



CEO  
WATER MANDATE  
COMMUNICATION  
ON PROGRESS  
**2013**

A S I A P U L P & P A P E R G R O U P





## COMMUNICATION ON PROGRESS – WATER

2013

<b>Contact person</b>	LibrianAngraeni	<b>Contact position</b>	Sustainability and Stakeholder Engagement
<b>Address</b>	Sinarmas Land Plaza Tower 2, 5th Floor Jl. M.H. Thamrin no. 51 Jakarta 10350	<b>Contact Ph.</b>	+62-21-392 9266 - 69
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<b>Sector</b>	Paper industry		



## COMMUNICATION ON PROGRESS - WATER 2013

### ASIA PULP & PAPER (APP)

#### REPORT SCOPE

This report has been developed based on the requirements of the United Nations CEO Water Mandate Programme as a Communication on Progress Report for companies under the Asia Pulp & Paper brand name in Indonesia:

1. PT Indah Kiat Pulp & Paper Tbk
2. PT Pindo Deli Pulp and Paper Mills
- 3. PT Pabrik Kertas Tjiwi Kimia Tbk**
4. PT Lontar Papyrus Pulp & Paper Industry
5. PT Ekamas Fortuna

This report covers progress on the implementation of the UN CEO Water Mandate Six Principles in the above companies during 2013. All activities described in the report are relevant to those five companies unless indicated otherwise.

## COMPANY AT A GLANCE

Asia Pulp & Paper (APP) is the trade name for a group of pulp and paper manufacturing companies in Indonesia, including PT Indah Kiat Pulp & Paper Tbk, PT Pindo Deli Pulp and Paper Mills, PT Pabrik Kertas Tjiwi Kimia Tbk, PT Lontar Papyrus Pulp & Paper Industry, and PT Ekamas Fortuna. APP Indonesia has a total production capacity of around 9.5 million tons and markets its products to more than 120 countries in six continents.

## MILLS' OVERVIEW



**PT. Indah Kiat Pulp & Paper, Tbk. (Indah Kiat)** was established in 1976 and has production facilities in three locations –Perawang in Riau Province and Tangerang and Serang in Banten Province.

Indah Kiat Perawang is an integrated pulp and paper mill located in a rural region of Riau Province, Sumatra. The mill production capacity is 3.3 million tonnes of pulp and paper products per year, with key products consisting of Leaf Bleached Kraft Pulp (LBKP) and wood free printing, writing, copier and coated papers. Due to the nature of production, it utilizes renewable sources for up to 64% of its fuel use. The mill has around 10,000 direct employees.

Indah Kiat Serang is located around 60km west of Jakarta and sources 88% of its raw material from post-consumer waste. The mill's key products are coated boxboards, test linerboards, corrugating medium and corrugated cartons, with production capacity of 1.5 million tons per year. On site operations convert the mills packaging paper grades into boxes ready for sale direct to end users which are largely focused on Asian and Pacific market. The mill directly employs around 5,600 people.

Indah Kiat Tangerang is located around 40 km from APP's Headquarters in Jakarta and specialises in coloured paper. Its key products include coloured printing, writing and copier, computer and duplicating paper. Although it is the smallest among the Indah Kiat mills, with production capacity of 108,000 tons per year, the mill is one of the largest coloured paper producers in the world. Around 85% of the mills' production is exported to a global client base. It uses both purchased pulp and post-consumer waste as the raw material for its products. The mill directly employs around 1,800 people.

**PT. Lontar Papyrus Pulp & Paper Industry (Lontar Papyrus)** is located in Tebing Tinggi, Jambi Province. It is an integrated pulp and paper mill that predominantly produces pulp which is supply to APP mills. The mill also has six tissue machines that produce jumbo rolls, which are converted by other production units into finished products. With annual production capacity of 1,081,000 tonnes, the mill utilize more than 70% of its fuel sources from renewable sources –mainly from the use of black liquor which is recovered from the pulp production processes. Currently the mill directly employs around 3,000 employees within its operations.

**PT Pindo Deli Pulp and Paper Mills (Pindo Deli)** have three operational sites, which are Pindo Deli 1 and 2, located in Karawang District, West Java, and Pindo Deli 3 in Perawang, Riau Province.

