercise books, writing pads, envelopes, computer forms, gift wrapping paper and shopping bags

Established in 1972, initially as a chemical plant, the mill is located near Surabaya in East Java. Today the site hosts 12 paper machines and over 100 converting units which produce a diverse range of value added products for sale across the world. The mill has a significant printing capacity, producing books

07 EKAMAS FORTUNA

06

07

Employees: 771 Production lines: 2 paper machines Production capacity: 203,800 tonnes Key products: corrugated medium, wrapping papers, chipboard, kraft liner, paper core, paper tube and heavy board

mill sells specialist, value grade market, with the remainder exported to markets in South East Asia. The main raw material is post-consumer waste. Coal boilers on site are used to provide process steam while electricity is purchased from the grid to power decreased slightly compared to 2010, with a drop of 5% per tonne of paper





We serve markets in over 120 countries, including North America, Japan, Australia and Europe. Operating responsibly is in our commercial interests. Customers are increasingly demanding responsibly manufactured products from responsibly managed sources. We achieve third-party certification and verification to national and international standards, and we are committed to sourcing all fibre from sustainably managed sources.

We go well beyond meeting minimum requirements for responsible forest management with a diverse range of biodiversity protection programmes and conservation initiatives. All of our mills are certified to the global environmental management system ISO 14001 and ISO 9001 quality management system to ensure product quality. APP's major production facilities hold Chain of Custody certification from LEI and PEFC which demonstrate the systems we have in place to trace fibre through the supply chain. Ecolabels and other product certifications are also used on specific products as required.

Efficient use of energy and water is a focus for all of our mills which brings both sustainability and commercial benefits. We strive to be transparent about everything that we do, responding to the interests of all our stakeholders. Such attributes support our competitiveness in a globalised marketplace.

BUYING LOCAL

We select our suppliers based predominantly on their commitment to delivery and supply, quality, cost and lead time. Although currently no formal policy to select local suppliers is in place, the procurement criteria itself tends to favour local suppliers and in 2011 76% (77% in 2010) of our procurement spending went to local suppliers.







Due to the decentralised structure of APP, each operating company¹ publishes an annual report which is publically available. Each report details the respective companies' board structure, governance arrangements and audited financial results. For full references to the relevant pages in the annual reports see page 140.

As required under Indonesian company law, companies in the APP Group have a Supervisory Board of Commissioners. There were no significant changes to governance of APP's operating companies during this reporting period.

ROLE OF THE DIRECTORS

APP's company Directors monitor financial results and measure the company's progress towards meeting or outperforming environmental targets, limits or guidelines. Directors also have responsibility for the delivery and management of social programmes.

Full biographies of all board members appear in the annual reports of the four principal operating companies; this includes board composition and the role of each board member. Employees are actively encouraged to feedback comments to the Board of Commissioners, via i-suggest, an online portal. Improvements made as a result of employee suggestions are rewarded.

EXECUTIVE PAY

Details of the total remuneration of the APP board of directors are published by each mill in their respective annual reports.

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¹ With the exception of Ekamas Fortuna which is not a public company



ANTI-CORRUPTION

Our policy is to ensure that no direct or indirect conflicts of interest occur between employees and APP. Board members are not permitted to hold any other position which could lead to a conflict of interest, or which violates the company's status. Exceptions are permissible with the agreement of all shareholders.

Anti-corruption

Central to our approach to managing anticorruption is our "whistle-blowing" programme which is led by the Internal Control and Audit Division (ICAD). The ICAD staff work at each APP company operation as well as at the APP headquarters. Full training is given to the relevant employees and audits are conducted in areas exposed to high risk of corruption, such as departments related to finance and those with regular contact with external parties, for example purchasing, sales and marketing. APP ceases trading with any supplier found to have breached our anti-corruption policies.

Codes of Conduct

People working at APP company sites must adhere to common mission and value statements and codes of conduct. Each site must establish and implement policies related to environmental, social and economic performance. These are applicable to every employee, including Board members. Detailed information is found on our intranet and corporate website. Relevant codes and polices are described throughout this report.

RISK MANAGEMENT

APP's risk assessment includes risks associated with global, regional and local economic outlook, and risks relating to social conditions. It also covers risks relating to the environment, weather and climate conditions, market and consumer trends, technological, regulatory and legislative change and reputational risks arising from external factors, communications, publications or media reports. These risks are constantly monitored and reviewed at monthly Board meetings at each individual mill as well as at headquarter level. Risks are managed through the appropriate management systems with independent third party verification in critical issue areas, such as raw material fibre certification and health and safety management.





MEMBER ASSOCIATIONS

Our Indah Kiat, Tjiwi Kimia and Pindo Deli mills are members of the Association of Indonesian Public Listed Companies (AEI), the Association of Indonesian Pulp and Paper (APKI), and the Association of Indonesian Entrepreneurs (APINDO). Through these associations, APP contributes to the development of various regional and national regulations by providing technical inputs relevant to sustainable development.

APP is actively supporting these organizations on specific projects or campaigns. For example, together with the Indonesia Global Compact Network (IGCN), APP initiated the 2011 UN Water Day event in Jakarta with a water awareness campaign and seminar. IGCN is a part of the UN Global Compact (UNGC), the largest social responsibility organisation with more than 7,000 members across the globe.

The initiative aimed to encourage the private sector to run sustainable businesses and partner with UN agencies, civil societies, academics and other stakeholders to contribute to sustainable development. APP has been a member of the IGCN since 2008.

In 2011 APP mills pledged to an initiative under the UNGC, the UN CEO Water Mandate, along with four other Indonesian companies. Shortly after the pledge, APP was elected to be the Chair of the Indonesia Water Mandate Working Group which consisted of representatives from the private sector, civil society and academics.





The objective of the Working Group is to encourage companies in Indonesia to adopt sustainable water management principles and develop collaborative action which contributes to addressing water challenges in Indonesia.

Lembaga Ekolabel Indonesia (LEI/Indonesian Ecolabeling Institute) is a non-profit constituent based organization that develops forest certification systems that promotes its mission of just and sustainable forest resource management in Indonesia.

In 2011, Ms Aida Greenbury, APP Managing Director for Sustainability and Stakeholder Engagement, was elected onto the organisational board of LEI's business chamber. As a constituent based organisation, the board consisted of four chambers that represent the most relevant stakeholders in the utilisation of forest resources: the private sector, private sector, traditional forest community and farmers, NGOs and eminent persons.









CHAIRMAN'S STATEMENT



Dear Stakeholder, Welcome to APP's fourth sustainability report.

The two years which this report covers, 2010 and 2011, saw significant developments for both APP and Indonesia, which are important for all of us who care about tackling climate change, protecting our precious natural resources, developing our national economy and alleviating poverty.

Our vision is to become the 21st Century's premier, world class pulp and paper manufacturer – making paper sustainably and delivering superior value to customers, shareholders, employee and the community. An essential element of that is to do everything we can to support the Government of Indonesia's 'pro poor, pro job, pro growth, pro environment' policy. In 2010 and 2011, there were significant developments in that policy, which APP embraced wholeheartedly.

In 2010, the Government of Indonesia (GOI) introduced two landmark national policies. The first was a set of new commitments and regulations to reduce Indonesia's greenhouse gas (GHG) footprint by 26 percent by the end of the current decade (from 'business as usual' levels). The second was a moratorium on new licenses to convert primary natural forest and peat land to other land uses.

In launching these new policies, the President of Indonesia has set the country on a new course, where Indonesia will become a world leader in the global battle against climate change. In harmony with that objective, protection of our natural forests and the biodiversity within them has become a national priority, alongside continuing to grow our economy and bringing more and more of the population out of poverty and lack of opportunity.

As a leading Indonesian company, we stand squarely behind the nation's commitments to protect the environment. Climate change represents a serious threat to our survival on this planet and collective effort is needed to find balanced solution. Indonesia has shown that a developing economy can make serious commitments on climate change, without endangering the future prosperity of its people. It could be that the Indonesian model represents one for other countries to follow, especially at a time when a global agreement on GHG is proving so hard to achieve.



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With our long history in the pulp and paper industry, we understand more than most just how important a role forests, natural and plantations, can play in reducing greenhouse gas emissions. That's why, in February 2011 APP announced a target to source all of our pulpwood from Sustainable Forest Management (SFM) certified plantation sources by 2015. We know this will be a challenge to fulfill but nevertheless see it as a vital part of demonstrating to our stakeholders that we are a responsible company prepared to take such actions.

APP continues to support the Government of Indonesia's commitments by supporting the Kampar Carbon Reserve project, in addition to the focus on carbon emission reductions within our operations. The Kampar Carbon Reserve is the world's first and only REDD+ project from private enterprise that proposes to transform a plantation forest concession area into a carbon farm by maintaining it as a natural forest area. In 2010 APP embarked on a one and a half year research project together with its pulpwood suppliers and tropical peat experts from Bogor Institute of Agriculture (IPB) to understand the carbon balance of plantation forest with that of the natural forest area. It is part of our effort to develop scientific solutions that can help our suppliers to manage their forest concession sustainably.

In 2011, APP become one of the first Indonesian companies pledged to the United Nations CEO Water Mandate, and was selected as the chair for the Indonesian CEO Water Mandate Working Group, taking a central role as this global issue develops. We recognize that social issues must be addressed alongside environmental issues —genuine sustainable development requires a consideration of both aspects.

APP's philosophy for social initiatives is in line with a local proverb "If you give them fish, they can eat for a day, if you give them a hook they can eat every day". So instead of focusing only on philanthropy, we expand on projects that can provide the community with the skills and tools to empower them and improve their welfare. That is why the Soran Eco-tourism village project is exciting to us, and one that I am particularly proud of. Soran is a village in the heart of Central Java with a rich cultural heritage and huge underdeveloped potential. Close to 60% of its villagers live below the poverty line. Together with Habitat for Humanity Indonesia, we are working to enable the people of Soran to unlock their potential by improving existing facilities, such as their houses and community centers, teaching them management and hospitality skills and providing them with training to better accommodate tourists.

Conservation of critically-endangered species in Indonesia is also high on our list of priorities. In 2011, APP started a public-private partnership with Ujung Kulon National Park, the government, NGO and scientific community to try to preserve the habitat of the critically-endangered Javan rhino. Ujung Kulon is the last remaining habitat of this iconic mammal. It is estimated that there are less than 40 remaining in existence. It is on the brink of extinction due to illegal encroachment, disease outbreaks, competition with other species, natural disaster and climate change. The rhino habitat is less than five hours' drive from APP headquarters in Jakarta. Finding a way to stabilize the rhino population is a major conservation priority for all stakeholders in Indonesia. That's why we were very keen to support the GoI in reaching the national rhino conservation goals: a three percent increase on the annual growth rate of the rhino population. The program will evolve around restoring the Javan rhino habitat in the national park and provide alternative livelihood for the community living in and around the national park. The objective is to protect the rhinos from external threats.









COMMITTED TO IMPROVING SAFETY

Health and Safety continues to be a focus area for all of our mills. Incidents, which occurred at the mills during 2010-2011, led us to further improve our health and safety system in our operations. New management procedures and preventive actions have arisen from each incident, and we are committed to keep on improving in order to keep our workforce safe. Our goal is to have a workplace free from accidents.

To ensure our mills follow well established guidelines in their approach to safety management, we use the Indonesian work safety and health and management system (known as 'SMK3'). Our Pindo Deli and Indah Kiat Tangerang mills are also certified to the internationally recognized OHSAS 18001 safety management system.

BALANCING SUSTAINABILITY WITH ECONOMIC OPPORTUNITY

Environmental sustainability is essential for our economic sustainability, because we source our main raw materials from the forest. Without a healthy ecosystem, the plantation forest where our trees are grown will not be sustainable. It is in our interest to secure this for our long term future.

We implement technologies to use our raw materials efficiently. For example, one of our 'continuous improvement' activities at APP mills is to capture more fiber in the white water from the pulping and paper making process. By doing so, we can get more economic benefit from the same amount of wood being pulped; we reduce the amount of solid waste going to the landfill and thus the cost for disposing it. We also reduce the load on our waste water treatment system, which reduces the cost of operating the system. Our integrated pulp and paper mills source more than 70% of their energy from renewable energy sources, while other paper mills are moving to fuel sources with lower GHG emissions, such as natural gas.

THE MARKETPLACE

APP's vision is to become a leading global pulp and paper company, and currently we have been successful in marketing our paper products in over 120 countries worldwide. Gaining ground in these other countries can be challenging as the paper industry is fragmented. In addition to that, we see an increase in dumping allegations against select paper products from Indonesia in our key markets, from local suppliers during hard economic times. The issues had been resolved and we are continuing to serve our customers in various parts of the world.

On the financial side, the group's performance is affected by the fluctuation of pulp and paper in the world's market as we buy some of our

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pulp from global market and sell our paper product globally. In 2010 and 2011 we saw an improvement in the global demand for paper products. We see a strong and increasing paper product demand in emerging countries, including Indonesia, which balances the reducing demand in Western Europe and North America.

As part of our risk management at APP, we constantly monitor the economic situation in Europe and the United States, as any weakening in those economies and general consumption will have a significant impact on the global paper demand and price. Fluctuations in these markets also impact the foreign exchange value and can pose some risk in our export-import activities.

THE GLOBAL PAPER INDUSTRY ROLE IN CONTRIBUTING TOWARDS SUSTAINABLE DEVELOPMENT

Today the growth of the global paper industry is centered on developing countries. The industry helps to support the economic and social development of those communities, whose living standards is much lower than their counterparts in the developed region. The plantation forest industry that supports the paper industry is usually located in remote and underdeveloped areas. Its presence encourages investment in better roads, health care, education facilities

and provides job opportunities in areas that are in desperate need of economic stimulus. In APP, we use national targets of MDGs as one of our baselines in the planning, implementation and monitoring of social responsibility initiatives across our operations.

We will continue to challenge ourselves in our commitment towards sustainability in every aspect of our operations. Relevant to our vision, we are setting a new benchmark to not only be the world class pulp and paper manufacturer, but also to become a credible and most respected company delivering superior value to our customers, shareholders, employee and the community. Our communication around issues that concern our stakeholders will continue to be transparent as we strive to meet the challenging goals we have set ourselves.

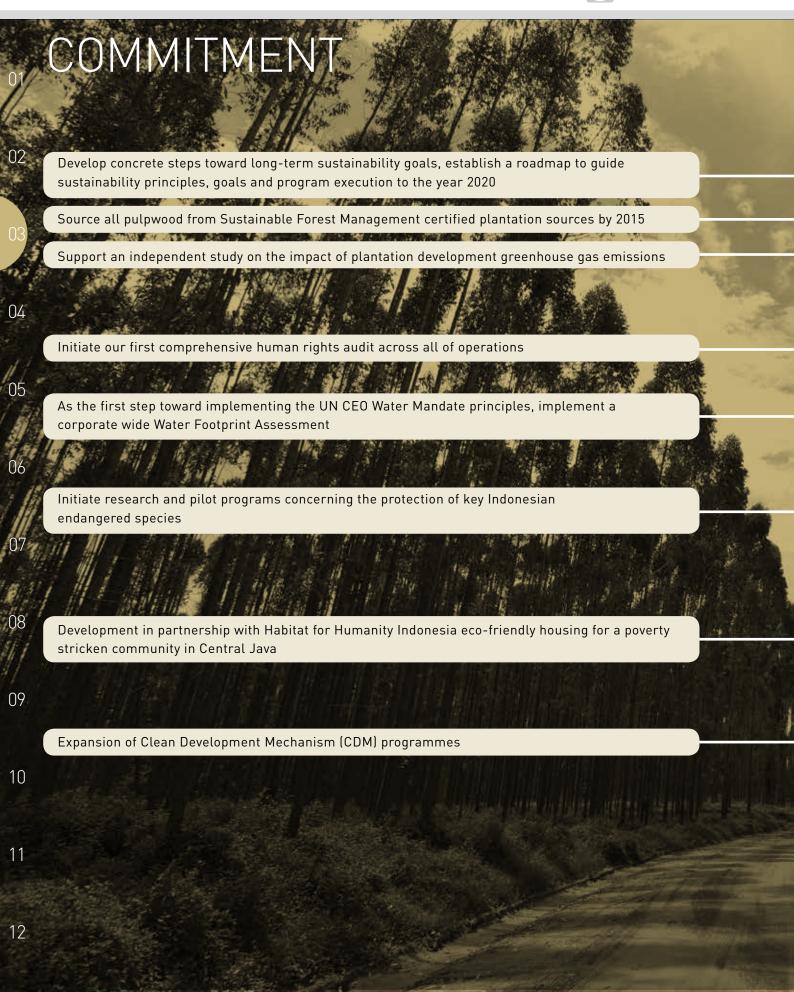
Looking ahead, the exciting prospect for me is having our company and the pulp and paper industry in Indonesia, play a leading role in the fight against climate change, protecting precious natural resources, developing our economy and continuing to alleviate poverty. All of our policies will be geared towards those worthy goals.

Teguh Ganda Wijaya

(I)

Chairman







ACHIEVEMENTS IN 2010/2011

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The Vision 2020 Roadmap has been finalised, details will be communicated in our 2012 Sustainability Report.

On track to achieve this goal by 2015, currently 79% is certified.

APP's landmark research project carried out at one of its pulpwood suppliers' areas in South Sumatra has granted the Indonesia Green Awards and endorsed by the Indonesian Ministry of Forestry for successfully proving the positive impact of plantation forestry on degraded peat land and greenhouse gas emissions.

APP initiated its first ever human rights audit across the company's operations.

Lontar Papyrus Water Footprint Assessment has been completed, covering water intake, mill processes and waste outputs. The assessment in Lontar Papyrus is the first of series of water footprint assessments that will be done in all of APP's major operations. The objective of the water footprinting is to further enhance APP's responsible water management processes.

APP supported various initiatives for the conservation of the Javan Rhino, Orang-utans and the Sumatran Tiger. The programmes supported the release of 40 wild born ex-captive orang-utans into their natural habitats as well as supporting the treatment of 330 orang-utans at a specially prepared treatment centre. The Ujung Kulon National Park, located on the south western tip of the island of Java in Indonesia, is the last remaining home to the Java Rhino. We set up a partnership with the national park to implement a number of conservation programmes.

Achievements to date include 104 people receiving Healthy Cooking training, 41 families receiving hospitality training and 30 people trained in co-operative management. We have also helped 16 families understand how to improve their homes to provide guest accommodation and 25 people were trained on organic farming techniques. Two houses in the community were re-built and a further five are in the final stages or rebuilding. One community centre and three gazebos were also built.

The Kampar Carbon Reserve is a project led by the green entrepreneur firm Carbon Conservation in partnership with APP. Working with the Indonesian Ministry of Forestry, land concession holder PT Putra Riau Perkasa (PRP) and local stakeholders, more than 15,000 hectares of deep peat carbon sink were transferred from concessions allocated for pulpwood plantation to conservation land in an effort to establish this world first pilot project.

Clean tech investments in Indah Kiat Serang are registered in the CDM. Ekamas Fortuna mills investments are currently awaiting registration.





From packaging products to office paper, APP supplies a wide range of paper based products to over 120 countries around the world.

We sell our products through both our own sales offices and sales agents across the globe.

Our customers include multinational companies, who buy a diverse range of products from APP, through to paper merchants and smaller,

more bespoke converters, printers and publishers. Rigorous product testing and attention to health and safety, particularly for food packaging products remains a priority for us.

EVERYDAY PRODUCTS, EVERYDAY NEEDS





KEY PRODUCT GROUPS

OUR KEY PRODUCT GROUPS ARE CLASSIFIED AS FOLLOWS

		2010	2011	
	Revenue	Sales Volume	Revenue	Sales Volume
	000,USD \$	000, Tonnes	000, USD \$	000, Tonnes
Pulp	1,312,840	3,015	1,273,336	3,020
Paper	2,612,691	2,840	2,733,282	2,863
Packaging	1,015,391	1,653	1,052,137	1,579
Stationery	287,288	212	288,416	205
Tissue	353,130	105	421,799	96

Sales decreased 0.3%
between 2010 and 2011
as a result of the challenging
marketplace for paper products
globally. Despite this we achieved
a growth in revenue of 3% between
2010 and 2011, reflecting our
continued control of costs and
efficiency of our operations.



INNOVATION

Our customers' needs are constantly changing.
Through our process of innovation we identify and respond to their requirements with a range of new products as well as continuously developing our current product range.

Our research and development department lead the process of gathering customer feedback, identifying new product niches and bringing new products to market. Central to our research and development activities is the development of our eco-friendly product range in response to the growing demands from our customers to deliver such products.

In 2008 APP carried out our first carbon footprint assessment for the group to understand the carbon impact of our activities. This work continues and our aim is to enhance our carbon monitoring system by developing an internal sustainability database system which will enable us to better monitor and manage the carbon footprint of our operations.



INNOVATION

Impressions Pindo 2000, produced at our Pindo Deli mill was launched in 2011. It's a premium quality paper grade which combines excellent printing performance with colour intensity.

Foopak is a product for use as paper cup material and a sustainable alternative to plastic based cups. It is produced without PE lamination which is safer for products which come in contact with food.





Excelpro Recycled Paper is a product made from 100% recycled paper, designed for use in the office environment. It carries the PEFC recycled label and its packaging and ream wrappers are also made from 100% recycled fibre.



Produced by Indah Kiat
Tangerang, Texper is a premium
colour paper product produced
in a wide range of formats
including envelopes, folders,
pads, loose leaf, memo, sticky
notes, corrugated paper
and card.







With such a diverse range of **ENVIRONMENTAL** products in our portfolio, the list of end uses of our products is a long one.

Paper products are either sold directly to the end user, or sold on for further converting or printing by our customers before finally reaching the end user. Pulp produced by our two integrated pulp mills, Indah Kiat Perawang and Lontar Papyrus is used solely within the APP mills. We sell surplus chemicals which have been produced on site at our mills to other industrial users and municipal water purification plants.

CREDENTIALS

One way to give a third party guarantee to our customers about the sustainability credentials of the products they buy from us is through the use of product certification and labelling. Broadly speaking these cover the sourcing of raw materials, environmental credentials of the paper mill and the contents of the paper product, which is particularly important when the product comes into contact with food. Taking a lifecycle approach, we ensure sustainability is considered across the full paper value chain.





MILL ENVIRONMENTAL CREDENTIALS

	Indah Kiat Perawang	Lontar Papyrus	Indah Kiat Serang
Quality Management	ISO 9001	ISO 9001	ISO 9001
Product Quality	ISO 9706		HP Indigo Media Certification
	Ecolabel (Indonesian Standard)		
EMS	ISO 14001	ISO 14001	ISO 14001
Environmental	PROPER (Blue)	PROPER (Blue)	PROPER (Blue)
Health and Safety	SMK3	SMK3	SMK3
Chain of Custody	PEFC	PEFC	PEFC
	LEI	LEI	
Product specific	RoHS	RoHS	RoHS & CONEG
	SVHC screening test		Ozone Depleting Substances
			REACH / SVHC screening
			Food Packaging Direct Contact FDA, Germany
			Food Packaging Direct Contact FDA, USA
			Supervision of Good Packaging for Food Packaging

This table summarises some of our key third party labels and certificates.



Indah Kiat Tangerang	Pindo Deli	Tjiwi Kimia	Ekamas Fortuna
ISO 9001	ISO 9001	ISO 9001	ISO 9001
	ISO 9706	ISO 9076	
	Eco-label (Indonesian Standard)	Eco-label (Indonesian Standard)	
	Eco-label - (European Standard)	Eco-label - (European Standard)	
	Green Mark	Eco-label (Japanese Standard)	
	Taiwan Ecolabel Standard		
	SNI		
ISO 14001	ISO 14001	ISO 14001	ISO 14001
PROPER (Green)	PROPER (PDI:blue, PDII: green)		PROPER (Blue)
IndustriHijau			
SMK3	SMK3	SMK3	
OHSAS 18001	OHSAS 18001		
PEFC	PEFC	PEFC	
	LEI	LEI	
RoHS of Heavy Metal	ISO 22000	Green Seal	
Analysis report of SVHC screening	ISPM (Phytosanitary)	Green Labeling Singapore	
	FDA USA	Food Grade Paper/ Board, US FDA	
		Food Grade Paper/ Board, Germany Recommendation XXXVI	

Each mill also has a range of other credentials which are specific to the type of product it produces and the market it exports too.

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In a global marketplace our customers demand the highest standards of product sustainability. Six of APP's mills have the PEFC Chain of Custody in place. This certification signifies that these mills can make credible claims on the content of PEFC certified fibres in their products originate from sustainably managed forests. In addition, PEFC Chain of Custody certification also requires those mills to have procedures in place to ensure the wood sources are traceable and that only PEFC certified and non-controversial sources¹ are used in its production. APP also uses the PEFC recycled product logo, introduced in 2009, on certain recycled products.

The Indonesia Ecolabelling Institute (LEI) is an organisation dedicated to promoting sustainable forest management through a forest certification program and wood product chain of custody certification program. LEI is the only voluntary, non-governmental Sustainable Forest Management (SFM) certification programme which is currently applicable to pulpwood plantation forestry in Indonesia.

Four of APP's mills have achieved Chain of Custody certification under the LEI scheme and we launched the first LEI-certified paper in 2009.

Food packaging products are subject to additional certification requirements to demonstrate that safety standards for the products have been met. Some of our packaging products, for example, are tested to standards set by the United States Food and Drug Agency or the EU Restriction of Hazardous Substances.

Ecolabels are an important tool to communicate environmental credentials when supplying products globally. They also provide proof that our products meet the local regulatory requirements. Ecolabels can offer a re-assurance which is familiar to the region in which we are selling a product. The labels have strict criteria which covers the sourcing of raw materials right through to production and quality testing of the product. APP applies the relevant eco-labels in response to customer demand in a given region.



incidents of product labelling non-compliance were recorded in 2010/11.

No breaches of customer confidentiality or complaints about the misuse of customer data were received in the same period.

PEFC controlled sources have been assessed based on the PEFC Due Diligence System to minimise the risk of uncertified content in certified products originating from controversial sources.



