

# APP-China Sustainability Report 2009









# Message from the Chairman

Teguh Ganda Wijaya  
Chairman & CEO  
Sinar Mas and APP-China



2009 was an extraordinary year. The global economies suffered a period of stagnation, following the global financial crisis. Industries spanning all market areas were greatly hurt by the challenging global economy and had huge financial hurdles to overcome. The paper industry in China was not immune. However, thanks to APP-China's six corporate strengths: cutting-edge technologies, integrated supply chain, in-house R&D focused on high-tech product development, a global sales network, an environment-oriented management philosophy, and a unique management system. APP-China managed to overcome the financial obstacles and thrive on the harsh economic climate and grow even stronger. APP-China's ability to mitigate risks and grow stronger in challenging times was evident in its performance during 2009. As a result, APP-China became the top choice for customers and markets based on its quality products and services.

Since it was founded, APP-China has gone through three major development stages to become bigger, stronger and more sustainable. The first stage was the strategic expansion of plantations and manufacturing facilities. Since entering China in the early 1990s, APP-China has established forest plantations in the Guangdong Province, Guangxi Zhuang Autonomous Region, Hainan Province, Henan Province, Yunnan Province, and other provinces. APP-China has also established four major pulp and paper mills, including Gold East Paper (Jiangsu), Ningbo Zhonghua Paper, Gold Hongye Paper (Suzhou Industrial Park), and Gold Huasheng Paper (Suzhou Industrial Park). Total production capacity for these mills amounted to 2.4 million tons and total asset value of 20 billion RMB. The second stage was to build a robust, vertically integrated business. APP-China completed a "Plantation-Pulp-Paper" integration with the establishment of Hainan Jinhai Pulp & Paper. The completion of Gold East Paper Phase III and Ningbo Phase II expansion projects further expanded the company's portfolio and brought APP-China's total production capacity to 5 million tons and raised total asset value to 50 billion RMB. The third stage was to create product-and-service mix to meet market demands with long-term sustainable development. Hainan Jinhai Pulp & Paper invested in world-class, state-of-the-art technologies to further upgrade its pulp production capacity and increase its product offerings. Meanwhile, APP-China continues to widen its spectrum of products and services. APP-China's total production capacity is expected to reach 8 million tons (comprises of 6 million tons of paper and 2 million tons of pulp mills), and total asset value is predicted to reach 80 billion RMB.

During its development, APP-China faced the challenges of both the 1997 Asian financial crisis and the 2008 global financial crisis. In 1997, APP-China was deeply affected by the economic downturn and its recovery was slow and painful. However, as management learned greatly from that previous experience, APP-China was able to mitigate and control its exposure and the problems that arose from the 2008 global financial crisis quickly. In 2009, APP-China focused on increasing revenues, reducing expenditures, and enhancing execution. As for management strategy, APP-China reduced production costs and increased productivity with performance-driven initiatives. Furthermore, where possible, APP-China strived to adjust, stabilize, enhance, and develop its overall operations to deliver the best paper and pulp quality and services.

In 2009, APP-China had more than 37,000 employees, achieved more than 34.5 billion RMB in sales revenues and contributed approximately 1.6 billion RMB in total taxes paid. Having weathered the storms of 2009, APP-China will continue to optimize human capital by attracting, developing, and retaining talent, and prepare for its medium and long-term growth and development.

In June 2008, APP-China achieved a corporate milestone to accelerate sustainable development, by publishing its first "Paper Contract with China (PCwC) 2008." The manifesto declared the company's commitment to become a dedicated advocate for and partner in China's green paper industry. One year later, the PCwC 2009 manifesto was updated with modified sustainable objectives and targets. We did this to further demonstrate APP-China's unwavering determination and continuous effort in time of difficulty, to foster sustainable plantation development, promote clean production, and bolster corporate social responsibility.

Moving forward, APP-China will seize opportunities in three key areas. The first area will be in Industry Development. Through this report, we hope to provide the general public with a clearer understanding of China's paper industry in an attempt to neutralize the outdated stereotypes and perceptions of the paper-making industry. We would like to relay to stakeholders and the public that the paper-making business can be transformed into a green industry and promote a stable economy with responsible management and sustainable practices. APP-China will aim to become the industry role model in low-carbon emissions and clean paper and pulp production. Ultimately we will lead the Chinese paper industry on a journey towards sustainability. The second area will be in Market Demand. The demand for paper will grow in pace with living standards. Based on China's development trends, we anticipate a large growth potential for industrial and household products. APP-China plans to develop more high-quality product offerings to anticipate market demand, and at the same time, continue to contribute to economic development through increased job creation and tax contribution. The third area will be in Global Leadership. With less than two decades of business development, APP-China still has a long way to go to be the world's No. 1 paper and pulp company. Nevertheless, APP-China will strive to become the industry leader in scale, quality, management and profitability. As a Chinese company, APP-China takes pride in its achievements in the global paper industry and in its endeavors in promoting one of the four great ancient Chinese inventions.

APP-China's steady growth over the past 17 years has reflected the company's realization of its sustainable development strategies. APP-China believes that sustainable plantation development, clean production, and corporate social responsibility are the driving forces to further the development of the paper industry. We look forward to building a green economy and a clean paper industry and, above all, upholding our green commitment with the full support of our management, employees and stakeholders.

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# About This Report

This is the fourth *Sustainability Report* published by Asia Pulp & Paper China (APP-China), as part of its ongoing commitment to keep stakeholders informed of its policies, management, actions and performance in sustainable development.

This report adopts all of the core and complementary indices of A-level *Global Reporting Initiative's (GRI) Sustainability Reporting Guidelines Version 3.0 (G3)*:

**Language:** Chinese and English;

**Period:** January 1, 2009 - December 31, 2009;

**Frequency:** Once in a year;

**Assurance:** APP-China commissions Bureau Veritas Certification (BV) to ensure its reliability, objectivity and transparency. For more details, please refer to the Assurance Statement.

APP-China will establish a sustainability management system that it anticipates will help stakeholders to better understand APP-China's commitment and efforts. The company welcomes feedback, supervision and recommendations.

## Index selection

In accordance with the GRI (G3) framework, APP-China developed this report by:

- Analyzing the most relevant and important sustainable development issues;
- Engaging stakeholders;
- Ensuring it offers continuity with previous reports.

For the first time, APP-China conducted the stakeholder interviews through a third party to collect their perceptions, expectations and suggestions to improve communication and cooperation with stakeholders.

## Scope of report

Performance indices cover operations under APP-China that exert major influence on sustainable development. These include:

- APP-China Head Office
- Gold East Paper (Jiangsu) Co., Limited (Gold East Paper)
- Hainan Jinhai Pulp & Paper Co., Limited (Hainan Jinhai Pulp & Paper)
- Ningbo Zhonghua Paper Co., Limited (Ningbo Zhonghua )
- Ningbo Asia Pulp & Paper Co., Limited (Ningbo Asia )
- Gold Huasheng Paper (Suzhou Industrial Park) Co., Limited (Gold Huasheng )
- Gold Hongye Paper (Suzhou Industrial Park) Co., Limited (Gold Hongye)

APP-China Forestry Business Unit Head Office  
Guangxi, Hainan, Yunnan, Guangdong and Henan forestry business sub-units.

Given larger size, many organizations, global locations with diversity of workforce, APP-China will improve data and information released in this report with increasing coverage of more entities of operations step by step.

## Data and information collection

When editing, measuring and disclosing data and information, APP-China adopts existing standards and regulations. It will do its best to provide historical references to help readers evaluate its sustainable development performance.

## Data and collection methodology:

For the first time, this report provides uniform, consistent data and information from APP-China, in accordance with the GRI (G3), China's national standards, the industry's standards, local rules and regulations in areas where the scope of report is located and the company's own best practices in sustainable development. Data and information from 2009 were based on new definitions, units, formulas of economic, environmental and social performance indicators. Data and information from 2007 and 2008 were taken from the *APP-China Sustainability Report 2008*.

## Data and information sources:

Data and information were from APP-China's sustainability best practices and case studies were provided by the APP-China Head Office, APP-China Forestry and major pulp and paper mills, as well as feedback from stakeholders. Additional data and information were collected through site visits, the inauguration conference, the project report of stakeholder interviews, company credentials and fact sheets, corporate websites, official documents, announcements, news releases, newsletters and other sources.

## Data and information footnotes:

In 2007, 2008 and 2009, different definitions, specifications, units, standards and formulas were used in collecting data and information. Therefore, there may be variations or areas where comparisons are not possible.

**In the sections of *Message from the Chairman, Corporate Profile and Challenges and Achievements*, the data and information refer to all entities operating under APP-China, but in all other sections of this report, the data and information refer only to those specific entities specified in the scope of report.**

# Corporate Profile

Registered in Singapore in October 1994, APP-China has been one of top 10 pulp and paper companies in the world after years of relentless efforts.

APP-China started to invest in China in 1992, with a focus on the Yangtze and Pearl River Deltas. APP-China established its pulp and paper mills: Ningbo Zhonghua, Gold East Paper, Ningbo Asia, Gold Huasheng, Gold Hongye and Hainan Jinhai Pulp & Paper using state-of-the-art technologies as well as modern, fast-growing forest plantation sites. Among them, Gold East Paper is the largest paper maker in China and one of the world's largest art paper makers while the Ningbo Zhonghua and Ningbo Asia are two of the largest industrial paper makers in China. Gold Huasheng and Gold Hongye have been two of the largest non-carbon paper and household paper makers in China, while the Hainan Jinhai Pulp & Paper is the largest pulp producer in China. Finally, Yalong Paper is one of the largest stationery paper products and makers in China.

At the end of 2009, APP-China owned more than 20 pulp and paper mills as wholly-owned subsidiaries and holding companies, over 20 forestry companies in operation and managed more than 300,000 hectares of forest plantations in China. With total asset value of 79 billion RMB and a total production capacity of nearly 7.6 million tons, APP-China reached sales revenues of more than 34.5 billion RMB and has more than 37,000 full-time employees.

In line with the sustainable development, APP-China is committed to operations that are in harmony with the environmental and social development. As a world-class, integrated Plantation-Pulp-Paper in 21st century, APP-China is devoted to a recycling economic model with more than 300,000 hectares of forest plantations. By the end of 2009, all pulp and paper mills set up by APP-China had been ISO14001-certified. In forest certification, 12 subsidiaries of APP-China have obtained the Chain of Custody (CoC) certification of the Programme for the Endorsement of Forest Certification Schemes (PEFC).

Sustainability is at the core of APP-China's business practices. By the end of 2009, APP-China had invested more than 5 billion RMB

in environmental protection, with emission indicators exceeding national and international standards. APP-China gradually changed the perception of the paper industry being tied to pollution in China. At the end of June 2008, six main pulp and paper mills under APP-China and two forestry companies completed the greenhouse gas assessment (GHS) that covered the whole Plantation-Pulp-Paper industry chain, making APP-China the first Chinese pulp and paper company to launch a comprehensive carbon footprint of this scope and size. In 2009, Gold East Paper completed the GHS conducted by Carbon Trust for its products, and became the first paper producer based in China to pass PAS 2050: 2008.

Since its establishment, APP-China has played an active role in supporting local communities and giving back to society in line with government policies. By the end of 2009, APP-China has cumulatively contributed more than 11.8 RMB billion in taxes paid in China, and made more than 600 RMB million in charitable donations. Philanthropic activities of APP-China were highly recognized by third parties and authorities concerned, including:

**2004:** APP-China was ranked 2nd among multinational corporations on the "China Philanthropy List" of *Forbes*;

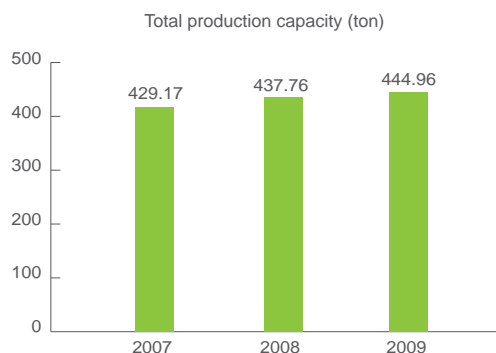
**2005:** APP-China was ranked 1st on Hurun's "Charity Company List in China." It ranked 3rd in 2006 and 2007;

**2007 and 2008:** APP-China was recognized as one of Hurun's "50 Corporate Social Responsibility Leaders;"

**2008:** APP-China received the "China Charity Award –The Most Caring Foreign-Invested Company," presented by the Ministry of Civil Affairs, the highest honor in the government's ranking of charitable contributions;

**2009:** APP-China was honored with the "20-year Special Contribution Award for the Hope Project" by the Hope Project Office.

APP-China has introduced state-of-the-art technologies to transform the Chinese paper industry into a modern and innovative model. In the meantime, based on its best practices, APP-China hopes to live up to the concept of a green paper industry and plays a role to promote sustainable development of the paper industry in China.



Note: The data and information disclosed in this chart refer to the sum of those entities specified in the scope of report. 2009 data and information follow new standards for GRI (G3) standards and may be inconsistent with data and information from 2007 and 2008.

# Challenges and Achievements

Due to rapid economic development taking place in China, consumption of paper products has grown dramatically. From 2000 to 2008, domestic consumption of paper products increased by 121.96 percent. In 2010, nationwide paper demand is expected to exceed 100 million tons. Enormous market demand and growth potential in China has provided an unprecedented opportunity for the paper industry.

Robust domestic demand for paper products has fueled the development of the Chinese paper industry. At the same time, the paper industry also faces a series of challenges stemming from a series of challenges stemming from a lack of resources and the need for environmental protection in China. Insufficient raw material supply is a critical challenge to the balanced and healthy development of the Chinese paper industry. According to the China Papermaking Yearbook 2010, 13.67 million tons of paper pulp and 27.5 million tons of waste paper were imported by China's papermaking industry in 2009, up 43.6 percent and 13.6 percent, respectively, year-over-year. Imports are estimated to account for 44 percent of total raw materials used in paper making.

For a long time, the paper industry in China has been perceived as an industry that produces a lot of pollution. In 2008, wastewater discharge and Chemical Oxygen Demand (COD) emissions for the industry accounted for 18.76 percent and 31.82 percent respectively of total industrial wastewater discharge and COD emissions nationwide.

To address the challenges created by the lack of sufficient raw materials, APP-China vows to adopt a business model that integrates forest plantations with pulp and papermaking, what we call Plantation-Pulp-Paper integration. Adopting scientific forest plantation management methods allows APP-China to take the lead in addressing the shortage of raw materials for the development of eco-friendly paper and ensure the sustainable development of the paper industry.

Making it a priority to protect the environment, APP-China advocates a "Paper Contract with China (PCwC) Manifesto" that calls for the adoption of responsible production standards. APP-China strives to minimize its impact on the environment and is committed to making sure that indicators such as water consumption per ton of paper/pulp, wastewater discharge per ton of paper/pulp and COD emissions per ton of paper/pulp remain far below international standards by continually improving its use of environmental protection facilities, advanced technologies and scientific management.

As an industry leader, APP-China does its best to meet these challenges through allied efforts. APP-China has the following strengths:

- 1) Economies of scale:** Advanced equipment and cutting-edge technologies were used;
- 2) Complete industry chain:** As a vertically integrated company, APP-China has strong risk management and produces a wide variety of quality products. APP-China owns many well-known paper brands;
- 3) High-tech products:** In-house R&D of APP-China enables us to make continuous innovations;
- 4) Extensive sales network:** It has a domestic and international reach;
- 5) Forward-looking environmental strategies:** APP-China environmental performance exceeds both national and international standards;
- 6) Unique management system:** The founder of APP-China created the Management by Olympic System (MBOS) that allows employees to develop professionally and achieve their full potential. APP-China is a leader to attract and retain talent and adjust its management to match employees to the right positions for their long-term development. APP-China has formed a corporate culture based on teamwork to help overcome adversity and achieve progress in unity.





## 2009 APP-China Achievements and Awards

|                                                                                                                                                                                                                                                                                                                                   |                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| In response to the economic crisis, APP-China overcame challenges, developed new innovations, and met market demand, achieving sales revenues of RMB 34.5 billion.                                                                                                                                                                | 3.45<br>billion RMB     |
| With steady operations, APP-China contributed 1.6 billion RMB in taxes paid in 2009                                                                                                                                                                                                                                               | 1.6<br>billion RMB      |
| APP-China created approximately 5,000 new jobs in 2009, providing stable employment and job security for its workforce. In 2009 APP-China had a work force of more than 37,000.                                                                                                                                                   | 37,000<br>employees     |
| At the end of 2009, APP-China's forest plantations covered more than 300,000 hectares, absorbing up to 8 million tons of carbon dioxide each year.                                                                                                                                                                                | 8<br>million tons       |
| By the end of 2009, APP-China had invested more than 5 billion RMB in environmental protection.                                                                                                                                                                                                                                   | 5<br>billion RMB        |
| APP-China continued to make environmental protection a priority in its overall efforts, and invested over 327 million RMB in environmental conservation facilities and activities in 2009 alone.                                                                                                                                  | 327<br>million RMB      |
| APP-China continued to improve its technologies and upgrade its equipment for water consumption. In 2009 it achieved wastewater discharge of 7.67 tons per ton of paper for major paper mills, and 16.22 tons per ton of pulp, for major pulp mills, significantly lower than national standards of 20 and 80 tons, respectively. | 7.67 tons<br>16.22 tons |
| In 2009, APP-China achieved 100% of solid waste treatment at its six main pulp and paper mills.                                                                                                                                                                                                                                   | 100<br>%                |
| At the end of 2009, APP-China had contributed more than 600 million RMB in philanthropic donations.                                                                                                                                                                                                                               | 600<br>million RMB      |



APP-China founder Huang Yi Cong was named **“2009 Hero of Philanthropy”** by *Forbes Asia*.

APP-China was awarded the **“20-year Special Contribution Award for the Hope Project”** by the Hope Project Office.

APP-China was honored with the **“Award of Contribution to Low Carbon Business (Multinational Corporation)”** at the first meeting of the Low Carbon Forum, hosted by the National Committee of the Chinese People's Political Consultative Committee (CPPCC) and the China Association for Science and Technology.

APP-China received the **“Green China Campaign – 2009 Scientific Development of Forest Plantation Special Award”** by the China Green Foundation and the State Bureau of Forestry, Center for Economic Development Research.

APP-China was awarded the **“Red Cross Medal of China”** by the Red Cross Society of China.