Pindo Deli 1&2 is located in an industrial area around 75km from APP's Jakarta headquarters. The mills' key 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. The mills production capacity is around 1 million tonne per year and directly employs nearly 7,000 people. An extensive list of product specific certifications supports the range of the mills' products such as ISO 22000 for food safety and ISO 9706 for permanent acid free papers suitable for archiving purposes.

Pindo Deli 3 is the smallest of the Pindo Deli mills, with a specialty in jumbo roll tissue production and an annual capacity of 413,000 tonnes. It currently has around 1,900 employees.

**PT Pabrik Kertas Tjiwi Kimia Tbk (Tjiwi Kimia)** is located in Sidoarjo, East Java Province. Equipped with 12 paper machines and over 100 converting units the mill produces a diverse range of value added products for sale across the world. Key products include exercise books, writing pads, envelopes and shopping bags, with an annual capacity of 1,677,000 tonnes. The mill also produces recycle grade paper. With such a huge diversity of products, the mill is labour intensive, and has almost 12,000 employees.

**PT Ekamas Fortuna (Ekamas)** is located in Malang, East Java Province, a small mill specializing in the utilization of post-consumer waste as the main raw material. It produces corrugated and kraft liner board grades, the majority of which is used as layers in container board and carton boxes which are exported to more than 10 countries across the globe. Its annual production capacity is 185,000 tonnes and it directly employs 757 people.

## OUR COMMITMENT



### STATEMENT OF CONTINUOUS SUPPORT

Water forms an essential part of APP's production processes, which is why we signed up to the UN CEO Water Mandate in 2012.

After launching the APP Sustainability Roadmap Vision 2020 in June 2012, we announced a new Forest Conservation Policy (FCP) in February 2013. Both of these commitments set ambitious goals with regard to water management, both within our own operations as well as those in our supply chain. In 2013, we continued to work with various experts and partners to roll out initiatives to help us reach these goals.

Water management in our mills can be divided into two areas; reducing water consumption and maintaining effluent quality from our mill processes. In our supply chain, the focus is on ensuring hydrological balance within the landscape where our pulpwood suppliers' plantations are located, to support the ecological health of the surrounding ecosystem.

In line with the UN CEO Water Mandate principles, APP continues to reach beyond our operations to address community water challenges. Throughout the second year of leading the Indonesia Water Mandate Working Group, we initiated and led two major collaborative projects, addressing community water and sanitation issues. We believe that collaboration with other stakeholders is key to ensuring success in this area.

As the end of the year is approaching, APP continues to seek sustainable water management innovations. Using the UN CEO Water Mandate principles as one of the guidelines, we aim to preserve this precious natural resource for the good of our company, the community and the world globally.

Jakarta, 13 December 2013

A handwritten signature in black ink, appearing to read 'Aida Greenbury', with a stylized flourish at the end.

Aida Greenbury  
Managing Director Sustainability & Stakeholder Engagement  
Asia Pulp & Paper Group Indonesia

## **SUSTAINABILITY BASELINE IN APP**

APP's vision is to become a leading and respected global pulp and paper company that provides superior values to customers, community, employees and shareholders, responsibly and sustainably. To realize this vision, APP strives to balance the three pillars of sustainability: economy, social and environment, throughout its operations. As part of our sustainability roadmap development, we then formalized a more structured management approach to improve sustainability communications, monitoring and reporting across all of our mills.

APP's Sustainability Declaration, first launched in 2004, clearly articulates the company's commitment to being socially, environmentally and economically sustainable in all its operations.

On *economic sustainability*, we have a responsibility to our shareowners, our employees and their families, our customers, and the communities who depend on us for their incomes and livelihoods. The responsible development of the pulp and paper industry is integral to the future prosperity of the communities and countries in which we operate. In support of that responsibility, we have to be a profitable and financially sound organization.

On *environmental sustainability*, we believe that continuous improvement in raw material sourcing and utilization, process efficiency, environmental impact/footprint minimization and supply chain management are core disciplines in achieving a better environment.

On *social sustainability*, we are committed to respecting and protecting human rights and will enforce this commitment within our own operations and our supply chain. Our long-term aim is to contribute to active development of the communities in which we operate. We will endeavour to make our operations transparent to stakeholders while respecting the cultural sensitivity and context in which we operate.