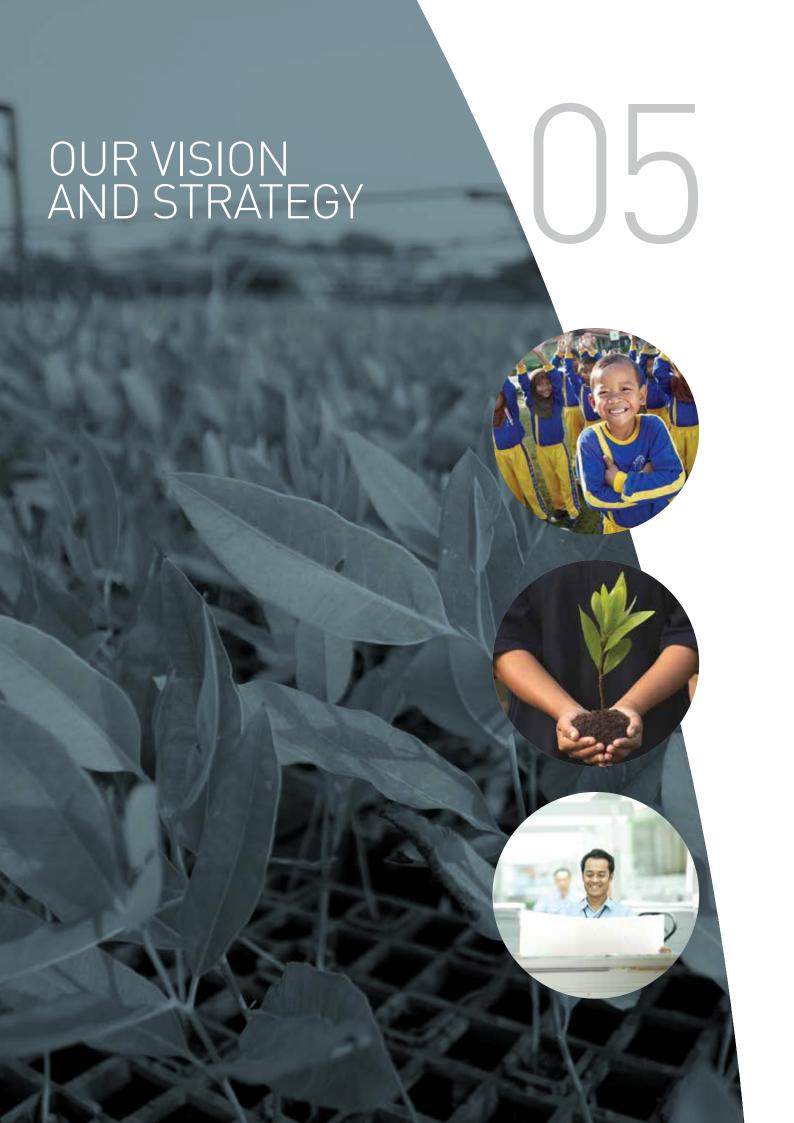
Enova is a premium coated paper produced at the Tjiwi Kimia mill. Despite being designed for high quality offset printing, the grade uses a mix of recycled fibre and virgin fibre; a feat achieved from extensive development of the product through the research and development process. It is also PEFC certified.

CUSTOMER SATISFACTION AND FEEDBACK

Systematically collecting customer feedback is essential to understand what our customers want from us and to react to any concerns immediately. Over 300 customers participated in the latest survey, the results of which we use to focus on areas for improvement. The survey told us that product knowledge, our sales offices, quality consistency and packaging of products are the attributes which customers rate us highly on. Areas for improvement include the APP website and complaint handling, both of which we will address and aim for progress in subsequent customer surveys.









Our vision is to become a global leader in sustainable manufacture of paper and pulp.

It is of paramount importance to APP to further develop our company in an economically, socially and environmentally sustainable ways by building on our efforts to protect the environment, reduce poverty and empower our host communities.

Ours is a challenging operational context. The Indonesian pulp and paper industry has grown significantly in recent years; APP's journey in pulp and paper began only 34 years ago when Tjiwi Kimia started producing paper. With this rapid growth comes sustainability challenges and as the leading pulp and paper company in the region, we're committed to tackling them head on. We are acutely aware of the tension between economic growth and sustainable development; our understanding and partnership with relevant stakeholders will help us realise our commitment to becoming a responsible business.

Our approach to the way we work today is a response to critical legacy issues. Indonesia is faced with illegal logging issues which add to the high rate of deforestation and forest degradation. This impacts the perception of the international community on the legality and sustainability status of Indonesian wood based products, despite the government launching an aggressive programme to halt illegal logging activities which has reduced the annual rate of deforestation by over 70%.

The Indonesian pulp and paper industry was established in the 1970s. Initially wood was primarily obtained through land clearance for agriculture and plantation development. As the plantation forestry in Indonesia rapidly develops, the industry is relying more and more on fast growing plantation wood species

such as acacia and eucalyptus as its raw material. These established plantation forests provide a more environmentally sustainable source of wood for the pulp and paper industry and allow for better control over issues of illegal wood contamination, provided they are responsibly managed. APP strives to continually improve the sustainability of its pulp wood source with the implementation of a robust wood traceability system in its supply chain and the adoption of third party verified sustainable forest management standards. We also promote best practice through our pulpwood suppliers' plantation forest concessions to demonstrate how we are improving the sustainability of our operations.

Beyond our immediate operational boundaries, we want to create solutions which balance social, environmental and economic needs. The influence we have on our operations, our supply chain and the proximity we have to our host communities not only pose challenges which we must face head on, but also huge opportunities to influence and impact wider society. We support measures to eliminate illegal logging practices in Indonesia by influencing behaviour of local communities and raising awareness of the detrimental impacts of illegal logging. Our core strategy is to offer alternative revenue streams to incentivise sustainable and legal employment where we operate.

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OUR STRATEGY

APP'S SUSTAINABILITY STRATEGY HAS EVOLVED OVER THE YEARS. IT IS BASED ON 3 KEY LAYERS.

Maintenance of an active and transparent dialogue with stakeholders

02

Adoption of relevant national and international voluntary standards

03

Legal compliance in the countries in which we are operating

To meet the first layer of legal compliance APP and its pulpwood suppliers have to undertake the relevant environmental and social assessments in line with the Indonesian environmental and forest regulations in advance of starting or expanding its operations.

This also covers compliance with international conventions which have been ratified by the Government of Indonesia; for example International Labour Organisation's (ILO) fundamental conventions and the Stockholm convention on persistent organic pollutants.

For the second layer, APP reviews various voluntary standards that are relevant to its operations that can help it to adopt industry best practices whether at the national or international level. We consider which standards are appropriate in guiding us in achieving our goals, appropriate for our operations and steering us towards industry best practice. For national voluntary schemes and standards, APP is participating in the Indonesian environmental monitoring program called PROPER.



KNOWING WHICH ISSUES TO FOCUS ON

We realise that a systematic and wide reaching approach is required to ensure that all stakeholders are fairly represented and considered. This is why we carried out our most significant stakeholder engagement exercise in 2010 as a means of defining our Vision 2020 Roadmap in 2011.

Carbon Conservation, our partner in the development of APP Vision 2020, spoke to 260 stakeholders to determine what issues are of concern to them. Interview questions were kept broad and open-minded to ensure that each stakeholder had the freedom to describe the issues that concerned them, without being influenced by our own objectives or the constraints of the questionnaire.

We also categorised the stakeholders into external and internal groups to capture different perspectives to various economic, social and environmental issues relating to APP's mills and its associated forestry operations. Internal stakeholders comprised of APP managers and employees from across the business. External stakeholders comprised of customers, NGOs, local government, community members from areas adjacent to mills, pulpwood suppliers, research organisations and academic institutions.

APP has also implemented (and our major mills have been certified to comply with) the Indonesian voluntary chain of custody scheme established by LEI. Examples of our voluntary international standards are the implementation of management systems in line with ISO standards ISO 9001 and ISO 14001. APP is also one of the first industry players in Indonesia to have committed to an assessment of carbon emission and sequestration in our supply chain which we will use to reduce our future energy consumption. APP was also amongst the first in Indonesian and South East Asian companies to undertake an extensive social and human rights assessment of its supply chain in accordance with international standards, helping us to highlight where the gaps in our approach exist and where the high risk areas exist.

For the third layer of our sustainability strategy we maintain an active and transparent dialogue with our stakeholders. We want to engage and respond to their issues. Since 2005 we have been developing our sustainability reporting based on the GRI standard to ensure that our reports are accurate, balanced, relevant, measurable and transparent. These reports provide our stakeholders with the complete picture of APP's performance in all three aspects of sustainability: People, Planet and Profit; the triple bottom line. Furthermore, APP continues to be active in international forums on sustainability including the UN Global Compact Network and the UN CEO Water Mandate Programme where we learn of global best practices and share our own experiences in sustainability.

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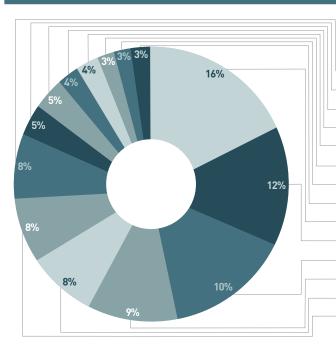
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OUR FINDINGS

INTERNAL STAKEHOLDERS - ISSUES OF INTEREST

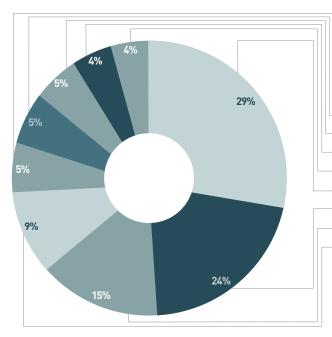


8% Community Engagement
5% Water
5% Recycling
4% Waste Water
4% Fibre source, chain of custody
3% Air Emmisions
3% Occupational Health & Safety
3% Other
16% Employment Practices
12% Conservation & Biodiversity
10% Management

8% Community Education & Development

9% Energy8% Solid Waste

EXTERNAL STAKEHOLDERS - ISSUES OF INTEREST



5% Water
5% Solid Waste
5% Fibre Source, chain of custody
4% Management
4% Carbon
29% Community Education & Development
24% Conservation & Biodiversity
15% Community Engagement
9% Other

N5





In 2011, we realised that we needed to incorporate all of our sustainability efforts and targets into a single long term sustainability strategy. This needed to incorporate all aspects of relevant environmental and social issues into a comprehensive, balanced and clear roadmap to help guide our business to be a responsible, sustainable and profitable company.

We wanted to review our current initiatives and commitments against global best practices more comprehensively, to understand where and how we can improve ourselves further. To help us in developing this roadmap, we engaged Carbon Conservation, a sustainability consulting firm, to help us craft our sustainability roadmap which we call Vision 2020. This roadmap will provide specific guidelines and targets for everyone working for our company from senior management to our operators on the mill floors

and the harvesters in our pulpwood supplier's plantation forest. This will help us to achieve our commitment to operate according to the highest international standards and practices in support of our objective to become one of the leaders in sustainable business by the year 2020.

These sustainability targets will guide our actions, with progress against them reported regularly.

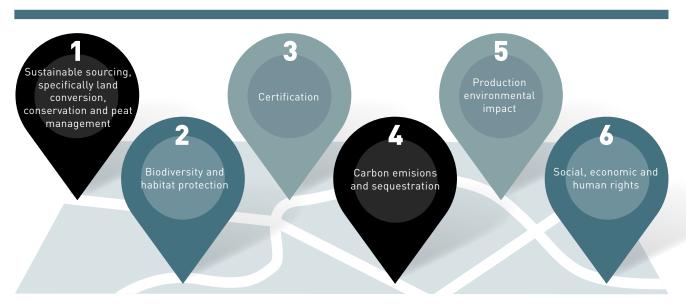


CREATING A 2020 VISION

WE UNDERTOOK THE FOLLOWING TO DEVELOP OUR VISION 2020 ROADMAP:

- **01.** Benchmarking APP's performance against global industry leaders on key aspects of sustainability to understand current performance relative to peers and best practices
- **02.** Site visits by the consultancy Carbon Conservation to review the various sustainability initiatives in APP's mills and its pulpwood suppliers
- **03.** Mapping issues and interviewing stakeholders to review relevant subjects that need to be addressed in the roadmap
 - → Host communities in the areas in which we operate
 - \rightarrow NG0s
 - → Experts (academics and industry experts) in relevant environmental and social topics
 - → Associations relevant to our industry and our challenges
- **04.** Synthesise findings on issues and best practices into clear and measureable goals and KPIs for the medium and long term until 2020

BASED ON OUR CURRENT UNDERSTANDING OF ISSUES RELEVANT TO OUR INDUSTRY AND US, WE EXPECT THAT THE SUSTAINABILITY ROADMAP WILL AT A MINIMUM ADDRESS THE FOLLOWING SIX INTERWOVEN ASPECTS OF OUR OPERATIONS:



Balancing these various aspects in the complex environment of a developing nation is a daily challenge that we have to face. We hope that with the launch of our roadmap in early 2012 we can better address these challenges and publicly communicate our progress to stakeholders via press releases and our website.



CREATING A 2020 VISION

MILESTONES TO ACHIEVE SUSTAINABLE PULPWOOD SOURCES

In February 2011 APP announced its commitment to source 100% of its pulpwood from Sustainable Forest Management certified sources by 2020. To achieve the commitment, APP set three critical targets that are the foundation of its sustainable forest management program in Indonesia.

Those include:

- **01.** To source 100 % of our pulpwood supply from sustainable plantation stock by the end of 2015
- **02.** To achieve the government of Indonesia's SFM certification for APP's pulpwood suppliers by the end of 2015

03. To have all exclusive pulpwood suppliers achieve the comprehensive and voluntary-based LEI (Indonesia Ecolabelling Institute) SFM certification standard by the end of 2020

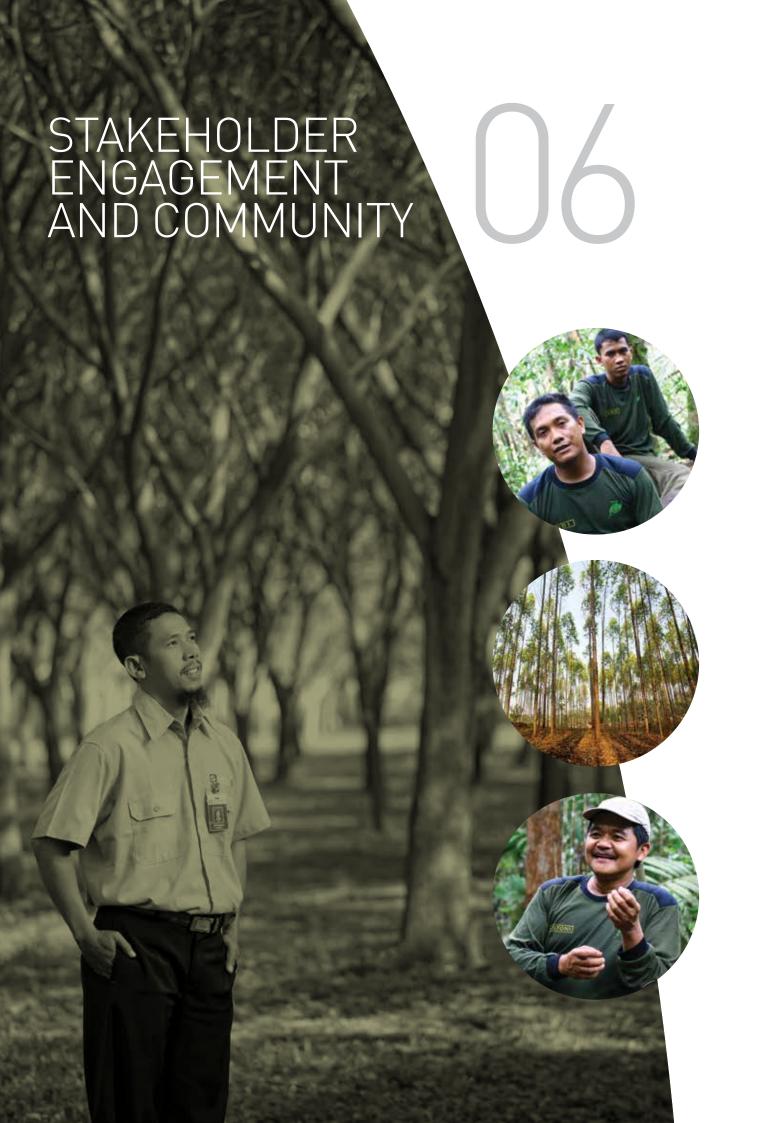
These targets also provide a foundation that will assure stakeholders that APP is operating in full legal compliance and continuing to strive to be a global leader in responsible paper production. The path to achieving these goals demands rigorous independent auditing of all APP operations as well as our pulpwood suppliers. Detailed certification and verification schemes are discussed in Section 8.

HUMAN RIGHTS

September 2011 saw APP initiate its first comprehensive human rights audit across all of its Indonesian operations, in line with the United Nations call for global protection of human rights by global businesses. This audit included our two most significant suppliers, representing 55% of the wood supplied to our mills. The first step in this commitment was to appoint independent assessment of APP's policies, principles and performance across the company's operations, including its supply chain. The audit process is rigorous and involves over 100 assessment points, the results of which will help us to identify areas of good performance and also areas where we need to work harder to address any gaps in our approach by developing policies and management approaches. The process will also help us to identify the areas which are of high risk of human rights violations, allowing us to ensure we focus on the operations and our suppliers that pose the greatest risk.

Prior to establishing this commitment Human Rights was already high on APP's agenda. Protecting the rights of indigenous people is particularly relevant to APP's pulpwood suppliers, which represents a significant proportion of our supplier base and which is also a subject of particular interest to our stakeholders. We expect our suppliers to respect the rights of Indigenous people living in or around the concession areas. The risk of forced and child labour lies predominantly in our supply chain, the risk of which was assessed as part of our human rights audit.

Our contracts with significant suppliers include human rights related clauses such as working hours and compliance to national regulations. We recognise that in the future we need to widen the scope of these clauses to include more of our suppliers; the first step towards achieving this was to carry out the Human Rights audit to identify these gaps. In 2010 and 2011 we did not refuse to work with any supplier following screening of their human rights related procedures.





At APP we don't see Stakeholder Engagement as an additional task, it's absolutely central to the way in which we conduct our business, helping to steer the way in which we operate and governing how we respond to our stakeholders' concerns.

With our raw material supply so heavily based on wood, we are interacting with our stakeholders every day; the communities that live and work in the areas surrounding our mills, our employees, NGOs and our customers. This day-to-day engagement is at the heart of how we conduct our business, examples of which you will see throughout this report.

APP has in recent years received criticism for the way that it operates, in particular our wood sourcing policies. In response to this we will demonstrate through clear commitments and progress against these commitments that we do operate sustainably.

WHO ARE OUR STAKEHOLDERS?

Employees	Contractors	Host communities	
Government	Suppliers	Customers	
NGOs	Educational establishments	Unions	

Our stakeholders are identified through our day-to-day activities and our knowledge and understanding of which groups of people are affected by our operations. Importantly, we recognise that we operate on both a local and global scale, and as such, we have the engagement mechanisms in place to make sure we address stakeholders at the correct level; members of an indigenous community within APP's Pulpwood supplier concessions require a very different approach to a global NGO.



THE MAIN ENGAGEMENT MECHANISMS ARE DESCRIBED BELOW Community engagement APP holds regular meetings and dialogue with its host communities, consisting of both formal and informal engagement in each of our operations. We engage with our host communities first hand to hear their concerns and maintain an on-going open dialogue, facilitating community meetings for example. APP is involved in various national and international level discussions around sustainability, such as the UN Global Compact forums and specific trade forums in the forestry and paper sector. Report development In developing our Sustainability Report we interviewed a wide range of stakeholders, from community leaders to mill employees and NGOs. We asked open questions about their concerns and the issues they face, before documenting all of their feedback. The report then acts as a communications tool to present our progress on the issues that concern our stakeholders. Attending global events such as Paperworld Frankfurt and European Greenweek allows us to engage in debate on our sustainability challenges to a global audience. We also hear from other key figures in the industry and keep track of what progress is being made across a wide range of issues on a global scale. APP educates its customers about its sustainability efforts. We hold regular meetings with customers to update them on product issues and issues around sustainability. We provide information on APP's influence on the welfare of its host communities and discuss APP's sustainability performance. We educate students and teachers about endangered species in Indonesia and what we can do to protect them. We also partner with a number of institutions, benefiting from opportunities for joint learning. Open House events We invite stakeholders to visit APP's operations to gain insight into the work that we do. For example, we invited stakeholders to Perawang on 15 occasions during 2010-2011. Stakeholders in attendance included customers, national and foreign government officials, NGOs, academics and members of the media. Through the website, www.rainforestrealities.com, APP also develops personal blogs on various topics to engage in online conversation. 12 Sustainability updates are also published on our website; these tend to

be focussed on a particular issue and how we are addressing it.





ENGAGING STAKEHOLDERS ON A GLOBAL PLATFORM

The paper industry is a global industry with international sustainability issues. APP wants to demonstrate that Indonesia is not a separate issue which must be dealt with in isolation, but part of the bigger picture of this industry. We also want stakeholders to form their own opinions of the sustainability of our operations. We do this by building platforms for engagement and giving clear messages about how we manage our business.

In 2010 we sponsored the launch of LEI certification for products sold to the European markets at the international trade fair, Paperworld. The event invited speakers from the Economic Counsellor from the Indonesian Embassy, to the European Union, Secretary General of PEFC Germany and the Executive Director of LEI. The discussions looked at the challenges that the paper industry will face as fibre supply move towards equatorial regions and how the demands for certified fibre from these regions will increase. APP sees this and other similar topics as a debate for the global industry and we will continue to raise these tough issues on a global platform.

"APP's main reason for participating in the conference is to present environmental, social and other sustainability related challenges facing the pulp and paper industry in Asia."

Aida Greenbury,
APP's Managing Director of Sustainability and Stakeholder Engagement



ENGAGING STAKEHOLDERS ON A GLOBAL PLATFORM

APP uses global platforms to inform interested industry stakeholders about its key sustainability activities that are described throughout this report. We were one of only a handful of non-European companies selected by the European Commission to showcase their environmental credentials at the European Commission's Green Week (the largest annual conference in European environmental policy) in June 2010.

We used the event to showcase some of our biodiversity highlights, including the Giam Siak Kecil – Bukit Batu Bioshphere Reserve (see page 110), the Taman Raja Nature Preserve (page 114) and the Senepis Sumatran Tiger Sanctuary.





Ensuring balanced and objective information is provided to our stakeholders is important to APP. We use blogs as an open platform for our stakeholders to discuss and comment on our progress. Aida Greenbury, Managing Director of Sustainability, has written for www.ecobusiness.com and RISI, amongst

others. APP also hosts Rainforest Realities, a website which describes life in the Indonesian rainforests. Here you can read about a range of our activities, hear from various stakeholders and watch videos. To find out more go to www.rainforestrealities.com





Issue	How we responded	Pag
Employment practices	Offer stable employment. Provide training opportunities for all employees and competitive remuneration.	73
Conservation & biodiversity	APP Pulpwood suppliers follow sustainable forest management practices which include conservation and biodiversity criteria. We have made these issues central to our Vision 2020 commitments. We made significant investments in conservation initiatives throughout 2010 and 2011.	87
Management	Transparent governance and management processes. This will be developed further as part of the Vision 2020 roadmap.	14
Energy	Continued investment in power operations at our mill sites to reduce fuel use and increase the use of non-fossil based fuels. Taking part in an industry-wide study to share best practice and improve mill efficiency.	123
Solid waste	On-going investment to increase mill efficiencies to reduce waste. Waste that is created is re-used or recycled when possible and we continually strive to increase the channels and methods through which APP mills can dispose of waste by exploring new innovative processes.	131
Community engagement, education and development	Community investment programmes amongst our mills and Pulpwood suppliers are heavily focussed on education and development. Active communication mechanisms ensure we listen and resolve disputes.	55
Water conservation	Consumption of water is measured at source at all mills and reported publically. We also chair the Indonesia Water Mandate Working Group to work with other stakeholders to address this global issue.	125



Issue	How we responded
Recycling	Utilisation of waste is increasing as we find new and innovative ways to reuse our waste, many of which are awaiting official government approval.
Waste water	Mills adhere to strict local guidelines on the quality of waste water. Samples are checked by both mill and external laboratories and reported.
Fibre sources and chain of custody	In February 2011 we announced a commitment to use only 100% certified pulpwood. We only use 100% Sustainable Forest Management (SFM) certified pulpwood, sourced from plantations and we guarantee not to use High Conservation Value Timber.
Air emissions	Emissions from our mills and power plants are constantly monitored against the relevant government guidelines. Air quality surrounding our mills is also measured to ensure our operations are not impacting on the air quality of the communities in which we operate.
Occupational health and safety	Safety is a priority for all of our mill sites and it is managed locally by each mill. National and/or international guidelines are followed. Good practice amongst employees is rewarded and we offer employees regular opportunities to discuss their concerns and suggest improvements to the way in which we work.
Carbon	We continually invest in power operations at our mill sites, increasing the use of non-fossil based fuels. Responsible forest management (including peat land management) reduces emissions related to land conversion and forest fires, therefore
	maximising carbon sequestration of our forests.



ADDRESSING THE ISSUES THAT MATTER

Community and forestry issues are consistently rated as the top priorities for both internal and external stakeholders, with forestry issues particularly important to the latter. These are some of the key drivers in establishing the Vision 2020 Roadmap (see page 40) and our commitment announced in 2011 to use 100% pulpwood from Sustainable Forest Management certified areas. We want to show our global audience that our commitments to sustainable development are clear.

WHAT ARE THE MAJOR CHALLENGES THAT APP HAD TO ADDRESS IN 2010 AND 2011?

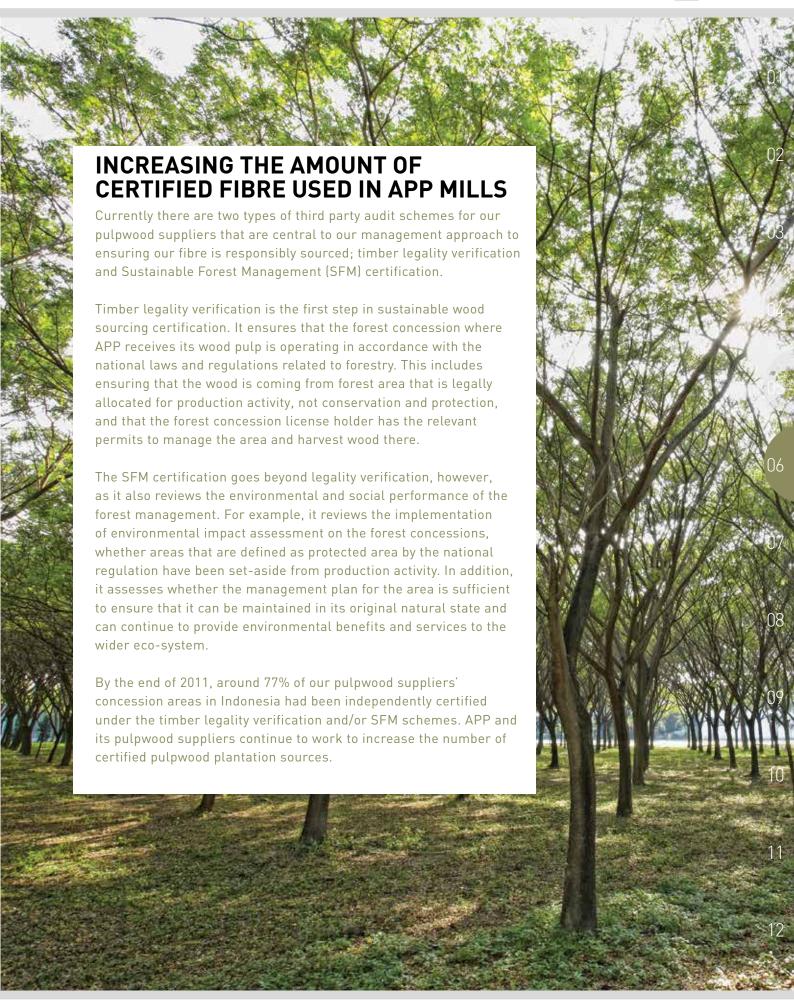
Concern amongst stakeholders and international media over the sustainability of our pulpwood plantations, in particular the use of Mixed Tropical Hardwoods, continues to be one of our most critical issues to address. APP is committed to sourcing its pulpwood from sustainably managed forest originating from legal production forest area that has been allocated by the government of Indonesia for plantation forestry. You can read more about our approach in the Sustainable Raw Materials section of this report.