APP-China was awarded the **“2009 Scientific Forest Plantation Development Contribution Award”** by the *China Green Times*.

APP-China's “Circular Forestry-Paper business model” was honored with the **“2009 Multinational Corporation in China Contribution Award”** presented by the China Enterprise News and CSR Research Center for Chinese Companies.

APP-China was honored with the **“2009 100 Best Human Resources Management (HRM) Companies Award”** by 51job, Inc., the leading integrated human resources service provider in China.

# Corporate Governance

Booming economic development fuels dynamic growth for the paper industry in China. Paper is a cornerstone of the Chinese civilization and current economic development. Being the only Chinese company among the world's top 10 paper producers, APP-China recognizes its responsibility to ensure its business activities are well managed with respect to China's environment and society. APP-China is committed to applying world-class technologies to advance the revolution of the paper industry and the evolution of green cycle. With a Plantation-Pulp-Paper integrated business model, APP-China drives the modernization of the paper industry in China by its relentless efforts and daily practices. For example, to protect natural resources and the environment, APP-China has been making continuous and significant investments in scientific innovation to seek of balance between economic, environmental and social development.

## Vision

APP-China will continue to be the world's premier, fully integrated green-cycle plantation, pulp and paper conglomerate. It will be:

**Integrated:** APP-China will increase the overall benefits to the business by operating throughout the industry chain from plantation, pulp and paper to converted paper products and related industries.

**The Largest:** APP-China will be the leader in the industry and number one in the world by being equipped with the largest production capacity, the most state-of-the-art technologies and the most thorough customer service network.

**The Strongest:** APP-China will manufacture high-quality products to maximize profitability through the most effective management team and strongest R&D.

**Green Cycle:** APP-China will take care of the large cycle from afforestation to pulp and paper making, as well as the small cycle of using recycled paper for production.

## Mission

**Be sensitive to the environment:** APP-China will promote afforestation to naturally increase forest area, minimize erosion, alleviate greenhouse effects and benefit society. **Advocate paper-making culture:** APP-China will promote the sustained manufacture of pulp and paper to preserve this ancient Chinese invention.

**Improve quality of life:** APP-China will perfect mankind's needs in printing, packaging, writing and sanitation.

## Support a balanced multi-dimensional community

APP-China will

Comply with environment protection regulations, create a healthy working environment and enhance the quality of life. Provide customers with quality products and services to enhance their competitiveness and profitability: realize win-win with our customers.

Empower employees by inspiring their potential, encouraging innovation and stimulating invention to speed up new high-tech development.

Improve corporate profitability by maximizing shareholder return on investment.

Complement comparative advantages with other players in the same industry and exert core competencies to improve industry competitiveness.

Create job opportunities for contractors, suppliers and local communities to promote overall development in communities where APP-China operates.

## Values:

### 1. Pursuing Excellence

Keep challenging ourselves and our perceived limitations. Improve continuously and endeavor at all times. Select the excellent among the best, and keep pursuing the highest efficiency and effectiveness.





## 2. Integrity

Promote a "down-to-earth" philosophy and devote our heart and soul to what we are doing.  
Be modest, objectivity and sincere: "Practice what you preach."  
Maintain confidentiality.

## 3. Leadership

Be a model to your subordinates through your own behavior.  
Be proactive, aggressive, and innovative to create the greatest value.  
Encourage subordinates to develop the team's collective potential.

## 4. Ownership

Exert the spirit of "Take-it-as-my-own-business."  
Be responsible for our company sustainability.  
Actively display your wisdom and capability.

## 5. Teamwork

Benchmark the best and encourage each other.  
Communicate frequently and help each other.  
Respect each other and make progress altogether.

Let's become APP-China **PILOT** through practicing these values.

## Business philosophy

### 1. Respect to Individual

Employees are our company's most precious assets.  
Provide learning and self-development opportunities to enhance employee capabilities.

### 2. Innovation and Development

Adopt state-of-the-art technology and advocate innovation for breakthroughs.  
Manufacture high value-added products to meet market needs.

### 3. Customer Satisfaction

Customer satisfaction is the ultimate target. Adopt a customer-driven and market-oriented mindset, develop products and services that create extra value for our customers.

### 4. Highest Performance

Our group always requires employees to do the right thing using a proven scientific approach.  
Benchmark the highest performance of world-class enterprises to measure our employees and the team's performance; achieve the world's number one business performance.

We will be very **RICH** by adhering to our business philosophy.

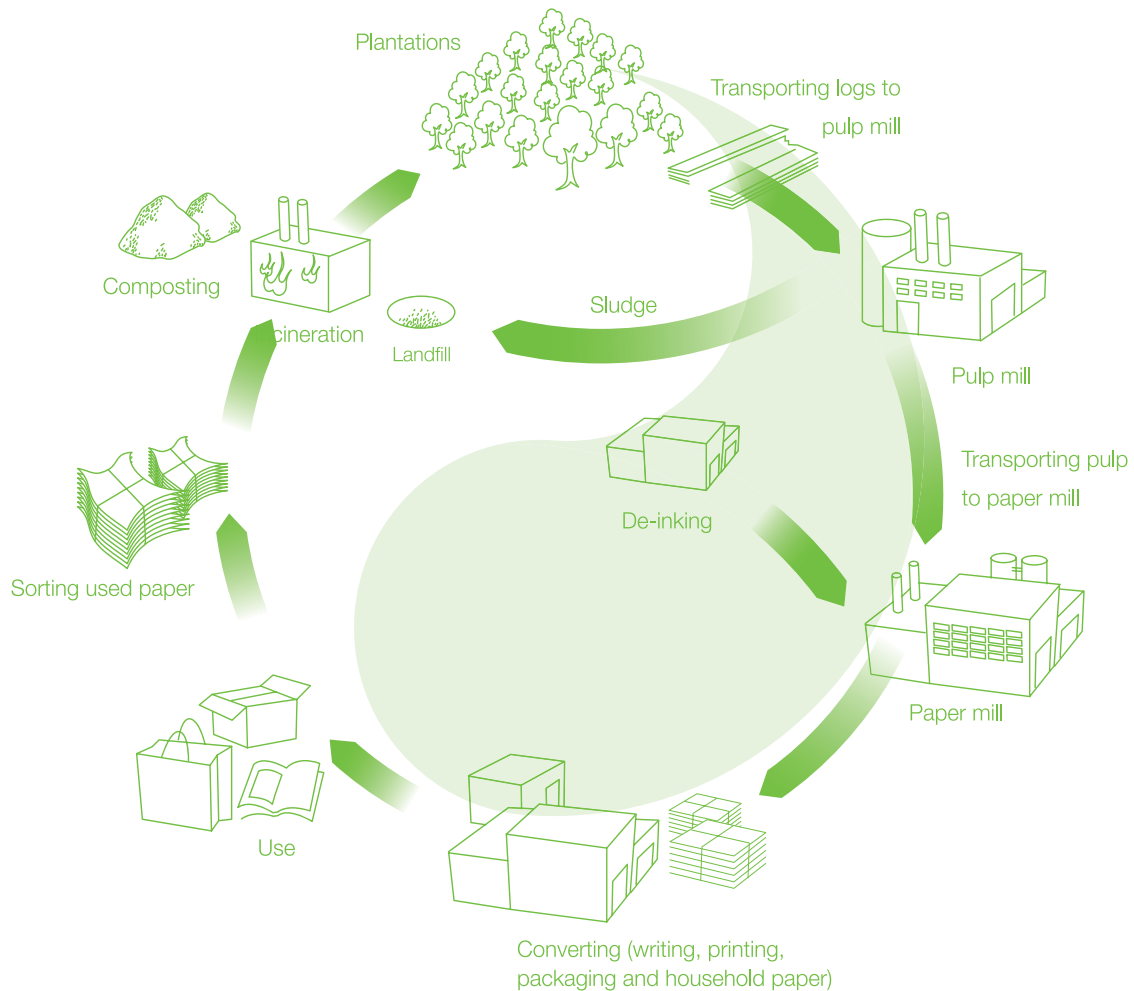


Plantation-Pulp-Paper integration is the core concept to fulfill vision and mission of APP-China.



### Plantation-Pulp-Paper green cycle

"Plantation-pulp-paper integration" is driven by the market, and calls for the linkage of three interdependent entities: plantation, pulp and paper. This requires paper producers to be held responsible for plantations, to take care of raw materials and wood pulp and develop eco-friendly ways to produce pulp and paper, and to form an interlinked cycle where all three phrases of production support one another. From forest plantation development, eco-friendly pulp and papermaking to manufacturing of high-quality paper products, APP-China has created a functional 'green cycle' through this integrated Plantation-Pulp-Paper industry chain.



Note: This diagram is taken from the World Business Council for Sustainable Development's *A Changing Future for Paper* report published on May 1, 1996



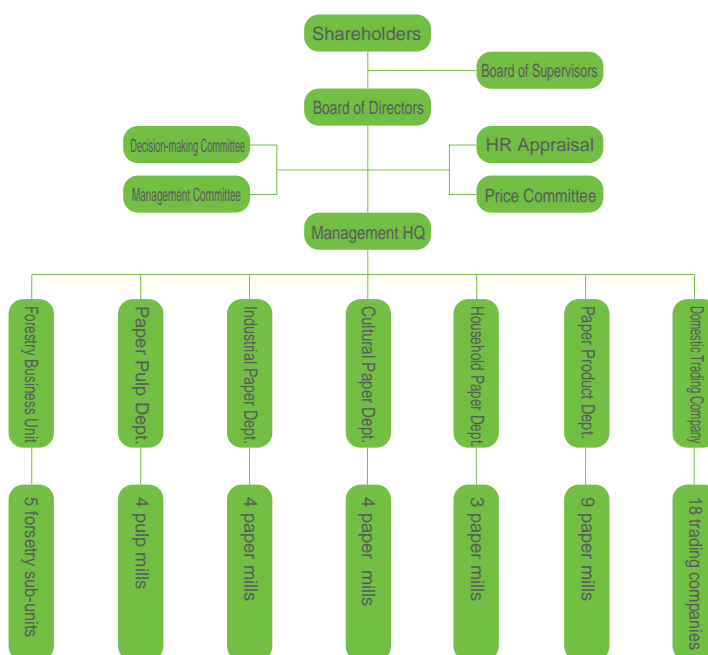
### Performance governance structure

As a big corporation, APP-China cites corporate governance and risk management as two top priorities to ensure effectiveness and efficiency in corporate investments and overall operations. In APP-China's management system, executives are evaluated by their professionalism, integrity and leadership, management and collaboration capabilities, goal setting and performance. APP-China advocates teamwork, setting good examples, and communication between management and subordinates. Top executives attend monthly meetings, while managers are subject to a six-month performance review and subordinates evaluate their superiors on an annual basis.

The APP-China governance structure is composed of shareholders, a board of supervisors, a board of directors and four management committees that include:

1. Decision-Making Committee, which is in charge of formulating and promoting the company's short-, medium- and long-term operations and development strategies; making decisions for major projects and building and reforming important institutional systems.
2. Operations Management Committee, which is in charge of examining, analyzing and improving APP-China's business and operational indicators; dealing with individual cases of operations including organizing monthly operations management meetings.
3. Human Resources (HR) Appraisal Committee, which promotes, appoints, relocates, appraises and dismisses executives or managers (including peer and subordinate evaluation).
4. Price Committee, which markets, prices and monitors quality control of pulp and paper.

APP-China organizational chart



### MBOS management system

Management By Olympic Systems (MBOS) is the core competency of APP-China's management. Using the collective wisdom of all employees to pursue the Olympic spirit, MBOS encourages employees to challenge the status quo, set great ambitions and accelerate improvement by thinking out of the box to strive for the realization of Olympic goals. MBOS inspires employees to pursue better performance. At the same time, it also emphasizes teamwork and encourages problem solving by scientific approaches. Through organizational coordination as well as individual performance reviews and incentives, MBOS creates an excellent corporate culture and cultivates talent in pursuit of sustainable development for the company.

In 1994, APP-China kicked off Small Group Activities (SGA). In 1996, Chairman Huang Zhiyuan put forth the vision of "Higher intention, Higher performance." To translate that vision into reality, APP-China officially launched two major schemes, Skill Development Activities (SDA) and Personal Performance Objectives (PPO). These were then followed by a competition of target-setting and monthly performance incentives to improve the MBOS platform in 1997. In 2002, improvement tools such as Cycle Time Reduction (CTR) and Six Sigma were introduced to enhance cross-mill exchanges and learning. In 2003, MBOS was fully launched. Since then, company-wide competitions have been held every year to reward employees, departments and mills for excellent performance.

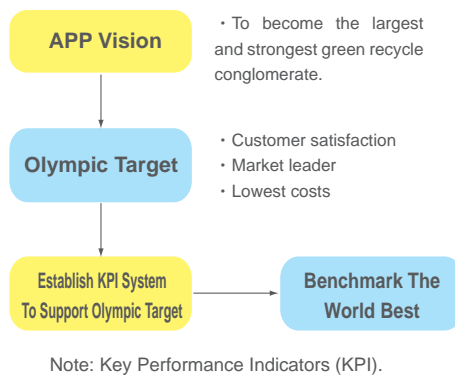
## MBOS contains three principles (ambitious intention, advanced methodology and organized tactics)

### MBOS underpins

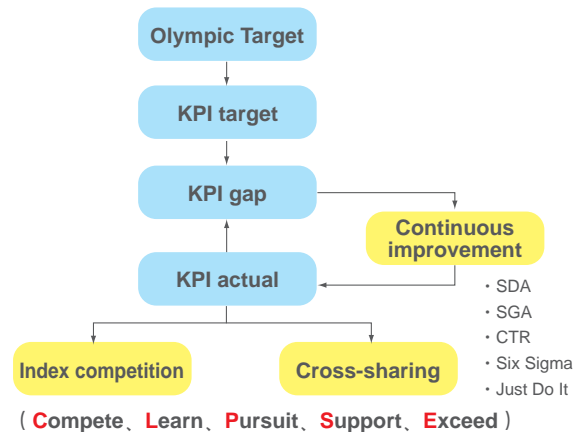
1. Ambitious intention: To create values and fulfill vision, APP-China will become a world-class company by learning from world-class companies.

2. Advanced methodology: Incorporate war games and working groups, i.e., SDA, SGA, CTR and SIX SIGMA, to achieve breakthrough performance and meet targets.

#### Ambitious Intention

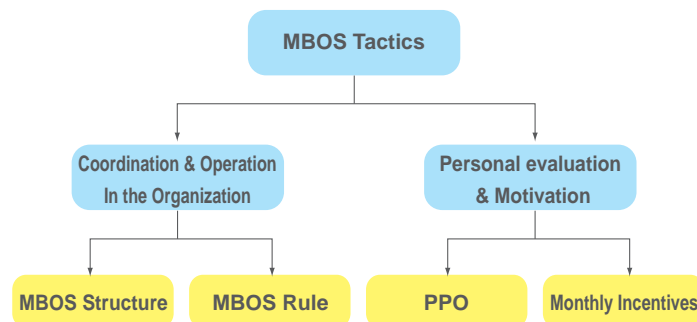


#### Advanced Methodology



3. Organized tactics: Assemble a powerful organization of MBOS and strict management standards to ensure systematic organization, project management and activate cross-mill and cross-departmental exchanges and sharing.

#### Organized Tactics



### Building a sustainability management system

As an important part of the sustainability management system, APP-China has improved its environmental management system, including certifications of environmental management systems, PEFC-CoC certification and ISO14064 GHG emission monitoring systems. APP-China makes it clear through its organization structure, responsibilities, procedures, operations and resource allocations that the environmental management system must be continuously reviewed and improved.

Ningbo Zhonghua was among the first companies in China's paper industry to introduce the ISO14001 environmental management system. APP-China then took the lead to promote this certification to other pulp and paper mills. By the end of

2009, all APP-China pulp and paper mills had obtained the ISO14001 certification.

APP-China Forestry continued to improve its existing ISO14001 environmental management systems. All certified forestry subsidiaries conducted internal audits to review their environmental management systems to ensure their effectiveness, where timely correction and prevention measures were implemented to minimize impact to the environment to maintain normal operations of the system. In 2009, six forestry companies under APP-China passed an annual audit conducted by a third party and where applicable, problems were carefully analyzed and corrective action plans were mapped out to further reinforce and regulate the environmental management system.



APP-China continued to implement PEFC-CoC certification, demonstrating its determination and efforts in environmental protection, social responsibility, sustainable development and use of forest resources. In 2008, Ningbo Zhonghua and Ningbo Asia obtained PEFC-CoC certification, becoming two of the first paper producers using recycled paper as raw materials to obtain this certificate. In 2009, Hainan Jinhai Pulp & Paper and Yalong Paper Products (Kunshan) Co., Ltd. under APP-China obtained the PEFC-CoC certification. APP-China will continue to perfect a management system to put sustainable pulp and papermaking into practice.

### Supply chain management

APP-China promotes sustainable development in supply chain management to influence suppliers' policies. APP-China selected suppliers with relevant experience and background to undergo qualifying audits to assess different aspects of their business. Manufacturing was one priority area, followed by wholesalers, regional dealers and general trading companies. Sample submissions and on-site visits were carried out. Finally, the best organizations were identified to win the bid for a last-stage evaluation. This was to make sure suppliers met all the criteria of quality, technology, pricing, delivery and services for long-term cooperation with APP-China.

APP-China implemented a three-step supplier management program that included planning, supervision and evaluation. First, APP-China adopted bidding processes to select suppliers and proceed with an audit. Second, it conducted constant monitoring and reviews which were required for the execution process. Finally, an evaluation and conclusion were set to determine final performance and results.

### Anti-corruption and commercial bribery

APP-China combats corruption and commercial bribery continually to promote its healthy and sustainable development. In 2009, APP-China encouraged people to report cases of corruption and commercial bribery and provided incentives for those who reported.

This was meant to strengthen supervision for those overseeing professional services, and in particular for those sales who are involved in supply chain management. APP-China continues to remain on the lookout for commercial bribery to make sure it is in legal compliance and with effective operations. Additionally, APP-China guarantees a smooth communication channel to handle customer complaints, employee concerns and suggestions. APP-China also stipulates behavior and principles of business development for its employees and vendor companies. Commissions, fees or rebates were prohibited for both buyers and sellers in business transactions. APP-China also forbade project managers, contact persons or managers to accept gifts or valuable entertainment activities. Related punishment rules were laid out as well.

### Internal risk management

After more than one decade of effective operations, APP-China has established an internal control compliance system to regulate business and operational activities.