### **APP Sustainability Roadmap Vision 2020**

In 2011, we set out to visualize APP as a sustainability leader in 2020. We then reviewed our current processes and designed a Sustainability Roadmap to meet this vision. On June 5th, 2012, we announced APP's Sustainability Roadmap for the next decade. The Sustainability Roadmap extends our commitments on further improving environmental performance, biodiversity conservation and protection of community's rights. Within this Roadmap, the GC principles are incorporated into our short and long term sustainability goals within our operating facilities, as well as throughout our supply chain.

APP Sustainability Roadmap Vision 2020 covers eleven impact areas, each of which has a number of subsidiary and specific goals. These goals cover both environmental and social issues related to APP commitment to the UN CEO Water Mandate. The detailed goals can be accessed through the following link:

<http://www.asiapulppaper.com/sustainability/vision-2020/targets-and-components>.

## **Forest Conservation Policy (FCP)**

The most critical issue in APP's Sustainability Roadmap Vision 2020 was our target to completely eliminate all natural forest derived products in our entire supply chain by 2020. Initially the APP Sustainability Roadmap set out a plan for APP to implement High Conservation Value (HCV) principles and end natural forest clearance across the supply chain by 2015. On February 5<sup>th</sup> 2013, we announced a Forest Conservation Policy (FCP) to accelerate the realization of our above objectives.

Both APP Sustainability Roadmap Vision 2020 and APP Forest Conservation Policy are critical foundations for all APP Sustainability Initiatives including our commitment to the UN CEO Water Mandate.

## **COMMITMENT TOWARD SUSTAINABLE WATER MANAGEMENT**

Our mills are typical of pulp and paper manufacturing operations in using substantial quantities of water. About 85 percent to 90 percent of the water used in both integrated and stand-alone paper mills in APP is for processing purposes, with some 10 percent to 15 percent of it used to produce steam, and for cooling associated with power generation.

Understanding the importance of water resource to its operations, APP has implemented a range of innovative water treatment and sustainable water management initiatives across its pulp and paper mills in Indonesia. Examples include installing new production technologies and equipment, re-engineering existing systems to improve efficiency, reducing water and steam consumption, improving water treatment and recycling treated water back into manufacturing process for reuse. Furthermore, APP is also working with local communities in providing access to clean water and building awareness of why clean and safe water is important. All of these activities follow APP's Environment Stewardship Policy and APP Corporate Social Responsibility Policy. These activities are also in line with Principle 1 of the UN CEO Water Mandate.

As a milestone of the commitment in water conservation initiatives, APP marked *World Water Day* on 22 March 2011 by becoming the first Indonesian pulp and paper company to commit to the United Nations Global Compact CEO Water Mandate. A testament to this is the election of APP to be the Chair of Indonesia Water Mandate Working Group under the Indonesia Global Compact Network. The group, which is comprised of various organizations including private sector, educational institutions and international NGOs, works to promote the six principles of the UN CEO Water Mandate and as a platform for collaborative actions in addressing water challenges in various sectors. Under APP lead, the group has implemented various save water campaign both nationally and internationally, raising public awareness of the urgency of water preservation as well as the taking part in direct engagement with community in addressing community water challenges. APP work in the working group reflects its commitment toward realizing principle 3,4 and 5 of the UN CEO Mandate Principles which encourage collective action, public policy influencing and community engagement.

In line with Principle 2 of the UN CEO Water Mandate, we extend our sustainable water management commitment to our suppliers. During 2012-2013, APP worked intensively with its pulpwood suppliers to develop a scorecard system which enable us to monitor environmental and social compliance across our supply chain relevant with regulatory requirements, APP Vision 2020 Roadmap and the FCP commitment.



## ENSURING SUSTAINABLE WATER MANAGEMENT WITHIN OUR OPERATIONS

### Continuous Sustainable Water Management in APP Mills

Water is essential to the pulp and paper making process, from stock preparation where the pulp is diluted into water for further processing, through to its conversion to steam for process heat and electricity generation. It's a water intensive process, but one that offers the opportunity to recycle and re-use a significant amount of water, reducing the amount of water our mills withdraw from local sources.