There are also concerns from our international stakeholders regarding increased GHG emissions as a result of land use change from degraded natural forest into plantation forest, especially with regards to peatland forest area. It has been suggested that peat subsidence due to improper water level management and forest fire can result in substantial GHG emissionsinto the atmosphere. To see the results of the study see page 93.



Although we are engaging stakeholders everyday through our work, we continue to conduct formal stakeholder engagement, on an annual basis. This process helps to provide feedback as we develop and implement the Vision 2020 Roadmap in the coming years and will ensure that our strategy is continuously informed by the priorities of our stakeholders.









NO CONVERSION OF NATURAL FOREST INTO PLANTATIONS

APP does not accept trees from primary natural forest areas. We only work with suppliers that supply wood from areas that have been specifically allocated by the government for plantation forest development. These areas consist of degraded logged over forest and denuded wasteland. Before development, APP's pulpwood suppliers commission multiple independent enviro-socio assessments on the production forest concessions, so that areas that are defined to have high conservation value are set-aside from plantation forest development activities. This is in line with the government regulation on plantation forest management.

ADDRESSING THE ISSUE OF PEAT LAND PROTECTION

In Indonesia, forestlands designated for production forestry, especially low-lands/peat lands are rapidly being degraded because of a lack of responsible management, sustained social and economic pressures, and the use of slash and burn land-clearing practices. The best solution to develop such areas while preserving the greater natural forest depends on active forest management and creating a buffer zone to prevent encroachment and illegal occupation.







OUR EMPOWERED COMMUNITIES

One of the primary goals of our community engagement programmes is to tackle the root cause of poverty by building community capacity and creating a sense of ownership and greater empowerment.

Empowerment does not mean renouncing our responsibility to the community – it's more about a collaborative approach to co-development. This in turn leads to confidence and awareness which can trigger change, for instance by promoting local economic development, building stronger democratic processes and reducing crime.

We endeavour to empower our host communities to become self sufficient and develop in a sustainable manner. In particular, the community programmes that have been established in the areas around APP's operations aim to create a sustainable source of livelihood that is inclusive of our business, for example the conversion of waste from the mills' operations into saleable goods. These type of programmes ensure that the community grows alongside the company and provides the mills with a license to operate, co-operating with their neighbouring communities.







APP aligns our community initiatives with the Millennium Development Goals, targeting our investments toward initiatives that address the specific targets set out by the development goals:

- → Promote gender equality and empowering women
- → Reduce child mortality rates
- → Improve maternal health
- ightarrow Combat HIV/AIDS, malaria and other diseases
- → Ensure environmental sustainability
- → Develop a global partnership for development



We use the results of our 2008 Social Footprint Assessment to help us to direct our community investments. Some of the mills also carry out social mapping themselves. We also receive proposals from the community regarding investments they would like to see and we select these based on the above.

Regional government, involving a range of local stakeholders also present their plans for social investments each year and invite companies to either participate in their projects or implement programs that are relevant to their objectives and goals.





APP's mills operate in various regions in Indonesia, each within diverse urban, industrial and rural settings.

As a result, each mill faces its own set of unique challenges with respect to engaging their surrounding communities. For instance, Lontar Papyrus, which is situated in Sumatra and largely surrounded by forest, has a significant challenge with respect to providing alternative sources of income to local communities to discourage illegal logging activities. Our community programmes reflect the disparate social conditions surrounding the different mills and consequently, the diverse needs of these community groups.

Healthcare provision within local communities is one of the core components of our community engagement work. Access to healthcare is problematic given where some of our mills are located. The two main barriers to providing healthcare in Indonesia are the cost of medicine and doctors' fees- and outside of major cities the distance to the nearest doctor or medical centre.

In 2010 and 2011 APP invested a total of \$1.7m and \$1m respectively in community development programmes

In this section of the report we will describe a selection of our main community initiatives at our mills, our main pulpwood suppliers and the wider group initiatives supported by APP.



INDAH KIAT PERAWANG

Indah Kiat Perawang is located in a 2,400 acre rural site in Riau Province, Sumatra. The mill is surrounded by nine villages with a collective population of 105,000, the majority of whom depend either directly or indirectly on the mill for their livelihoods.

APP implements a number of community initiatives designed to help local people to become self-sufficient and obtain a steady income. For instance, Indah Kiat Perawang's community husbandry programme has been running since 2008

The community husbandry programme provides 58 family leaders with 78 pregnant cows which deliver financial benefits to the community though the sale of milk and compost. The male calves are also sold, which helps farmers to boost their income, whereas the female calves are kept by the farmers, to produce milk and give birth to more calves in the future and sustain the community husbandry initiative. The programme also provides compost and additional training to teach farmers how to grow organic compost which can be sold at the local market, providing additional income.

The Agriculture Loan Fund is a similar programme implemented by Indah Kiat Perawang. Tools and equipment are provided to locals on an interest free loan basis in order to help them set up and maintain their own farming initiatives. The farmers must pay the loan back to a community development fund, which therefore benefits other members of the local population. Twelve families benefitted from the Rolling Agriculture Fund in 2011 with the investment from APP during 2010 and 2011 totalling \$44,545.





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In addition to agricultural ventures, APP also helps the community around Indah Kiat Perawang by providing local people with surplus material, such as plastic strap from the paper mill which can be used to make handy craft products. Locals buy the raw materials and waste from the mill, producing home-made bags and mats, which they sell to customers both in the local market and other provinces in Sumatra. At the end of the year, the scheme's participants are reimbursed to support further economic development.

We see the life changing impacts that can be made when access to education is improved. At our Indah Kiat Perawang mill, we awarded scholarships to 20 people from the local community surrounding the mill and eight of the mill's employees, to allow them to attend university. In return we provide a long term commitment of employment with a job at the mill for six years. We also funded the education of 130 university students and provided a school bus for 200 pupils. As well as this, we trained 150 students to work at our mill, therefore providing them with the skills they need to work for APP or any other similar industries in the future, which we hope will enhance their future prospects.





POWER FOR THE COMMUNITY

In the more remote parts of Indonesia electricity is unreliable, and in some cases completely unavailable. Two villages near Indah Kiat Perawang's mill had no electricity at all, so working in partnership 09 with local government and the State Power Company (PLN) a development plan was put in place to build a power generation plant and network which would sell electricity to the community at a reduced price. Initially the programme operated at a loss to take into account the low incomes within the community. Gradually over the years the price was increased to a point where the programme broke even and in 2010 it became profitable. It was agreed that all profits would be reinvested into expanding the infrastructure.

The programme demonstrates how private and public organisations can form a mutual partnership to benefit both themselves and the wider community - a win win.



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LONTAR PAPYRUS

APP's Lontar Papyrus mill is located in a remote region, 137km from Jambi City.
The mill is adjacent to Tebing Tinggi, a large village settlement.

At Lontar Papyrus we make an effort to engage with village leaders surrounding the mill site on a regular basis.

Over the past two years we have initiated a housing renovation programme for widows in Kelagian village in order to improve their sanitation. We have also built a water tower in the village, which has provided villagers with access to groundwater, therefore reducing their reliance on water from the river. 540 families, a total of 2,013 people, have benefited from these activities in the last two years.

INTERVIEW: MR SURATAM LEADER, BAZIS PROJECT

- Explain the activities of the project?
- A We co-ordinate the donations from the mills employees. We are hugely grateful for the donations we receive they come from a monthly salary deduction scheme where each employee decides how much they wish to donate to our projects.
- What do you use these donations for?
- A Broadly we focus on education, health & welfare for the community. We are supported by a team of volunteers from the mill who teach students from the local area, particular support is given to high school students who are preparing for their exams. We also provide support if the community needs healthcare provisions we can pay for this using our funds. Lontar Papyrus will also top up the fund if required. Donations are also used directly to purchase food supplies; in 2011 we donated rice to 160 heads of families.

DRIVING SUCCESS

A group of mill employees at the Lontar Papyrus mill were concerned about the low graduation rate (below 50%) at the local schools in the area. Working alongside the Al-Hidayah mosque and the Lontar Papyrus charity division the group set up an after school study group to help students prepare for their exams. Text books are donated by the mill. The programme is particularly important because of the lack of quality education outside of the major cities in Indonesia, making it of significant benefit to the community.

In 2011 the graduation rate had increased to a remarkable 96%, almost double the rate when the programme was started.



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PINDO DELI

Pindo Deli's two mills operate on different sites in Karawang, West Java. APP's community efforts at Pindo Deli focus on the development of opportunities for local farmers, primarily helping them to secure a reliable income.

The mill works with the Agricultural Department and a local farming group to provide start-up capital for farmers to help them to grow organic rice. We provide either materials including seeds and fertilisers, or a small loan, which the farmer pays back over time at a low interest rate. Since we started the project two years ago with an initial group of ten farmers, the project has grown significantly. Over 60 farmers now benefit from the scheme, and we hope to extend the project to all 180 farmers in the local farming group in the future. There are many other companies in the area but Pindo Deli is the only one that helps local farmers in this way. Our next goal is to inspire other companies to do something similar and learn from our experiences.

A number of programmes initiated in 2010 and 2011 focussed on improving primary education in the community. APP provided scholarships to 68 students in 2011 as well as providing support for sports and art events at the local school.

In 2011 infrastructure investments included road repair and buildings repair to the local school and church.

INDAH KIAT TANGERANG

Indah Kiat Tangerang mill is located 30km west of central Jakarta in what used to be a rural location. However, the expansion of Jakarta's suburbs means that the mill is now surrounded by urban and industrial development. The wellbeing of our many employees and their families, in addition to addressing the challenges faced by urban communities surrounding the mill are therefore some of our most significant challenges.

We believe everyone is entitled to quality education and in 2010 and 2011 APP invested \$22,793 in improvements to community education. The Indah Kiat Tangerang Paper Mill provides scholarships to students at 20 local schools, as well as teacher training. APP also donates paper and other materials to the schools.

The mill also provides vital support to a community maternity clinic. Basic check-up services are provided, as well as information on healthy eating. Over the past year the facility has supported more than 70 children. It was built by the government but, in common with some of our community farming enterprise projects, it is APP funding that keeps the facility open.







INDAH KIAT SERANG

Indah Kiat Serang mill is situated on the outskirts of the town of Serang, 60km west of Jakarta. The surrounding area is largely used for subsistence agriculture and it continues to draw an increasing population as a result of potential employment opportunities at the mill.

APP's concern for the health and wellbeing of our employees extends beyond the workplace. We recognise that cleanliness of our employees' homes is vital for a healthy lifestyle and so we encourage all of our employees at the Indah Kiat Serang mill to partake in Indonesia's Clean House Competition, which was founded in 2010. The competition judges APP's employees on their waste disposal, use of clean water and sanitation. It also incorporates training to explain the criteria to the competition entrants. The home of each participant is inspected every four months and they are then judged against entrants from 3,500 homes in 22 areas, as well as 14 government offices and 35 schools. As a result of their participation our employees enjoy a better living environment and an improved awareness about the importance of a healthy lifestyle and a clean environment.

As part of APP's community development work, we also want to offer new sources of income to local people who are not directly employed by the mill. For example, a recycled paper project at Indah Kiat Serang called Mitra Kreasi Handicraft offers micro business opportunities to members of the local community.

Each member of the project is trained from scratch in local handicrafts and business skills to help them develop the knowledge they need to start their own business. The craftsmen use rejected paper from the converting process at the Indah Kiat Serang mill. Paper which cannot be recycled because of its glue content is given to Mitra Kreasi Handicraft for free and craftsmen transform it into paper string for shopping bag handles. APP buys back all of the finished products; however we hope to forge a partnership with a book store, which would also sell some of the Mitra Kreasi Handicraft products.

Over 1,500 students from the local schools were awarded scholarships to help support their education. College scholarships were also provided to four students enrolled on a Pulp and Paper Technology course.



TJIWI KIMIA

Tjiwi Kimia is located near Surabaya in East Java. It is a relatively urban location and as such, APP recognises the need to stimulate economic growth and quality of life through the facilitation of local empowerment by providing better infrastructure and regional development.

The Tjiwi Kimia mill contributes to the village development budget for the three villages surrounding the plant. These donations help finance projects for cleaner water or infrastructure improvements as well as preschools and Islamic education. Priorities stem from the village development plan and are discussed between APP and local representatives. In 2010 we donated \$131,391 in small enterprise empowerment and loan provisions for enterprises in the local community with the goal of

empowering the community to secure alternative means of income and stimulate economic development.

Village secretary at Kramat Temenggung (near Tjiwi Kimia) Rusman Hadiyanto states: "APP's contribution helps us to provide better facilities and has greatly increased the economic development of the area surrounding the mill."

Infrastructure investments include construction of a clean water tower and renovating the irrigation infrastructure in Sebani village. Throughout 2010 and 2011 we ran an AIDS awareness campaign within the local community, including events at the local high school and radio station.



EKAMAS FORTUNA

Ekamas Fortuna is situated within Gampingan village, 35km South of Malang in East Java. Our community work focusses on enhancing development opportunities within the village and providing new revenue streams, in addition to looking after the welfare of our employees.

Other activities at the Ekamas Fortuna mill include improving the quality of the main road through the Gampingan Village and improving mobility for the people in the community.



Infrastructure investments include installing clean water distribution equipment in the Sumberejo village and reforestation projects in various areas adjacent to the mill.

The total budget for CSR projects aligned to the Millennium Development Goals increased 22% between 2010 and 2011 at Ekamas Fortuna, with a total budget of \$68,550 in 2011.



Established in 2011, the Educational house Pavilion provides non-formal educational facility



OUR VILLAGE AND APP: WORKING PARTNERSHIP

Interview with the leader of village Gampingan, Malang – East Java. He describes the community relations with the Ekamas Fortuna mill.

- How would you describe the relationship with APP?
- A The relationship is very good. APP is very important to the local economy as 60% of the people that live in the surrounding areas are employed by the mill.
- What issues have you recently dealt with between the mill and the community?
- A Many people in the village want to work for the mill, they see the benefits that stable employment offers and want to realise those benefits for themselves and their families. However there are only limited jobs available and not all potential employees have the required skills for the jobs on offer. I have to explain this to the local community and help them understand the mill's position.
- What opportunities do you see in the future for the mill to support community development?
- One of our new projects in our community involves reducing the amount of plastic waste disposed of on the mill site.

The waste is given to the local community free of charge and they sell it on. This generates an income for the villagers and of course reduces pollution because less waste needs to be disposed of on site. I am sure that there will be many more opportunities like this in the future. We also have a biogas project for households around the Ekamas Fortuna mill. We conducted a pilot project with villagers who own a minimum of five cows: this is the basic requirement, ensuring there will be enough manure for the biogas reactor. This pilot project was a voluntary programme and we hope it will encourage many more households in the community in Gampingan village to have their own biogas reactors. Once the pilot project is complete, we will allow other villagers who express interest in the programme to join. Households owning a biogas reactor have the ability to produce their own electricity, therefore reducing electicity usage and costs.

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APP PULPWOOD SUPPLIERS



APP strives to operate in a socially responsible manner and we extend this approach to our suppliers. We do this by observing social responsibility principles across our supply chain, most importantly in relation to our two main pulpwood suppliers, Arara Abadi and Wirakarya Sakti.

Our suppliers adopt the same approach to APP in implementing their corporate responsibility programmes with a focus on community empowerment. Among their various programmes

APP's pulpwood supplier's key aim is to empower local communities to establish alternative means of income to illegal logging and promote sustainable development.

APP PULPWOOD SUPPLIER ARARA ABADI

APP's pulpwood supplier, Arara Abadi, is located in Perawang, Riau Province, close to our Indah Kiat Perawang mill in an area surrounded by natural and plantation forest. Encroachment into the nearby forest by local people, as well as illegal logging, is a big challenge that together, APP and Arara Abadi are working to tackle.

Arara Abadi has set up a series of community initiatives which focus on building human capacity and providing regular employment to local people as an alternative to illegal logging.

One such example is Arara Abadi's partnership with the NGO Siak Cerdas, which works to empower local communities not to clear land for palm oil production. Some 13 farmers, 89 school students and 256 university students are involved in the programme, the main benefit of which is to build capacity and extend the market to sell their produce.

Core to the programme is a community training centre on land allocated to local people for fruit trees. We provide free seedlings and fertilisers, technical support, basic business, sales and pricing skills and training on tree cultivation. The training centre teaches local people how sustainable fruit tree cultivation delivers greater returns than land clearance for palm oil monoculture. Another lesson we have learned is that it is vital to constantly engage with local people to ensure they do not revert back to harvesting palm oil after fruit cultivation and we encourage participants to apply their knowledge in plantations in other areas. This has been aided by the government's recognition of the benefits of the scheme which has led to replication in other districts.

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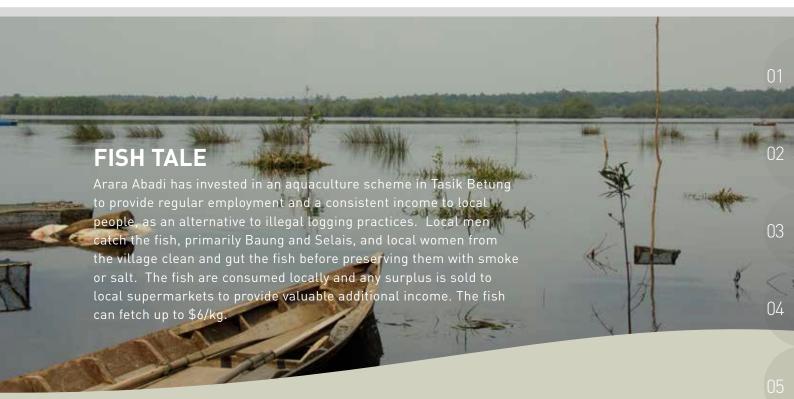
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The conservation areas in the pulpwood concessions area are also used for educational purposes. In the arboretum in the Arara Abadi conservation area, the local community can visit and learn about the environment, biology and botany. Nature trails have been established throughout the area and trees are labelled with identification tags, displaying local and botanical names.

"We want to encourage the local community to visit the the area to learn about the importance of conservation and the work APP is doing. They also collect honey from the bees nests as well as Kulim fruit."

Edy Haris, Planning Manager at PT Arara Abadi.

APP PULPWOOD SUPPLIER - WIRAKARA SAKTI

APP's pulpwood supplier, Wirakara Sakti (WKS), is located in Jambi province, near our Lontar Papyrus mill.

After a history of conflict and disorder amongst local communities over illegal logging, Wirakarya Sakti, is now supporting community-led land management which empowers local people to take ownership of the forest. This collective effort has changed their approach to one which recognises the value of sustainable forestry.

Illegal logging is a significant problem in the plantations around the WKS concession area and 2005 saw a new and stricter management approach to the issue. WKS saw this as an opportunity to work in partnership with the local indigenous communities such as the Suku Anak Dalam to establish a sustainable existence in the community in which they live.

The Suku Anak Dalam are indigenous to the conservation area designated by the concession. Their way of living is nomadic and some aspects of their tradition are largely dependent on forest resources.

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APP PULPWOOD SUPPLIERS

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Through it's CSR programs, WKS empowers the Suku Anak Dalam to develop alternative and more sustainable sources of income and become part of our sustainable forest management. We offer new, longer term income streams as an alternative to logging and we provide opportunities for better education, religious worship and medical infrastructure. By the end of 2011 the programme supported 40 people in total. Its focal point is a Community Centre which provides medical facilities, chapel, support to building homes, improved access roads, seedlings and access to drinking water.

"With their regular income, local people are able to buy electricity for their homes, and motorcycles for travel, giving them greater freedom and empowerment for their economic development. Conflict in the region has been eradicated and the local people now work with WKS to conserve the

area. Our main challenge involves protecting their unique culture whilst also allowing them freedom to modernise and remain independent."

Mochamad Ridwan Nuryadi, head of the community centre

SEI BAYAS VILLAGE, JAMBI

Our pulpwood supplier Wirakarya Sakti (WKS) started this community development programme in 2006 within their concession area and in partnership with local NGOs and the Department of Agriculture. The aim was to provide an alternative livelihood for the community who at the time depended on illegal logging for their income. By empowering the community to develop alternative sources of income we provide both economic and environmental benefits – a win-win situation.

INTERVIEW: WITH EDI, DEPUTY OF SEI BAYAS VILLAGE

• Explain how your village became established in this location?

- A WKS offered us the village which allows 12 families 49 people to live together with good facilities such as water for the development of fisheries for additional income. The village has good road access to trade and other employment opportunities in the area. We travel by bike to other villages in the area which means we can reach more job opportunities and also sell our produce to a wider market. Our accommodation here is significantly better than what we had before we have comfortable accommodation and shelter.
- O Do you have any other sources of income?
- (A) Yes, we produce honey and along with the fish we use this for our own consumption, with the rest being sold to the community or to the WKS Community Centre.
- How has life changed for the villagers since you relocated?
- A This settlement is much better than what we had before; it provides housing for all the families so we can live together this is a significant improvement for us. Our income has improved and is a much more stable income than logging. We earn more now through legitimate activities than we did in the past. Access to free medical care and clean drinking water has also been a huge benefit to us. The improved income also allows us to buy mopeds and fuel so we have much better access to the areas surrounding our community. We have a much higher standard of living now and live healthier and more prosperous lives.



APP PULPWOOD SUPPLIERS

In addition to community empowerment and providing local people with alternative sources of income, we see health and wellbeing as vital to developing a strong and able community. WKS worked with the Obor Berkat Indonesia (OBI) Foundation to provide free medical care and dental services to five villages in a very remote area of Jambi, home to the Lontar Papyrus mill and related plantations. A team of 13 GPs, a dentist and a nurse were sent to each village to offer free consultations, quit smoking advice, family planning, medical treatment and medicine. Some of the villagers had never seen a dentist in their lives, so the chance to receive a check up and treatment was particularly welcome. In total 2,250 patients attended these free clinics.

FORESTRY GROWS ON CAMPUS

The number of students studying forestry at University in Indonesia continues to increase because the pulp and paper industry offers good employment prospects and growth opportunities. University students are given access to APP related community projects as well as the suppliers' nursery facilities to learn about forestry related cultivation techniques.

INTERVIEW WITH DR FORST BAMBANGIRAWAN, UNIVERSITY OF JAMBI

- How popular is the forestry course at the University?
- A It's very popular. Three years ago we had 32 students enrolled; now we have 125. It's the university's biggest department. Students see the value and importance of the Indonesian forestry industry and want to learn more, and follow a clear career path.
- How do you work with PT Wirakarya Sakti?
- Our established teaching programme gives the students first-hand experience in a range of forestry disciplines. Students are involved in the tree improvement programme where they learn about every step of the process, from seedling production, trial plantations and commercial plantations. They learn about the continuous development process from some of the leading experts in this field. PT Wirakarya Sakti offers the chance to take students to the conservation areas to carry out research; it's great to have this level of access for the students to see for themselves how these areas are managed.
- Do you have a good relationship with PT Wirakarya Sakti?
- (A) Yes, the great thing about working together is that the knowledge transfer works in both directions so both parties learn from each other.
- What are the funding arrangements between the University and PT Wirakarya Sakti?
- A PT Wirakarya Sakti offers us funding on a project-by-project basis. We look at how each project will benefit each party and then make an agreement. At the moment we are cultivating 22,000 seeds at the university, which will eventually be planted in the plantation areas. Our students will see the whole cultivation process from start to finish it will be invaluable experience.

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APP AND SMF JOINT PROGRAMMES

PEAT TO POTABLE: BETTER ACCESS TO CLEAN WATER

Access to clean water is an acute problem in lowland forest areas. Partnering with Man-and-the-Biosphere (MAB) Indonesia – Lembaga Ilmu Pengetahuan Indonesia (LIPI, which translates as the Indonesian Institute of Sciences) – we established a community water treatment project in Sumatra which aims to provide clean water to the communities living in and around the Giam Siak Kecil – Bukit Batu Biosphere Reserve.

As part of the pilot programme, which began in 2011, we installed local water treatment systems to turn peat water into potable water at a rate of 60 litres per minute. That's enough to provide a constant supply of water for 100 families that otherwise would have to continue consuming peat water, which is very unhealthy. The longer term vision is that the project will be replicated to provide for other communities across the country.

"By helping address the basic needs of communities, we are helping people to use natural resources in a more sustainable way. Water is one of the world's most vital natural resources and it is becoming an increasingly limited commodity. This project will help to address the on-going clean water shortages experienced by millions of Indonesians."

Aida Greenbury,
Managing Director, Sustainability and Stakeholder Engagement, APP



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DISASTER RELIEF

As a part of our partnership with Habitat for Humanity Indonesia (HFH-Id) we also fund Disaster Response projects, providing fast response to people who need support when such an event occurs.

HFH-Id assisted 1,675 refugees affected by the Merapi Eruption in November 2010. Three camps were built by installing water access, toilets and bathing facilities. The response provided Emergency Toolkits to 196 families that were affected by the eruption. The kits enabled these families to clean up the volcanic ash and repair damage to their houses.

"We are delighted and very grateful to receive this offer from Asia Pulp & Paper, which shows that the world is watching and responding to the dreadful events in north eastern Japan. Once access to the affected areas is possible, HFH Japan is planning to mobilise our many local volunteers to assist in clean-up and relief.

We will focus on assisting specific communities to rebuild their lives."