APP-China advocates a management philosophy based on integrity. APP-China has developed management regulations and is focused on implementing them throughout the company in the form of an employee handbook. Key personnel are required to abide by confidentiality, nondisclosure and non-competition agreements. In the meantime, APP-China also emphasizes training of employees on professional ethics.

APP-China's internal control compliance system has five main elements: control of environment, risk assessment, control of activities, information and communication, and monitoring. These elements are interconnected and function as the company's effective internal control mechanism.

APP-China has also established an internal control department which has three main functions: internal audit, facilitating external independent audits, and anti-fraud investigations. The internal control department developed an annual audit plan to evaluate and test how effectively it is to implement its internal controls. Routine audits and special investigations are conducted to look for weaknesses and signs of fraud. From 2007 to 2009, the internal control department put forward proposals to improve internal systems and take action against non-compliant activities and individuals.

APP-China's internal auditors determine audit scope based on the degree of risks identified by examining strengths, weaknesses and inadequacies of the internal control systems. This helps drive improvements that directly prevent and avoid fraud. The internal audit department reports its results directly to the company's senior management or to the Audit Committee of the Board of Directors. This helps ensure independence, objectivity and effectiveness. There are also specific efforts by the internal control department to ensure the professionalism and ethics of internal auditors through a strict auditor code of conduct and a system of declaring any possible conflicts of interest.

APP-China has also established a system for employees to report suspicious activities directly to the internal control department or senior management, through emails or a 24-hour fax hotline.

### External independent audit

In addition, every year APP-China hires an international certified public accounting (CPA) firm to conduct a financial audit.

APP-China commissions this registered firm to provide an objective, fair, and independent audit of activities to check for any fraudulent activities by compliance senior management or weakness in the internal control compliance system.

Internal risk audits, internal control compliance systems, corporate safety net and anti-corruption investigations, combined with an annual external independent audit, form an integrated system to prevent, detect and report fraud, and thus help to ensure that APP-China is free from corruption.

## Stakeholder Engagement

Stakeholder communication and cooperation have been a top priority to accelerate sustainable management and improve operational performance. APP-China aspires to build multiple communication channels and create a communication platform of openness, transparency and trustworthiness.

### With government:

APP-China strictly abides by national laws and regulations, operates in legal compliance and spares no effort to protect the environment, conserve energy, reduce carbon emissions, and achieve clean production. At the same time, it creates job opportunities, produces tax revenues and boosts economic development in local communities.

### With industry associations:

APP-China is committed to the long-term development, advancement and innovation of the paper industry. APP-China shares its experiences with industry associations through its involvement in many activities, including ecological protection and environmental education.

### With customers:

APP-China's customer-driven culture addresses their needs and is committed to providing safer, better quality, greener products.

### With business partners:

Business partners are a cornerstone for the company's steady operations and long-term development. Partnership with APP-China goes beyond business transactions and financial interests. The company seeks to develop win-win solutions for mutual growth, complementing each other for sustainable development. Coupled with the principles of fairness, openness and mutual

trust, APP-China vows to establish strategic relationships and fulfill Paper Contract with China manifesto for sustainable development.

### With Non Government Organizations (NGOs)

APP-China initiates co-operation with NGOs in an open and transparent manner in order to better contribute to community development. APP-China also invites NGOs to supervise its operations and provide constructive suggestions to improve sustainable management.

### With research institutes:

APP-China collaborates with high-end, domestic and foreign research institutes in the Plantation-Pulp-Paper industry chain to obtain and apply cutting-edge technologies and stay ahead of national and international standards. APP-China is an advocate for industry innovation and development.

### With employees:

Employees are APP-China's most important assets. APP-China offers an excellent working and living environment, compensation and benefits. Personal development and growth have been highlighted. APP-China's human resources management system provides the fair recruitment, training, welfare, performance review, promotion, job transfer and contract termination of employees. With training and educational opportunities, APP-China strives for employee satisfaction to ensure the mutual growth of employees and the company.

### With communities:

APP-China firmly believes that the collaborative development of the economy, the environment and the community are critical to its sustainable development. Corporate social responsibility is built upon balanced economic, environmental, social, and educational development.

### Stakeholder and communication channels

APP-China strives to be a solution provider and the industry leader in addressing the concerns of sensitivity for the environment, a lack of natural resources, a risk of pollution and economic development. Through daily communication and industry events, APP-China reaches out to its stakeholders in response to their concerns.



### List of stakeholder composition, concerns and communication channels

| Stakeholder group          | Target audience                                                                                                                | Stakeholder concerns                                                                                                                                                                                                                     | Communication channels                                                                                                                                                                                                                                                     |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Government                 | -National Development and Reform Commission (NDRC)<br>- Ministry of Environmental Protection (MEP)<br>- Local Forestry Bureaus | -Comply with national laws and regulations<br>-Protect the environment and reduce its impact on the environment due to business operations<br>-Protect the forests<br>-Collaborative development of economy, environment and society     | -Regular reporting<br>-Daily communication<br>-Industry forums<br>-Website/newsletter<br>-PCwC quarterly reports                                                                                                                                                           |
| Industry                   | -Industry associations                                                                                                         | -Legal compliance and operations<br>-Promote industry development<br>-Retain and grow talent<br>-Domestic/international exchanges                                                                                                        | -Daily communication<br>-Exchanges and fact-finding tours<br>-Industry forums/seminars<br>-Website/newsletter<br>-PCwC quarterly reports                                                                                                                                   |
| Customers                  | -Customers                                                                                                                     | -Product quality/pricing/services<br>-Production capacity/expansion plans<br>-New-product planning<br>-Source of raw materials<br>-Environmental protection issues                                                                       | -Customer visits<br>-Key account club<br>-Blue Sky client service project<br>-Sinar Mas Print Award<br>-Exhibitions<br>-Quality service teams<br>-Service hotline<br>-Regular exchanges<br>-Customer satisfaction survey<br>-Website/newsletter<br>-PCwC quarterly reports |
| Business Partners          | -Banks<br>-Suppliers<br>-Contractors                                                                                           | -Liquidity and corporate reputation<br>-Open, transparent bidding process<br>-Supply chain management<br>-Environmental protection issues                                                                                                | -Bidding meetings<br>-Supplier receptions<br>-Daily communication<br>-Website/newsletter<br>-PCwC quarterly reports                                                                                                                                                        |
| Third- Party Organizations | -NGOs<br>-Research institutes<br>-Universities<br>-Media                                                                       | -Legal compliance and business ethics<br>-Honest information and timely communication<br>-Environmental protection/research and development<br>-Retain and grow talent<br>-Collaborative development of economy, environment and society | -Site visits<br>-Independent research<br>-Speeches, presentations and press conferences<br>-PCwC annual forums<br>-Press release distribution/ news announcements<br>-Project co-operation<br>-Website/newsletter<br>- PCwC quarterly reports                              |
| Employees                  | -Employees                                                                                                                     | -Safe and healthy working environment<br>-Reasonable benefits and remuneration<br>-Career development<br>-Environmental protection and sustainable development                                                                           | -Labor union<br>-Employee clubs<br>-Employee discussion meetings<br>-Company tours/training<br>-Philanthropic activities<br>-Employ satisfaction survey<br>-Website/newsletter<br>-PCwC quarterly reports                                                                  |
| Communities                | -Student groups<br>-Impoverished areas<br>-Communities near mills                                                              | -Give back to society<br>-Stimulate collaborative development of economy, environment and society in local communities                                                                                                                   | -Discussion meetings<br>-Philanthropic activities and projects<br>-Local hiring<br>-Website/newsletter<br>-PCwC quarterly reports                                                                                                                                          |



### Interviews with stakeholders

APP-China commissioned a third-party to conduct telephone interviews with stakeholders to learn about how the company is perceived, as well as gathering suggestions and viewpoints regarding its achievements and areas for improvement in 2009. APP-China hoped to gather genuine feedback to review the company's effectiveness, identify issues and fine tune action plans for better co-operation and communication with stakeholders.

Respondents to the telephone interviews had either worked with or worked for APP-China for more than three years, and included customers, banks, suppliers, industry associations, schools, NGOs and employees.

Twenty-five valid questionnaires were completed in the interviews.

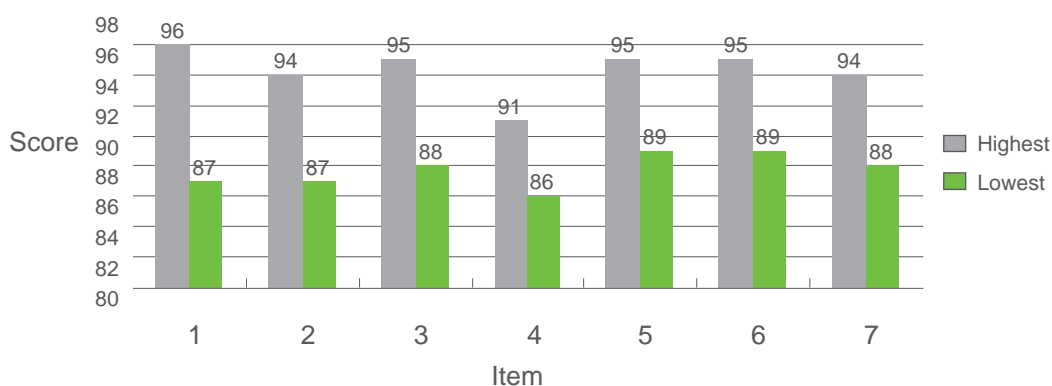
The questionnaire consisted of three parts. The first was background information, including verification of company information and respondent profile, their contact frequency with APP-China and the departments of APP-China that they contact most often. The second part contained 44 items for evaluation, such as management ethics, customer services and product quality, supplier management, community outreach, clean production, philanthropic programs and employee relations, comments on stakeholder co-operation and engagement, and an overall comment on APP-China's sustainable development. The third part contained open-ended questions regarding the stakeholder's expectations and suggestions for APP-China.

In the first and second parts of the survey, respondents were

### Breakdown of the highest and lowest scores of the seven major items

| No. | Item                                  | Highest score                                                |       | Lowest score                                     |       |
|-----|---------------------------------------|--------------------------------------------------------------|-------|--------------------------------------------------|-------|
|     |                                       | Breakdown item                                               | Score | Breakdown item                                   | Score |
| 1   | Management ethics                     | Integrity                                                    | 96    | Industry exchanges & cooperation                 | 87    |
| 2   | Customer services and product quality | Provide good after-sales services                            | 94    | Cost estimate                                    | 87    |
| 3   | Supplier management                   | Abide by procurement process/emphasize long-term cooperation | 95    | Understand supplier needs                        | 88    |
| 4   | Community outreach                    | Increase job opportunities/retain & grow talent              | 91    | Build Infrastructure                             | 86    |
| 5   | Clean production                      | Ahead of national & international environmental requirement  | 95    | R&D cooperation / technological innovation       | 89    |
| 6   | Philanthropic programs                | Disaster relief / education                                  | 95    | Environmental education activities / summer camp | 89    |
| 7   | Employee relations                    | Emergency support                                            | 94    | People-oriented management/training              | 88    |

### Breakdown of highest and lowest scores for each item



asked to rate APP-China on the various factors. Ratings included very satisfied, somewhat satisfied, satisfied, not satisfied and very dissatisfied. The following items scored highest to lowest: Management ethics, supplier management, clean production, philanthropic programs, customer services and product quality, employee relations and community outreach.

Twenty two respondents showed "green lights" on expectations and suggestions. Major expectations included: that APP-China will leverage its management philosophy and social status, hoped that APP-China will drive the paper industry's sustainable development and environmental protection; supported APP-China's economic model of developing agriculture with forest plantations. Many stakeholders mentioned that APP-China is an industry model and corporate benchmark, and hoped that APP-China would communicate its efforts and achievements in CSR to the general public. One customer said that APP-China has done well in environmental protection, but that there is lots of misunderstanding about forest plantations on the internet. APP-China needs to improve communication.

As to integrity, stakeholders had positive remarks and 50 percent gave APP-China its highest score on this attribute. Quite a few stakeholders recognized APP-China for its management system and first-class, quality products. For after-

sales services, APP-China has built a well-trained team. The survey also acknowledged that APP-China has invested in energy savings, consumption reduction and emission control, and that APP-China has invested billions in wastewater recycling, which has paid off with significant improvement. With a focus on scientific research, APP-China has set up its Asia Pacific R&D center in Suzhou. Stakeholders also highlighted what APP-China has done in talent retention and growth. A customer and a supplier mentioned that renowned experts and executives in the paper industry all came from APP-China, and that APP-China has the reputation of 'Huangpu Military School.' A school respondent affirmed APP-China's contribution to and success in implementing the APP-China Summer Camps. As to philanthropic programs, many stakeholders were impressed by APP-China's donations during the Wenchuan earthquake, not only in the name of the company, but also mobilizing employees to donate as well.

It was APP-China's first attempt at stakeholder interviews with room for improvements in sampling methodologies, questionnaire design, flexibility in written and telephone interviews etc. Meanwhile, APP-China will build more communication mechanisms for stakeholder outreach.

Having been an industry leader for nearly two decades, APP-China is emerging as a global business. Given the goals in pursuit of excellence, better corporate governance and reinforce stakeholder engagement and communication, APP-China will continue to promote the Plantation-Pulp-Paper green cycle, make the most of industry development, market demand and international status to build a brighter future.











# Sustainable Development Strategy and Implementation

APP-China formulates its sustainable development strategy and implementation in line with the corporate vision and mission. Sustainable development strategy sets the guiding principles for action plans and daily practices.

## Paper Contract with China Manifesto

With dramatic economic development in China, paper consumption is growing rapidly. Domestic paper demand is expected to reach 100 million tons in 2010. However, vast market opportunities also pose severe challenges for the paper industry.

Paper-making is an energy- and waste-intensive process that is traditionally regarded as a heavily polluting industry. For scarced and insufficient raw materials, how will the paper industry become a sustainable business? For climate change, how will the paper industry change its traditional image to be environmental friendly? For social evolution, how will the paper industry be an integral part of local communities in harmony with economic, environmental and social development?

To protect the Chinese and global environment from these environmental, economic and social challenges, APP-China is determined to become a solution provider to responsibly manage and sustain plantations along with paper-making operations. In June 2008, APP-China launched PCwC and pledged to minimize its environmental impact and ensure that APP-China's

social and economic impact is resoundingly positive. APP-China set tangible emission targets for benchmarking. This pledge specifically took into account sustainable plantation practices, green pulp and paper production, a reduction in energy consumption and emissions, corporate social responsibility and community support and empowerment.

On one hand, PCwC is the interpretation of APP-China's corporate vision and mission and proposes a roadmap of the industry upgrade in China and to reinforce its competitive edge in global markets by the business model of Plantation-Pulp-Paper integration. On the other hand, PCwC met the three challenges. Sustainable plantation development addresses the shortage of raw materials while clean production introduces the latest technologies with significant investments in sustainable pulp and paper making. This will build an environmentally friendly industry model. Corporate social responsibility is set to be the cornerstone for community building and the pursuit of balanced development in the economy, environment and society.



APP- China's Paper Contract with China (PCwC) is an ongoing effort to make continual improvement to the environment. APP-China will set attainable yet significant objectives, and will continue to evaluate, refresh and build upon its initial goals in order to ensure that standards for sustainability are continuously raised. At the same time, the progress toward these goals are reviewed and published regularly.

Since the publication of the PCwC in June 2008, APP-China has made significant progress under the supervision and continuous support of third parties who share its concerns for a balanced approach of paper-making, including NGOs, media, government research institutes, students and other stakeholders. The key interim achievements include progressive improvement for objective-driven issues, increased operational transparency and increase inclusion of stakeholders' opinions in the decision making processes. APP-China has been routinely updating stakeholders and the general public on development goals through the PCwC website, quarterly reports and special issues. At the end of 2009, APP-China has released six quarterly reports and two special issues, the March 2009 Carbon Footprint and the August 2009 PCwC Sustainability Forum.

Long term, APP-China looks forward to being a positive role model, influencing industry peers in the resolution of key environmental issues and the pragmatic advancement of the paper industry. The company will achieve this goal through continuous initiatives to raise industry benchmarks and proactively share knowledge within the industry to achieve better management ethics, clean production, sustainable resources management, enhanced environment conservation, and improved economic performance.

### Commitments for 2009

APP-China's key commitments are to:

- Seek solutions in sustainable plantations and biodiversity protection for the areas in which it operates.
- Contribute to the fight against climate change by implementing measures throughout its business to conserve energy and reduce emissions.
- Enhance its capacity to further engage employees to support the company's environmental initiatives.
- Continue its commitment to community empowerment by promoting economic growth, creating job opportunities,

investing in infrastructure in rural areas, building schools, and providing job training in the communities where it operates.

### Advocating sustainable plantation development

APP-China is committed to developing its sustainable plantations to:

Abide by APP-China's sustainable plantation development and management policy which adheres to all relevant national laws and regulations. APP-China will strictly comply with the government's regulations on forestry classification and management in developing forest plantations and protecting natural forests.

Continue to conduct research on advanced plantation and cultivation techniques by enhancing its state-of-the-art R&D centers and nurseries in China. The long-term goal for APP-China is to develop its plantations in China to an international level.

Establish plantations only on government-approved lands and in compliance with the terms of the national forestry development plan. APP-China will constantly strive to increase its plantation productivity by utilizing advanced technologies to meet the increasing demand for raw wood-fiber material from the fast-growing Chinese pulp and paper market.

Manage plantations using harvesting rotation cycles. One-sixth of plantations will be harvested annually. These areas will be replanted shortly after harvest. The remaining plantations will be left to grow and mature, allowing for sustainable development.

Ensure legally-sourced fibers are used as raw materials for our pulp mills through a strict chain-of-custody (CoC) and a sustainable plantation management system.

Continue to collaborate actively with research institutes and universities both in and out of China to develop new approaches for plantation and biodiversity protection.

### Advocating environmentally responsible pulp and paper production

APP-China will practice environmentally responsible pulp and paper manufacturing. Through substantial investments in environmentally sound facilities, use of the latest technologies and sustainable pulp and paper production, the company is committed to minimizing its impact on the environment. By the end of 2009, APP-China had invested more than 5 billion RMB into clean pulp and paper production.