As one of the first companies in Indonesia that pledged to The UN Global Compact CEO Water Mandate programme, we have a challenging task to ensure that a responsible approach to water management is implemented not only within our operating facilities but also across our supply chain. It is one of our strategic goals highlighted in our Roadmap and a key metric measured by our mills.

Our mills focus on two areas; reducing water consumption and maintaining effluent quality from our mill processes. Reduced water consumption is achieved through reducing absolute consumption and increasing water re-use in our processes.

In line with the APP Sustainability Roadmap Vision 2020, a Water Footprint Assessment has been undertaken in partnership with Nalco, one of the world's leading innovators in clean water technology and solutions, to conduct a company-wide water foot-printing analysis based on guidelines developed by The Water Footprint Network. The assessment will provide a baseline for APP to develop a more detailed roadmap for sustainable water management in its manufacturing processes, including extended plans for water reduction programmes in each mill.

Due to the intensive and detailed nature of the assessment, we targeted to complete the assessment for all mills by 2015. This project started in Lontar Papyrus in 2011, followed by Pindo Deli mills in 2012. Assessment in Indah Kiat Perawang started on early 2013 and will be completed in Q1 2014. Similar assessments will be done in other APP mills in 2014-2015.

In addition to the on-going Water Footprint Assessment, all of our mills continue to implement various water improvement programmes, including reduction in water consumption, increase efficiency and water quality enhancement. The following are highlights of our mills' water innovations during 2013.

- One of Indah Kiat Tangerang mill's major initiatives was to adapt the pulp dying process to reuse water, rather than dying different colours using fresh water each time. The four colours are therefore dyed in sequence, lightest to darkest, and the water is reused to dye each shade in succession. It is important to find a balance between achieving water efficiency savings whilst ensuring we do not impact on the quality of the coloured paper.
- In some areas, improvement in water management links directly to energy conservation and greenhouse gas (GHG) reduction. At Indah Kiat Serang for example, the condensate return from the paper manufacturing process to the power plant was not as efficient as the equipment should have allowed. To resolve this, we made an effort to increase the efficiency of our condensate return process through the implementation of a

new efficiency programme. As a result of our efforts (which included pipeline and insulation maintenance, reducing blow down), the condensate return increased by 74%. We also achieved a 14% decrease in coal use.

Pindo Deli 1 and 2 have initiated similar project and have intensified their monitoring systems to accurately measure the levels of water and condensate from the power plant to the mill. At the mill sites, condensers have been modified and reconditioned to reduce the losses.

- To maintain the quality of their effluent, Indah Kiat Serang continued to develop technologically advanced waste water treatment systems, which harvest methane gas from the mills' waste water, before converting it into steam to be used in the production process, reducing GHG emissions by 287,820 tonnes a year. It is registered as a project under the Clean Development Mechanism. Similar project is also commissioned in Ekamas Fortuna. Methane gas generated from Ekamas Fortuna's anaerobic waste water treatment plant is currently flared, but we are now in the process of developing a recovery system to capture the excess gas and convert into electrical power thus utilising a heat recovery system for heating boiler water.

As a part of its regulatory requirement, APP mills have developed the Environmental Management Plan (Rencana Pengelolaan Lingkungan/RKL) and an Environmental Monitoring Plan (Rencana Pemantauan Lingkungan/RPL). The RKL and RPL have to be completed and submitted every six months to the regional and national Environmental Agency to report its environmental monitoring and impact control activities and performance.

The RKL (Environment Management Plan) and RPL (Environment Monitoring Plan) include monitoring the quality of the wastewater, which is treated in the wastewater treatment facilities before being discharged into water bodies and the water quality at both the intake and discharge points to assess the impact of its operation on the water sources. The parameters used in the IKPP mills monitoring system are biological oxygen demand (BOD), chemical oxygen demand (COD), suspended solid, dissolved oxygen (DO), AOX, temperature and pH values. In addition to the physical parameters, the mills also monitor the biodiversity in its water source and discharge points to ensure that its operations do not negatively affect the existing ecosystem.