Kentaro Yamazaki, national director HFH Japan. 62 families affected by the Cikangkung Flooding in Serang District of Banten Province, near the capital city of Jakarta, were provided with emergency shelter kits with which they could repair their damaged houses. New houses were also built to replace ones that were destroyed by the flooding. In addition, HFH-Id installed water facilities in the area that serves 204 families to provide safe drinking water.

Disaster relief efforts extend to countries outside of Indonesia too. In 2011 APP committed \$1.25m to the disaster relief following the March 2011 earthquake. The donation was made to Habitat for Humanity Japan who used the funds to support both early response efforts and long term support to help rebuild the devastated communities.





INTERVIEW WITH JIM KENDALL, HABITAT FOR HUMANITY INDONESIA

Explain the partnership between Habitat for Humanity and APP?

Abbitat for Humanity Indonesia (HFH-Id) has partnered with APP since October 2010 in the Soran Community Based Eco-Tourism Project. It's a project to empower the rural community of Soran to improve their economic opportunities and living conditions by building on their existing natural and cultural assets to become a destination where tourists can experience the culturally rich traditional Javanese lifestyle of yore

What are the key features of the partnership?

A Funding from APP allows us to provide housing and infrastructure improvements, ranging from renovations and repairs to make properties more hospitable, to improvements to laundry and cooking facilities. It also supports community participation activities, particularly working with women to encourage them to take a lead role as hosts of tourism activities.

Describe the village before the programme began?

A The Duwet Village, 40km from Jogiakarta was recognised by the Ministry of Culture, Tourism, and Sports as having the necessary qualities to become a tourism village. 60% of the residents live below the poverty line, many of the houses needed repairing and additional houses were required to ensure all families have their own home.







• How does APP's involvement benefit the programme?

A Firstly, the financial contribution is vital to support our work. APP is providing \$600,000 over a three year period starting in October 2010. We also gain access to their network through APP's membership of the Indonesian Global Compact Network, bringing stakeholders to the programme who we otherwise would not have had access to.

• What are the objectives of the partnership?

- $\mathbb{A} o 500$ families will have improved houses suitable to host tourists
 - \rightarrow 500 families will have participated in training on hospitality
 - ightarrow 100 people will have been trained on hygienic cooking for quests
 - → 100 families in the village will have developed know-how in marketable traditional art and culture performance

Describe one of the homes or guest houses that have been created?

A Mr Sajiman is 70 years old and lives with his wife. He is a retiree from the Air Force and now farms as his source of income. Mr Sajiman already used his house as a homestay to house guests from the Soran Foundation, however, the premises were very basic. Mr Sajiman accessed a \$1,100 loan through the project which he used to renovate three bedrooms in his house and install ceilings and ceramic tiling throughout the house. Thus, the home improvement will help make his house more accommodating to guests and provide him with additional income. It also has helped to ensure a better living environment for him and his wife.

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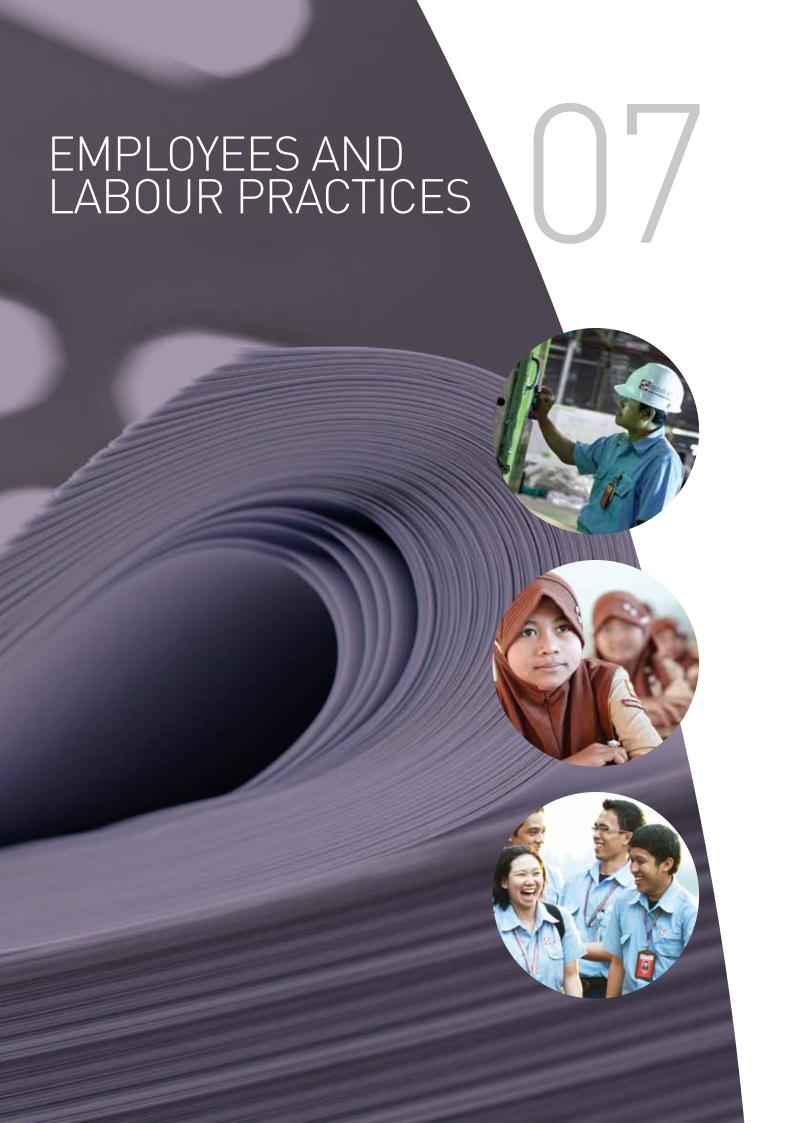
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EMPLOYEES

One of APP's most important assets is our employees.

Their skills and commitment play a crucial role in the success of our company. In return we offer a stable, safe and prosperous working environment for our employees. With a total workforce of 40,572 people at the end of 2011, an increase of 1% from the previous year, we are one of Indonesia's largest employers. Our mills are major employers in the areas in which they are located, especially in the more remote locations where some of the mills are situated. Lontar Papyrus and Indah Kiat Perawang are two such mills, having been established in areas away from major cities, they are now surrounded by communities which depend heavily on the employment offered by the mill.

A significant proportion of our workforce comes from the communities surrounding our mills and we recognise our responsibility towards these communities in providing them with stable employment. In 2011 95% of our employees in management roles were hired from the local community. Although no formal policy exists towards hiring for management roles from the local community, our preference is to hire locally and only look at recruiting from further afield if the people with the right skills cannot be found locally.

In addition to this, our mills stimulate the economy within their host communities and provide employment amongst suppliers, most notably the APP Pulpwood Suppliers.

		2010		2011	
Total employees		40,326		40,572	
Gender	m/f	34,172	6,154	34,427	6,145
Management	m/f	1,479	314	1,524	315
Non management	m/f	32,689	5,843	32,903	5,830
Direct ¹		40,326		40,572	
Indirect ²		15,078		15,588	

TOTAL GROUP EMPLOYEES BY GENDER

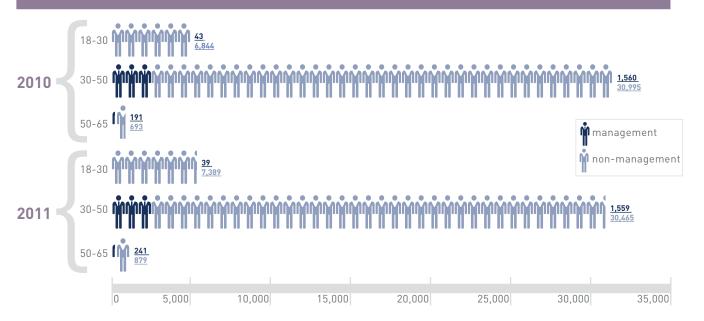


¹Direct employee are employees hired under APP (permanent employee and contract-based employee).

²Indirect employees are outsourced employees. APP does not have part-time employees

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AGE DISTRIBUTION OF EMPLOYEES



Permanent employees made up 98% of our workforce at the end of 2011 – an increase from 97% at the end of 2010. The remaining proportion comprises temporary workers who are usually employed on a short term contract to meet a specific demand at the particular mill, for example, during the installation of a new paper machine. It also includes new employees, who are usually employed on a temporary contract for between three months and two years, depending on each mill's policy, before moving onto a permanent contract.

Across the group the male to female ratio is 85:15. The predominantly male workforce is partly historic and partly due to the paper industry offering heavy manual labour which is more suited to men. Basic salary for male and female employees is identical. In 2010 and 2011 no instances or alleged incidents of discrimination were recorded.

Women represent 17% of management roles in the group (18% in 2010). The decrease in women represented in management is due to natural changes in employee composition; APP is committed to being an equal opportunities employer and will continue to offer women the same opportunities as men across the organisation, including equal pay and leave entitlement.

We are proud of our employee retention rates. In 2011 our turnover rate was 5% amongst male employees and 2% for female employees. Employees tend to stay with us for many reasons including job security, skills development and the health and welfare benefits we provide. The company provides annual holiday entitlements, sick leave and maternity leave that meets or exceeds Indonesian employment regulations, in addition to social security and medical benefits. In both 2010 and 2011, 100% of male and 98% of women employees returned to work after parental leave.

TURNOVER RATES

		2010		2011	
Gender	m/f	4.30%	1.39%	4.96%	1.64%
Age	←30	2.87% 2.34%		3.74%	
	30-50			2.46%	
	→ 50	0.48%		0.39%	

RATE OF NEW HIRES

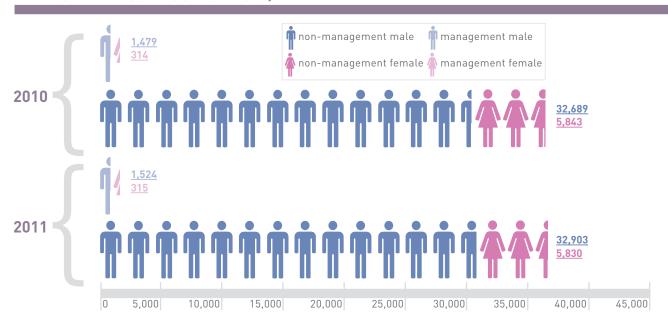
		2010		2011		
Gender	m/f	7.7%	1.3%	6.3%	0.9%	
Age	←30	7.9%		6.2%		
	30-50	1.0%		0.9%		
	→50	0.1%		0.0%		

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EMPLOYEES

MANAGEMENT COMPOSITION 2010/11



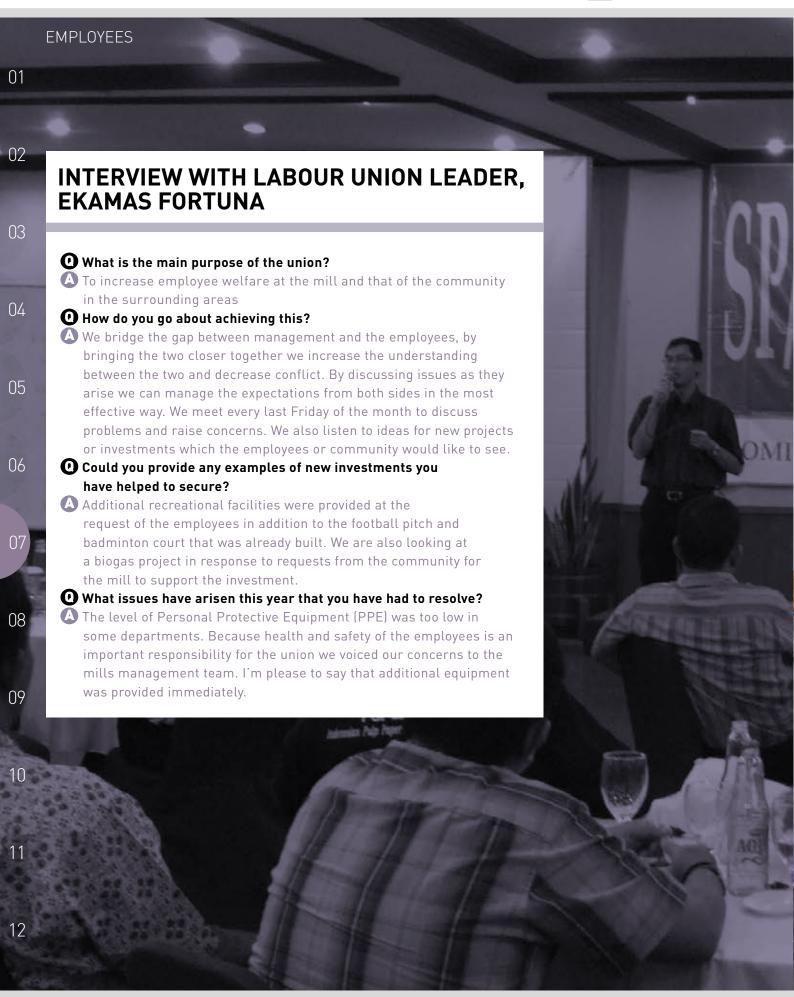
We want to retain talent and be a company known as a responsible and desirable employer across Indonesia. This commitment is also reflected in our low absentee rate. All permanent employees receive annual career development reviews, giving our employees the opportunity to discuss career aspirations and set development goals with their managers. We link performance to each employees KPI's in accordance to their area of responsibility. This covers both environmental and social aspects, depending on the individuals' role. We also pay a fair wage, in 2011 our entry level wage was 8% above the minimum wage within each mills local area. Post-retirement benefits across all APP mill's are in compliance with Indonesian employment law.

Unions are an important part of our mills and APP employees are free to associate themselves with the relevant union. 86% of APP employees are union members. Collective Bargaining Agreement and other negotiations between Labor Unions and Management apply to all employees. Mill management teams work in collaboration with unions and employees and each mill has their own approach which is suited to their particular situation.

Discussions between management and unions cover a wide range of topics including health and safety, payroll, working hours, leave entitlement and employee benefits which are discussed and revised on an annual basis. Health and safety is a particularly important part of the union's activity and meetings between unions and mill management are held on a case by case basis. Recent examples of topics discussed at these meetings include accident assurance training and work equipment safety checks.

Tjiwi Kimia mill, for example, has a mechanism to elect a new board for their labour union every three years. The welfare programme is very active with the union being involved in many aspects of the employees lives, from salary negations to charitable collections to help employees or their families when they need financial help and during disaster emergency responses. It also offers a platform for collective bargaining; the current topic is breastfeeding and how mothers can be provided with time and the facilities to do so.







TRAINING

Training is vital to creating and maintaining a highly skilled and motivated workforce. APP invests heavily in a diverse range of training, conducting a total of 14 training hours per employee in 2011, up 79% from 2010.

Training covered over 100 different topics across all of our mill sites, with each mill tailoring their own approach to the needs of the employees. We adjust the level of investment depending on what we hear from our employees. The Pindo Deli mill, for example, carries out an employee survey at the end of each year to determine training needs for the following year.

Professional development is an area upon which we place particular importance, with courses such as the APP Strategic Management Development Programme, which was introduced at the Pindo Deli mill in 2011. This ensures our management teams are equipped with the relevant skills and competencies and also ensures we are identifying and training employees that have the potential to take managerial roles in the future.

Aside from workplace based training, we also want to give our employees lifelong skills that benefit them in their day-to-day lives. We offer training on topics such as Positive Mental Attitude, Family Goal Setting, Family Financial Management and Positive Mental Attitude.

In addition we provide courses to support employees at the end of their working careers. Our Indah Kiat Perawang mill, for example, ran a pre-retirement training programme throughout 2010 and 2011 to support such employees and prepare them with the skills they will need at the end of their working careers.



APP Sustainability Report 2010/2011



HUMAN RIGHTS

APP seeks to protect human rights amongst our employees and within the wider global community through the influence we can have on our suppliers and contractors.

We comply with Indonesian employment laws and recognise our employees' rights of free association and collective bargaining. Notice periods for APP employees are typically 30 days and are stipulated for each employee individually, in line with Indonesian law. Notice periods are not part of collective union contracts. Our mills do not allow child labour, the minimum employment age is 18.

Human Rights training forms a core part of the training given to our employees. In 2010, 14,321 (36% of the workforce) and in 2011, 3,165 (8% of the workforce) employees completed training in Human Rights related topics. This represented a total of 102,223 hours of training. The drop in training participants reflects the huge effort a number of mills went to in 2010 with respect to employee training, which meant that only shorter refresher training courses were required in 2011.

Anti-corruption training, including awareness raising of APP's whistle blowing programme, receives high priority coverage across our mills. Every employee receives this training as part of their induction training when they join the company.

Our Ethics Call Centre was established to offer employees the opportunity to report incidents of concern regarding Human Rights, anticorruption or any other concern they wish to report anonymously. In 2010 and 2011 a total of 23 and 56 incidents were recorded respectively. The majority of cases involved manipulation of procedure (14 and 41 cases respectively). Each case is investigated and if the allegations are against an employee and are upheld either a warning letter is issued or employment terminated, depending on the severity of the incident.



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A SAFER TEAM

One of our most unassailable convictions is that the employees, contractors and visitors on our sites return home safely after every shift. A safe workforce also means a profitable and successful business.

We recognise the inherent risks to our workforce in our operations: primary risks occur in pulp and paper mill operations and road travel. Our mill operations require heavy equipment, chemical processing and power generation which involve heat and steam, fast moving parts of the paper machine and pulping equipment. Roads around our mills are busy with traffic, particularly during shift changes and the majority of our workers commute by motorbike. Our goal is an accident rate of zero across all sites. The greatest challenge we face is changing behaviours and attitudes towards health and safety.

As a result of our continued efforts to both raise awareness and improve preventative measures we managed to reduce the number of accidents by 2%. We recognise that much more work is needed to continue to reduce this. Indonesian law dictates that all accidents, irrespective of severity are reported and recorded which makes some of our mills appear to have a high accident rate when in reality many are minor first aid cases.



APP Sustainability Report 2010/2011

A SAFER TEAM

HEALTH AND SAFETY PERFORMANCE OVERVIEW

	2010	2011
Number of fatalities	12	8
Accident rate	16	16
Lost days	77,900	53,443
Loss time rate	171	114
Sickness rate	0.0120	0.0112
Health and Safety training hours	68,495	77,879

SAFETY PERFORMANCE

In view of the formidable challenges during our journey to a safer workplace we are saddened to report 12 fatal accidents in 2010, and eight in 2011.

In 2010, five fatalities occurred at Indah Kiat Perawang mill when a black liquor tank collapsed. Since the incident, additional site maintenance, inspection routines and monthly safety seminars are run to boost safety awareness. When an accident occurs the immediate priority is to treat any casualties with immediate medical attention. We then investigate the cause of the incident, put a mitigation plan in place and provide additional training as required. A report is also sent directly to the top management, explaining the incident and what corrective measures are in place to prevent the accident from recurring.



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SAFETY MANAGEMENT

Safety management is tailored to suit individual circumstances at each APP mill.

Each management approach is guided by recognised national and international standards. The Indonesian work safety and health management system (known as 'SMK3') is a government-led, mandatory scheme which is in place at the majority of APP's mills. Our Pindo Deli and Indah Kiat Tangerang mills are also certified to the OHSAS 18001 safety management system.

One mechanism that we use is a formal joint management-employee health and safety committee. 20% of the total workforce across our mills are members of such committees, representing all of our workforce and we find them an excellent way of empowering employees to be part of the health and safety process. They also provide a useful forum for engaging management and allowing managers to hear employees' concerns first-hand, helping us to reach our goal of making safety part of our day-to-day work.

TRAINING

Continuous training is critical to improve our safety performance and ensure that safety is a part of our day-to-day activities, rather than an 'add-on'.

Total health and safety training hours in 2011 increased by 14% over the previous year, which demonstrates our commitment to improving safety for our people – it is our number one priority.

In 2010 and 2011 we carried out 68,495 and 77,879 hours of health and safety training, respectively. Some of the common training topics include emergency response training, first aid training, and occupational health training. Health and safety topics represented 13% of total training provided across all our sites. In addition to this we also offer training on machine operations, standard operating procedures and safe operation of machinery relevant to each employee's role. For instance, Lontar Papyrus increased the number of employees receiving training by 198%. One type of training in particular was occupational health and safety, which increased from 488 employees trained in 2010 to 1,116 in 2011.

Simulation training, where a low probability, high risk incident is recreated and the response tested, is an excellent way to prepare employees for such incidents. Ekamas Fortuna trained 318 employees in 2010 on emergency response to fire, earthquake, electrical shock and oil spills. The risk of natural disaster is a risk that must be addressed in Indonesia. Mills in high risk areas in particular are trained on how to respond in the event of an earthquake.

Whilst we work hard to minimise the risk of fire, we must ensure our employees are trained in preventative measures and fire drills as well as safe and effective extinguishing. At Pindo Deli mill we ran 280 hours of fire safety training in 2011. Similarly at Indah Kiat Serang in 2010 and 2011, 561 employees received fire safety training.

APP Sustainability Report 2010/2011







SAFFTY MANAGEMENT

ROAD SAFETY

Many of our workers commute and move around the mill sites by motorbike. Traffic is heavy, particularly at the times of shift changes at the mill. Roads are shared with trucks, predominantly delivering wood to the mills. Traffic accidents have been at an unacceptable level in recent years. At each mill we take a focused approach to manage these risks and educate employees.

At the Indah Kiat Serang mill we achieved a 'zero traffic accident' rate in 2010 and 2011. One initiative we believe contributed to this achievement was a zero tolerance on speeding within the mill and fines were issued to those caught speeding.

Our responsibility extends beyond the mill gates too. Large numbers of employees commute to work, and so to decrease the risk of accidents, we seek ways to ensure they are safe on public roads. One initiative was to video accident black spots and show these to employees, raising awareness of why these areas are dangerous and how to ride in a safer fashion. Where possible we route heavy vehicles delivering and collecting goods from the mills away from the busy commuter routes.

Road safety training is part of the wide range of health and safety topics that we run. Pindo Deli, for example, carried out 252 hours of road safety training in 2010 and 2011



APP Sustainability Report 2010/2011





diabetes, drug use and stress at work.

Health insurance is offered to permanent employees and for employees at Indah Kiat Perawang this also covers their families and up to three children. We also offer free medical check-ups to all our employees, and financial support for families with illnesses, where a family member cannot work due to poor health. Comprehensive employee benefits and a range of health and welfare initiatives all contribute towards the low absentee rate. Many of our mills have sports and recreational facilities, such as tennis and badminton courts which are for use by our employees.





AWARDS AND RECOGNITION IN 2010 AND 2011

Mill	Achievement	Description	
Indah Kiat Tangerang	Health and Safety Awards	Banten Governor	
Indah Kiat Serang	Health and Safety Golden Awards	Ministry of Man Power (Disnakertrans)	
Indah Kiat Perawang	HIV & AIDS Awareness awards	Ministry of Manpower	
	Health and Safety Golden Awards (SMK3)	Ministry of Man Power (Disnakertrans)	
	Health and Safety Implementation	Disnakertrans	
	Health and Safety management	Disnakertrans	
Tjiwi Kimia	Health and Safety Management System Award	Ministry of Man Power	
	HIV & Aids Program Awards in workplace environment	Ministry of Man power and Transmigration	

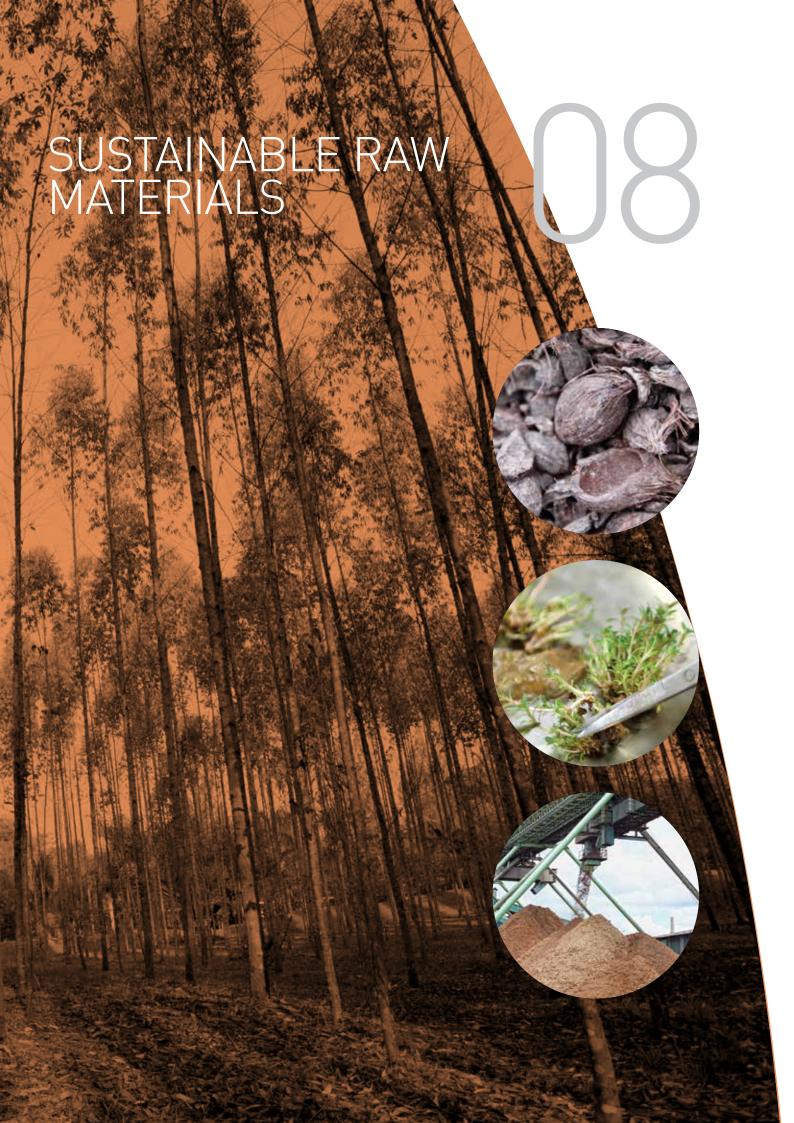
HIV & Aids Program Awards

in working environment.

HIV & AIDS Awards Program Coordinator Minister of people's welfare

East Java Governor

APP Sustainability Report 2010/2011





OUR FIBRE SOURCES EXPLAINED

APP's pulp mills are supplied exclusively by wood from plantation forest concessions. We have two categories of suppliers.

The first are plantations in which APP has share ownership; they operate under the management of Sinar Mas Forestry. The suppliers are Arara Abadi (Riau Province), Wirakarya Sakti (Jambi Province), Satria Perkasa Agung (Riau Province), Riau Andalan Lestari (Riau Province), Finnantara Intiga (West Kalimantan) and Sumalindo Hutani Jaya (East Kalimantan).