### 2009 APP-China data promised for sustainable pulp and paparmaking

| Item                                | Unit                        | Promised data | National standards from May 1, 2009 | Future standards from July 1, 2011 | International level |
|-------------------------------------|-----------------------------|---------------|-------------------------------------|------------------------------------|---------------------|
| Water usage / ton of paper          | ton of water / ton of paper | ≤ 10          | /                                   | /                                  | 12—18               |
| Wastewater discharge / ton of paper | ton of water / ton of paper | ≤ 9           | 20                                  | 20                                 | /                   |
| COD emissions / ton of paper        | kg / ton of paper           | ≤ 0.61        | 2*                                  | 1.6*                               | /                   |
| Water usage / ton of pulp           | ton of water / ton of pulp  | ≤ 28          | /                                   | /                                  | 35—41               |
| Wastewater discharge / ton of pulp  | ton of water / ton of pulp  | ≤ 17          | 80                                  | 50                                 | /                   |
| COD emissions / ton of pulp         | kg / ton of pulp            | ≤ 2.16        | 16*                                 | 5*                                 | 8                   |

Note: " \* " signifies data after conversion, source: GB 3544-2008 *Discharge Standard of Water Pollutants for Pulp and Paper Industry*. International level data are from the EU Environmental protection Guidelines for Pulp and Paper Industry (IPCC 2001)

#### Advocating corporate social responsibility & community development

In addition to our commitment to the development of a green paper industry, APP-China is also committed to contributing actively to local communities through various public service activities. By the end of 2009, APP-China had contributed 600 million RMB to community programs in China. APP-China will continue to implement a range of projects that support education, training and development for local communities, as well as providing much-needed student scholarships and infrastructure improvements, enabling local communities to better help themselves.

#### Providing job opportunities and enhancing economic growth

APP-China recognizes that its most basic corporate social responsibility is direct and indirect job creation, which contributes to China's economic development and poverty alleviation in rural communities.

APP-China will maintain direct local employment of approximately 30,000 workers, as well as continue to create local job opportunities through its supply chain.

APP-China will continue to improve rural communities through reforestation efforts and development of infrastructure like roads and irrigation systems. In addition, APP-China will also provide water purification equipment to improve sanitation in local communities.

#### Providing education and training

APP-China is committed to improving the skills training and education of rural communities. To this end, APP-China will execute the following programs:

Expand current training opportunities which teach local farmers new skills and transfer practical agriculture

knowledge.

Expand scholarship funding for disadvantaged students, supporting students at all levels, from primary school to university.

Sponsor local technical colleges to nurture young professionals' talents for forest and paper industry, thus promote continuous improvement in both APP-China and the industry.

Continue to raise living standards and educational quality in rural areas by funding the development of educational facilities like libraries and schools.

#### Preserving cultural richness

APP-China will invest in preserving local culture and historical heritage to help promote the ethnic traditions of our local communities.

APP-China will host cultural activities in local communities to help enrich the spiritual and cultural lives of local citizens.

#### Promoting environmental protection

APP-China will launch and promote educational campaigns to encourage environmental protection, reduced consumption and increase energy efficiency as part of APP-China's corporate culture. This includes the APP-China Eco-office Campaign to promote energy conservation and low-carbon lifestyles among employees and the public.

#### Supporting China's "New Socialist Villages"

APP-China is firmly committed to promoting the government's vision for a "New Socialist Villages". The programs outlined above comprise various aspects of APP-China's contributions to the development of rural China.

The PCwC manifesto is the beginning of APP-China's efforts to promote sustainable development. Over the past year the PCwC program has enhanced the company's sense of mission and responsibility, and strengthened its belief in the strategic significance of sustainable development. APP-China will continue working closely with business partners to deliver improved sustainable performance to customers and stakeholders to create a better future for Chinese society.







# Sustainable Plantation Development

The development of scientifically sound forest plantations is the foundation for "Plantation-Pulp-Paper" integration, a key to maintaining the paper market, and supporting the sector's sustainable growth. As a net importer of paper pulp, the development of China's domestic forest plantations plays a vital role in balancing the growing demand for paper and the paper industry's ongoing development. The adoption of an integrated "Plantation-Pulp-Paper" business is critical to the future of paper making. In 2009, APP-China Forestry, one of the most active advocates and practitioners of this integration, continued to promote scientific development throughout its forest plantation activities.

## Overview of APP-China Forestry

APP-China Forestry was founded in 1995, and has set up more than 20 forestry companies, two nurseries, established forest plantations across nine provinces (Anhui, Guangdong, Guangxi, Hainan, Henan, Hunan, Jiangxi, Liaoning and Yunnan). It currently manages more than 13,700 forest plantation compartments. By the end of 2009, APP-China Forestry had established more than 300 thousand hectares of forest plantations planted with tree species like Eucalyptus, Acacia, Poplar, Pinus, Casuarina, Alnus, Liquidambar and other indigenous types.

### APP-China Forestry's vision of sustainable development

Enhance the environment through the development of

forest plantations on degraded and barren land to bring land back into use, thus minimizing soil erosion and increasing carbon sinks.

Enhance social development through cooperation with local communities to provide economic opportunities in the areas where APP-China operates.

Support and contribute to China's paper-making culture by promoting paper, one of China's greatest gifts to the world. Contribute to an improved quality of life by providing products for communication and knowledge sharing, packaging for the safe delivery and protection of goods, and human sanitation.





### Sustainable plantation management

APP-China Forestry is dedicated to making its forest plantation operations sustainable, abiding by applicable laws, regulations and other requirements, and promoting scientifically credible and environmentally and socially responsible forestry practices. APP-China employs micro-planning, intensive management and reasonable resource utilization to optimize production efficiency and protect the environment, health and safety.

### Guidelines for plantation management

APP-China forestry operations are strictly governed by a set of guiding standards, procedures, measures and management systems. APP-China's "Legal Guidelines for Forestry Operations" ensures all operational activities conform with the law. The "Employee Handbook" clearly and transparently articulates employees' rights, interests, responsibilities and obligations, in accordance with both the law and the company's charters. The "Plantation Management Policy" and the "Environmental Policy" communicate the challenges, commitments and APP-China's coherent approach to sustainable management in daily activities. These policies are further supported by APP-China's "Standard Operating Procedures (SOPs)," which drive APP-China's sustainable values through the value chain, to better ensure economic, environmental and social performance. These SOPs include "Eucalyptus Plantation Handbook" and "Poplar Plantation Handbook," which provide clear guidelines for all plantation procedures, processes and activities to ensure consistent quality output; "Green Manure Handbook," a technical guide, based on years of R&D trials for under-storey cropping to enhance soil quality and reduce the use of inorganic fertilizer; "Safety Manual for Forestry Operations," which outlines safe operations, including the protection of forest plantation assets from forest fires, illegal logging, pests and disease, and "Technical Guide for Harvesting Operation," which outlines the process for harvesting and transport activities and chain-of-custody.

### Overview of APP-China Forestry labor force

At the end of 2009, APP-China Forestry was responsible for 1,737 direct jobs, including 930 forester positions. In pursuing a diversified workforce, APP-China Forestry is an equal opportunity employer, with 22.6 percent of the workforce composed of ethnic minorities and 14 percent of the positions are held by women. APP-China Forestry also has generated more than 6,300 indirect jobs among local suppliers, contractors, rural laborers, forest plantation rangers, and others who work for the company.

### Forestry Business risks and challenges

In 2009, the global financial crisis pressured economies and industries around the world. The forestry industry was no exception, and faced the additional challenges of pests and diseases, natural catastrophes, and illegal logging. Moreover, the continual decrease in the value of timber, excess inventory and increased market competition further challenged

the industry. To overcome the challenges, and achieve stable and green growth, APP-China Forestry continues to commit resources to ensure legal compliance, invest in science and technology, continue its research and development and promote ecosystem conservation.

To create a competitive edge and a favorable environment for long-term sustainable development of its business, APP-China Forestry continues to increase investment in sustainable forestry R&D. This will ensure that its forest plantation planning, management and development are viable and scientifically-sound. To meet its commitment to social responsibility, APP-China Forestry continues to invest in socio-economic development through community development, philanthropic programs, engagement activities, job creation opportunities, and other efforts. APP-China Forestry is dedicated to building harmonious social relations with the communities where it operates as these local communities play an important role in APP-China Forestry operations and in supporting its forest fire and forest crime prevention efforts. To increase profitability and to cope with land scarcity, APP-China Forestry continually seeks ways to use resources more efficiently, improve forest plantation safety and health, and promote best practices to maximize productivity.

## 1. Managing Legal Compliance

APP-China Forestry development strategies, management policies and operation guidelines strictly comply with national and local laws and international conventions, including *Agenda 21*, *Convention on Biological Diversity (CBD)*, and the *UN Convention to Combat Desertification (UNCCD)*. To that end, the company has embedded regulatory requirements in its management and operations processes, and systematized transparency in daily operations by requiring regular reporting to relevant government bodies. To ensure it is environmentally responsible, APP-China Forestry conducts annual internal and third-party audits of its environmental management systems. To ensure the protection of the legitimate rights and interests of collectives and individuals, all operational activities are subject to rigorous review by internal legal and audit teams. APP-China Forestry believes the intensive, ongoing reviews will ensure the company's long-term sustainable development.

### Land use and land management

#### Land tenure

APP-China Forestry strictly abides by China's land policies and establishes forest plantations only on lands designated by the government for fiber-timber production. APP-China Forestry's fiber-timber comes mainly from plantations that are internally and externally managed. Internally managed plantations occupy lands leased from collective landowners or managed through a profit-sharing scheme with local communities. Independently managed plantations provide fiber-timber through supplier relationships or joint ventures.

### Land-Use planning

APP-China Forestry's plan for the establishment and management of forest plantations is based on national forestry resource management policies, forestation plans provided by local forestry administrative departments, internal production demands, and company-sponsored R&D. In the interest of protecting high conservation value lands, APP-China Forestry strictly forbids the development of forest plantations in natural forests, nature reserves and other protected areas. In addition, during the planning process, APP-China Forestry also protects buffer zones, wildlife corridors and high conservation value land protection areas, such as local heritage sites, including burial sites and temples.







### Afforestation on arid and sandy land

In response to the Chinese government's call for greater efforts to combat desertification, and in conjunction with its "Plantation-Pulp-Paper" integration, APP-China Forestry actively contributes funding to support the establishment of coastal shelter belts and initiated several land rehabilitation projects to protect coastal soil and ecosystem. In the semi-arid region of Changjiang County, Hainan Province, natural vegetation was introduced to degraded and barren land to restore the micro-environment before tree planting. To date, the afforestation project has successfully established over 1,067 hectares of forest cover. In the Paibuwenqing region of Danzhou County, Hainan Province – where the land is typically tropical, fine-grained sandy soil, with thin topsoil and poor moisture retention – intensively managed, short-rotation *Eucalyptus* forest plantations were established to protect the soil. The projects expect to ultimately enhance the local ecosystem and the well-being of local communities.

### Harvesting

To ensure that forest plantation harvesting operations deliver optimum quality products with minimum environmental and social impact, APP-China Forestry has established a set of operating guidelines, "*Safety Manual for Forestry Operation*," "*Technical Guide for Harvesting Operation*," and others, to govern harvesting activities. Working closely with local governments, all APP-China Forestry subsidiaries routinely report to local forestry resources administrative units on their forest plantation resource inventory and operational activities. In the case of harvesting, APP-China Forestry ensures that it is conducted within allocated quota and tree harvesting permits obtained before harvesting activities are carried out.

### Transportation

In 2009, APP-China Forestry continued to monitor the execution of its plantation management policies and SOPs. "*Harvesting and*

*Transportation Management Guidelines*," "*Eucalyptus Plantation Handbook*" and "*Technical Guide for Harvesting Operation*," were all developed to ensure that every truckload of planting materials and timber meets legal requirements and has the necessary documentation required by local governments. In China, the government enforces stringent laws and regulations to ensure the legality of wood transport. In fact, inspection stations have been set up nationwide along major transport routes to monitor the flow of timber. As a "Plantation-Pulp-Paper" integrated company with forest plantations and manufacturing facilities widely distributed across China, APP-China Forestry's harvested timber often must be transported across multiple counties, requiring it to apply for multiple cross-county permits and go through multiple checkpoints. Therefore, to ensure timely timber delivery to downstream production facilities, APP-China Forestry has to ensure that all legal requirements are duly met.

### Contractor management

In APP-China Forestry, most of the on-site operations and processes are outsourced to contractors. Therefore, the management of contractors is critically important to APP-China's operations; as APP-China expects its contractors to uphold all legal and operational requirements. To make sure contractors meet the company standards for quality, APP-China Forestry has developed the "Elite-Contractor Support Program." The program provides technical and skill development training, support for underprivileged elite contractors to grow their businesses, contractor-management engagement workshops, elite contractor networking events, contractors' peer-review activities, and other initiatives. To motivate contractors, APP-China Forestry has introduced a "Contractor's reward and penalty system" that not only evaluates performance but also rewards achievement. Top performing contractors are given incentives, support and priority on new contract jobs. In addition, APP-China Forestry has also introduced an add-on "responsible contractor" agreement to encourage better quality, social responsibility, management, worker benefits, worker income, incentives and so on. APP-China Forestry anticipates the programs and system to enhance its supply chain management and contractor integrity.

## 2. Managing with Science and Technology

APP-China Forestry takes a scientific approach to the establishment of its forest plantations, and has established state-of-the-art research and development centers and nurseries, in Ding'an County of Hainan Province and Qinzhou City of Guangxi Zhuang Autonomous Region to conduct cutting-edge research on rapid propagation and advanced cultivation techniques for developing fast-growing, high-yield planting materials. At the same time, APP-China Forestry has incorporated best practices, such as widespread use of SOPs, computerizing data and information management, and mechanization, in its forest plantation management to enhance overall quality, efficiency and profitability.

### Quality tree species and scientific research

In the continuous effort to enhance the productivity of its forest plantations, APP-China Forestry has invested heavily in research and development of superior planting materials. To date, APP-China Forestry has developed a variety of fast-growing, high-yield tree species that are resistant to pests and diseases, drought and frost, tolerant of wind, and are able to grow well in high altitudes. To maximize production efficiency, APP-China Forestry carefully matches the most suitable and best-performing tree species to the specific micro-environment to be planted when establishing a new forest plantation. Therefore, it extensively researches the cultivation of trees with superior environmental adaptation to meet the demands of the diverse geographic and climatic settings of its widely distributed forest plantations, while minimizing production costs. For instance, at its Hainan Province's nursery, intensive R&D is carried out to enhance the development of new *Eucalyptus* hybrids, which are fast-growing, high-yield, consistent producers and are highly adaptable.

### Information systems

#### Systems Application Products in Data Processing (SAP)

APP-China Forestry is proactively improving its forest plantation management through the implementation of systems to enhance management of its operational data, and has introduced SAP to integrate information from its various business units. As a result, the information management systems of the forestry business, plantations, materials management and the financial department are all integrated into the SAP system. The resulting integration ensures real-time information-sharing throughout its business operations, significantly improving efficiency.



### Plantation Management System (PMS)

To systematically manage forest plantation resources, APP-China Forestry makes full use of modern science and information management technology. The PMS is one system developed to serve this requirement. It allows real-time tracking of individual forest plantation department operations, geographic information system map management, tree stands inventory, materials inventory, contract job records, quality review records, and other data. In addition, to meet the needs of remote site-based personnel, APP-China Forestry works closely with local telecommunication service providers to establish channels for direct transmission of plantation data to the PMS platform via mobile phones. So far, such implementations have enhanced the efficient use of resources and increased transparency, allowing management to access updated forest plantation data for decision making.

### Mechanization

To enhance its forest plantation efficiency, APP-China Forestry has adopted and incorporated modern machinery into its operations. Newly introduced machinery is used for labor-intensive tasks such as clearing plantation lands, weeding, soil preparation and timber harvesting, greatly reducing labor intensity, improving efficiency, and effectively increasing plantation productivity.

### Performance monitoring, audits & control

APP-China Forestry has established multiple monitoring and auditing systems to routinely review its forest plantation management and business activities. Each audit team is comprised of experts in their respective fields. For example, the silviculture audit team is responsible for overall management quality control review; the plantation assessment, plantation investigation and peer-review teams are responsible for reviewing forest plantation resource monitoring and SOP audits; the environmental and sustainability team is responsible for reviewing environment management system and sustainable forestry performance; and the accounting and financial audit teams are responsible for integrity of accounting and financial systems.

### 3P systems (PRT, PAT & PIT)

To track forest plantation growth, health and implementation of SOPs at each site, APP-China Forestry has established "3P" teams and systems to monitor and check performance throughout the plantation rotation. The Peer Review Team (PRT) is responsible for plantation operation process quality review and corrective action recommendations; the Plantation Assessment Team (PAT) evaluates the survival rate and growth of 3-, 6- and 12-month old plantations, and the Plantation Inventory Team (PIT) is responsible for Mean Annual Increment (MAI) monitoring and corrective action recommendations for tree stands that are two to six years old. The "3P" systems allow a review of individual forest plantation department performance through the rotation period, for better corrective action and forecast of yield.

### Third-party monitoring and audit

In addition to in-house monitoring and audit systems, APP-China Forestry routinely engages accredited, third parties to conduct audits and offer recommendations to continually improve its management systems. This includes ISO14001 annual audits to review the credibility of its environmental management systems, joint environmental monitoring and impact assessment programs with local universities and research institutes to ensure APP-China Forestry meets legal requirements and in-house corporate sustainability objectives.





### 3. Managing Plantation Ecosystem

APP-China Forestry takes into account the potential environmental impacts of forest plantation operations and has implemented an environmental management system to better protect biodiversity, soil, water and the natural ecosystems where it operates. At the same time, it ensures that protective measures are executed at all times, continuously reviews operations and takes corrective actions when necessary to drive environmental performance and sustainable development. To date, six of APP-China forestry subsidiary companies have adopted the ISO14001 environmental management system. They are among the first forestry companies in China to utilize ISO14001 for forest plantation management. APP-China Forestry routinely reviews and identifies the key environmental aspects of its operations and sets clear management, monitoring and protective measures integrated into each operation's SOPs to strictly guide on-site activities. For example, APP-China Forestry continually seeks ways to enhance forest plantation soil fertility while finding less harmful ways to fertilize. It also has several on-going R&D projects to assess the effectiveness of such processes as the use of green manure and composite organic fertilizers from harvesting debris, enhancing topsoil cover and organic matter in soil by leaving unused harvesting debris such as leaves, bark and branches at harvest sites, determining the best plant spacing to allow sunlight penetration that will help to regenerate understory vegetation while preserving diverse flora, and promoting mixed-tree forest plantations, to better enhance the vitality of forest plantation ecosystem.