As well as meeting regional and national requirements, APP mills also benchmark their operational and environmental performance against international standards, such as the Environmental, Health and Safety Guidelines for Pulp and Paper Mills, published in December 2007 by the World Bank / International Finance Corporation (WB / IFC), when relevant.

### **Extended Commitment to Our Suppliers**

Our commitment toward sustainable water management also applies to our pulpwood suppliers. These commitments are reflected in our Vision 2020 Roadmap and the FCP.

During 2012 and 2013, together with our pulpwood suppliers, we developed a comprehensive scorecard system to enforce and monitor these commitments throughout our supply chain. The scorecard system was developed to measure social and environmental performance of each of our suppliers, in line with regulatory requirements and best practices from internationally recognized Sustainable Forest Management certification standards. Regular assessments using the system enable us to ensure that our suppliers meet our commitment and action plans are developed to address any existing gaps in timely manner.

As a part of realizing the Vision 2020 commitment, in 2012, we began working together with our pulpwood suppliers in implementing the High Conservation Value Forest (HCVF) assessment. The assessment, which is also a part of our Natural Forest Moratorium commitment in line with APP Forest Conservation Policy (FCP), is done to recognize areas with outstandingly significant or critically important ecological, social or cultural value.

The HCV toolkit identifies 6 types of high conservation values within a forest that needs to be protected; among them are forest areas that provide basic service of nature in critical situations and forest areas fundamental in meeting basic needs of local communities. The HCV assessment will enable APP and its suppliers to develop proper management plan for those valuable areas.

Water level in peatland area plays a critical role in ensuring hydrology balance in the surrounding ecosystem. To further ensure sustainable water management in our suppliers' area, together with our pulpwood suppliers we are currently developing Best Practice for Peat Management & Monitoring Plan (PMMP). The Plan will be developed based on assessment and recommendations from internationally recognized team of peat experts. An assessment to find best approach in peatland management will also be a part of our HCV assessment. APP committed to zero new development on peatland, including canal & infrastructure construction, before assessment and best practice recommendation from peat experts are completed.

The result of these various assessments; HCV, Scorecard and Peat assessment, will feed into the Integrated Sustainable Forest Management APP and its suppliers are currently developing. The integrated management system will help ensure, amongst others, improved water and watershed management within the concession areas which will also affect water condition in the surrounding landscape.

To find out more about APP Sustainability Roadmap Vision 2020 and our FCP commitment please visit <http://www.asiapulppaper.com/sustainability/vision-2020>.

## **WATER COMMITMENT BEYOND OUR OPERATIONS**

As a responsible company and in line with the principles of the UN CEO Water Mandate, APP is also committed to addressing water related challenges outside its operational boundaries. Various community programmes are in place in community settlements across our mills, addressing many water related needs including clean water proficiency, disaster mitigations, hygiene and sanitation, education and facility provision.

Below are a few highlights of our efforts in contributing to community water challenges.

- **Installation of Community-based Water Purification Device**

In partnership with the UNESCO's Man and Biosphere Programme (MAB) Indonesia – LIPI (Lembaga Ilmu Pengetahuan Indonesia/Indonesia Institute of Sciences), APP implemented a water treatment system to address the problem of limited access to clean water experienced by communities in and around the Giam Siak Kecil Biosphere Reserve in Sumatra. The water treatment system will convert peat water, which is naturally acidic and may contain high levels of harmful substances into potable water for more than 200 families that live in and around the conservation area.



**Water purification laboratory scale experiment**



**Water purification installment together with localcommunity**

Following the installation of the units, members of the local community will be trained in their usage and maintenance. Each unit can produce up to 60 litres of potable water per minute, sufficient to provide an ongoing supply for approximately 200 families.

The project was completed in early 2013 and the device was handed over to the community. Recent improvements to the water purification device result in even better quality output. Currently the water outlet quality meets the national standard for drinking water, which means that the water comes out of the device fit to be directly consumed without having to be boiled.

The next plan for the project is to provide basic financial management training for village officials to ensure sustainable and independent financing of the device's future maintenance.