The second group are suppliers for which APP has no share ownership; currently there are around 30 non-owned suppliers.

APP PULPWOOD SUPPLIERS





OUR FIBRE SOURCES EXPLAINED

Like any paper company, the biggest challenge APP faces is the sourcing of sustainable fibre. With a global client base we are acutely aware that this is an issue of high importance to stakeholders and one which we are 100% committed to addressing.

The Indonesian pulp and paper industry has grown significantly in recent decades, in part because the climate and geography support a high growth rate of fibre. In the same way that other global paper manufacturers have turned their attention to establishing plantations as a fibre source,

APP believes that sustainably managed plantation based fibre will provide a major portion of its fibre needs in the future.

Plantation development in a region that hosts a significant proportion of the world's natural forest, with its rich biodiversity and vital role in the carbon cycle, presents a real challenge. This means balancing sustainable development with economic growth in an area of high social and environmental sensitivity.

PLANTATION FOREST DEVELOPMENT IN INDONESIA – THE STORY SO FAR

1st regulation regarding development of plantation forest launched by the government¹

1st license for plantation forestry awarded by the Ministry of Forestry²

Investment interest in plantation forestry begins to grow significantly³

10 million hectares (10% of Indonesia's forested area) now licensed for plantation forestry. Of this total only 53% has been planted into plantation forest area

1986 1989 1995 2011

Poverty is linked to tension over land use. Increased risk of deforestation as illegal logging provides a means of income and forest fires. By engaging with the communities that practice illegal logging and illegal encroachment, APP seeks to reduce these risks and empower communities to become part of our sustainable forest management.

Community development is a central part of our management of sustainable forestry.

Sustainable forest management at APP means;

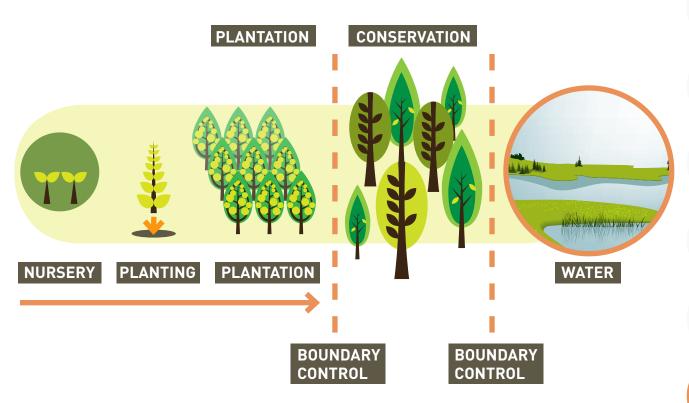
- → Sourcing our pulpwood from legal and responsibly managed plantations subjected to the highest relevant environmental standards, with third party verification and certification to ensure and monitor this
- → Maintaining the correct balance of economic development, with social development and environmental protection, providing economic alternatives to communities in the areas of our plantations
- → Ensuring our pulpwood suppliers include conservation zones which are maintained and rehabilitated in line with the approved forest land planning and best practices

¹ Minister of Forestry Decree No 320/KPTS-II/1986: Development of Industrial Plantation Forest

² IUPHHK-HTI No. 360/Kpts-II/89, source:http://www.dephut.go.id/files/u1/DEFINITIF_Sampai_dengan_bulan_Desember_2002.html

 $^{^{\}rm 3}$ Forestry Statistics of Indonesia 2011. Ministry of Forestry





Plantations are managed from the initial stages of land preparation through to seedling or tree production, planting and on-going forest management until harvesting occurs.

Acacia and Eucalyptus are the main species grown in our plantations, selected for its paper making qualities and speed and ease of growth.

APP's pulpwood suppliers currently have around 2.5 million hectares of land under management. The Indonesian Government plays a pivotal role in the process of plantation development. Land allocated for plantation development is either degraded forest, barren or waste.

Plantation development generates a host of complex and sensitive issues. Here are the key questions which our stakeholders ask and our response to each.

WHAT IS THE PROCESS **OF ESTABLISHING A** PLANTATION?

The process for pulpwood plantation development in Indonesia is detailed, transparent and lengthy. Key considerations are conservation value. bio-diversity, eco-systems, cultural and social balance and the national land-use plan.

The first step is that the Ministry of Forestry, in line with their national land spatial plan will auction the land for plantation development. The plan allocates land use in a way which balances the needs of economic development opportunities, poverty alleviation and areas of high conservation value.

To participate in the auction the pulpwood supplier must prove that they are capable of sustainable management of the plantation should they win the auction.

Once the winner of the auction is chosen the pulpwood supplier must then carry out a mandatory micro-macro delineation audit1 (with governmentaccredited auditors) to determine high conservation value areas and community infrastructure and settlements that form the baseline for the company to develop both a short and long term working plan for plantation development. Once this working plan has been approved, the pulpwood supplier will be granted a license to operate.

Feasibility Study	Environmental Impact Analysis	Application for Pulpwood Plantation	Application for Land Conversion	Independent Macro- Delineation
Independent Micro-Delineation	APP Critical Forest Assesment	Permission for Timber	Submission and Approval of Operating Plan	Begin Operations

DOES APP CONVERT PRIMARY FOREST INTO PLANTATIONS?

No. Plantation development occurs on land which is either barren, waste or degraded. The Government of Indonesia designates the land for conversion into plantations before granting APP's pulpwood suppliers or any concession holders with the legal rights to begin development. Land planning of forestry areas in Indonesia is a complicated and lengthy process, the foundations of which stretch back to the late 1800's

and the period of Dutch Colonisation when forest production concession areas were allocated. In the late 1980's the government identified areas that had become degraded which were then allocated for plantation development.

Prior to granting permission for development, the company which the land has been allocated to carries out extensive social, environmental and ecological assessments through a third party auditor. The government reviews these assessments and grants final approval for plantation development.

¹ See appendix on page 149



WHY IS THE LAND DEGRADED OR BARREN? DOES APP DRIVE THIS CHANGE?

There are multiple reasons why land has become degraded. Primarily, it is illegal logging which drives this change in the status of the land. Groups or individuals remove natural forest timber which is then sold on for profit, the main drivers being poverty and the demand to find a livelihood. APP has strict policies and procedures aimed at preventing the entry of this wood into our supply chain. Illegal logging is also linked to demand for alternative land use, such as the removal of natural forest to replant with palm oil or rubber. Although there are legitimate organisations who themselves manage palm oil and rubber plantations in the same way APP manages pulpwood plantations, there remains an element of illegal activity which is driving this change in land use.

Despite the issues caused by illegal logging activities APP recognises it has a responsibility to replace illegal logging as a source of income with other means of making a living. We do this both out of responsibility to the community, the environment and as a means to prevent host communities returning to illegal logging activities in the future. You can read more about examples of these community initiatives on page 45.

Forest fires are another major driver in land degradation. The driver can be both a natural one but also as a method of illegal land clearance. Not only does this cause significant environmental damage on the immediate forest area, it is also a considerable contribution to carbon emissions. By converting this degraded land into a sustainably managed forest it is possible to turn it into a carbon store.

ONCE THE LAND HAS BEEN DESIGNATED FOR PLANTATION, WHAT HAPPENS NEXT?

The pulpwood supplier undertakes several independent audits and assessments on the selected land. This involves identifying areas of high conservation value that need to be protected from development and checking the status of any local communities who live and depend on the area designated for development.

Finally, the results of this assessment are collated into a long term working plan for the development and ongoing management of the plantation. This is sent to the Ministry of Forestry for final approval before any development can take place.



MANAGING DEGRADED PEATLAND BRINGING WIDE REACHING BENEFITS

One of APP's pulpwood suppliers PT. Sebangun Bumi Andalas Wood Industries (SBA) manages a plantation area of approximately 142,000 hectares in Ogan KomeringIlir (OKI) district, South Sumatera province.

Forest fires plagued the land until early 2000, the climate impacts of El Nino having a particularly significant impact in increasing incidents of natural forest fire. At one point 80% of the natural forest had been destroyed.

SBA instigated a forest management programme to restore and actively manage the area. Employing around 5,000 people from the local community the process began with land clearance of the degraded forest, constructing canals for pulpwood transportation and seedling cultivation and planting. The programme also included provisions for education facilities and supporting aquaculture development to provide the local community with alternative sources of income and decrease the chances of illegal logging activities in the area.

HOW ARE OUR PLANTATIONS DEVELOPED ONCE PERMISSION TO DEVELOP HAS BEEN GIVEN?

THE STORY OF SEEDLING TO TREE











- **01.** Tubes are prepared and filled with nutrient rich growing medium
- **02.** Seedlings are prepared either from tissue culture or sowing seeds
- **03.** Water and fungicides are sprayed as the seedlings grow
- **04.** Poor quality seedlings are removed
- **05.** Final selection of seedlings ready for planting



This sustainable forest management programme has had significant positive impacts for both the environment and the local economy.

This area is also subjected to research by APP in collaboration with IPB (Institut Pertanian Bogor/Bogor Agricultural University) to study the carbon sequestration process on tropical peatland areas. The key conclusion from the study was that leaving degraded peat land unmanaged is not a sustainable option.

Actively managed pulpwood plantations on peatland can have a greater level of carbon absorption than degraded natural forest or denuded land in the same area.

The research programme received the Indonesian Green Awards in October 2011.

Once the land has been harvested, planting should take place within two weeks to minimise the risk of erosion. Proper spacing between the seedlings is important to maintain optimum growth conditions. Fertiliser is applied and the area is weeded. The journey from seedling to plantation establishment is particularly intensive and takes approximately one year. In contrast, the remaining growth period is very un-intensive; most plantations in the region are ready for harvesting in around five years.

Mechanisation is increasingly being applied to the harvesting process with machinery that removes the tree and its branches before cutting it into logs ready for collection by truck. The areas designated for harvesting are separated into non-adjacent zones to prevent any danger to workers in adjacent areas when the trees are felled.





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MIXED HARDWOOD A DELICATE ISSUE, TACKLED HEAD ON

In recognition
of the concern which
surrounds this wood
source APP has committed
to source 100 % of its
pulpwood supply from
sustainable plantation
stock by the end of
2015

Significant stakeholder attention is given to the sourcing of Mixed Hardwood, linking its use to tropical natural rainforest destruction. APP fully acknowledges that sourcing this material presents an environmental impact which must be managed in parallel to the economic development of Indonesia.

Plantation forest development is considered as the main strategy to maintain a sustainable forest industry in Indonesia. To do this a balance between environmental, social and economic impacts must be met.

Well managed plantation forest creates employment with better income for the local communities which reduce the likelihood that the communities continue to engage in slash and burn agriculture, illegal logging and poaching.

Mixed Hardwoods, also referred to as Mixed Tropical Hardwood (MTH) residue is only sourced from land designated by the Government of Indonesia for planation forest development. Using the wood residue is considered the best option environmentally in contrast to burning or allowing the material to remain on the ground, which helps to avoid forest fires and the release of methane into the atmosphere, as well as outbreaks of forest disease. A common misconception is that MTH, a low cost fibre source, is an economic driver to increase profits. In fact the opposite is true.

The pulping process needed to use MTH requires more chemicals, water and energy due to the non-uniform fibres present in this raw material.

MIXED HARDWOODS IN PAPER PRODUCTS

MTH fibres can originate from recycled paper or it can come from the legal and sustainable selective harvesting. It can also come from tree residues that are cleared, after a forest area has become degraded, logged-over or burned, as part of a sustainable development plan.

As far as APP products are concerned, MTH does NOT come from the felling of virgin natural forest in Indonesia. APP has strict policies and practices in place to ensure that MTH that enters the production supply chain only comes from residues from legal plantation development on degraded or logged-over forest areas and not those which are home to protected species.

Legally sourced fibre is the minimum requirement for all fibre, irrespective of supplier, to any APP mill.



ENVIRONMENTAL MANAGEMENT

Careful planning and the acquisition of licenses required to begin a plantation are only part of the story. Environmental management continues as the plantation develops. We demand that our suppliers have a strategy for sustainable forest management that covers not only tree growth and harvest but also rotation management, soil fertility, fire prevention and water management.

WHAT APPROACH DO OUR SUPPLIERS USE TO ADDRESS PEATLAND PROTECTION?

A specific challenge facing the Indonesian pulp and paper industry is the responsible management of peatland (sometimes referred to as 'wet land', as opposed to conventional forestry which is termed 'dry land'), which is constantly under threat from degradation if left without active management. It is an issue high on the agenda of many of our stakeholders and we, along with our suppliers, are committed to tackling the problem.

We ensure that our mills only receive pulpwood supplied from plantations developed on degraded, non-critical peatland, as defined by Indonesian government laws and regulations that designate lands for production forestry. Peatland identified within high value conservation areas is set aside to protect from disturbance.

Restoration of degraded peatland has a positive carbon impact, as highlighted by award winning research carried out in partnership with Bogor Agricultural University.

Our suppliers also implement strict water management systems to ensure that the wider peat ecology is protected. Water level is constantly monitored in adjacent canals and the results are used to manage water gates and overflows in the area as part of the wider water management of the region.

APP's pulpwood suppliers have built canals in some peat areas to lower the water table enough to plant trees on the government-assigned lands. The suppliers carefully maintain ground water levels to protect and seal the peat, ensuring it continues to store carbon even as the surface is used for renewable timber production.

Our canals also provide two critical additional benefits: a vital source of water for dealing with fire outbreaks and as fire breaks to impede the spread of forest fire. By maintaining a water table high enough to protect peat deposits in areas that are not identified as high value conservation areas, ensures that even peat areas that fail to meet Government of Indonesia requirements for preservation continue to store carbon for years to come.







Through the implementation of water management practices, we enable an environment conducive to tree growth, while also limiting peat subsistence and oxidation. Alongside this, we work with local communities to put into practice fire prevention and suppression management practices. Most importantly, by setting aside natural peat swamp forest, which has unique conservation value and extremely beneficial carbon storage properties, we aim to preserve these fragile ecosystems for generations to come.

In 2010 and 2011 we worked with experts from IPB (Bogor Agricultural University) on two major projects. The first was a landmark study in South Sumatra to research the impact of plantation forestry on degraded peatland and the related greenhouse gas emissions. The study was carried out on an area of land of about 600,000 hectares in South Sumatra that was largely destroyed by fire in 1997-98.



ENVIRONMENTAL MANAGEMENT



Forest fires during the El Nino climate pattern were an ongoing phenomenon until early 2000, at which point forest cover in the area had been reduced by 80%. The area was then developed into a pulpwood plantation by APP's pulpwood suppliers.

Using airborne and spatial radar technology, the research team was able to evaluate the impact of pulpwood plantation on the degraded land over four distinct periods: before the forest fires; after the forest fires; during the early plantation period; and during the recent plantation period, from 2009 onwards. The results showed that the development of pulpwood plantations on degraded peatland can help the land sustainably recover contributing significantly to increase carbon absorption. In October 2011, the research project was honoured at the Indonesian Green Award endorsed by the Ministry of Forestry.

The second project was a two year study to assess the carbon balance of plantation forest in both mineral and peat soil conditions, looking at how this affected carbon release and sequestration. The objective of the research was to calculate the carbon budget of peatland in a plantation forest with Accacia crassicarpa tree species in three locations in Sumatra.

The result of the research will provide a scientific basis for calculating the carbon budget of plantation forestry, an issue which is subject to global debate. The result of this research can also provide strong scientific basis for developing the best policy for peatland utilisation and in designing the best management technique for achieving sustainable plantation forestry in peatland area.



ENVIRONMENTAL MANAGEMENT

FIRE

One of the principles of our plantation management policy is zero tolerance towards burning as a method of land clearance. Not only does it release large quantity of CO_2 into the atmosphere and have a significant impact on biodiversity, it also creates a health hazard for those in the immediate vicinity of the fire. Burning for land clearing is also a source of uncontrolled forest fire which spreads from the intended area and becomes difficult to contain, creating a huge risk to both people and the environment.

Despite this policy, forest fires are an issue which our suppliers have to address within their concessions because local communities use it as a method of fast and cost effective land clearance. Our suppliers provide fire fighting crews in every forest management unit and provide training to local people on spotting fires and tackling them.

Fire spotting towers have also been constructed in areas which are at high risk of fires while satellites monitor fire hotspots. These are then checked by local district employees who in turn notify the police if a fire is spotted. Specially adapted helicopters are used to put out forest fires, they are quick to respond and able to reach remote areas affected by fire.

In 2010 fires affected 626 hectares of our pulpwood suppliers' land, equivalent to 0.02% of our total area. In 2011 the figure was 14,992 hectares and 0.59% respectively. The increase in area affected by fire in 2011 was due to single incident where a fire was started in land owned by the community around a plantation area in South Sumatera. The local community here have a culture called "sonor" which means land clearance using fire.

SUSTAINABLE FOREST MANAGEMENT CERTIFICATION SCHEMES

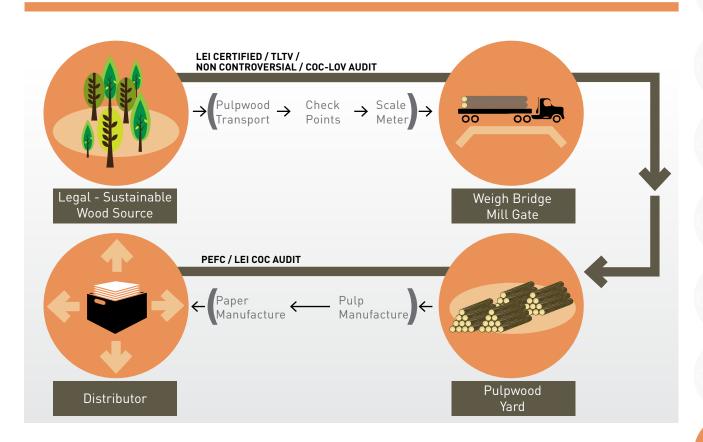
Customers demand reassurance that our products are made from sustainable sources. To achieve this we use independent third party organisations to certify or verify both our suppliers' sustainable forest management practices and chain of custody systems in our own operations.

Regulations already exist in Indonesia to support sustainable forest management. They are strict standards which take into account the nature of the pulp and paper industry in Indonesia. However, APP recognises that it must adopt relevant international standards if it is to gain the trust of its stakeholders across the world.

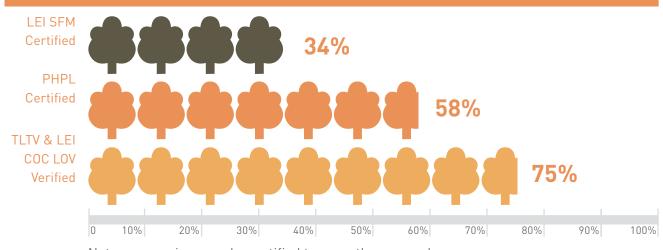




COC FLOW & CERTIFICATION



CERTIFICATIONS COVERAGE OF APP PULPWOOD SUPPLIERS, PERCENTAGE OF **TOTAL FOREST AREA UNDER MANAGEMENT, END 2011.**



Note: concessions can be certified to more than one scheme

THE STANDARDS EXPLAINED

MANDATORY CERTIFICATIONS

PHPL (Pengelolaan Hutan Produksi Lestari -Sustainable Production Forest Management)

The Ministry of Forestry PHPL certification scheme assesses the forestry operations against the Indonesian national forestry standard. It is a mandatory certification scheme which is independently verified by a nationally accredited certification body. Total supply certified to this standard is 47%, an increase from 18% at the end of 2010.

SVLK (Sistem Verifikasi Legalitas Kayu/Wood Legality Verification System)

SVLK is a government mandatory certification scheme with the objective of ensuring that wood and wood based product produced in Indonesia is sourced from legal origins and produced, distributed and marketed in a legal manner based on Indonesian law and regulation. The certification scheme is developed in cooperation with the Indonesian Ministry of Forestry and the EU, as part of it Voluntary Partnership Agreement (VPA) in relation to EU Timber Regulation, to ensure that all forest based products imported from Indonesia are legal. SVLK is the first step toward achieving the full mandatory sustainable forest management certification. PHPL certified forest management units already undergo the SVLK audit as part of

VOLUNTARY SCHEMES

LEI SPFM

Sustainable Plantation Forest Management under the Indonesian Eco labelling Institute (Lembaga Ekolabel Indonesia – LEI) is a voluntary certification scheme to ensure forest management quality through performance based principles, criteria and indicators that examine the sustainability of production and its environmental, social and economic impact. The LEI SPFM certification is currently the only voluntary national standard that is applicable and credible for forest plantation management in Indonesia. The standard was developed with the support of a wide variety of stakeholders including indigenous community representatives and environmental and social NGOs. More details on I FI can be found at www.lei.or.id

By the end of 2011, 27 % of pulpwood plantations were certified to the LEI SPFM standard, up from 9% at the end of 2009.







VOLUNTARY TIMBER LEGALITY ASSESSMENT

LEI COC/LOV

LEI COC/LOV (Chain of Custody/Legal Origin Verification) is a voluntary verification scheme developed in conformity with the Criteria and Indicators of the Indonesian Ecolabelling Standard (LEI) for wood fibre material. The verification scheme is developed for the purpose of preparing a management unit for the SPFM certification. Verification under the LEI COC/LOV scheme covered 88% of our wood supply in 2011.

Timber Legality and Traceability Verification Protocol (TLTV)

Pulpwood suppliers are audited annually by the independent inspection and auditing company Societe Generale de Surveillance (SGS) who developed the TLTV protocol. The Timber Legality and Traceability Verification Protocol is used in the process to independently verify the origin and legality of fibre sources.

Non controversial / Verified Legal Origin

LEI CoC/LoV and TLTV are both verification schemes which confirm that pulpwood is classified as non-controversial and of legal origin. Verified legal origin is a requirement of the PEFC standard, which requires all non-PEFC fibre used in our products to be non-controversial.

Why isn't 100% of our raw material third party verified?

Achieving third party verification is not something that can be achieved instantly. Working with our pulpwood suppliers we have a strategy in place to increase the coverage of verification with the goal of 100% of our supply being covered by at least one of the verification schemes by 2015.

To achieve this our suppliers need to implement training for their employees and build capacity to ensure that their employees understand the requirements of the verification system. The limited number of accredited auditors is also a barrier we must overcome to achieve our target.







FIBRE SOURCE TO OUR MILLS

Not only do our mills use fibre supplied from local pulpwood suppliers, we also use recycled fibre and imported pulp from external suppliers. We demand the same standards of traceability and legality from all of our suppliers in the same way that our pulp mills operate using third party verification and certification to provide reassurances that standards in our supply chain are met

IMPORTED FIBRE

Fibre, in the form of pulp, is also purchased from suppliers other than the local Pulpwood Suppliers in order to meet the technical requirements for our products. To achieve the correct balance between printability and strength of the paper product it is necessary to mix short and long fibres. Indonesian plantations produce pulp with short fibre which produce good printing, writing and optical properties but lack strength, hence the need to purchase long fibre pulp from outside of Indonesia.

APP applies the same strict standards to imported pulp from third parties as it does to its locally produced pulp. We purchase only sustainably sourced fibre which has been independently verified or certified by well recognised schemes such as PEFC, FSC and other credible national schemes.

PRE AND POST CONSUMER WASTE

Post consumer waste is recycled paper material which is collected and used in the Tjiwi Kimia, Ekamas Fortuna and Indah Kiat Serang mills. The majority of this material is old newspapers, magazines and packaging products from household waste collected by our suppliers from Indonesia, Asia, Europe, Australia, New Zealand, USA, Canada and the Middle East. Recycling fibre is an important part of the sustainable life cycle of paper products but it relies heavily on the availability of raw materials. It is also very important to ensure the quality of our products.

There is a finite number of times a wood fibre can go through the paper recycling process as it degrades over time and loses its strength. Typically the fibre becomes too degraded even for the lowest quality paper after going through the recycling process five to seven times¹.

A balance on the use of virgin and recycled fibre is required for sustainable paper production. The infrastructure for waste paper collection in Indonesia currently is not sufficient to provide a reliable source of waste paper material, another reason we have to import 54% of our waste fibre supplies for our mills.

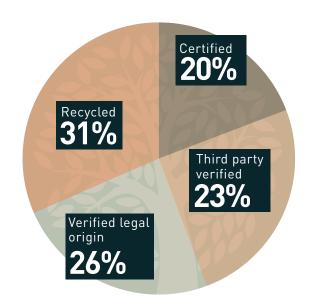
¹ Environmental Protection Agency.http://www.epa.gov/osw/conserve/materials/paper/faqs.htm#times



APP RAW MATERIAL COMPOSITION 2010

APP RAW MATERIAL COMPOSITION 2011





PEFC

The Programme for the Endorsement of Forest Certification (PEFC) scheme is one of the leading global standards in forestry certification and the world's largest in terms of the area of certified forest. The scheme endorses national certification schemes by assessing them against the sustainability benchmark criteria set by PEFC international.

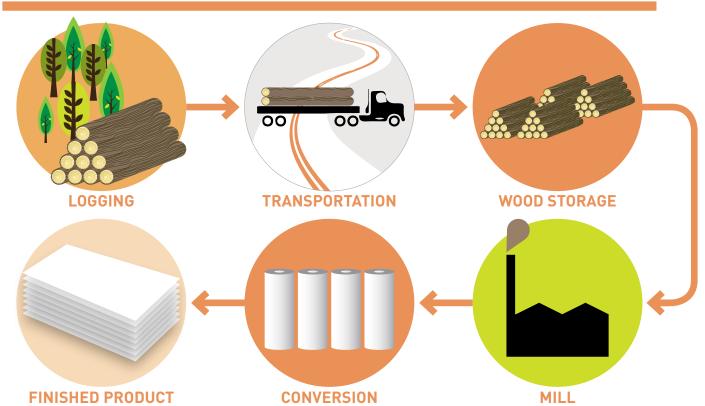
FSC

The Forest Stewardship Council (FSC) is a not-for-profit multi-stakeholder organisation. The standard sets out requirements for responsible forest management which form the FSC Principles of Criteria. These cover forest management practices, land rights, indigenous peoples and community rights and environmental impacts.

Legally verified material is the minimum standard required for all APP pulpwood suppliers



WHAT IS A CHAIN OF CUSTODY?



All of the standards described above require a chain of custody system to ensure wood material is traced through the supply chain. It ensures traceability from forest through to the pulp and paper mill and then through to the final product purchased by our customers. For the reasons explained in this section, the risk of illegally sourced wood entering one of APP's mills is an issue that we are acutely aware of. APP has a zero tolerance on illegal wood. Chain of custody is one mechanism to help us reduce this risk.

In practice, a chain of custody combines physical labelling of wood products with associated documentation to allow material to be tracked from the forest to the mill site. When trees are harvested and stacked in each of the harvesting blocks by the roadside for collection they carry identification which gives the details of the wood source, the wood types and the supplier.