#### Protecting biodiversity and ecosystem diversity

To protect forest plantation biodiversity from the initial stage of forest plantation planning to post-harvest retrieval, APP-China Forestry takes a methodical, scientific approach to minimize disturbances on the natural ecosystem. APP-China Forestry actively conducts joint biodiversity monitoring projects with universities and research institutes, trains employees to conduct biodiversity monitoring, and created an electronic

herbarium of flora species found on its forest plantations. APP-China Forestry also cooperates with universities and research institutes in R&D projects, such as diversified forest plantation models and the development of indigenous tree species for commercial fiber-timber. To minimize the operational impact to the local biodiversity and ecosystems, APP-China Forestry prohibits the use of chemicals listed in WHO IA and IB, and other chemicals that are banned in China. APP-China Forestry continues to improve the management of its environmental risks to reduce the emergence of threats such as forest fires, pets and diseases, misuse of chemicals and illegal tree harvesting. These efforts are designed to support the health and stability of ecosystems and promote their ability to regenerate naturally. Prior to the establishment of each forest plantation, APP-China Forestry considers and adopts the most scientifically-sound plan to improve the area. For instance, if the plantation is to be set in a hilly region, natural vegetation belts are set on the crown of the hill, mid-sections and gullies are preserved and reasonable buffer belts are established at the base of the hill. In addition, APP-China Forestry will design and adopt the optimum planting layout and select tree species best suited for the particular micro-environment to minimize the spatial concentration of forest plantations and maintain diversity of tree species.

#### Protecting the water cycle and preventing soil erosion

APP-China Forestry feels one of its most critical responsibilities is to protect local hydrology. APP-China Forestry strives to efficiently use water and land resources while limiting anthropogenic water pollution, thus improving the environment and operational conditions. Strict measures are implemented for the storage, transport, and application of fertilizer. For instance, APP-China Forestry prohibits the use of open air fertilizer storage, its uncovered transport and requires that fertilizer be buried at a 20cm depth, not applied at the soil surface. Moreover, empty fertilizer bags are 100% recovered, to ensure zero fertilizer loss and to reduce potential pollution to nearby water bodies.



APP-China Forestry also has strict requirements for its soil preparation, planting and tending processes for forest plantations with hilly topography. In these cases, terrace planting is required to meet national standards. APP-China strictly integrates the *National Afforestation Technical Regulations* framework into individual operation processes.

### Efficient Use of Land and Resources

To mitigate the negative effects of its production and operational activities on the environment, APP-China Forestry imposes multiple measures to improve resource-use efficiency, reduce resource consumption and protect forest plantation ecosystems.

**Increase forest plantation land products and services:** APP-China Forestry works closely with local farmers to enhance the use of its forest plantation land. In 2009, a total area of 6,106 hectares of agro-forestry and farming-forestry areas was established in Henan Province's *Poplar* forest plantation. The *Poplar* plantation comprises 282 hectares for livestock breeding, herding and apiculture, 5,105 hectares for agro-forestry, 548 hectares for planting traditional Chinese medicinal crops and

171 hectares for tea planting. The program APP-China Forestry has developed, strives to better utilize land resources, reduce plantation tending costs, improve tending quality and enhance the development of local agro-forestry systems, while generating increased profits for local farmers.

### Reduce energy consumption and GHG emissions in offices:

APP-China Forestry has implemented programs to promote a greener working environment. Some of these initiatives include the reduction of office power consumption for lighting, air conditioning and refrigeration, utilization of video conferencing to reduce business travel, adoption of electronic signatures to decrease the need for faxing, printing and the use of printer toners, and reducing the use of office supplies to cut back on unnecessary new purchases.

**Reduce waste:** APP-China Forestry has continued to improve its on-site management and harvest procedures to minimize waste. SOPs require all timber larger than 3 cm in diameter and all parts of a tree 3 cm above the ground to be fully utilized.

**APP-China Forestry's energy and water consumption**

|                                 | 2007      | 2008       | 2009        |
|---------------------------------|-----------|------------|-------------|
| Gas (GJ)                        | 4,907.77  | 3,663.63   | 1,164.06    |
| Diesel (GJ)                     | 1,520.62  | 348.02     | 400.85      |
| Electricity purchased (10 MWh ) | 98.14     | 232.77     | 142.06      |
| Total water consumption (ton)   | 79,159.00 | 34,630.00* | 125,004.90* |

Note: The increase in water usage in 2009 is mainly due to the increase of Guangxi's nursery production.

### Reduce the use of chemicals

To reduce its chemical use, APP-China Forestry launched new measures that significantly decreased the use of many major chemicals. During the year, herbicide, fungicide, pesticide and fertilizer usage was decreased by 83 percent, 92 percent, 69 percent and 68 percent, respectively.



### Greener fertilizing methods

#### Green manure inter-cropping and composite organic fertilizers

"Green manure" refers to cover-crops grown primarily to add nutrients and organic matter to the soil. Typically, a green manure crop is grown for a specific period, and then plowed under and incorporated into the soil. Green manure is beneficial in changing soil composition. It can be used to improve soil fertility, aeration, and improve the soil's ability to hold water and nutrients. Green manure can also help suppress weeds, decrease forest plantations under brushing, and thus reduce the need for herbicides and prevent soil erosion. APP-China Forestry continuously seeks better, safer and greener ways to improve the soil's quality of its forest plantations. In 2009, APP-China Forestry focused on green manure crop research and experimented with the creation of organic fertilizer by composting harvest by-products like bark and leaves. Several pilot project sites in Guangdong forest plantation were selected for the experiment where tree bark from the harvest was used as a key compost feedstock. Primary laboratory test results indicate that, on average, cured compost contained a 32.4 percent concentration of organic substances, higher than Ministry of Agriculture's national standard of at least 25 percent organic substances. In 2010, APP-China forestry plans to implement the use of the organic compost fertilizer in its forest plantations. At the same time, APP-China Forestry will continue to monitor the green manure's effects on tree growth and soil fertilization and its effect on compost quality and its other possible benefits. Comparison trials will be set up to compare the various types of fertilizer currently used in forest plantations. The introduction of green manure and composite organic fertilizer into APP-China Forestry forest plantation sites has greatly contributed to the realization of its sustainability policies for soil conservation, land usage, local ecosystem protection, enhancing the soil food web, plant health, and land productivity.

### Environmental protection investment

APP-China Forestry actively invests in environmental projects and in 2009 invested nearly 290 thousand RMB. APP-China Forestry has partnered with various research institutes and universities to develop better forest plantation management techniques, environmental monitoring and conservation projects. In addition, APP-China Forestry's in-house R&D seeks to develop better practices for its forestry operations and find ways to improve planting materials to drive its overall environmental performance.



### Environmental performance monitoring

APP-China Forestry's Guangxi district unit continues to cooperate with Guangxi University's School of Forestry on its environmental monitoring program. In January and July 2009, the university conducted site surveys and monitoring of the *Eucalyptus* forest plantations in Guangxi Province. Biodiversity, water, soil, slope stability, tree growth and carbon stock were surveyed and monitored. In October 2009, Guangxi University released an interim report, which showed that in suitable regions, with scientifically-sound management, replacing *Pinus* secondary forest, shrub land, and grassland with a *Eucalyptus* forest plantations, does not reduce biomass or productivity. In fact, replacing a slow-growing and inefficient ecosystem with a fast-growing, high-yield forest plantation ecosystem enhances the ecosystem and its ability to serve as a carbon sink. The biodiversity monitoring findings also indicated that the *Eucalyptus* forest plantation biodiversity is not significantly different than previous *Pinus* forest plantations in the same locality. Furthermore, it has significantly more biodiversity than farmland or barren land.

### Carbon sink and carbon footprint assessments

To better address climate change and formulate better mitigation strategies, APP-China Forestry established its Greenhouse Gas (GHG) inventory. APP-China Forestry also completed the assessment of its forest plantation carbon sinks and its operational carbon footprint for year 2008. The baseline assessment provides APP-China Forestry's management with a science-based reference for decision making, to set rational emission reduction targets and allocate resources to manage key priority emission sources. It provides the company with a better understanding of climate change implications for the industry, establishes and adapts potential risk mitigation measures and plans for long-term sustainable growth. APP-China Forestry has conducted an annual assessment to better drive its plantation management and environmental policies.

It hopes that by doing so, it would be able to maximize forest plantations' carbon sequestration potential and minimize its operational footprint.



## 4. Managing Health and Safety

APP-China Forestry views safety management as one of the top priorities of its forest plantation management. Therefore, APP-China has established a safety management system to protect people, the environment, operations, company assets and products and to create a better operating environment.

### Forest plantation operation safety

Forest plantation management is an arduous task and safety enforcement is critical to responsible production. To eliminate potential risks and hazards, APP-China Forestry adopts a no-nonsense approach and strictly enforces its "safety first" philosophy throughout its operations. To ensure the vitality and productivity of forest plantations under its management, APP-China Forestry continually seeks ways to reduce and prevent risks such as forest fires, illegal logging, and the emergence of pests and diseases. By enforcing its operational safety requirements and standards, APP-China Forestry ensures that employees are well-versed in occupational health and safety rules. In addition, monitoring and audit systems are in place to track, review and implement new improvements in overall operations.

### Workforce safety

APP-China Forestry stresses workforce safety and adopts a people-oriented management style to ensure its adoption. To equip employees with work safety knowledge, APP-China Forestry has established a set of training programs for employees of different levels and various types of work. To ensure corporate health and productivity, APP-China Forestry continues to require all employees to undergo routine health screenings and organizes regular health enrichment programs. These promote healthy lifestyle and wellness, and participation in organized fitness and sports activities. To improve employee response in the event of an emergency, APP-China Forestry makes sure that all employees are familiar with emergency procedures and routinely organizes drills. To develop a safer supply chain, APP-China Forestry continues to educate and support rural contractors and workers with safety awareness programs, protective measures and insurance coverage.

To stress workforce safety, in 2009 APP-China Forestry focused on improving:

#### Anti-corruption and legal compliance:

Building an ethical corporate culture through Code-of-Conduct enforcement and awareness activities, this included educational programs, internal audits and investigations. When internal investigations of major fraud and corruption are conducted, outcomes are shared and publicized to all employees, to demonstrate transparency and deliver a cautionary message. This reinforces management's message to employees that APP-China is unwavering in its expectation that employees conduct themselves ethically.

#### Fire prevention and control:

APP-China Forestry actively reviews and upgrades its fire management system and structure. It conducts fire awareness training, fire evacuation drills, upgrades fire fighting equipment, and establishes fire breaks in its plantations. For example, in Guangxi Zhuang Autonomous Region, Nanning City, following the promulgation of the new *Fire Prevention Law of the People's Republic of China*, Guangxi district forestry unit organized employees to participate in a comprehensive fire drill organized by the Nanning High-tech Industrial Development Zone.

#### Health and safety:

APP-China Forestry organized employees for regular health checkup and training sessions on occupational health and safety. Guangdong district forestry unit's employees participated in the common illnesses and accidental injuries prevention training held by the Guangdong Science, Health and Education Center in promotion of "The 100-day nationwide action campaign for safer production." In addition, APP-China Forestry persuaded its contractors to obtain group accident insurance coverage for their workers. In Hainan district forestry unit's nursery, emergency evacuation drills were organized to prepare workers for fires, chemical leaks and other natural disasters. Overall, APP-China Forestry's safety performance has continued to improve over the years.

APP-China Forestry work-related fatalities and injuries rates

|                                                   | 2007 | 2008 | 2009 |
|---------------------------------------------------|------|------|------|
| Number of work-related fatalities (No. of Person) | 2    | 0    | 0    |
| Number of work-related injuries (No. of cases)    | 19   | 15   | 8    |





## Forest plantation health and security

### Forest fire prevention and control

In 2009, hit by extreme drought, the southern regions of China suffered an escalation of forest fires. Aggravating the situation, local farmers used traditional slash-and-burn agriculture practices during the harvest season, and openly burning incense and joss-paper offerings during Tomb Sweeping Festival. These practices further increased the fire risks and stress on APP-China Forestry operations, especially during the dry season. To address such challenges, APP-China Forestry made forest fire prevention and control a high company-wide priority. Through strengthening and enforcing its forest fire preventive measures, management, reporting and contingency system, APP-China Forestry was able to reduce the forest fire risk measurably. This included the establishment of fire breaks, increased road accessibility in the event of an emergency, increased fire patrols, an improved fire reporting system and network, reduction of fire ignition sources, a strengthened fire-fight taskforce, and multiple fire drills and public awareness campaigns. With all the forest fire prevention efforts, APP-China Forestry saw reductions in its forest plantation fire rates in 2009, compared to 2008, and a more stable and safe environment for growth.

### Illegal logging prevention

Safeguarding forest plantation resources is an important part of sustainable plantation management. To address the pervasive issues of forest crime activities, such as illegal logging in some parts of Hainan and Guangxi Provinces, in 2009 APP-China Forestry made them a high priority.

**Joint-effort with government and local Forest Security Bureau:** In 2009, APP-China Forestry cooperated with local governments in joint efforts to maintain forest security in crime regions. For example, some joint-effort activities with Hainan Province's government included:

- In Lin Gao County, a dedicated communication channel was established to process reported forest crime cases; and a special taskforce, the plantation unit, was established to assist Forest Security Bureau in forest crime law enforcement.

- In Dan Zhou City, APP-China Forestry collaborated with city forest security to create a special task force dedicated to forest crime prevention.

- In Dong Fang County, major forest crime cases were brought to higher-level government officials' attention and this led to increased support and resources to mitigate forest crime activities.

- APP-China Forestry actively assisted forest security forces in forest crime reporting and investigations, such as illegal felling activities, illegal processing factories and illegal timber transport.

**Joint-effort with local community:** APP-China Forestry increased local community engagement activities and created numerous programs to enhance forest crime prevention. This included public campaigns in rural areas to increase local legal awareness. At the same time, APP-China Forestry sets up reward incentives to encourage communities to form "forest watch" programs and report illegal forest activities. In 2009, over 21,600 brochures were distributed to community areas and more than 1,600 promotion boards were posted.

**Building a harmonious relation with local community and supporting rural socio-economic development:** APP-China Forestry believes that enhancing socio-economic development in areas where it operates will improve local security conditions and provide a stable and favorable



business environment for long-term development. In 2009, APP-China Forestry continued to improve the living standards in communities where it operates by providing employment and business opportunities for contractors and suppliers. APP-China Forestry supports community development with ongoing programs to alleviate rural poverty, scholarship programs to improve education, infrastructure and transportation improvements to increase accessibility, health services and better sanitation to improve residents' well-being.

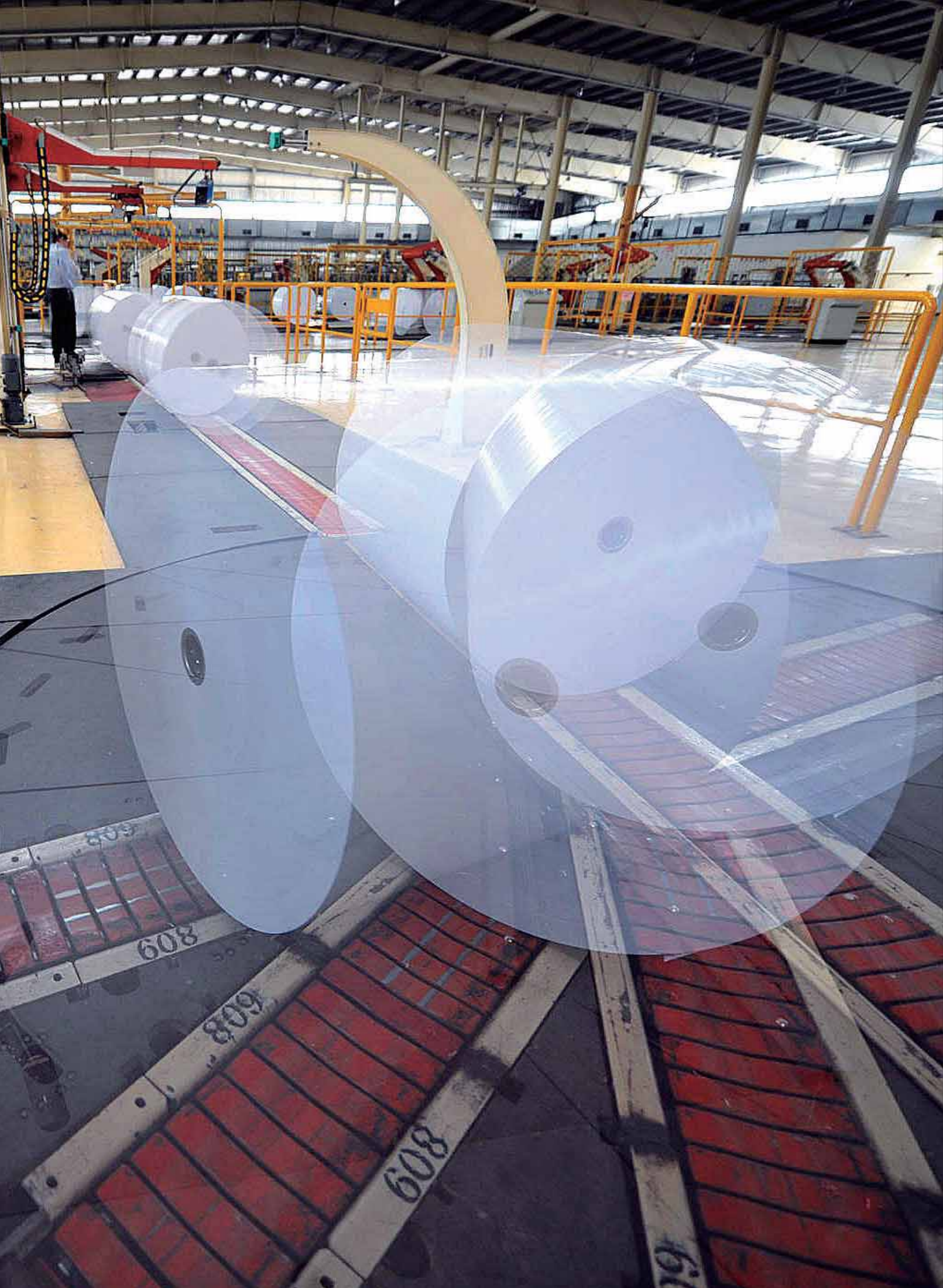
Internally, APP-China Forestry adopts three key strategies to manage critical risks and protect its forest plantation resources; take appropriate measured actions and steps to solve a problem, support critically affected regions, and form special taskforces to drive results. Specific measures include the creation of forest plantation rangers, optimization of management systems and establishment of internal responsibility systems to ensure forest crime cases are handled effectively. In areas where illegal logging is a major problem, exchange platforms are established to share experience and information. To drive results, APP-China Forestry introduced a program where 10 model forest plantation units and 10 elite forest plantation rangers are acknowledged and honored for their performances.