- **Water initiatives with Habitat for Humanity Indonesia**

APP in partnership with Habitat for Humanity Indonesia has implemented water initiatives in some area of Indonesia to contribute in addressing community water challenges:

- a. Community Water and Sanitation Rehabilitation**

A community living near to one of APP's operation facility in Serang, Banten Province, utilizes the local river as the main source of water for daily use as well as for sanitation facility. This unhealthy practice has been continuing for years and caused widespread skin and digestive diseases, especially among children. In 2012, APP together with Habitat for Humanity Indonesia collaborated in developing a sanitation centre facility that is able to accommodate more than 200 families in Cikangkung Village. The completion of the sanitation facility is followed by a hygiene and sanitation campaign to raise the community's awareness on good and healthy practices of water use.



The decoration of the facility is voluntarily done by The Jakarta Art Club



Encouraging Hygiene Practices from early childhood

**b. Rehabilitation of water sources in Soran Ecotourism village, Yogyakarta, Central Java**

APP in partnership with Habitat for Humanity Indonesia built their first eco-tourism village in culturally rich Soran Village in Central Java. To support the objective of making the village as tourism destination, public facilities related to tourism activities are being developed based on the concept of eco-friendly tourism, including water resources.

To date, seven water sources surrounding the village have been rehabilitated. The rehabilitation of water sources is also aimed to preserve the water sources and to educate the community on how to sustainably manage this natural resource for long term benefit, both economically and environmentally.



Two water sources in Soran Village, Umbul Gendruwo and Umbul Ndoya, under construction. Both water sources are used for community daily activities including washing and drinking. Education on water hygiene and renovation of the water sources aim to ensure their sustainability.

- **Indonesia Water Mandate Working Group**

2013 is the second year that APP has led the Indonesia Water Mandate Working Group under the Indonesia Global Compact Network. The group, which is comprised of various organizations including private sector, educational institutions and international NGOs, works to promote the six principles of the UN CEO Water Mandate and as a platform for collaborative actions in addressing water challenges in various sectors.

As the Chair of the Working Group, APP leads various collaborative actions during 2013. Among them is the commemoration of the World Water Day. Taking advantage of the popularity of the water day concept, the Group in collaboration with UNESCO and Clean Ciliwung River Movement (Gerakan Ciliwung Bersih/GCB) marked the day with a series of events to engage local and international stakeholders to raise awareness of the importance of water conservation. These included public dialogue on water issues, water technology exhibitions, a water education class for students, a radio talk show on water scarcity, and other water campaign related activities.



Get the full story of the collaborative efforts in water conservation campaign during World Water Day 2013 on <http://www.asiapulppaper.com/news-media/blog/world-water-day-water-water-everywhere-only-if-we-share>.

In 2013, led by APP, the Working Group embarked on an on-the-ground collaborative action with World Vision Indonesia on a sanitation project in a slum area in near Jakarta, the capital of Indonesia. The objective of the program is to address waste management issue in the densely populated area to prevent the annual flooding that has been happening in the past years. The project aims to be a stepping stone towards the next level of contribution in addressing community water challenges in Indonesia.



**Problems faced in Jakarta slum area: annual flooding and garbage inadequate waste management**

The project is currently underway, with training and capacity building for waste management for both the community and relevant local government already completed. Following the training, the Community-based Waste Bank has been officially launched and the waste management plan has been developed, involving various stakeholders relevant to the program. A waste bank is a place where people send their daily household waste to be further processed to gain economic value. The waste are usually sorted between organic and non-organic, the recyclable ones will be sold to a third party while the organic waste will be turned into fertilizer. The Bank will be managed by the community representatives and the income and products it generates will also used for community purposes. The project is aimed to be completed by first quarter of 2014.



Capacity building for waste management for village's officials and community



Working together in clearing space for the Community Waste Bank

## TRANSPARENCY

All APP social and environmental initiatives are reported through its annual Sustainability Report developed based on the Global Reporting Initiatives (GRI) 3.1 guideline. To ensure its accuracy and credibility, APP Sustainability reports are third party verified and have achieved an A+ level –which recognises APP’s commitment to transparency. In addition to the Sustainability Reports, APP also releases quarterly updates on its Sustainability Roadmap Vision 2020 achievements and progress reports on the implementation on its FCP commitment. Our various reports, press releases and blogs are available to public and can be accessed through [www.asiapulppaper.com](http://www.asiapulppaper.com).