When the wood arrives at the mill it is checked again against the documentation of the delivery before entering the mill gate. If the wood load failed the legality verification at the mill gate, which includes assessment by staff from the forestry agency, it is prohibited from entering the mill.

After entering the mill, additional visual checks are performed by trained mill employees to ensure that no unwanted wood species enter the pulp production process. There are two categories of unwanted species: species that are not suitable for pulp production and species that are listed as protected according to national laws and regulation. Any unwanted species which are identified are sorted out and placed in a quarantine area until it can be disposed of in accordance with the applicable laws and regulation.





CHANGES IN OUR FIBRE SUPPLY IN 2010 AND 2011

Realising the importance of increasing the environmental credentials of our pulp sources in line with our commitment of sourcing our fiber from sustainable sources, APP's mills had been increasing consumption of certified pulp, in place of the non-controversial pulp. This is also relevant to our commitment to have our pulpwood suppliers LEI-SPFM compliant by 2020.

We also see customer demand affecting the type of pulp we use. For example, in Indah Kiat Tangerang mill the percentage of non-controversial pulp was increased to 28% as a result of increasing demand for PEFC products from customers in Europe and Australia.

RESEARCH AND DEVELOPMENT

LEADING INNOVATION IN PLANTATION TECHNIQUES

Considerable investment into the Research and Development functions of our pulpwood suppliers plays a central role in our sustainable plantation management. There are three areas of research and development;

01. Nursery

The production of trees from cuttings or tissue culture

02. Tree Improvement

Breeding species of trees with enhanced properties, such as increased yield or reduced fertiliser requirements

03. Siviculture

The wider study of controlling the growth and establishment of the forest, including soil, fertiliser and forest management practices



Selecting clones through traditional breeding methods is a continuous process of improvement. Clones are created under laboratory conditions using cutting methods and those selected are cultivated in trial plantations located throughout the company's plantation area.



Improvements sought via the tree improvement process include improved disease resistance, which is achieved through the identification of a disease resistant tree species to decrease the risk of fungal infection. This cuts waste in the plantation development process by reducing the risk of a plantation area being unusable.

Lignin is found naturally in all natural wood products. It forms the "glue" that binds the cellulose fibre together but is removed during the chemical pulping process. Reducing the amount of lignin is desirable in order to decrease the amount of chemicals and energy required to remove it.

Developing species with a lower demand for fertiliser has clear benefits too.

Decreased fertiliser use reduces soil compaction and erosion, while also limiting the chances for herbicide resistant weeds establishing themselves.

Because APP suppliers use fast growing plantation species that are harvest ready within 5-6 years, tree improvement efforts have a much faster cycle, and thus success rate, compared to those plantation species in colder climates that are harvest ready in 25 years or longer.

In line with national regulations, APP's pulpwood suppliers do not plant and supply trees that have been genetically modified.

In partnership with the Bunut Abadi Community Cooperative, APP concession Arara Abadi operates an acacia management programme in the West Pinang Sebatang community. The Bunut Abadi cooperative was formed in 2002 with 20 local community members and by 2011 it had 183 local community members, 80 of whom work as administrators, supervisors and seedling project workers in the acacia programme.

The cooperative benefits from higher revenues generated from the seedling production, and other local cooperatives in the area are provided with acacia seedlings free of charge for the establishment of their own acacia plantations. In turn, this leads to the creation of extra jobs in the surrounding villages of Temiang and Sei Limau.

In 2009 the Bunut Abadi cooperative won an award from the Indonesian Ministry of Cooperative and Small and Medium Enterprise for its category.

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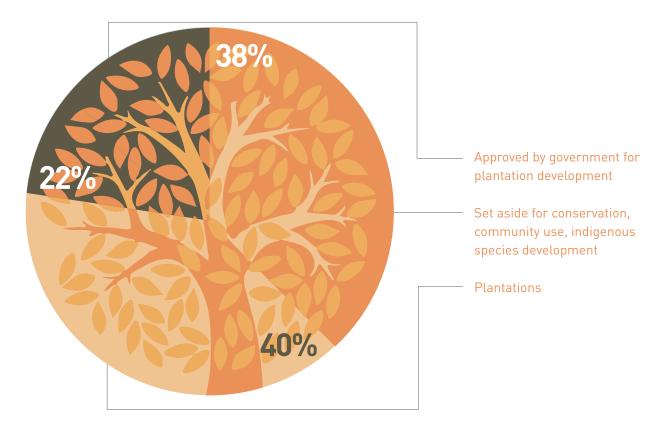
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Protecting the rich and diverse range of species that inhabit the forests managed by APP is vital to ensure environmental sustainability.

To achieve this we place a high priority on biodiversity in our sustainable forest management and place added focus on our conservation areas and programmes. The nature of Indonesia's natural forest means that our pulpwood suppliers operate in areas of high biodiversity value, but we expect our suppliers to actively manage these risks and maintain or improve biodiversity in the areas in which they operate.

STATUS OF LAND WITHIN APP PULPWOOD SUPPLIERS PRODUCTION FOREST CONCESSIONS

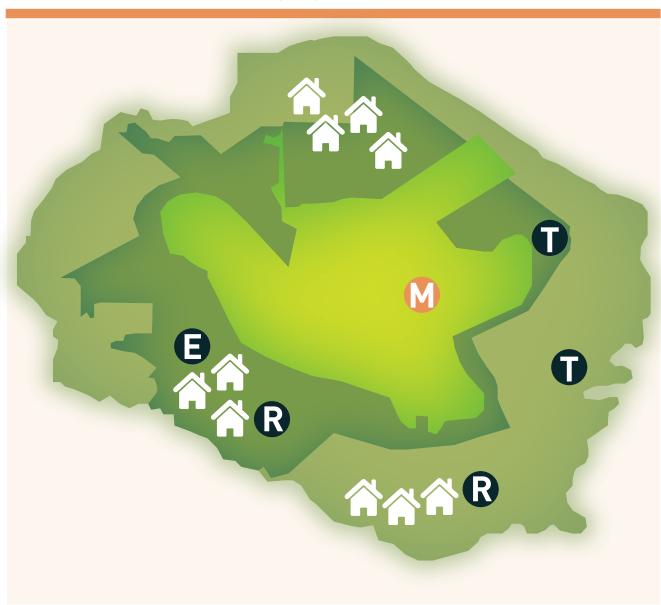


The Ministry of Forestry sets a minimum target of 30% total plantation area which must be set aside for conservation, community, and indigenous species initiatives.

At the end of 2011, APP pulpwood suppliers had set aside 962,000 hectares for this purpose, equivalent to 38% of the total plantation area; a significantly higher proportion than the minimum legal requirement.



CASE STUDY - THE GIAM SIAK KECIL (GSK) BIOSPHERE RESERVE













Reasearch Station



Monitoring



Education/Training



Tourism/Recreation

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The first biosphere reserve to be initiated and managed by the private sector, the Giam Siak Kecil – Bukit Batu (GSK-BB) biosphere reserve, is one of APP's flagship conservation programmes. Covering 705,271 hectares it is a great example of how conservation can co-exist with plantations providing economic development to the region. At the heart of the programme is the designation of three distinct zones; the core, transition and buffer zones.

The core zone is the conservation zone, covering 25% of the total reserve. A number of endangered species on the IUCN red list can be found in the reserve, including the Sumatran tiger, silver leaf monkey and black hornbill. It is also host to endangered reptiles and fish, including the salt water crocodile and the golden dragon fish. Part of the core zone, around 72,000 hectares, was originally production forest area allocated for plantation forest development. It is now set aside for conservation activities, where only low impact activities such as non-destructive research and education are allowed. It is critical to involve local government and communities in the ongoing management of the reserve to ensure the protection of the areas at risk from illegal logging.

The buffer zone serves to protect the core zone from illegal logging activities by acting as a protective boundary around the conservation area. This zone, which represents 32% of the total reserve, is host to plantations which are managed using the same principles as our plantations outside of the reserve. They are patrolled and the roads in and out of the zone are subject to tighter security to ensure that the core is kept safe from detrimental activity.

The outer zone is the transition area, covering 43% of the reserve. It is designated to agricultural and community development activities, and tourism, research and training is actively encouraged.

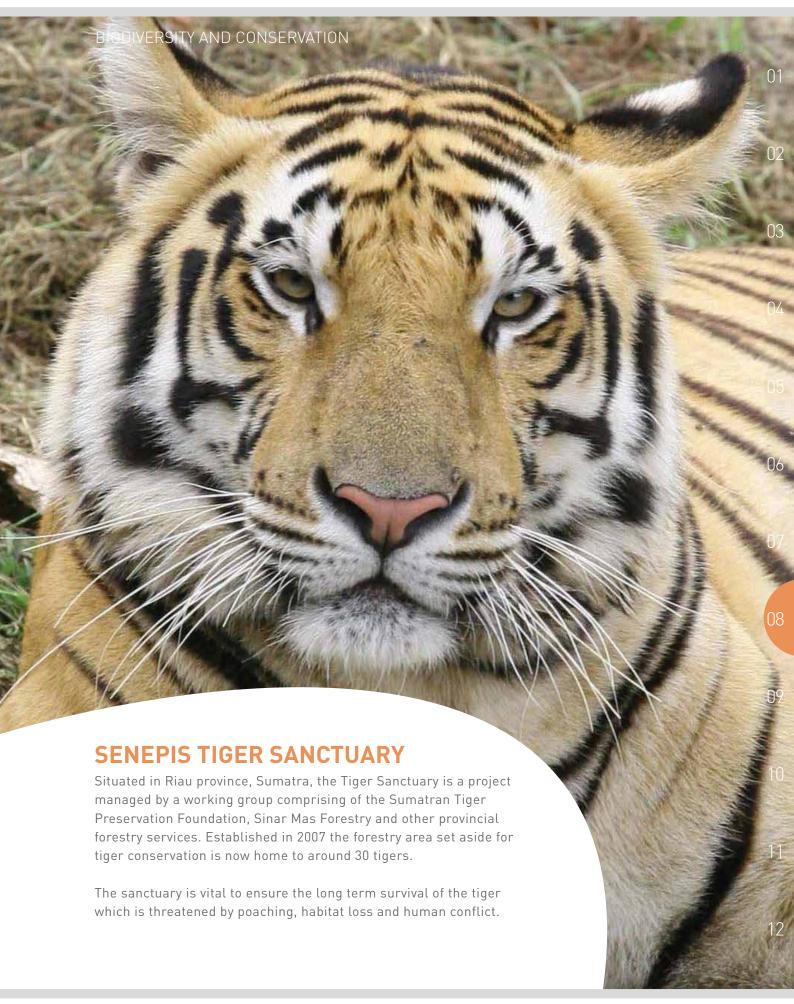
In 2010 and 2011 APP and its pulpwood suppliers continued to invest heavily in conservation initiatives within the GSK-BB reserve. The total amount invested in the conservation project in 2010 and 2011 was \$224,834.

In the same year we also invested \$58,675 with our partner LIPI in biodiversity research within the GSK-BB reserve to provide a baseline understanding of the long term management of the GSK-BB reserve. The results of the research indicated that peat forests in the GSK-BB reserve provide a vital habitat for birds, amphibians, reptiles, fish and mammals. Therefore, preservation is absolutely necessary to maintain the balance of ecosystems and protected species.

Investments continued in 2011 with a range of new conservation initiatives. Partnering with The KSP(Kelompok Studi Perairan, or Aquatic Research Group) of Riau Islam University we supported trials with the Selais, Baung and Catfish breeds to find methods of improving yield and income for the residents of the Tasik Betung village. The project also provided university students with a practical project and experience outside of the classroom.

Our most significant investment in 2011 was in a project to survey the bio village within the GSK reserve and install a peat water treatment plant to provide clean water to the communities that live in the area. The project was a partnership between APP and Man and Biosphere (MAB) UNESCO - LIPI.







INTERVIEW WITH BASTONI, CHAIRMAN OF THE SUMATRAN TIGER PRESERVATION FOUNDATION

Explain the objectives of your tiger conservation work.

A We assist and protect endangered tigers outside the national park and also within the GSK biosphere reserve. The government currently does not have the capacity to protect the tigers alone, so they enlist our help.

• How do you protect the tigers?

We study the tigers and resolve any conflict that arises with local communities. Conflict usually arises when there is close and frequent contact between tigers and humans. Therefore, if any tigers are found in the surrounding villages or around the plantations, we rescue them and move them back to the conservation areas using humane methods, such as a wooden tran hox

• What are the major threats to the local tiger population?

Degradation of its habitat and poachers are the major threats. When forests are developed without proper wildlife corridors and conservation zones then the tigers hunting and roaming zones become severely limited, leading to increased human-tiger contact and conflict. Threats from poachers come in two types: illegal poachers who want to capture the tigers for sale on the black market, and local people who set traps illegally in conservation and production forest areas for other wildlife such as boars and deer but accidentally snare the tigers instead. Often these tigers are fatally injured by traps set for other wildlife.

• What steps do you take to reduce humantiger conflict?

A The first part is education. We need to work closely with the local community and the plantation workers to explain to them the importance of the tiger and how and why they should be protected. It is not a simple task to keep the tigers in the conservation area, they naturally move to areas where they can find food and this leads them onto the plantation zones that border the conservation area and sometimes into community areas too. When workers are also in the same area we have a potential for conflict. Working with APP I have developed a Standard Operating Procedure (SOP) to help provide guidance, such as how to protect yourself from tiger attacks and that the workers should quickly alert the YPHS team of any tiger sightings to manage them away from any conflict. We must reduce any chance people have to see tigers as a threat to their safety, which they are not if treated with respect.

How do you work with APP?

We support APP's work and promote the inclusion of conservation zones within APP Pulpwood supplier plantations. APP has allowed us access to its plantations to monitor the tigers in their natural habitat using GPS collars and cameras. Through these devices we can identify the location of their habitat and observe how the tigers behave in their natural habitat without our presence affecting their behaviour.





TAMAN RAJA NATURE PRESERVE

Located in Jambi province, Sumatra, the Taman Raja reserve is part of the concession area for plantation forestry granted to one of APP's pulpwood suppliers PT Rimba Hutani Mas (RHM). Within the area are five villages which have been established for generations, housing a community that relies on agriculture, employment in local palm oil and timber industries and other nontimber products from the forest. The community relies heavily on the forests natural resources to sustain their way of life.

The natural forest provides habitat for species including the Sumatran tiger, clouded leopard, sun bear, pangolin, hornbills and rare timber species. It is also a vital water catchment area, providing regulation of rainfall and reducing the risk of flooding in the area.

Supported by APP, RHM created the conservation area, covering almost 10,000 hectares of natural forest. Active management of the area was required to ensure the long term survival of the area as a natural forest. Bringing together civil society groups, international NGO's and local and national governments, a multi-stakeholder development plan was established.



Key activities of the development plan include;

- → A programme to support and develop opportunities based on sustainable non-timber products as an alternative income source
- → Promoting eco-tourism, developing hiking tracks and ways to demonstrate the unique culture and customs to tourists
- → Establishing a base camp in the conservation area to provide a base for scientific study

ORANG-UTAN FOUNDATION INTERNATIONAL

In November 2011 APP announced a partnership with the Orang-utan Foundation International (OFI), creating a two year conservation programme to protect the orang-utan.

The Friends of Orang-utan programme supported the release of 40 wild born ex-captive orang-utans into their natural habitats as well as supporting the treatment of 330 orang-utans at a specially prepared treatment centre.

A training plan was also developed for employees of APP pulpwood suppliers to teach them about the importance of orang-utan conversation and how to build this into sustainable forest management.

KAMPAR CARBON RESERVE

Located in the Riau Province in Sumatra the Kampar Carbon Reserve is a project led by the green entrepreneur firm Carbon Conservation in partnership with APP. Working with the Indonesian Ministry of Forestry, land concession holder PT Putra Riau Perkasa (PRP) and local stakeholders more than 15,000 hectares of deep peat carbon sink were transferred from concessions allocated for pulpwood plantation to conservation land in an effort to establish this world first pilot project.

Currently assessments are being made of the land, including soil analysis and community needs, issues and challenges. Some of the issues and challenges are that the forest carbon trading mechanism has not yet fully developed as the regulations are not yet clear and the carbon market is still volatile due to the unstable global economic climate.

Despite these limitations the project will continue. Following completion of the assessments the next step will involve independent auditors validating the carbon preservation model and securing third-party investment. We will then begin activities within the reserve to both protect and improve the land in addition to on-going annual third-party verification and certification.

The Ujung Kulon National Park, located on the south western tip of the island of Java in Indonesia, is the last remaining home to the Javan Rhino. We are committed to protecting this endangered species and in 2011 set up a partnership with the national park to implement a number of conservation programmes.

COMMUNITY WATER ACCESS

APP also supports the provision of clean water through an eco-friendly piping system to a community living in and around the Ujung Kulon National Park (Taman Nasional Ujung Kulon/TNUK) on Java Island.

This programme is designed to run for five years, targeting 15 villages that are directly adjacent to the TNUK area. In addition to the clean water provision the programme will also be implemented to raise the community's awareness of the importance of clean water and sanitation.



An organic farming group was developed to increase collective awareness of organic farming techniques and share best practice. In 2011 500 litres of organic fertiliser were provided to help the farmers establish new growing techniques. Land mapping activities in a number of villages within

the TNUK in August 2011 has helped to implement clearer management and awareness of the range of skills amongst the village community. In October 2011 training for craft production was provided to a group of women across six villages, helping them to establish additional sources of income.



PROTECTION OF THE JAVAN RHINO

The Javan Rhino population has suffered significantly from both illegal poaching for the highly valuable single horn and habitat destruction. Numbers worldwide are estimated to have decreased to just 50, placing this rare and special animal at severe risk of extinction.

Conservation is not only about animals and biodiversity; it's about the community too. We work with the local communities in the park's six surrounding villages to establish lasting relationships and build capacity amongst villagers to aid our conservation efforts. Prior to our work within the region, local communities supported themselves by hunting the rhino and felling trees within the park and its surrounding area.

To empower the community and offer alternative means of income we began by providing the local community with clean water and organic fertiliser, in addition to sea weed cultivation training which we provided for those living near the sea. We then worked to raise awareness of the initiative and provide education to local people about the importance of conservation.

Within the national park, the rhinos' habitat is monitored by camera, allowing experts to check the animals without disturbing them. We also need to maintain and enhance the Javan Rhino's habitat. For example the grazing area has been expanded to reduce the competition for food with the wild buffaloes within the park, and invasive species, such as the Langkap palm tree.

This programme was co-ordinated by the Javan Rhino Conservation Working Group (CWG)) which is a multi-disciplinary team made up of experts from Ujung Kulon National Park, local NGOs, private sector companies, including APP and academics.

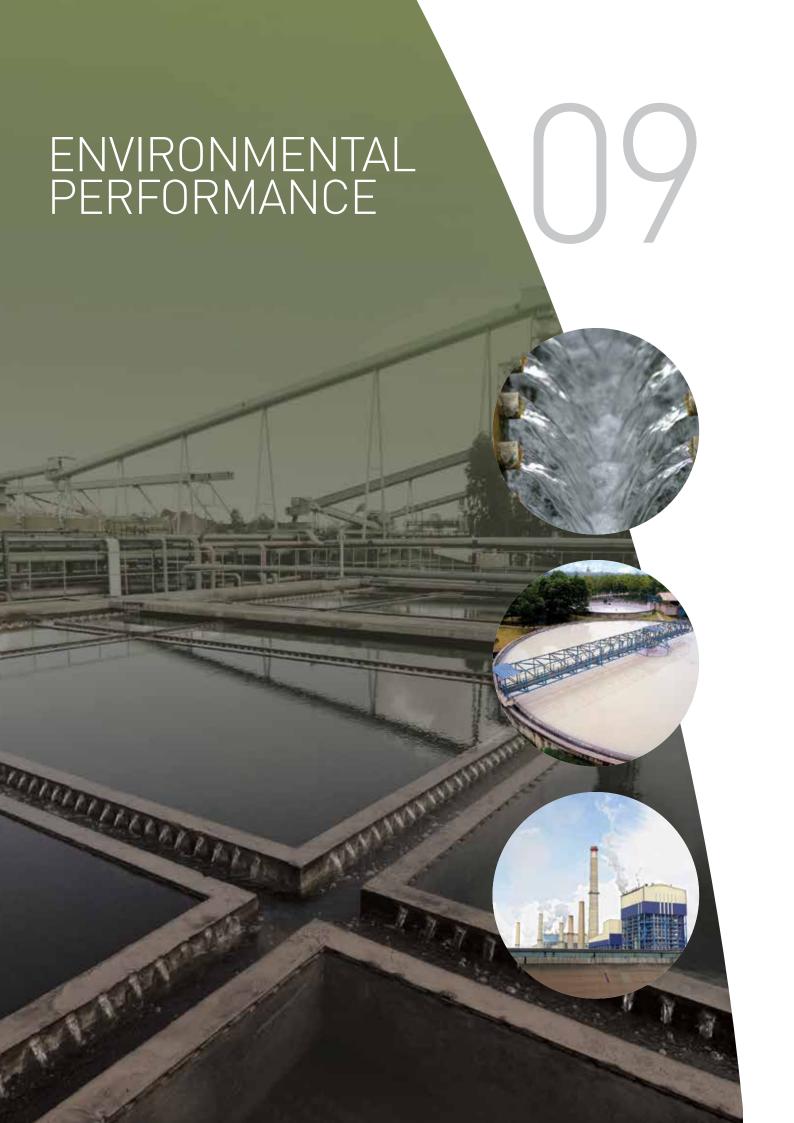
By 2016 the programme will extend from six villages to a total of 15. We are committed to supporting these communities, which in total comprise around 20,000 people, in order to ensure the safety of the national park and preserve its fragile future. In 2011 we invested \$241,490 in the programme.

Through our partnership within the Working Group, we drive systems and procedures to manage the park's buffer zone and we have created a task force consisting of local NGOs and government to improve the park's protection.

Over the next five years, these conservation efforts will continue, whilst furthering our community empowerment programme and building capacity within the park's local communities will remain a priority.

CHEMICALS AND OTHER MATERIALS

Fibre is not the only raw material used by APP's mills. Other process chemicals used in the paper making process include salt, limestone, sodium sulphate, calcium carbonate and optical brightening agents. These are sourced from external suppliers with the exception of Indah Kiat Perawang and Lontar Papyrus, which, due to their remote location, produce some of these chemicals on site.





ENVIRONMENTAL PERFORMANCE

Our mill managers and staff have been diligent and attentive to the steady development of robust environmental performance over the years. And it's been recognised: we are pleased to report that our mill operations are independently certified to international and regional environmental standards.

The Indonesian government requires its industry to comply with its primary environmental assessment, pollution and control programs. We also want to be a responsible neighbour, ensuring that environmental impacts to the communities that surround our mills, mainly air and water emissions are monitored and controlled.

We manage a wide range of impact areas in our environmental programs. Energy and water are of course crucial in paper and pulp production. We measure water and air quality and calculate energy and water intensity. Most of APP's mills produce power on site which in itself requires careful environmental controls. In addition, significant quantities of chemicals are required in pulp preparation and paper making, some of which are produced on site.

We benchmark and compare ourselves to other international mill groups to compare our environmental and operational performance, using IFC/World Bank guidelines where appropriate.

KEY ENERGY AND WATER SAVING INITIATIVES

Mill	Project	Result (2010 to 2011)
Pindo Deli	PM11 energy consumption reduction	9% reduction in electricity consumption per tonne production
Pindo Deli	Optimised waste water treatment	18% reduction in electricity consumption
Tjiwia Kimia	Improve steam and condensate system	3% increase in condensate returned to system
Tjiwia Kimia	Reduce mill raw water consumption	7% reduction in water consumption







All APP mills must complete the Indonesian environmental impact assessment ('AMDAL') process. This assesses potential environmental, social and economic impacts of each site and checks that systems are in place to manage and mitigate all the potential risks identified.

This obligatory process must be successfully carried out before a site can be commissioned or before a major modification or investment, such as a new paper machine or upgraded power equipment.

All APP mills follow the ISO 14001 Environmental Management standard, the internationally recognised standard that provides a framework for establishing an environmental management system. Indah

Kiat Tangerang

Mill was upgraded to

Green in 2011 following
investments in processes to
separate rainwater from effluent.

The mill also re-uses sludge waste
from the waste water treatment
operation. It is used to provide
fuel for the boiler on site and
also as a raw material in
chipboard production.

APP: PROPER COMPLIANT

In 1995, Indonesia's Ministry of Environment launched a voluntary environmental initiative called PROPER - Program for Pollution Control, Evaluation and Rating. It was designed to use public disclosure, environmental awards and reputational incentives as the motivating forces for environmental improvement. Under the program each participating company would be rated using five colours: Gold for going beyond compliance and showing best in class performance of the top 1% in each industry, Green for excellent performance beyond compliance, Blue for compliance, Red for non-compliance, and Black for those companies that caused serious damage to the environment. PROPER was the first fully-fledged disclosure program for industrial pollution control in the developing world. Our mills are PROPER compliant with either a blue or green rating, with the exception of Tjiwi Kimia in 2011 which was not participating in the audit program due to the installation of new equipment.



AIR EMISSIONS IMPROVEMENTS

Air emissions from our mills are created mainly by fuel combustion of our on-site power generation facilities and from pulping and paper-making processes. The main emissions from our pulp mills are $\mathrm{CO_2}$, $\mathrm{NO_2}$ and $\mathrm{SO_2}$, the pulp mills also emit $\mathrm{ClO_2}$ and $\mathrm{Cl_2}$.

We monitor direct emissions from both our on-site power generation facilities as well as local air quality in the area around the mill to ensure air quality is acceptable and within government guidelines. Our Indah Kiat Perawang mill, for example, uses a Continuous Emissions Monitoring System (CEMS) which also allows us to observe how changes in other parts of the mill affect air quality, helping us to understand how we can continually reduce our emissions. The equipment is also installed in our Lontar Papyrus, Pindo Deli II, Indah Kiat Serang and Tjiwi Kimia mills. The emission monitoring results are regularly reported to the Ministry of Environment.

To control emissions from our power plants we use equipment such as bag filters and Electrostatic Precipitators (ESP) within the exhaust systems to prevent harmful substances from reaching the atmosphere. We also use scrubbers in the exhaust systems of our chemical plants.

For a full breakdown of air emissions from each mill please refer to page 135.



CARBON

Climate change presents a financial and environmental risk to APP, namely the impact changes in climate patterns could potentially have on the availability of our main raw material, wood fibre and the subsequent impact on our wider supply chain.