### Pests and diseases prevention and control

For pest and disease risk management, APP-China Forestry adopts a preventive approach; coupled with an extensively science-research based integrated management system. To ensure early detection for prompt eradication, APP-China Forestry has set up a comprehensive pest & disease monitoring and reporting system for developing trends. Besides, APP-China Forestry ensures that all its foresters are equipped with up-to-date knowledge on common plantation pest and disease prevention and control. APP-China Forestry is committed to controlling pests using safer methods that have a lower environmental impact. It seeks to reduce its use of chemicals and has adopted protocols that ban the use of chemicals banned by WHO IA and IB and Chinese laws. APP-China Forestry has implemented measures and monitoring systems to ensure requirements are practiced and met through all operation procedures.

APP-China Forestry shall continue to practice sustainable plantations. Therefore abide by all legal terms set by the government, pursue scientific development, uphold environmental conservation policies and safety management principles for continuous improvement in managing and realizing sustainable plantation development.







# Sustainable Pulp and Paper Production

As the paper industry utilizes natural resources, it must be extremely sensitive to the environment. Its most important corporate social responsibility is to be environmentally friendly. As one of the world's leading pulp and paper producers, APP-China must protect the environment and surrounding biodiversity, cope with climate change and incorporate sustainable pulp and paper production protocols into daily operations. In 2009, APP-China continued to improve and promote clean production, energy savings and emission reductions. APP-China increased its resource utilization rate to minimize its impact on the environment with advanced technologies and research-based and scientific management. APP-China is devoted to achieving collaborative economic, environmental and social development by managing plantation ecosystems and encouraging sustainable pulp and paper production.

## Sustainable Pulp & Paper Production Management System

Based on the PCwC, APP-China is steadfast in its commitment to clean production, energy savings and emission reductions. With the application of advanced technologies and increasing investment in refining management systems, APP-China has implemented water and energy saving practices, promoted resource, pollution and carbon reduction initiatives, and introduced efficiency improvements. APP-China believes these steps are the backbone of sustainable development for the paper industry in China.

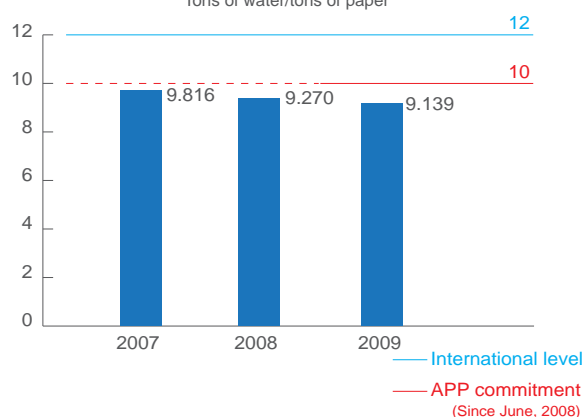
In line with its relentless efforts to lead by example, APP-China advocates for the accountability of other paper and pulp makers in terms of their corporate operations and clean production initiatives. APP-China hopes to encourage more industry players to help solve the problems of resource shortages, environmental

deterioration and economic development in China. For example, APP-China channels large investments in resources, equipment and manpower, makes the most of the company's unique MBOS platform to build mechanism, set clear targets and embrace cross-functional exchanges to drive all the performance indicators across the company, in its departments and for individual employees. With a sustainable pulp and paper production management system, APP-China translates awareness into practice.

Having adhered to GB 3544-2008 *Discharge Standard of Water Pollutants for Pulp and Paper Industry*, APP-China's six main pulp and paper mills met or exceeded the national standards in all emission indicators. In 2009, no environmental pollution penalty cases involved these six main mills. In addition, APP-China treated 100 percent of its solid waste at its six main mills.

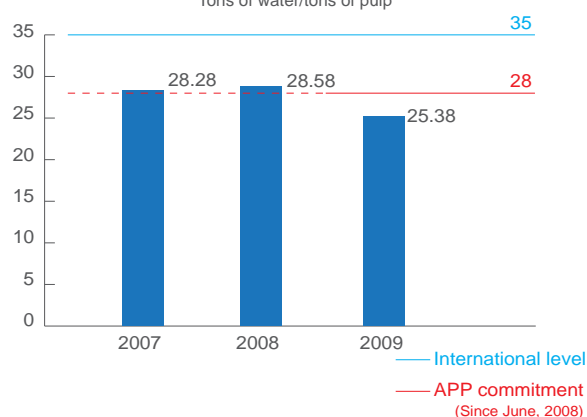
APP-China met or exceeded national and international standards in key environmental performances, such as water consumption per ton of paper/pulp, wastewater discharge per ton of paper/pulp, and COD emissions per ton of paper/pulp.

Annual average water consumption per ton of paper  
Tons of water/tons of paper



Note 1: The data is the average of all the paper mills included in the scope of report  
Note 2: International level data are from the *EU Environmental Protection Guidelines for Pulp and Paper Industry* (IPCC 2001)

Annual average water consumption per ton of pulp  
Tons of water/tons of pulp

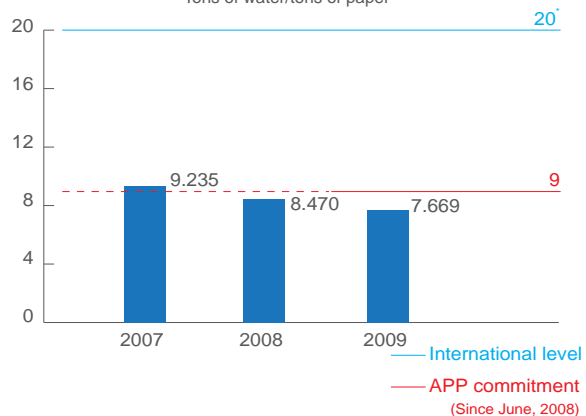


Note 1: The data is the average of all the pulp mills included in the scope of report  
Note 2: International level data are from the *EU Environmental Protection Guidelines for Pulp and Paper Industry* (IPCC 2001)



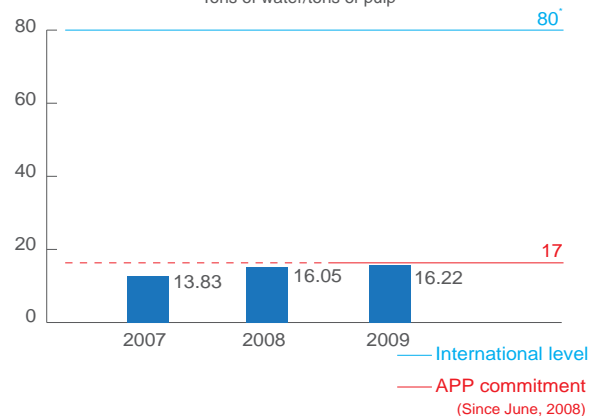


Annual average wastewater discharge per ton of paper  
Tons of water/tons of paper



Note: " " National standards effective May 1st, 2009. Source: GB 3544-2008 Discharge Standard of Water Pollutants for Pulp and Paper Industry

Annual average wastewater discharge per ton of pulp  
Tons of water/tons of pulp



Note: " " National standards effective May 1st, 2009. Source: GB 3544-2008 Discharge Standard of Water Pollutants for Pulp and Paper Industry

| Year | COD emissions per ton of paper (kg/ton) | National standards | COD emissions per ton of pulp (kg/ton) | National standards | International level* |
|------|-----------------------------------------|--------------------|----------------------------------------|--------------------|----------------------|
| 2007 | 0.64                                    | /                  | 1.29                                   | /                  | 8                    |
| 2008 | 0.58                                    | 6                  | 1.61                                   | 88                 |                      |
| 2009 | 0.47                                    | 2*                 | 1.51                                   | 16*                |                      |

Note 1: " " indicates data after conversion, source: GB 3544-2008 Discharge Standard of Water Pollutants for Pulp and Paper Industry

Note 2: International level data are from the EU Environmental Protection Guidelines for Pulp and Paper Industry (IPCC 2001)

| Water consumption per ton of paper (ton) |                |               |             |                 |             |                     | Water consumption per ton of pulp (ton) |                     |
|------------------------------------------|----------------|---------------|-------------|-----------------|-------------|---------------------|-----------------------------------------|---------------------|
| Year                                     | Gold EastPaper | Gold Huasheng | Gold Hongye | Ningbo Zhonghua | Ningbo Asia | International level | Hainan Jinhai                           | International level |
| 2007                                     | 7.46           | 10.24         | 12.30       | 12.24           | 13.82       | 12-18 *             | 28.28                                   | 35-41 *             |
| 2008                                     | 7.19           | 8.94          | 12.62       | 11.66           | 12.54       |                     | 28.58                                   |                     |
| 2009                                     | 7.00           | 9.06          | 11.58       | 12.01           | 12.38       |                     | 25.38                                   |                     |

Note: " " International data are from the EU Environmental Protection Guidelines for Pulp and Paper Industry (IPCC 2001)

## 1. Responsible Procurement

In 2009, APP-China fulfilled its 2007 commitment to ensure all used raw materials were legally sourced fibers originating from forest plantations. APP-China prohibits the use of raw materials obtained from the destruction of high conservation value forests, purchases only legal raw materials from home and abroad and strictly adheres to national and international timber trading laws and regulations, including but not limited to *Forest Law, Regulation on Plant Quarantine, and Administration of Timber Operation and Transportation*.

**APP-China overview of wood fiber consumption**

| Year | Total use of wood fiber<br>(ton) | Total amount of wood fiber<br>from forest plantations (ton) | Total amount of PEFC-certified<br>wood fiber (ton) |
|------|----------------------------------|-------------------------------------------------------------|----------------------------------------------------|
| 2007 | 4,495,803.6                      | 4,495,803.6                                                 | No statistics                                      |
| 2008 | 5,073,413.62                     | 5,073,413.62                                                | No statistics                                      |
| 2009 | 4,540,017.47                     | 4,540,017.47                                                | 1,047,637                                          |

**Hainan Jinhai Pulp & Paper overview of wood fiber procurement**

| Year | Total amount (ton) | China (ton)  | Imported (ton) |
|------|--------------------|--------------|----------------|
| 2009 | 5,430,365.17       | 1,843,364.10 | 3,587,001.07   |

**APP-China overview of wood pulp procurement for its main paper mills**

| Year | Total amount (ton) | China (ton) | Imported (ton) |
|------|--------------------|-------------|----------------|
| 2009 | 1,921,312          | 1,314,021   | 607,291        |



### We abide by national and international timber trading laws

APP-China requires that all its raw materials go through strict and independent audits and be certified as legal from the country of origin, with forest certification, chain of custody (CoC) or related legal certificates, such as PEFC, LEI, SGS and GFS. APP-China stipulated *Raw Material Procurement Practice Guidelines* and *Raw Materials Procurement Contract* are designed to ensure raw material acquisition follows strict processes and the practices of its suppliers are sustainable. APP-China also regularly inspects wood chip plants to ensure they operate with legally sourced wood.

### 2. PEFC-CoC certification

In 2009, APP-China applied for more PEFC-CoC certifications. This was to verify the company's continued efforts to protect the environment, act in a socially responsible manner, promote sustainable development of forest resources and create long-haul environmental protection activities.

Hainan Jinhai Pulp & Paper obtained PEFC-CoC certification in February 2009. By the end of 2009, 12 China-based enterprises of APP-China received PEFC-CoC certification, which ensures more legally sourced timber was used for pulp and paper making.

**APP-China PEFC-CoC certified companies**

| No. | APP-China companies                                           | Certificate no.    | Scope of certification                         |
|-----|---------------------------------------------------------------|--------------------|------------------------------------------------|
| 1   | Gold East Trading (Hong Kong) Co., Ltd.                       | SGS-PEFC/COC-0249  | Sales                                          |
| 2   | Gold East Paper (Jiangsu) Co., Ltd                            | SGS-PEFC/COC-0263  | Printing paper                                 |
| 3   | Gold Huasheng Paper (Suzhou Industrial Park) Co., Ltd         | SGS-PEFC/COC-0328  | Printing paper                                 |
| 4   | Ningbo Zhonghua Paper Co., Ltd                                | SGS-PEFC/COC-00334 | Packaging paper                                |
| 5   | Ningbo Asia Pulp and Paper Co., Ltd                           | SGS-PEFC/COC-0360  | Packaging paper                                |
| 6   | Gold Hongye Paper (Suzhou Industrial Park) Co., Ltd           | SGS-PEFC/COC-0462  | Household paper                                |
| 7   | Gold Shengpu Paper Products (Suzhou Industrial Park) Co., Ltd | SGS-PEFC/COC-0533  | Photocopy paper, stock forms, non-carbon paper |
| 8   | China Union (Macao Commercial Offshore) Co., Ltd.             | SGS-PEFC/COC-0339  | Sales                                          |
| 9   | Top Harvest Asia Co., Ltd.                                    | SGS-PEFC/COC-0352  | Sales                                          |
| 10  | Jin Feng Yuan Paper (Shanghai) Co., Ltd.                      | SGS-PEFC/COC-0628  | Food packaging                                 |
| 11  | Hainan Jinhai Pulp & Paper Co., Ltd.                          | SGS-PEFC/COC-0805  | Pulp                                           |
| 12  | Yalong Paper Products (Kunshan) Co., Ltd.                     | SGS-PEFC/COC-0787  | Notebook, paper bag                            |



### Green procurement

Hainan Jinhai Pulp & Paper upholds the company's philosophy of sustainable plantation ecosystems and clean pulp and paper production to balance economic, social and ecological performance. Hainan Jinhai Pulp & Paper pledges that its timber supply chain prohibits the purchase of timber or raw wood fiber from high conservation value forests such as natural forests and tropical rainforests. All harvested timber must be legally transported. Harvesting permits, wood transport permits, plant quarantine certificates are issued from local forestry administrative departments, truckload stack measurement carried out and abide by "one-vehicle-one-certificate" rule, all the timber will be transported via a stipulated route in a planned period of time.

Since it obtained the PEFC-CoC certification in November 2007, Gold East Paper has used 100 percent quality wood pulp for papermaking; 86.92 percent is Elemental Chlorine Free (ECF) and Totally Chlorine Free (TCF) pulp, sourced mainly from Hainan Province (China), Southeast Asia, Brazil and North America. In order to fulfill its corporate social responsibility and reduce COD emissions, raw and additional materials, including pulp, chemicals and packaging, have been included in the carbon footprint project. During the raw material procurement process, Gold East Paper requires its suppliers to provide the China Compulsory Certificate (3C) for those products as required by national law. Gold East Paper obtained the procurement permit issued by police offices. In addition, a Volatile Organic Compounds (VOCs) audit was conducted as required by customers.





### 3. Advanced technologies

APP-China made significant investments in building a state-of-the-art laboratory and introducing cutting-edge papermaking technologies, facilities and production lines. In the pursuit of excellence, APP-China set ambitious goals to lay a solid foundation for clean production

To translate carbon and energy savings into daily practice, Hainan Jinhai Pulp & Paper set the highest environmental requirements throughout the procurement process. Moreover, Hainan Jinhai Pulp & Paper requires its suppliers to design and produce world-class facilities strictly based on modern technologies and R&D. Suppliers must maximize their resource utilization rate based on the principles of "recycling economics."

In 2009, Hainan Jinhai Pulp and Paper introduced the cutting-edge paper machine 2 made by VOITH in Germany to produce art board and fine paper. It produces the world's widest paper and is the world's longest paper machine.

Gold Hongye adopts the latest processing and packaging equipment to manufacture household products. To produce quality products, Gold Hongye made the most of two Andritz Crescent Former Tissue Machines imported from Europe. They are the world's largest, most advanced machines, able to produce paper at a speed of 2,150 meters/minute. The company operates 90 automated assembly lines, 20 percent of them imported from Italy and Germany and 80 percent from Japan and Taiwan. In 2009, Gold Hongye was named one of the third-ranked high-tech companies operating in Suzhou Industrial Park.



#### Modify production lines to meet the targets of waste reduction and product quality

Gold Hongye extensively applied management methods, such as SEIRI, SEITON, SEISO, SEIKETSU, SHITSUKE and SAFETY (6S), to on-site process improvement. This move increased work efficiency and reduced waste by rebuilding and refining RT3 processes, RT3 parent rolls, RT3 finished product transportation, BF3 lines conjunctions, 1F case-packer conjunctions, 1F multiple wrapper transporter, 1F12 transporter lines and BF folding uniformity. Systematic adjustments and speed enhancements were introduced to improve operational efficiency, guarantee waste reduction and upgrade product quality to make continuous investments in equipment and technologies, such as the BF color box diverter, BF color box diverter exit, IF multiple wrapper folding & sealing, BF13 carton sealing, IF multiple wrapper thermal sealing, HK QuanLi production lines and HT triple folding.

Note: RT: roll towel, BF: box facial; IF: interfold facial; HK: handkerchief; HT: hand towel



#### 4. Clean production

To be a good corporate citizen, APP-China constantly strives to balance industrial, environmental and social growth. APP-China strictly follows the principles of "Reduce, Reuse and Recycle (3R)" to advocate recycling economics; to maximize economic output, minimize waste and reduce resource consumption. Through technical and managerial innovation, APP-China improves energy savings, and emission reductions to achieve clean waste water, gas emission and solid waste management. In 2009, APP-China met and exceeded national standards and international levels in all of the key discharge indicators for its main paper and pulp mills in the scope of report.

#### Improve energy and resources utilization rate

In 2009, APP-China continued to raise the bar for the energy and resources utilization rates by adopting best practices to protect natural resources and the environment. APP-China's main mills, such as Hainan Jinhai Pulp & Paper, Gold East Paper, Gold Huasheng, Ningbo Zhonghua and Ningbo Asia took advantage of their power plants and steam boilers to sell electricity to adjacent communities and companies. As a result, APP-China has converted its energy distribution into a beneficial contribution to society. Through this energy sharing and effective utilization, APP-China decreased consumption of energy, materials and water on a yearly basis through technical innovation and better management among six main mills.