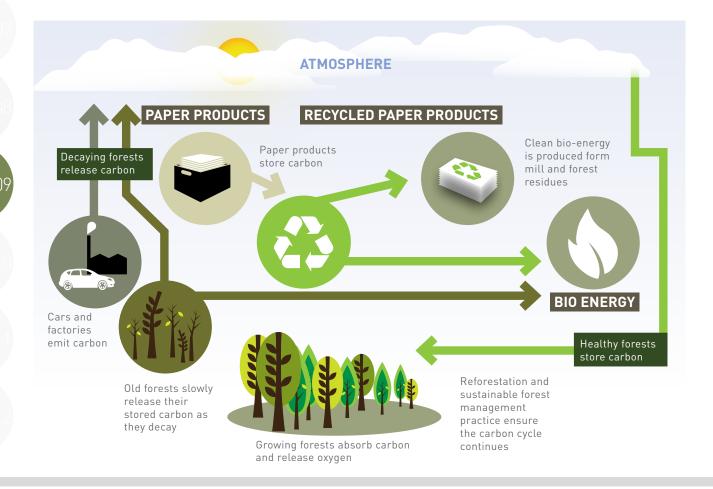
Our property in low lying below sea level areas also present a risk in the event of sea level rise as a result of climate change

We manage carbon emissions from our own operations and recognise the opportunity sustainable forest management offers as one of the solutions through carbon sequestration via forest growth.

On a product level, the carbon cycle of paper products presents a strong sustainability story.
Sustainably managed forests used to produce paper

at mills with strong environmental credentials. This means that our products are effectively a carbon store which is kept within the product until it is either recycled or disposed of by the end user. APP's overall goal is to offer carbon neutral paper to our customers by combining carbon sequestration of responsibly managed forests with production facilities with a low carbon impact.

For details of how responsible forest management has a positive impact on GHG emissions please refer to section 8, Sustainable Raw Materials on page 87.



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REDUCING GHG EMISSIONS FROM OUR MILLS

The key driver in reducing our GHG emissions is reducing the use of fossil fuels as energy sources in our mills. We do this by installing technologies to improve the efficiency of our energy consumption in our manufacturing process and by using alternative renewable energy sources to reduce the use of fossil fuels.

A full carbon footprint assessment of all APP mills using the latest GHG protocol is scheduled to be carried out in 2012. We recognise the importance of re-assessing our impact again with an up-to-date assessment to help us understand our impacts, opportunities and realise the reductions in emissions which our mills are achieving. The results of this study, alongside appropriate targets, will be communicated in a separate report.

We continue to drive forward improvements across our organisation which results in GHG emission reductions every year. In 2011 we identified a total reduction of 264,156 tonne $\mathrm{CO}_2\mathrm{e}$ through a range of initiatives

Mill	Initiative	Total GHG savings (ton CO ₂ e)
Indah Kiat Perawang	Use of biofuel, empty fruit bunches (EFB) from Palm Oil industry waste	83,145
	Use of biofuel, palm kernel shells (PKS) from Palm Oil Industry waste	
	Use of waste water sludge as fuel	
	Increasing the use of natural gas as fuel in Lime Kilns	62,891
	Excess hydrogen from chemical plant reused	
	Increasing the reuse of the condensate from evaporators in the pulp mill and causticising plant, increasing heat recovery and reducing fresh water use	47,736
Lontar Papyrus	Use of biofuel, empty fruit bunches (EFB) from Palm Oil industry waste	6,746
	Use of biofuel, palm kernel shells (PKS) from Palm Oil Industry waste	
	Increasing the reuse of the condensate from evaporators in the pulp mill and causticising plant, increasing heat recovery and reducing fresh water use	33,211
	Switch from Diesel Oil to Natural Gas	10,917
Indah Kiat Serang	Anaerobic water treatment system	19,460



AN INTENSE FOCUS ON ENERGY

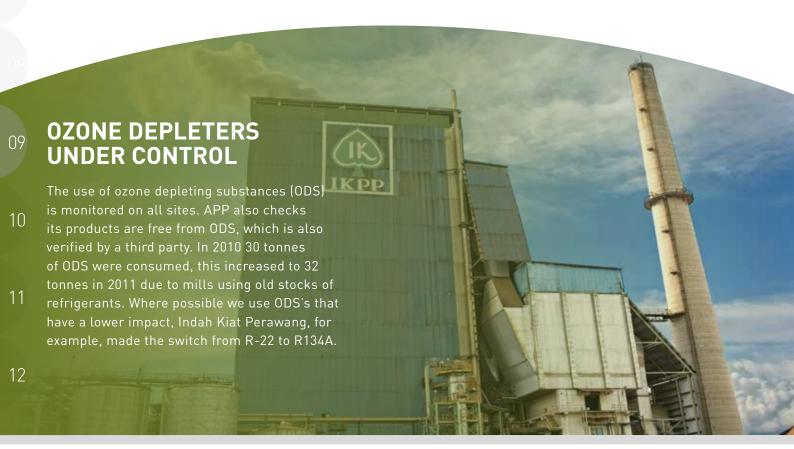
Paper making is an energy-intensive process. Pulping and drying paper consumes the most energy.

Indah Kiat Perawang and Lontar Papyrus generate their own electricity because there's no adequate infrastructure for electricity supply from the national grid in the remote areas the mills are located in.

For several mills in Java the capacity of the national grid might not be sufficient for production and only used as back up, so these mills must also produce their own energy to meet their production demands. Non renewable fuels used at our mills are predominantly gas and coal, renewable fuels are mainly black liquor and bark.

GENERATED AND PURCHASED ELECTRICITY

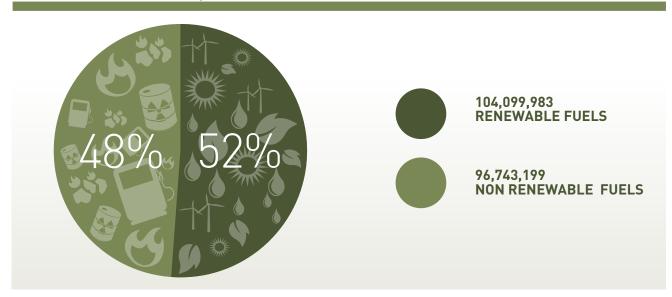
	20	10	20)11
	GJ	Ton CO _{2e}	GJ	Ton CO _{2e}
Generated energy	196,506,250	8,917,834	200,843,177	8,673,193
Purchased electricity	2,472,783	501,425	2,834,343	574,742





THE SWITCH TO CLEANER ENERGY

ENERGY GENERATED (GJ), 2011



Energy generated from renewable fuel sources increased considerably between 2010 and 2011, with a 7% increase across the group. We intend for this trend to continue with clean-tech and alternative energy investments.

Our two integrated pulp and paper mills, Lontar Papyrus and Indah Kiat Perawang, generated 70% and 73% respectively of their energy from renewable sources in 2011. Such a high renewable fuel use is achieved by recovering black liquor – a by product from the pulping process.

Our paper mills in Java do not have the same level of access to renewable energy sources due to their urban location, so they must rely on coal and natural gas as their main source of fuel. This doesn't mean they can't improve their fuel mix – we are actively looking at increasing the use of natural gas in preference to coal or diesel oil as a cleaner fuel alternative.

Some mills produce more energy than their current need. Indah Kiat Perawang supplies energy to the local community. Because the infrastructure for the national grid to provide electricity to the nearby communities is still being developed, the mill provides electricity to those communities. The national grid recommends that energy is not provided free of charge to ensure communities do not come to expect free electricity as a long term arrangement. Therefore the mill provides energy at a reduced price and reinvests the money collected into CSR programmes for the local community.

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WATER IS EVERYBODY'S BUSINESS

Water matters: we know it, and stakeholders tell us. Steadily, customers are showing an interest in the embodied environmental impact of the product they buy, and water is one of their focus areas.

APP addresses the issue of water on two levels – by ensuring responsible water management of our own operations and by contributing to initiatives that address water issues in surrounding communities. Our commitment is highlighted by our pledge to the UN CEO Water Mandate in 2011. Access to clean drinking water in Indonesia is improving but it still remains a problem, particularly in more remote areas. This makes the challenge of responsible water use even more real for APP.

Water is a vital part of the pulp and paper making process. It's used in the pulping process, as a medium to transfer fibre through the process and in the form of steam for heating.

Paper making is a water intensive process but the majority of the water is reused or returned to the mills' water source once it has been treated.

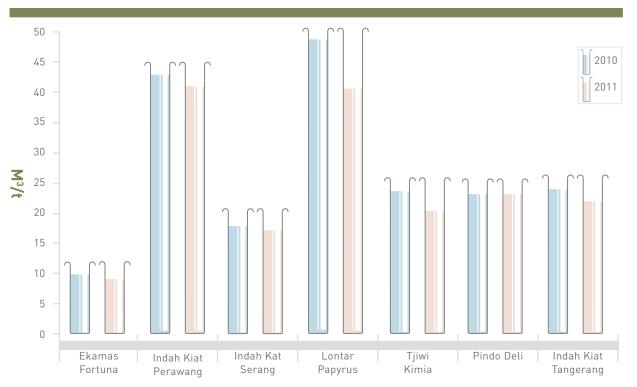
We measure two water input streams at our mills: 'raw' water from local sources at each mill and 'process' water which is sourced and then treated before being used in production.

In 2011 we extracted 234 million m³ of water from local sources for our production processes, a 5% reduction on the previous year. Our treated water consumption decreased 2% between 2010 and 2011.





WATER CONSUMED PER TONNE OF PULP AND PAPER PRODUCTION.



All of our mills achieved a reduction in water consumption per tonne of pulp or paper produced from 2010 to 2011. The variation between the mills is due to the type of products they produce, both in terms of paper and pulp and in terms of the paper grade they are producing. Water consumed is also affected by the type of equipment and technology employed.

We are aware that our customers are increasingly interested in the water footprint of the paper products that they buy. Whilst there is not yet a globally recognised method of calculating and communicating the water footprint of a paper product, APP continues to publish headline data on water consumption per tonne of paper with the aim of reducing water intensity year-on-year.

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WATER IS EVERYBODY'S BUSINESS

TWO CASES OF EFFICIENCY

→ Tjiwi mill:

7% raw water uptake reduction achieved by raising awareness across the entire mill as to why water saving is important and that the mill has ambitious long term goals to continuously reduce water use. Capital investment as part of this initiative included a new filtration for white water recycling systems on the paper machine.

→ Ekamas Fortuna:

Water consumption remains steady in 2011 compared to 2010. The water intensity of Kraft liner production shows what an achievement this was. The production volumes of Kraft liner have increased by a third to 65%, resulting in higher water requirements, yet the mill still managed to keep water use at 2010 levels.





KEEPING WATER CLEAN AND SAFE

Water quality is also important to APP and its stakeholders; it is tightly monitored by local authorities at each mill: minimum quality limits are set and any deviation must be reported.

Water quality upstream and downstream from a mill is monitored regularly. Parameters of mill water discharge to rivers is also monitored constantly by our own laboratory as well as independent ones.

WHAT DO WE MEASURE?

Biochemical Oxygen Demand and Chemical Oxygen Demand is a measure of water quality, the lower the figure the cleaner the water is as it has less organic pollutants present. Total suspended solids is a measure of the level of small solid particles and provides another indication of water quality. All mills adhere to targets which follow either the government standard or if applicable the IFC / World Bank standard for pulp and paper industries.

For detailed information on our performance in water effluent quality and main water bodies affected by our discharge please refer to page 135.

PARTNERSHIPS THAT DRIVE IMPROVEMENT

We also work in partnership with others as part of our approach to improving performance. In line with our commitment to the UN CEO Water Mandate, Lontar Papyrus ran a partnership with Nalco, one of the world's leading innovators in clean water technology and solutions, to implement a corporate wide Water Footprint Assessment. Working with a team of six water process experts, the inventory assessment which took place covered water intake through to mill processes and finally to the waste outputs. The team recommended improvements where the greatest savings could be made. The assessment in Lontar is the first of a series of water footprint assessments that will be conducted across all of APP's major operations. The objective of the water footprinting is to further enhance APP's responsible water management.



"The assessment was very useful: a benchmark to other mills from around the world showed that Lontar Papyrus is on a par in most areas. Working with APP, we have identified the key improvement opportunities".

Mohan Kelkar, Nalco, An Ecolab company



'CLEAN TECH' IN ACTION

Seeing the opportunity for an environmentally friendly operation, Indah Kiat Serang mill installed a technologically advanced waste water treatment system that enable it to harvest methane gas from its waste water and turn it into energy for the production process. Started in 2008, the waste water system is now able to generate biogas at a rate that equals the energy required to light around 2,700 light bulbs. The advanced treatment system also requires less energy to operate and is able to remove a higher amount of contaminant in the waste water resulting in a much cleaner effluent discharged to the river.

Recognising its environmental value, Indah Kiat Serang mill registered the project into the Clean Development Mechanism (CDM)¹, a carbon trading scheme developed by the United Nations Convention on the Climate Change (UNFCCC), based on the Kyoto Protocol. As is required by UNFCCC, a CDM validator was assigned to independently assess the carbon emission reduction of the system.

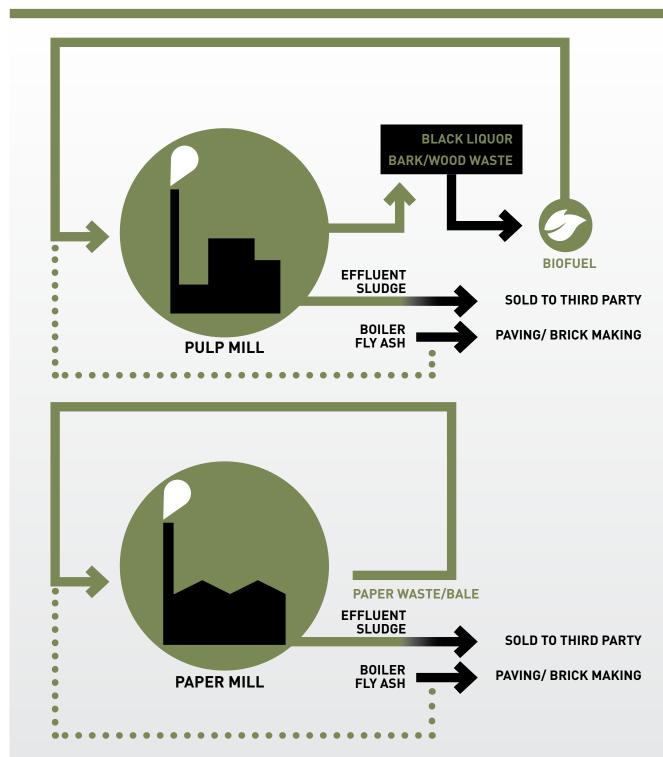
Based on the audit, by installing the system Indah Kiat Serang mill will be able to reduce around 60,000 tonnes of CO_2 /year, equal to eliminating carbon dioxide emitted by over 10,000 minibuses per year¹.

Shortly after Indah Kiat Serang, Ekamas Fortuna followed suit. Waste water generated from recycled paper production process is highly suitable for biogas generation because it contains a higher amount of organic material compared to the paper production process from virgin fibre. Built in 2010, the waste water treatment system complete with its biogas digester in Ekamas Fortuna is projected to be able to generate bio energy at the rate of 200-230 Nm³/hour, equivalent to around 1,290 light bulbs. Once the installation is completed, the project will go through the same process as the Indah Kiat Serang CDM project; registering to the UNFCCC, audit and verification process by UNFCCC appointed bodies and then progress to the relevant carbon trading market under the Kyoto Protocol. The investment is projected to reduce greenhouse gas emission by around 13,000 tonnes CO₂e/year.



¹ http://cdm.unfccc.int/Projects/Validation/DB/6K29RDBGQ6SAWGCTFERBYY7XBG4TBG/view.html

WASTE: WIN-WIN





The pulp and paper making process itself creates waste streams that are re-used as part of the efficient processes we apply at all of our mills. We strive to constantly challenge ourselves to make our operations as efficient as possible; this goes hand in hand with minimising waste at all stages of the pulp and paper making process.

We seek to minimise and re-use waste using the '3Rs' approach – reduce, reuse, recycle. In 2011 our waste reuse rate was 17%, excluding reusing fibre. Naturally the benefits of waste minimisation are environmental as well as financial. Some waste materials can be reused by APP, for example, waste sludge is reused in the production process. Other waste streams, particularly ones categorised as hazardous are sent to a fully licensed third party who processes the waste in order for it to be re-used.

When paper is converted on site from the jumbo rolls on the paper machine into smaller paper products ready to be sent to our customers there is often waste paper from the trim. This waste material, called 'broke' is returned to the paper machine and re-pulped, reducing the requirement for additional raw material.

During the pulping process the pulp is screened to remove contaminants such as bark from wood chips or glue from recycled paper and other impurities which would be detrimental to paper quality. The waste from the screening process can be reused. Bark and wood waste can be used as fuel for example.

The method of waste disposal varies between our mills and is influenced by the facilities at the mill and the availability of suitable waste streams external to the mill, for example third party buyers for the waste material.

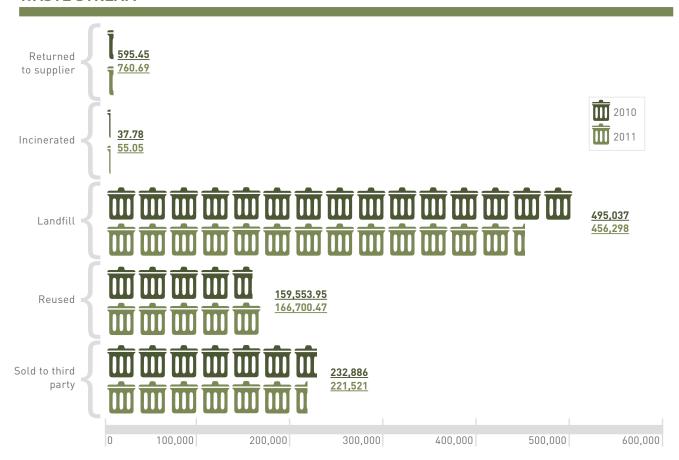
Hazardous waste created by our mills includes used oil, electronic waste, coal fly ash, batteries and expired chemicals. In 2010 and 2011 respectively we created 820,825 and 777,370 tonnes of hazardous waste, a reduction of 5%. Disposal methods vary between the mills, but in each case we follow local and national standards to ensure safe disposal of all of our waste products. The majority of hazardous waste is sold to a third party who are licensed to process the waste, disposal methods can include incineration, landfill and re-use.

DISPOSAL METHOD, HAZARDOUS AND NON HAZARDOUS WASTE

Disposal method	Example
Recycle/Re-used	Plastic waste from non-production activities recycled. $\rm H_2SO_4$ from the pulping process
Re-sold to third parties	Used oil
Returned to supplier	Metal wires used in pulp packaging
Landfill	Dregs, grit and lime mud
Incinerated	Used oil that can no longer be recycled

WASTE: WIN-WIN

WASTE STREAM



We are constantly looking for new ways to re-use waste material. In 2010 we carried out a project with the Department of Soil Sciences and Land Resources to look at how boiler ash could be combined with other by-products to provide an alternative soil improver for Acacia. In 2011, Indah Kiat Perawang successfully completed a trial using waste water treatment sludge as a fuel source. One benefit is a further reduction in coal use. The mill is awaiting government approval to scale up the process.

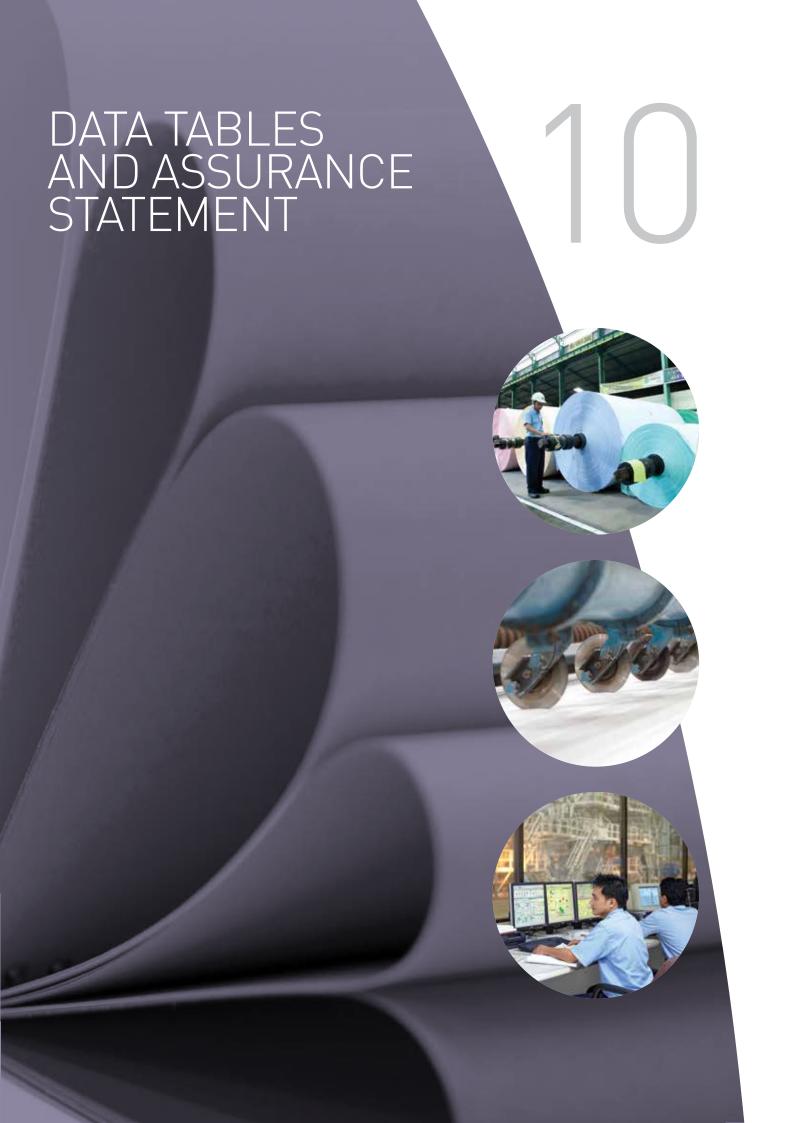
In 2011 Ekamas Fortuna was awarded a Ministry of Environment license to utilize the fly ash and bottom ash waste from the mill's power station as material for making paving and bricks. 100% of fly ash is re-used and around 30-40% of bottom ash is re-used.

In 2011 over 360,000 bricks were produced from the waste material, which are used to build and maintain infrastructure within the mill and for CSR activities in the mills surrounding communities. Lontar Papyrus, Tjiwi Kimia and Indah Kiat Perawang also have a similar process on site.

Pindo Deli also plans to make bricks from fly ash. The equipment is in place and the mill is now awaiting government approval before commercialising the project.

We are pleased to report that in 2010 and 2011, no spills, leaks or other incidents involving waste products that were significant enough to notify the relevant authorities were reported.

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GROUP ENVIRONMENTAL DATA TABLE

			2010	2011
Production	Pulp	000 of ADT	3,015	3,020
	Paper	000 of ADT	2,840	2,863
	Stationary	000 of ADT	212	205
	Tissue	000 of ADT	105	96
	Packaging	000 of ADT	1,653	1,579
	Chipboard	000 of ADT	31	38
	Chemicals	000 of ADT	2,043	2,109
Raw materials	Pulpwood Verified legal Origin (VLO)	tonnes	1,285,245.03	1,350,878.37
	Pulpwood Local Certified (LEI)	tonnes	716,177	725,715
	Pulpwood Local Non-controversial (NCONT)	tonnes	1,084,323	1,112,502
	Import fibre certified (PEFC, FSC, SFI, etc)	tonnes	256,949	321,504
	Import fibre verified	tonnes	190,619	106,869
	Recycled fibre	tonnes	1,783,534	1,594,193
	Fillers and chemicals	tonnes	2,057,060	2,117,657
Water	River Uptake (Raw Water)	m³	245,459,579	233,995,272
	Percentage water recycled	%	19%	20%
	Effulent discharge to river	m^3	182,389,165	180,718,749
Energy	Direct energy	GJ	196,506,250	200,843,177
		tCO ₂ e	8,917,834	8,673,193
	Indirect energy	GJ	2,472,783	2,834,343
		tCO ₂ e	501,425	574,742
Non renewable energy	Coal	GJ	80,954,310	79,987,001
	Marine Fuel Oil	GJ	5,319,430	4,270,442
	Industrial Diesel Oil	GJ	3,660,646	2,108,525
	Gas	GJ	9,600,921	10,377,233
Renewable Energy	Black Liquor	GJ	68,288,962	71,444,390
	Bark	GJ	24,665,758	29,190,062
	Saw dust	GJ	178,234	161,457
	Palm shell	GJ	2,678,126	2,299,428
	Empty fruit bunches	GJ	735,646	535,903
	Sludge	GJ	76,823	179,001
	Solid waste biomass	GJ	347,395	289,742
Waste	Hazardous waste	tonnes	820,825	777,370.08
	Non hazardous waste	tonnes	48,901	55,535.00

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MILL ENVIRONMENTAL DATA TABLE

		units	E	kamas Fortuna	Indah	Kiat Perawang	Indah Kiat Serang
			2010	2011	2010	2011	2010
Water	Name of local water source			Lesti River		Siak River	Ciujung River
Effluent quality	рН	-	7.31	7.34	7.22	7.38	7.14-7.3
	TSS	mg/l	38.08	39.67	70.48	73.38	69-73
	BOD	mg/l	39.08	42.42	41.32	50.78	44-74
	COD	mg/l	110.25	106.08	285.95	282.46	169-208
	AOX	mg/l	-	-	8.79	7.03	n/a
Air emissions ¹	SO ₂	mg/Nm³	194.0	194.0	209.5	177.8	146.0
	NO ₂	mg/Nm³	23.2	49.9	136.4	132.6	417.0
	Particulate	mg/Nm³	90.0	105.4	100.7	91.4	59.0
	TRS	mg/Nm³					
	CIO ₂	mg/Nm³			0.7	0.6	
	HCI	mg/Nm³			0.2	0.4	
	Cl_2	mg/Nm³			0.6	0.1	
Misc	Protected area mill in kilomete		Pulau Sempu N Reserve (30)	ature	Tesso Nilo Natio	onal Park (50)	Rawa Danau Tukung Gede Conservation Area (20)

¹Air emissions data follows Indonesia law on reporting against this parameter. Due to the complexity of the interlinked power generation to various pulp and paper making facilities in several mills it is impossible to report the air emission using unit measurement required by GRI



		- 0		T W		D: 1 D 1:		
	L(ontar Papyrus		Tjiwi Kimia		Pindo Deli	Indan K	iat Tangerang
2011	2010	2011	2010	2011	2010	2011	2010	2011
	Par	ngabuan River	River Brant		Brantas River Citarum River		С	isadane River
7.12-7.32	6.96	7.02	7.42	7.30	7.25-7.63	7.14-7.4	6.86	7.20
39-69	54.02	52.89	53.75	47.58	12-49.78	11-52.70	17.18	17.94
25-66	48.48	46.05	15.58	33.75	12.76-32.10	14.26-37.64	10.82	11.06
25-162	258.55	262.89	65.42	79.25	35.99-88.63	35.78-91.43	61.81	60.60
n/a	4.91	4.36	← 0.01*	0.115*	0.55*	0.26*		
292.0	63.9	135.4	109.0	574.0	10.6	52.2	13.0	83.5
207.0	178.8	261.4	243.0	948.0	234.5	184.0	65.5	334.0
30.0	148.3	122.2	68.0	82.0	27.8	25.8	11.5	35.5
	2.0	2.0						
	1.1	3.5						
	1.3	0.0						
	0.4	0.5						
	Bukit Tigapul National Park		Bromo Tengger Semeru National Park (80)		Nature Reserve of Tangkuban Perahu Mountain (40)		Halimum Mou National Park	

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^{*} External laboratory data



INDEPENDENT ASSURANCE STATEMENT



INTRODUCTION

Det Norske Veritas AS ('DNV') has been commissioned by the management of APP group of companies, comprising of PT. Indah Kiat Pulp & Paper Tbk, PT. Lontar Papyrus Pulp & Paper Industry, PT. Pindo Deli Pulp And Paper Mills, PT. Pabrik Kertas Tjiwi Kimia Tbk, PT. Ekamas Fortuna ('APP' or 'the Company') to carry out an independent assurance engagement (Type 2, Moderate level) on the sustainability performance reported in Company's Sustainability report - 2010-2011 ('the Report') in its printed format. This engagement focused on underlying management and reporting processes for the qualitative and quantitative information provided in the Report. The engagement was carried out against AccountAbility's AA 1000 Assurance Standard 2008 (AA 1000AS), the DNV Protocol for Verification of Sustainability Reporting¹ (VeriSustain) and adherence to principles of the Global Reporting Initiative (GRI) 2011, Sustainability Reporting Guidelines Version 3.1 (G3.1).