**2009 APP-China overview of energy utilization for six main mills**

| Energy utilization (GJ)                | Gold East Paper | Gold Huasheng | Gold Hongye   | Ningbo Zhonghua | Ningbo Asia    | Hainan Jinhai  |
|----------------------------------------|-----------------|---------------|---------------|-----------------|----------------|----------------|
| Coal                                   | 270,001,291.2   | 101,133,371.7 | 34,745,990.41 | 81,155,681.55   | 123,523,623.66 | 69,358,186.11  |
| Gasoline                               | 61,733.27       | 43,463.62     | 27,101.48     | 29,686.56       | 23,226.59      | 59,274.79      |
| Diesel                                 | 1,871,193.938   | 617,003.832   | 139,241.72    | 189,815.18      | 336,801.52     | 368,896.06     |
| Fuel oil                               | 3,633,545.83    | 0             | 0             | 0               | 98,751.84      | 2,854,665.84   |
| Pulp making Black liquor & biofuel     | 0               | 0             | 0             | 0               | 0              | 324,245,244.19 |
| Natural gas                            | 20,712,152.14   | 3,015,695.14  | 3,670,560.64  | 0               | 0              | 20,565,425.94  |
| LPG                                    | 2,810,696.08    | 108,838.25    | 182,300.31    | 0               | 0              | 0              |
| Total electricity consumption (10 MWh) | 170,383         | 36,520.07     | 18,628.57     | 43,515.2        | 73,565.08      | 136,865.23     |

**2009 expenditure of energy consumption per ten thousand RMB output value for six main mills**

|                     | Gold East Paper | Gold Huasheng/Gold Hongye | Ningbo Zhonghua | Ningbo Asia | Hainan Jinhai |
|---------------------|-----------------|---------------------------|-----------------|-------------|---------------|
| (ton standard coal) | 0.89            | 1.26                      | 1.36            | 1.16        | 0.498         |

Note: the expenditure of energy consumption per ten thousand RMB output value indicates the volume of energy consumption per ten thousand industrial outputs (ton standard coal)

### Improved wastewater treatment and recycling

In 2009, with advanced paper and pulp making technologies and stringent management rules, APP-China's main mills have all reduced water and chemical consumption. Moreover, water used during the manufacturing process was continually recycled

for reuse. As a result, wastewater discharge was reduced and was cleaned using a third grade wastewater treatment system. The resulting wastewater discharge exceeded requirements of national standards.

#### 2009 APP-China water efficiency for six main mills

| Water consumption, treatment and discharge (ton)          | Gold East Paper | Gold Huasheng | Gold Hongye | Ningbo Zhonghua | Ningbo Asia | Hainan Jinhai |
|-----------------------------------------------------------|-----------------|---------------|-------------|-----------------|-------------|---------------|
| Total water consumption (ton)                             | 15,957,765      | 5,438,380     | 1,661,822   | 6,783,064       | 11,305,639  | 28,386,312    |
| Total water discharge (ton)                               | 12,223,893      | 3,907,446     | 1,380,178   | 7,292,853       | 9,724,329   | 18,143,000    |
| Wastewater treated (ton)                                  | 15,020,233      | 3,907,446     | 1,380,178   | 11,750,109      | 12,997,544  | 18,143,000    |
| Annual average water consumption per ton paper/pulp (ton) | 7.00            | 9.06          | 11.58       | 12.01           | 12.38       | 25.38         |

#### 2009 APP-China effluent to water for six main mills

| Effluent Indicator (mg/L)                                     | Year 2009               | Gold East Paper | Gold Huasheng/ Gold Hongye | Ningbo Zhonghua | Ningbo Asia | Hainan Jinhai |
|---------------------------------------------------------------|-------------------------|-----------------|----------------------------|-----------------|-------------|---------------|
| BOD monthly average discharge concentration                   | Discharge concentration | 5               | 5.3                        | 10.87           | 10          | 10            |
|                                                               | Standard limit          | 30              | 20*                        | 30              | 30          | ≤30           |
| COD monthly average discharge concentration                   | Discharge concentration | 50              | 49.5                       | 75.65           | 63.4        | 93.00         |
|                                                               | Standard limit          | 100             | 60*                        | 100             | 100         | ≤100          |
| Suspended solids (SS) monthly average discharge concentration | Discharge concentration | 22              | 19.24                      | 26.25           | 24          | 43.00         |
|                                                               | Standard limit          | 50              | 30                         | 50              | 50          | ≤70           |

Note: "\*" data source: Jiangsu Province Environment Protection Bureau 《Jiangsu EC(2004) No. 75 Document》

#### 2009 APP-China water reuse for six main mills

| Year     | Gold East Paper | Gold Huasheng | Gold Hongye | Ningbo Zhonghua | Ningbo Asia | Hainan Jinhai |
|----------|-----------------|---------------|-------------|-----------------|-------------|---------------|
| 2007 (%) | 95.6            | 96.0          | 98.32       | 92.3            | 92.35       | 94.7          |
| 2008 (%) | 95.9            | 96.5          | 97.67       | 92.3            | 91.8        | 94.9          |
| 2009 (%) | 96.2            | 97.2          | 98.86       | 92.8            | 92.05       | 94.9          |

#### 2009 APP-China reuse of reclaimed water for six main mills

| Year     | Gold East Paper | Gold Huasheng | Gold Hongye | Ningbo Zhonghua | Ningbo Asia | Hainan Jinhai |
|----------|-----------------|---------------|-------------|-----------------|-------------|---------------|
| 2007 (%) | 7               | 0             | 0           | 29.7            | 17.7        | 2.38          |
| 2008 (%) | 12              | 0             | 0           | 27.9            | 18.6        | 1.54          |
| 2009 (%) | 15              | 0             | 0           | 31.4            | 14.1        | 0.43          |

Note: Gold Huasheng and Gold Hongye built their reclaimed water system in December 2009. Both will report data in 2010.

### Ningbo Asia built Fenton wastewater treatment system

In November 2009, the 32 million RMB Fenton wastewater treatment system went into operation. Compared with traditional wastewater treatment facilities, this world-class Fenton system boasts a high discharge reduction, powerful treatment capability and smaller in floor space. This sophisticated chemical oxidation treatment system is designed to handle advanced treatment following the bio-treatment process at Ningbo Asia. It can reduce COD wastewater discharge concentration from 100mg/liter to 80mg/liter and has a daily treatment capacity of 40,000 m<sup>3</sup>. The

system is designed to meet the 2011 national standards for wastewater discharge in the papermaking industry ahead of the competition. The following formula illustrates how it works:



As a result, it reduces COD wastewater concentration by decomposing organic pollutants that are hard and non biodegradable in wastewater, while removing the odor.





### Hainan Jinhai Pulp & Paper promotes water savings and wastewater reduction activities

In 2009, Hainan Jinhai Pulp & Paper made progress in reducing water consumption and wastewater. It reduced water unit consumption at its pulping and recausticizing facilities, improved water recycling at the ClO<sub>2</sub> plant with a closed system, increased cooling water tower concentration, reduced fresh water consumption by increasing pulping facility's clean condensed water volume. The progress also included a reduction of clear water volume, repair of leaking water tubes and reduction of water unit consumption by the Multi-fuel Boiler (MB), Recovery Boiler (RB) and Vacuum Evaporator (VE). Water consumption has decreased from 28.58 m<sup>3</sup>/ton of pulp in 2008 to 25.38 m<sup>3</sup>/ton of pulp in 2009 with annual water savings and wastewater discharged reduction volume at 3.58 million m<sup>3</sup>. In 2009, Hainan Jinhai Pulp & Paper was certified as the pilot company to pass the clean production audit in Hainan Province.



### Ningbo Zhonghua increases wet end dewatering capacity

Given that high basic weight dewatering velocity is not desirable at a higher speed, Ningbo Zhonghua set up a task force to apply advanced technologies to boost wet end dewatering capacity to save energy, reduce discharge and improve resource utilization.

For the second half of 2009, production and R&D departments of Ningbo Zhonghua collaborate with its chemical product suppliers to develop new process and technologies, and have successfully introduced a new highly effective water filtering agent (thermosetting polymer) into its production facility, following numerous experiments. This water filtering agent is composed of cross-linking copolymer with low molecular weight, with low cationic charge, high solubility in water and is applicable in PH environment ranging from 4 to 8 and would not be dissociated in the system. It reacts with fiber to form covalent bond, thus increasing the efficiency of the wet end dewatering of pulp, enhancing the tensile properties of paper and paperboard, such as stretch, bursting strength and stiffness. It will noticeably reduce backwater on the sheet after press, enhancing efficiency of heat drying speed process of the paper and paperboard and reduce steam usage. Actual compression dewatering rate increase by 1.5 percent, steam consumption reduced by 4.5 percent (in theory, 1 percent increase in compress dry rate, will reduce 3 to 4 percent of steam consumption for later part of production stages), pulp consumption will be reduced by 1.83 percent, at the same time, increase production capacity by 7.2 percent and reduced unit ton paper's electricity consumption by 6.9 percent.



### Gold Huasheng builds its own reclaimed water re-usage facility

At Gold Huasheng, nearly 20,000 tons of wastewater treated that met or exceeded the *Discharge Standard of Water Pollutants for Pulp and Paper Industry* promulgated in 2008 is discharged into the river daily. To further improve energy savings and emission reductions, and to achieve a 10 percent reduction for major pollutants within the 11th 5-year period, Gold Huasheng built a 34 million RMB reclaimed water re-usage system with a daily processing capacity of over 10,000 tons. In line with its mission of balancing environmental accountability and economic performance in terms of recycling and reuse, the water re-usage system began to operate in August 2009 and was in full operation by December 2009. The newly built system will recycle 7,000 tons of wastewater used in the water consumption for boiler, significantly reducing the current 20,000 tons of wastewater discharged daily. Moreover, Gold Huasheng expects to reduce 128 tons/year of COD emissions and increase the volume of water recycled to about 2.56 million m<sup>3</sup>, thus reducing the fresh water consumption and SS discharge to 93 tons/year.

### Relentless efforts to reduce air emission

In 2009, with technical and managerial projects in place, APP-China's main mills greatly reduced air emission. They made the most of their alkali recovery boiler systems to combust odorous gas generated during the process of pulp making. APP-China's main mills also took good care of their waste gases produced during the process of pulp bleaching and from chemical use during production. Furthermore, a highly efficient electrostatic precipitator was used to collect suspended solids (SS) caused by the treatment boiler and lime kiln. All measures ensure the gas emissions were significantly lower than national environmental standards.

2009 APP-China emissions to air for six main mills

| Emission Indicators (mg/m <sup>3</sup> )                       | Year 2009              | Gold East Paper | Gold Huasheng / Gold Hongye | Ningbo Zhonghua | Ningbo Asia | Hainan Jinhai |
|----------------------------------------------------------------|------------------------|-----------------|-----------------------------|-----------------|-------------|---------------|
| Annual average sulfur dioxide (SO <sub>2</sub> ) concentration | Emission concentration | 555/294         | 138.80                      | 569.21          | 159         | 130.73        |
|                                                                | Standard limit         | 2100/400        | 400                         | ≤1200           | 400         | ≤1200         |
| Annual average Nitrogen Oxide (NO <sub>x</sub> ) concentration | Emission concentration | 177/166         | 102.90                      | 74.19           | 183         | 370.35        |
|                                                                | Standard limit         | 1100/450        | 250                         | /               | 450         | ≤650          |
| Annual average suspended solids (SS) concentration             | Emission concentration | 61/29           | 69.60                       | 81.24           | 27          | 33.33         |
|                                                                | Standard limit         | 300/50          | 200                         | 250             | 50          | ≤200          |

Note: many boilers of Gold East Paper were built in different times. Therefore, their standard limits vary. Please refer to details from *Gas Emission Standards for Thermal Power*.



### Enclosed eco-friendly coal storage

Ningbo Asia built a 4 million RMB coal storage facility to store and transport coal in an fully enclosed system. This in turn, established Ningbo Asia as one of the first companies to adopt this kind of environmental facility in China. With two sets of Circulating Fluided Bed (CFB) and two turbine generators that operate at 62.4MW, the new de-sulfurization rate is over 90 percent. The system has an advanced on-line monitoring system in compliance with national standards. When the system's electrostatic precipitator efficiency stabilized at 99.8 percent, neighboring communities and the surrounding environment were assured good and clean air quality.



### Enclosed and highly efficient odorous gas combustion system

During the cooking process of wood chips, non-condensable gas (NCG) is produced, composing of alcohol and ethers. To control NCG pollutants to air, Hainan Jinhai Pulp & Paper built a fully enclosed odorous gas collection and combustion system to convert odorous gases into heat energy. The boiler is a good example of how the company not only to reduce pollutants but also to recycle production by-products into energy.



### CFB desulfurization renovation and modernization

To improve the de-sulfurization rate of the boiler and further reduce SO<sub>2</sub> emission concentrations, Ningbo Zhonghua upgraded two sets of 220t/h CFB boilers at its thermal power plant in 2009. To integrate the new equipment and technologies into the existing limestone system, pneumatic pressure ash handling system and bottom ash system, it was necessary to increase the concentration and evenness of the limestone in the boiler by adding more feeding, more input points and by refining input locations. In doing so, CaO and sulphur were well mixed to complete the reaction. The result was an improved desulfurization efficiency rate, a renovation of the pneumatic pressure ash handling system and bottom ash system, which ensured the balance of input and output materials. As expected, testing data released by Ningbo City Environmental Protection and Inspection Center indicated that desulfurization rate of two renovated CFBs has increased from 75 percent to more than 90 percent. SO<sub>2</sub> emission concentration dropped to less than 400 mg/Nm<sup>3</sup>. The renovation project did not affect daily operations. Furthermore, during the annual inspection of the boiler's interior, the upgrade was found to cause no damage of the boiler tubes. After testing, total volume of SO<sub>2</sub> discharge dropped from 1,832.76 tons in 2008 to 1,385.75 tons in 2009.

## Solid waste recycling and reuse

In 2009, APP-China made the most of the solid waste generated in the pulp and paper making process, including bark, wood chips, pulp residue, and sludge. APP-China never ceases to minimize its impact to the environment. It actively limited solid waste disposal and applied combustion treatment to the power boiler and adopted calcinations to re-collect and reuse lime mud in the lime kiln.

**2009 APP-China solid waste proposal for six main mills**

| Indicators                            | Gold East Paper | Gold Huasheng / Gold Hongye | Ningbo Zhonghua | Ningbo Asia | Hainan Jinhai |
|---------------------------------------|-----------------|-----------------------------|-----------------|-------------|---------------|
| Sludge (ton)                          | 69,628          | 31,340                      | 97,542.84       | 194,446     | 204,609       |
| Fly ash (ton)                         | 310,000         | 102,024                     | 121,025.94      | 186,451     | 62,162        |
| Dregs & Grit (ton)                    | 82,752          | 54,933                      | 5,665.1         | 33,647      | 54,611        |
| Hazardous waste disposal volume (ton) | 304             | 114.25                      | 71.98           | 1.76        | 8             |
| Solid waste treatment rate (%)        | 100             | 100                         | 100             | 100         | 100           |



### Reuse of bottom ash

Gold East Paper commissioned Zhejiang Shenghua Bottom Ash Development Co., Ltd. (Shenghua) to reuse the bottom ash generated from its production, which was mainly used to build roads and produce building materials and bricks. To adapt to market changes and ensure the best lifecycle management, Gold East Paper signed long-term agreements with its contractors and encouraged Shenghua to use bottom ash to develop new wall materials, such as aerated concrete blocks made from coal burned ash that is autoclaved. The technology and technique used to recycle bottom ash into wall materials was adopted from a research project conducted at Wuhan University. The project was sponsored and encouraged by Zhenjiang City Wall Material Reform Office, as it tried to produce non-clay materials for walls. This initiative answered the need for wall material innovation and ensured the total reuse of bottom ash generated by Gold East Paper every year. The result was the total recycling of the bottom ash, a first for the paper and pulp industry. From 2007 to 2009, Shenghua reused 0.2269 million tons, 0.2342 million tons and 0.31 million tons of bottom ash.



### Waste paper recycling

Recycled paper consists mainly of raw materials and some municipal waste paper pulp, put through a 10-step process to sort, clean, filter and purify the product. Paper is made from wood pulp or recycled waste paper pulp fiber, ash (filling and coating), water and other chemicals. There are large differences in the composition of waste paper and wood pulp used for different kinds of paper. Using waste paper as a raw material in the production of recycled paper will reduce black liquor, which poses significant environmental impact and is difficult to treat. So the reduction of black liquor is significant to protect the environment and promote sustainability. Moreover, greater use of recycled paper will reduce the overall paper making industry's impact on the environment, and save large amounts of timber and reduce the use of chemicals. Ningbo Asia insists on substituting up to 50 percent of raw materials with recycled paper in its finished products to promote clean paper making.

Advanced technologies helped to transform waste paper into quality paper products. This is referred to small cycle of paper making in the industry. In 2008 and 2009, consumption volume of waste paper accounted for about 0.4 million tons for Ningbo Asia.



### Energy savings and discharge reduction in full swing

In 2009, APP-China actively promoted energy savings and discharge reduction initiatives to minimize its impact on the environment at the mills, through the supply chain and throughout its offices. APP-China's energy consumption and pollutant indicators were significantly lower than those average industry rates.



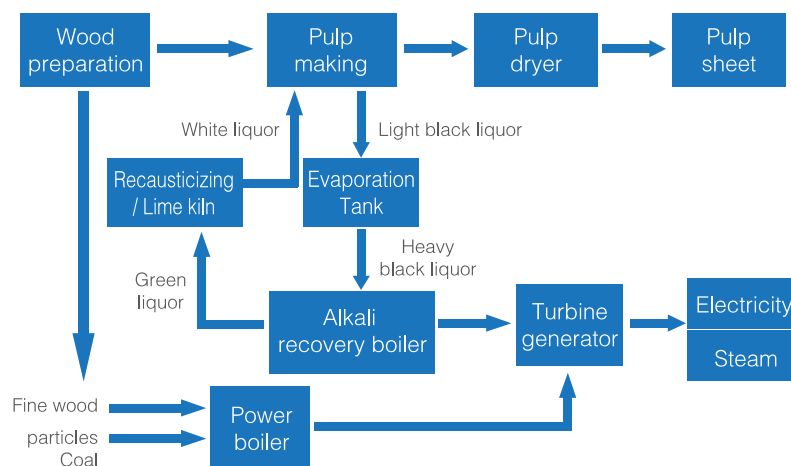
### Gold Huasheng in charge of sludge incineration

Experiments showed that production by-product, sludge contained about 40 percent of  $\text{CaCO}_3$  and produced about 1,447 kJ/kg of heat when incinerated. Sludge incineration is a good example of energy savings, emission reductions and production cost control. In 2009, Gold Huasheng incinerated 29,758 tons of sludge to produce energy, rather than using 1,980 tons of coal and 4,000 tons of limestone – a win-win solution for the environment and the company's balance sheet.