The intended users of this assurance statement are the readers of Company's Sustainability Report. The management of APP is responsible for all information provided in the Report as well as the processes for collecting, analyzing and reporting that information. DNV's responsibility in performing this work is regarding the verification of the Report only, in accordance with the agreed scope of work. The assurance engagement is based on the assumption that the data and information provided to us is complete, sufficient and authentic. Our assurance engagement was planned and carried out in December 2012 - March 2013.

SCOPE OF ASSURANCE AND LIMITATION

The scope of the assurance as agreed upon with APP included the verification of the content of the Report. In particular the assurance engagement included:

- → The external verification of the qualitative and quantitative sustainability performance reported in the Report using the GRI G3.1 guidelines, covering economic, environmental and social performance for the activities undertaken by APP over the reporting period 1st January 2010 to 31st December 2011 and reported in this Report covering 2 integrated pulp and paper mill and 5 paper mills;
- → Review of the policies, initiatives, practices and performance described in the Report pertaining to sustainability performance;
- Evaluation of the disclosed information in the Report, the systems and the processes APP has in place for adherence to the three Accountability Principles (Inclusivity, Materiality and Responsiveness) as required for a Type 2, moderate level of assurance, in accordance with AA1000AS (2008) detailed below:
 - Information relating to company's sustainability issues, responses, performance data and underlying systems for the management of such information and data;
 - → Information relating to company's materiality assessment and stakeholder engagement processes;
- → Evaluation of the adherence to the principles set out in the Global Reporting Initiative Sustainability Reporting Guidelines 2011 (GRI G3.1) and the additional principles of Completeness and Neutrality, as set out in DNV's Protocol for Verification of Sustainability Reporting; and
- → Confirmation of the APP's declared Application level i.e. A+.

The reporting boundary is as set out in the report covering sustainability performance of PT. Indah Kiat Pulp & Paper Tbk, PT. Lontar Papyrus Pulp & Paper Industry, PT. Pindo Deli Pulp and Paper Mills, PT. Pabrik Kertas Tjiwi Kimia Tbk, PT. Ekamas Fortuna and during the assurance process, we did not come across limitations to the scope of the agreed assurance engagement. Limited external stakeholders i.e. employees, trade union and proximate community were interviewed as part of this assurance engagement.

VERIFICATION METHODOLOGY

This assurance engagement was planned and carried out in accordance with the AA1000AS (2008) and the DNV Protocol for Verification of Sustainability Reporting. The Report has been evaluated against the following criteria:

- → Adherence to the principles of Inclusivity, Materiality and Responsiveness as set out in the AA1000AS (2008);the Reliability of specified sustainability performance information, as required for a Type 2, moderate level assurance engagement,
- → Adherence to the additional principles of Completeness and Neutrality as set out in DNV's Protocol, and
- → The principles and requirements of the GRI G3.1 for an application level A+.

As part of the engagement, DNV has verified the statements and claims made in the Report and assessed the robustness of the underlying data management system, information flow and controls. In doing so, we have:

- → Reviewed the company's approach to stakeholder engagement and its materiality determination process;
- Verified the sustainability-related statements and claims made in the Report and assessed the robustness of the data management system, information flow and controls;
- → Examined and reviewed documents, data and other information made available by the APP and Visited the Corporate office at Jakarta and three operational sites (Lontar Papyrus mill, Pindo Deli Karawang mill, Tjiwi Kimia mill) in Indonesia;
- → Conducted interviews with key representatives including data owners and decision-makers from different functions of the Company;
- → Performed sample-based reviews of the mechanisms for implementing the company's sustainability related policies, as described in the Report;
- Performed sample-based checks of the processes for generating, gathering and managing the quantitative data and qualitative information included in the Report.

CONCLUSIONS

In DNV's opinion, based on the scope of this assurance engagement the Report provides a fair representation of the Company's sustainability related strategies, management system and performance. APP has drawn up its Vision 2020 Sustainability Roadmap with objectives and targets to effectively manage its sustainability performance – environmental and social performance; also the company has started quarterly progress reporting (from the third quarter of 2012) of the critical stakeholder concerns (forest clearance, deforestation etc.). We confirm that the Report generally meets the requirements for GRI application level A+.

¹www.dnv.com/cr







We have evaluated the Report's adherence to the following principles on a scale of 'Good', 'Acceptable' and 'Needs Improvement':

AA1000AS (2008) PRINCIPLES

Inclusiveness: The Company has documented its stakeholder engagement process and demonstrates engagement with key stakeholders through different channels both at corporate level and operational site level. The issues emerging from the stakeholder engagement are analysed, prioratised and addressed through appropriate sustainability strategies. In our view, the level at which the Report adheres to the principle of inclusivity is "Good".

Materiality: The Company has reported its materiality issues of significance based on internal and external stakeholder perspective at the macro level and has not missed out any known material issues, however the process could be further strengthened to bring out all material aspects related to individual operational sites and aggregated at corporate level including material issues related to pulp wood suppliers, so as to further evolve suitable sustainability strategy to effectively address the short, medium and long term sustainability impacts. In our view, the level at which the Report adheres to the principles of Materiality is "Acceptable".

Responsiveness: We consider that the Company's response to key stakeholder concerns, through its policies and management systems including governance are fairly reflected in the Report. In our view, the level at which the Report adheres to the principle of Responsiveness is "Acceptable".

Reliability: The majority of data and information verified at head office and site were found to be accurate. Some of the data inaccuracies identified during the verification process were found to be attributable to transcription, interpretation and aggregation errors and the errors have been corrected; Hence in accordance with the AA1000AS (2008) requirements for a Type 2, moderate level assurance engagement, we conclude that the specified sustainability data and information presented in the Report are generally reliable and acceptable.

SPECIFIC EVALUATION OF THE INFORMATION ON SUSTAINABILITY PERFORMANCES

We consider the methodology and process for gathering information developed by the APP for its sustainability performance reporting is appropriate and the qualitative and quantitative data included in the Report, were found to be identifiable and traceable; the personnel responsible were able to demonstrate the origin and interpretation of the data and its reliability. We also assessed the reported progress against the company's commitments as disclosed in its previous Report and observed that the Report presents a fair description of the sustainability activities and the goals achieved.

ADDITIONAL PRINCIPLES AS PER GRI AND DNV'S PROTOCOL

Completeness: The Report has fairly attempted to report or respond the sustainability strategy, management approach and sustainability performances against the GRI G3.1 core indicators, with omissions explained or commitments to future reporting that are material within the Company's reporting boundary for application level A; In our view, the level at which the Report adheres to the Principle of Completeness is "Acceptable".

Neutrality: The Company has reported its sustainability issues and performance in terms of content and presentation; however the report could enlarge its disclosures related to general issues of Pulp and paper industry (sourcing of wood, deforestation, forest clearance etc.) in response to concerns raised in media by NGO's. In our view, the level at which the Report adheres to the principle of Completeness is "Acceptable".

OPPORTUNITIES FOR IMPROVEMENT

The following is an excerpt from the observations and further opportunities for improvement reported to the management of APP and are not considered for drawing our conclusion on the report; however, they are generally consistent with the Management's objectives:

- → Further Strengthen the internal process of data aggregation and monitoring of environmental and social performance and also implement a systematic quality assurance procedure for further improving the quality and reliability of performance data for systematic monitoring and reporting the sustainability performance to stakeholders on regular basis;
- → To include data and information relating to supply chain sustainability performance and develop a management process to identify and mitigate associated risks in supply chain activities and outsourced processes;

DNV'S COMPETENCE AND INDEPENDENCE

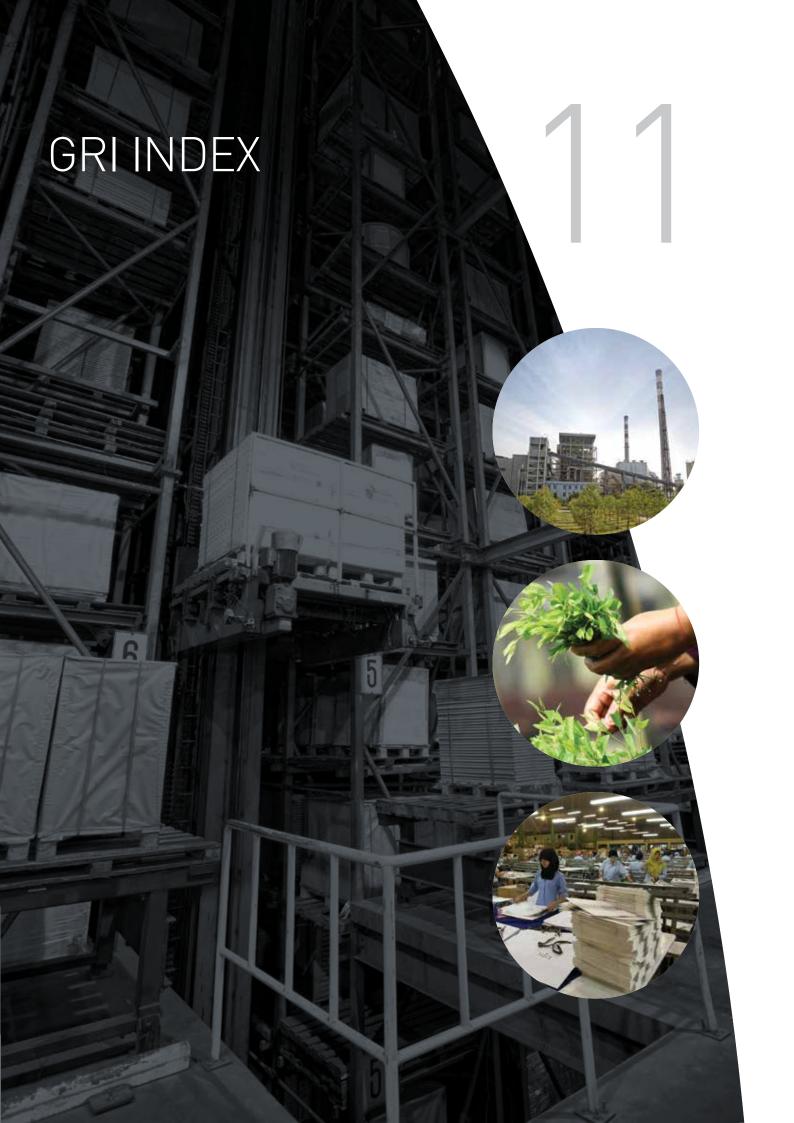
DNV is a global provider of sustainability services, with qualified environmental and social assurance specialists working in over 100 countries. The DNV assurance team were not involved in the preparation of any statements or data included in the Report except for this Assurance Statement. DNV maintains complete impartiality towards any people interviewed. DNV expressly disclaims any liability or co-responsibility for any decision a person or entity would make based on this Assurance Statement.

For Det Norske Veritas AS

Ramesh Rajamani Project Manager, Det Norske Veritas AS, India Antonio Astone Assurance Reviewer, Det Norske Veritas AS, Italy.

3rd April' 2013, New Delhi, India







STANDARD DISCLOSURES DISCLOSURES

1. STRATEGY AND ANALYSIS						
Profile Disclosure	Description	Disclosure F=Full disclosure P=Partial disclosure NR=Not reported	Response / page number Mill annual reports shown with the abbreviations IK, LP, PD, TK			
1.1	Statement from the most senior decision-maker of the organisation.	F	18			
1.2	Description of key impacts, risks, and opportunities.	F	36			

2. ORGANI	SATIONAL PROFILE		
2.1	Name of the organization.	F	4
2.2	Primary brands, products, and/or services.	F	6, 27-36
2.3	Operational structure of the organisation, including main divisions, operating companies, subsidiaries, and joint ventures.	F	4, 145
2.4	Location of organisation's headquarters.	F	6
2.5	Number of countries where the organisation operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report.	F	6
2.6	Nature of ownership and legal form.	F	4
2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).	F	26
2.8	Scale of the reporting organisation.	F	4 IK 12, 2', 36', 62', 63' LP 46', 47', 57' PD 92, 36', 71', 83' TK 11, 2', 39', 65', 85'
2.9	Significant changes during the reporting period regarding size, structure, or ownership.	F	No significant changes in reporting period.
2.10	Awards received in the reporting period.	F	86















3. REPOR	T PARAMETERS		
3.1	Reporting period (e.g., fiscal/calendar year) for information provided.	F	4
3.2	Date of most recent previous report (if any).	F	4
3.3	Reporting cycle (annual, biennial, etc.).	F	4
3.4	Contact point for questions.	F	5
3.5	Process for defining report content.	F	4, 38
3.6	Boundary of the report.	F	4, Annex
3.7	State any specific limitations on the scope or boundary of the report.	F	4, Annex
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organisations.	F	4, Annex
3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the indicators and other information in the report.	NR	Not material
3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g., mergers/acquisitions, change of base years/periods, nature of business, measurement methods).	F	no re-statements of previous reports
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	F	none
3.12	Table identifying the location of the Standard Disclosures in the report.	F	140
3.13	Policy and current practice with regard to seeking external assurance for the report.	F	1



4.1	Governance structure of the organisation, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organisational oversight.	F	14 IK 46, LP 46, PD 46, TK 45
4.2	Indicate whether the Chair of the highest governance body is also an executive officer.	F	The Chair of the highest governing body is the Chairman, who is not an executive officer.
4.3	For organisations that have a unitary board structure, state the number and gender of members of the highest governance body that are independent and/or non-executive members.	F	IK 22, LP 20, PD 22, TW 22
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	F	IK 46, LP 46, PD 46, TK 46 Minority shareholders: General meeting of shareholders relevant with Government Regulation Clause 19 of article of association of the company and the Regulation of Indonesian Capital Market Supervisory Board - National Financial Institution (Bapepam - LK).
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives.	F	76 APP intends to form a remuneration committee for each mill.
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	F	17
4.7	Process for determining the composition, qualifications and expertise of the members of the highest governance body and its committees, including any consideration of gender and other indicators of diversity.	F	IK 46, LP 46, PD 46, TK 45
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	F	7
4.9	Procedures of the highest governance body for overseeing the organisation's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles.	F	IK 46, LP 46, PD 46, TK 45
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	F	IK 46, LP 46, PD 46, TK 45
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organisation.	F	IK 39', 51', 35 ', 2 ' LP 14, 50 PD 39 TW 50
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organisation subscribes or endorses.	F	16
4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organizations.	F	16
4.14	List of stakeholder groups engaged by the organisation.	F	46
4.15	Basis for identification and selection of stakeholders with whom to engage.	F	46
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	F	45,46
4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organisation has responded to those key topics and concerns, including through its reporting.	F	49

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STANDARD DISCLOSURES PART II AND III: PERFORMANCE INDICATORS

ECONOMIC	C		
DMA	Disclosure of management approach.		15, 21, 23, 36 IK 38 LP 30 PD 35 TW 34-35
EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.	F	15, 21, 22, 36 IK 42-46 LP 36-41 PD 40-46 TW 38-45 In future sustainability reports this data will be consolidated.
EC2	Financial implications and other risks and opportunities for the organisation's activities due to climate change.	Р	Financial implications specifically as a result climate change are not currently calculated. We aim to report fully against this indicator by 2015 Sustainability Report.
EC3	Coverage of the organisation's defined benefit plan obligations.	F	Employee Benefits Liability section of mill annual reports. IK 69', PD 77' TK 69'
EC4	Significant financial assistance received from government.	F	No financial assistance received.
EC5	Range of ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation.	F	76
EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	F	13
EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation.	F	74
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or probono engagement.	F	58-72
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts.	Р	59

ENVIRONMENTAL					
DMA	Disclosure of management approach.		118-132		
EN1	Materials used by weight or volume.	F	Data table.		
EN2	Percentage of materials used that are recycled input materials.	F	Data table.		
EN3	Direct energy consumption by primary energy source.	F	Data table.		
EN4	Indirect energy consumption by primary source.	F	123, data table.		
EN5	Energy saved due to conservation and efficiency improvements.	Р	123, data table. We aim to fully report against this indicator by the 2014 Sustainability Report.		



EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	Р	118, 124 We aim to fully report against this indicator by the 2014 Sustainability Report.	
EN7	Initiatives to reduce indirect energy consumption and reductions achieved.	Р	118, 124 Direct and indirect energy reduction initiatives are add collectively. We plan to improve our reporting of these initiatives in the future to allow for direct and indirect initiatives to be reported separately.	
EN8	Total water withdrawal by source.	F	Data table.	
EN9	Water sources significantly affected by withdrawal of water.	F	Data table.	
EN10	Percentage and total volume of water recycled and re-used.	F	Data table.	
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	F	Data table.	
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	F	87-116 Wood fibre is not sourced from forests of high biodiversi value or protected areas (refer to principles of responsible forest management) 87-116.	
EN13	Habitats protected or restored.	F	109-117	
EN14	Strategies, current actions, and future plans for managing impacts on biodiversity.	F	89, 109-107	
EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.	F	Black Hornbill (near threatened). Salt water crocodile (low risk). Golden dragon fish (endangered). other species listed in page 111 are not yet classified.	
EN16	Total direct and indirect greenhouse gas emissions by weight.	F	121, data table.	
EN17	Other relevant indirect greenhouse gas emissions by weight.	NR	A full GHG analysis is currently underway and will be published in the 2014 Sustainability Report.	
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved.	F	122	
EN19	Emissions of ozone-depleting substances by weight.	F	124	
EN20	NOx, SOx, and other significant air emissions by type and weight.	F	data table.	
EN21	Total water discharge by quality and destination.	F	data table.	
EN22	Total weight of waste by type and disposal method.	F	data table.	
EN23	Total number and volume of significant spills.	F	132	
EN24	Weight of transported, imported, exported or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.	NR	Not material.	
EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organisation's discharges of water and runoff.	F	data table.	
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	F	24, 41, 86-132	
EN27	Percentage of products sold and their packaging materials that are reclaimed by category.	NR	Not material.	
EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.	F	None in reporting period.	
EN29	Significant environmental impacts of transporting products and other goods and materials used for the organisation's operations, and transporting members of the workforce.	NR	Not material.	
EN30	Total environmental protection expenditures and investments by type.	Р	2010: \$28.2m. 2011: \$33,4m. We aim for investment by type to be reported by the 2012 Sustainability Report.	

LA1

SOCIAL: LABOR PRACTICES AND DECENT WORK

DMA Disclosure of management approach.

Total workforce by employment type, employment contract, and region broken

Return to work and retention rates after parental leave, by gender.

73-86

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	LAI	down by gender.	F	/4
	LA2	Total number and rate of new employee hires and employee turnover by age group, gender,and region.	F	75, data table.
	LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation.	NR	Not material.
	LA4	Percentage of employees covered by collective bargaining agreements.	F	76
	LA5	Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements.	F	Government of Indonesia regulation states that if the company will be permanently closed down the requirement for notice period is 7 days. Notice period for other operational changes are not covered under Indonesian law. For specific operational changes, APP's policy is for management to decide days of notice required based on the consideration of the nature of the operational changes.
	LA6	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs.	F	82
	LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region and gender.	Р	81 We aim for gender data to be reported in by the 2014 Sustainability Report.
	LA8	Education, training, counselling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.	F	74, 83, 85, 86
ĺ	LA9	Health and safety topics covered in formal agreements with trade unions.	F	76
	LA10	Average hours of training per year per employee by gender and by employee category.	Р	78 We aim for gender and employee category data to be reported by the 2014 Sustainability Report.
	LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	F	78
	LA12	Percentage of employees receiving regular performance and career development reviews by gender.	F	76
	LA13	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity.	Р	74, 75 Mill annual reports, multiple references We aim for diversity data to be reported in the 2012 Sustainability Report.
	LA14	Ratio of basic salary of men to women by employee category.	Р	"76 We aim for data by employee category will be reported in the 2012 Sustainability Report".

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LA15

Data for employees retained after 12 months is currently not collected. We aim to collect and publish this information by the 2014 Sustainability Report.



DMA	Disclosure of management approach.		43-86
HR1	Percentage and total number of significant investment agreements and contracts that include human rights clauses or that have undergone human rights screening.	NR	The mills made no significant investments in the reporting period.
HR2	Percentage of significant suppliers, contractors, and other business partners that have undergone human rights screening and actions taken.	F	42
HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.	F	78
HR4	Total number of incidents of discrimination and corrective actions taken.	F	75
HR5	Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights.	F	42
HR6	Operations and significant suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor.	F	42
HR7	Operations and significant suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor.	Р	During the human rights audit we identified the operations and significan suppliers where we can take further measures to contribute to the eliminati of forced or compulsory labour.
HR8	Percentage of security personnel trained in the organisation's policies or procedures concerning aspects of human rights that are relevant to operations.	NR	Not material.
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken.	F	None in reporting period.
HR10	Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments.	F	Operations (mills): 100% Suppliers: 55%
HR11	Number of grievances related to human rights filed, addressed, and resolved through formal grievance mechanisms.	Р	None reported. During the human right audit we identified the requirement to improve the reporting process further to ensure we can accurately capture all incidents.

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SOCIAL: S	OCIETY		
DMA	Disclosure of management approach.		43-72
S01	Percentage of operations with implemented local community engagement, impact assessments, and development programs.	F	All mills have carried out a social impact assessment which in turn guides each mills allocation of CSR spending. Informal stakeholder engagement is an on-going process for all mills and local community needs are considered in our approach.
S02	Percentage and total number of business units analysed for risks related to corruption.	F	All mills are analysed for risks relating to corruption.
S03	Percentage of employees trained in organisation's anti-corruption policies and procedures.	F	15, 79
S04	Actions taken in response to incidents of corruption.	F	15, 79
S05	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.	F	None in reporting period.
S06	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.	NR	Not material
S07	Total number of legal actions for anti-competitive behaviour, anti-trust, and monopoly practices and their outcomes.	F	None in reporting period.
S08	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with laws and regulations.	F	No significant monetary fines in reporting period.
S09	Operations with significant potential or actual negative impacts on local communities.	F	Operations 11. Impacts 118".
S010	Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities.	F	118-132



AMC	Disclosure of management approach.		25-36
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.	F	33
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes.	F	None in reporting period.
PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.	F	Third party certification and labelling predominately apply to sourcing and content life cycle stages.
PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labelling, by type of outcomes.	F	None in reporting period.
PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	F	34
PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.	F	For marketing products we comply with Indonesian law on advertising. Our global sales offices also develop their own material relevant for their own market and adhere to the respective adverting laws. This is managed by the marketing communications departmen and sustainability team at head office.
PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes.	F	None in reporting period.
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.	F	None in reporting period.
PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.	F	None in reporting period.

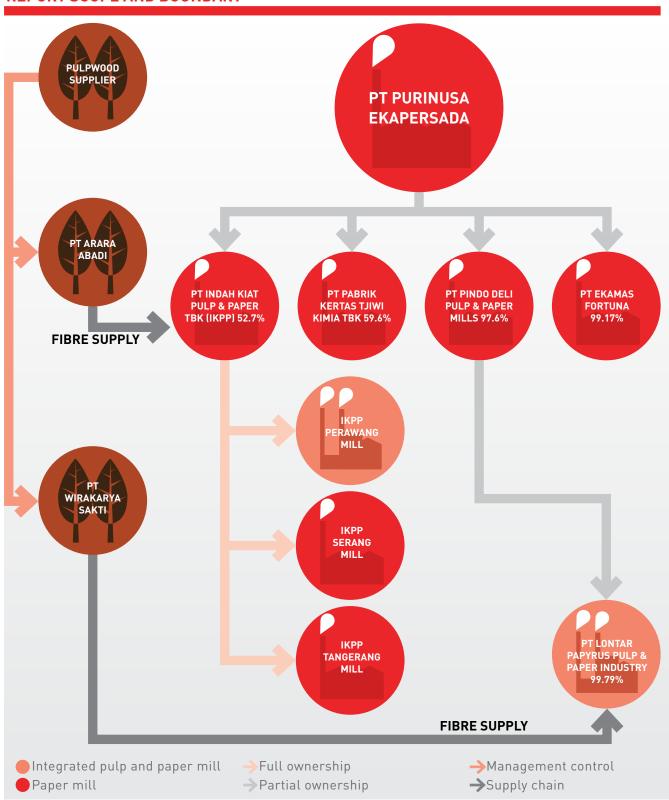
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APPENDIX

From page 04

REPORT SCOPE AND BOUNDARY





From page 91

¹"micro-macro delineation audit"

As stipulated in the Indonesian Ministerial Decree: SK. 101/Menhut-II/2004, plantation planning first requires macro-level delineation, which differentiates between areas that are already planted, empty land, scrub land and grassland, and natural forest. A micro delineation assessment will be implemented in the area designated for plantation development that still contains natural forest. The purpose of this assessment is to determine the areas that need to be protected and the areas that can be developed for plantation purposes.