### High energy recovery and high efficient material recycling alkali recovery system

Hainan Jinhai Pulp & Paper built a highly efficient alkali recovery system. The whole system recovers 97 percent of the total volume of alkali used in production. Heat energy generated by burning recovered lignin meets 70 percent to 80 percent of the mill's total heat energy requirement. The heat energy generated from alkali recovery system substitutes for around 920,000 tons of standard coal consumption per year. 100 percent of white mud generated by the recausticizing process goes back to the alkali recovery system for reuse, while the green mud that is generated is recovered to produce cement. The amount of recycled water is 24,340 m<sup>3</sup> in the whole system.

Alkali recovery system



Note: Recausticizing: green liquor from recovery boiler reacts with lime to produce  $\text{NaOH}$  (major element of white liquor) and  $\text{Na}_2\text{CO}_3$  (lime mud). After separating the white liquor from the lime mud, the white liquor is sent to the digester as the boiling liquor. After being washed, the lime mud and residual alkali are recycled, sent to a lime kiln where they are burned and converted into lime. The regenerated lime is then sent to the recausticizing plant. The principle function of recausticizing (RC) and lime kiln (LK) is to create a reaction with lime and  $\text{Na}_2\text{CO}_3$  in the green liquor and to produce  $\text{NaOH}$ . It is used to increase recausticizing and to recycle mud residual for repeating use in this system.

### 'Reduce seven wastes in management' in action

To save resources and improve efficiency, Hainan Jinhai Pulp & Paper hosted the "Reduce seven major wastes in management" event in 2009. A series of activities were featured in the Jinhai newsletter, including the "Seven Wastes, Go Away" proposals and the "Q&A to identify wastes" column. The event was held to motivate employees to help pinpoint areas that need improvement to reduce the seven wastes in management; including wastage due to waiting time, poor coordination, poor utilization, lack of process, temporary solution to issues, low efficiency and unnecessary management costs.

### 'A Day without Cars' each month

Since September 2009, Gold Huasheng holds a monthly, "A Day without Cars", event to advocate low-carbon office management and practices.

With almost 3,000 employees, Gold Huasheng now has more than 200 car owners. "A Day without Cars" is set on the 20th every month. On average, fewer than 10 persons drive to work. Employees who often drive were encouraged to shift to shuttle buses and motorcyclists were encouraged to arrive to the office on foot. However, on the monthly "Day without Cars", Gold Huasheng provides 32 shuttle buses that are always filled. Some employees came up with the idea of "vehicle sharing" for employees taking the same route, which has become a daily practice now. If we assume that one car carries four employees, three fewer cars get on the road every day, and we will save 1,080 car trips each year. Apart from fuel savings and air pollutant reductions due to the shuttle buses and walking, there has been considerable energy consumption and emission reductions from the "vehicle sharing." Taking shuttle buses instead of driving, or walking instead of motorcycle riding once in a month has become part of everyday life for each employee at Gold Huasheng.

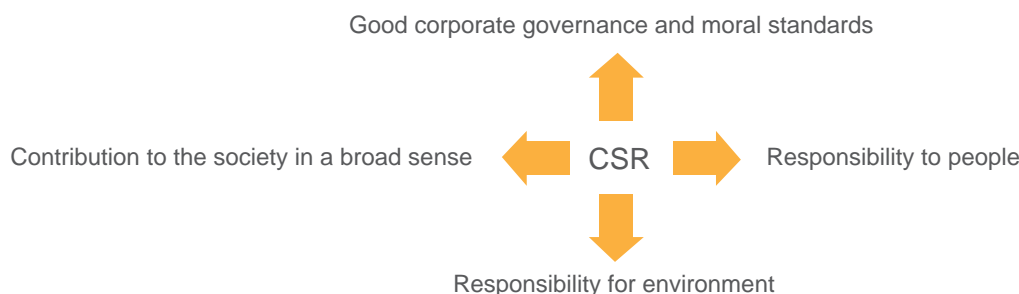




# Corporate Social Responsibility

Corporate Social Responsibility (CSR) is often considered to be charitable contributions. In fact, CSR is a combination of many things. The World Economic Forum specifies four aspects of CSR. First, it is good corporate governance and moral standards, including embrace of legal compliance, moral principles and business ethics. Second, it is responsibility to people, including employee safety, equal employment and anti-discrimination. Third, it is taking responsibility for the environment, including protecting the environment, addressing climate change and preserving bio-diversity. Fourth, it is contributing to society in the broad sense, including participation in public service and charity events, and eliminating poverty.

For the pulp and paper making industries, which are closely associated with environmental resources, the foundation of CSR must be built on minimizing the impact on the environment in operations and to taking responsibility for management and sustainable development. At the same time, it is critical for the paper and pulp making industries to grow and prosper with local communities.



In addition to proactively protecting the environment, addressing climate change and preserving biodiversity, APP-China is committed to being in harmony with social development. It extends CSR to every aspect of corporate operations, such as employee care and win-win co-operation with local communities, as well as long-term business development.

## 1. Localizing Operations

APP-China has been engaged with local communities and actively supports community activities, including economic development, job creation, infrastructure, school construction and the creation of skills workshops and vocational training programs. APP-China continually contributes to be in harmony with community development efforts.

### Investment strategy

Since it began to invest in China in 1992, APP-China has embraced the guiding principles of sustainable development and recycling economics. APP-China has made significant investments to establish more than 20 modern, large-scale pulp and paper mills, including Gold East Paper, Ningbo Zhonghua, Gold Huasheng, Gold Hongye and Hainan Jinhai Pulp & Paper as well as forest plantations in the Yangtze River and Pearl River Deltas. With the formation of its "Plantation-Pulp-Paper" green cycle, APP-China has built a new business model and evolved the industry supply chain to extend from plantation to pulp making to paper making to waste paper recycling to overall waste management.

### Job creation

With the integration of labor-intensive, capital-intensive and technology-intensive businesss in forest plantations, pulp and paper making, the green cycle economy and industry chain, APP-China provides different levels of job opportunities for the communities in which it operates. Supplying raw materials creates opportunities for many low-skill workers and farmers in remote villages. To retain local talent, APP-China has created many technical positions focused on machinery, power, electronics, logistics, sales, environmental protection, human resources and assembly-lines. Moreover, many of APP-China's large-scale investment projects attracted considerable capital by creating business opportunities in the manufacturing sector and throughout the supply chain, including financial and related industries. Besides, ample investment in various plantation areas provides more indirect job opportunities.

Consider Hainan Jinhai Pulp & Paper. About a third of its 2,388 employees were hired from Hainan Province. In autumn 2009, Hainan Jinhai Pulp & Paper organized a job fair for over 1,000 new positions of 12 categories with industry focus in papermaking, marketing, industrial safety, guards, securities, and secretaries.

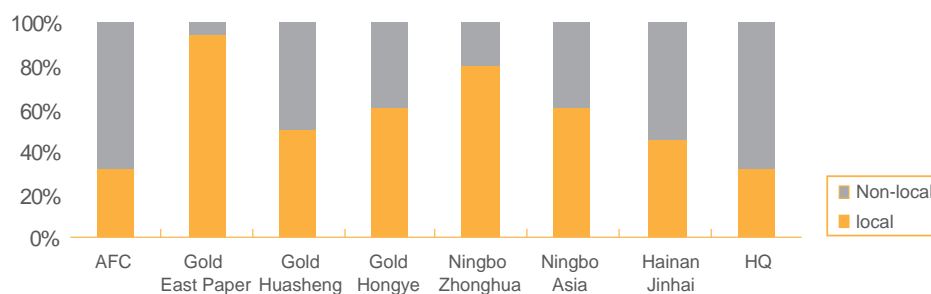




APP-China number of employees for six main mills & business units

| Year | AFC   | Gold East Paper | Gold Huasheng | Gold Hongye | Ningbo Zhonghua | NingboAsia | Hainan Jinhai | HQ  | Total number |
|------|-------|-----------------|---------------|-------------|-----------------|------------|---------------|-----|--------------|
| 2007 | 3,869 | 6,106           | 3,476         | 2,857       | 1,588           | 1,637      | 2,481         | 417 | 22,431       |
| 2008 | 1,744 | 6,220           | 2,924         | 3,275       | 1,595           | 1,570      | 2,615         | 424 | 20,367       |
| 2009 | 1,737 | 6,325           | 3,128         | 4,165       | 1,556           | 1,573      | 2,388         | 460 | 21,332       |

APP-China percentage of local & non-local employees for six main mills & business units



#### Hainan jinhai Pulp & Paper facilitates local economic development

With the creation of a forest plantation in the Yangpu area, Hainan Jinhai Pulp & Paper has influenced economic and social development throughout the years. Residents and farmers benefited from forest plantations in the many ways: 1. The plantation increased local income by raising leasing rates; 2. It generated jobs to manage nursery operations, seedling care, management and after-care, harvesting and transportation; 3. It transformed the area, shifting work from ad hoc wood harvesting to forest plantation operations, from primitive planting to scientific management. This paradigm shift to accelerate plantation modernization laid a solid foundation for continued economic development for the local communities.

### Forest workers fight poverty on the road to prosperity

The recycling economics of 'Plantation-Pulp-Paper' propelled the development of local plantations. Forest plantations built in remote areas create sustainable ways to increase income for forest workers and local residents.



Take Guangxi for example. APP-China built a nearly 10-hectare forest plantation site in Guangxi with total investment of 1.8 billion RMB. About 44 percent of the total investment, 800 million RMB, was used to hire rural workers, creating job opportunities of 16 million workdays for local farmers in Guangxi. By working with rural farmers and sharing commissions with them, APP-China increased annual land income by 4.8 million RMB. Local residents leased their land to APP-China, increasing income from the land by 700,000 RMB. This channeled resources to agricultural zones and encouraged investment by financial institutions, the private sector, social groups and local farmers, which resulted in the emergence of more prosperous, bio-friendly villages with more amenities.

### Localizing procurement

Just as it created jobs for local workers, APP-China found ways to source goods and services locally, encouraging local economic growth, technology advancement, and the incubation of quality suppliers in those communities. After locally procuring raw and additional materials, spare parts and components, equipment, hardware, software and services, APP-China adopted procurement practices to subcontracting selective work processes. As a result, in 2009, APP-China's percentage of local procurement rose to 94 percent, from 82 percent in 2008.



### Application of MBOS in procurement

Management By Olympic Systems (MBOS) is the platform APP-China uses to manage innovation and fulfill corporate social responsibility. APP-China uses this platform to mobilize employees, drive innovative ideas and promote execution to create value for both the company and the community.

From 2008 to 2009, the financial crisis triggered dramatic price fluctuations in raw materials, posing tremendous challenges to procurement. Initiating MBOS to reduce costs, Gold East Paper and the procurement department replaced coal with energy-efficient biomass and new energy-saving fuels. This contributed to environmental protection, energy efficiency and a reduction in the use of raw materials. In addition, it reduced costs to help APP-China improve its competitive advantage.

Another SDA was a joint effort by Ningbo Asia and the procurement department. Since most heavy machinery is manufactured overseas, most of the replacement parts for those machines have also been made outside China. To end this foreign monopoly of heavy machinery parts, APP-China began to use components developed and made in China, creating new opportunities for domestic manufacturers.



## 2. Employee Training and Development

Employees are our most valuable corporate assets. APP-China not only provides staff with good salaries and benefits, but also builds a platform for employees to realize their potential, take advantage of learning opportunities, achieve higher employee satisfaction and ingrain the recognition that growth benefits both workers and managers. APP-China works hard to attract and retain star employees, boost their morale and productivity, and encourage diversity to build a competitive edge for the company. Employees have access to many training programs, to promote their ongoing development. APP-China listens to employee complaints, turns their ideas into actions and conducts employee satisfaction surveys on a regular basis. In 2009, APP-China won the "2009 100 Best Human Resources Management (HRM) Companies Award" presented by 51job, Inc., a leading integrated human resources service provider in China.

### Improve labor relations

APP-China sought to optimize its relationship with the company's labor union by ensuring the union served as a two-way communications channel between labor and management: APP-China delivered management messages to employees and sent employee feedback to management. The labor union's chairman kept close, direct and frequent communication with

top management. APP-China hosted regular discussions, where employees proposed suggestions and shared different views. APP-China offered incentives to promote employee involvement and to create a better working environment.

### Diversity of employee structure

APP-China is devoted to creating a diverse employee structure with a healthy mix of different age groups, ethnic minorities and female employees and local hiring. This commitment to diversity has led to competitive advantages for APP-China. Different age groups has instilled more vitality into the organization. Cultural diversification has inspired innovation in management and operations. Regional diversity has helped the company understand customer segmentation.

APP-China does not discriminate by ethnicity, race, social status, gender, region, nationality or political preference in recruitment, employment, training, promotion or termination. All employees enjoy fair job opportunities and a good working environment. To ensure harmony in the workplace, APP-China also organizes briefings on human rights and management regulations for its security guards.



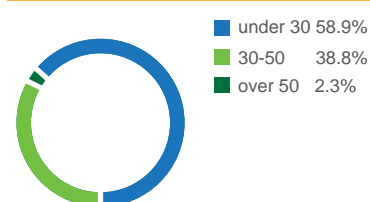




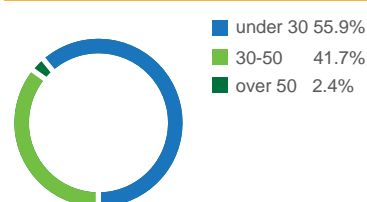
| Item                                                                                  | 2007          | 2008          | 2009          |
|---------------------------------------------------------------------------------------|---------------|---------------|---------------|
| Total number of employees                                                             | 22,431        | 20,367        | 21,332        |
| Number of employees for direct employment                                             | 20,271        | 18,170        | 18,644        |
| Number of employees for indirect employment                                           | 2,160         | 2,197         | 2,688         |
| Percentage of employees for different age groups (under 30: 30-50: over 50 years old) | 58.9:38.8:2.3 | 55.9:41.7:2.4 | 50.2:46.7:3.1 |
| Percentage of employees of ethnic minorities                                          | 3.7%          | 2.9%          | 2.9%          |
| Percentage of gender (male: female)                                                   | 77.2:22.8     | 74.3:25.7     | 75.3:24.7     |
| Number of female employees of management level                                        | 326           | 359           | 417           |

Note: Management indicates deputy section chief and its higher level at APP-China.

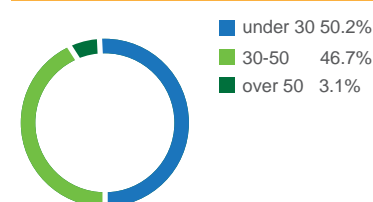
2007 percentage of APP-China employees by different age groups



2008 percentage of APP-China employees by different age groups



2009 percentage of APP-China employees by different age groups



### Employee benefits and remuneration

According to the *Labor Law of the People's Republic of China* and related labor and human resources regulations for foreign invested companies in local governments, APP-China entered into formal employment or service agreements with its employees. It paid attention to their fixed benefits, including insurance, pensions, unemployment benefits, medical care, maternity, workman's compensation, and public housing funds for each employee, based on national and local policies. In line with these policies, social insurance bodies safeguarded and issued legal benefits in appropriate and timely manner for the elderly workers after their resignation and retirement.

APP-China offers good employee benefits and competitive compensation. Despite of the challenges of the financial

crisis, APP-China didn't reduce salaries of employees. In fact, Gold East Paper, Gold Hongye and Gold Huasheng issued bonuses for two to three months. APP-China continued to offer performance-based salary increases, providing average raises of 5 to 6 percent for employees at the APP-China Head Office in 2009. Star employees received additional salary increases of 3 to 4 percent.

Even underperforming employees were provided assistance position adjustments or retrain for other positions. APP-China salaries in the scope of report meet or exceed the requirements of local labor departments, ensuring that even entry level employees meet living standards in their local communities.



### Employee training and development

APP-China has dedicated itself to upgrade staff quality, skills and knowledge and created favorable development opportunities for them. The human resources department is in charge of general training, while other departments focus on specialized training. To advance e-Learning, APP-China identified trainers by expertise and shared them within the group, i.e., safety and hygiene, quality control. To kick off sustainability training, APP-China carried out a systematic all-employee training on Paper Contract with China throughout 2009. Training was designed to be relevant to each employee's daily work. For external training, employees adapted content for internal training materials to make the most of its training investment and improve training quality and effectiveness. For diploma learning, APP-China sponsored tuition and encouraged staff to pursue higher education. Several main pulp and paper mills co-operated with vocational schools, research institutes, colleges and universities in adjacent communities. Employees who enrolled in graduate schools or EMBA are entitled to scholarship grants. APP-China's Head Office elects about 20 star employees each year to receive awards from top management and obtain prizes or other substantial incentives from the company.

#### 2009 APP-China overview of employee training & development

|                                                                    | AFC   | Gold East Paper | Gold Huasheng | Gold Hongye | Ningbo Zhonghua | Ningbo Asia | Hainan Jinhai | HQ    |
|--------------------------------------------------------------------|-------|-----------------|---------------|-------------|-----------------|-------------|---------------|-------|
| Total training costs (10,000 RMB)                                  | 12.75 | 468.64          | 28.19         | 22          | 30.95           | 19.24       | 26.31         | 21.41 |
| Average training costs per employee (RMB)                          | 16.00 | 740.87          | 101.44        | 52.34       | 198.98          | 123.89      | 123.70        | 0.05  |
| Average training time per employee (hour)                          | 0.80* | 29.15           | 24.9          | 23.39       | 68.9            | 46.90       | 65.85         | 10.42 |
| Number of employees & company spending in sponsoring diploma study | 2     | 20              | 102           | 0           | 117             | 63          | 18            | 4     |
| person<br>10,000 RMB                                               | 0.00  | 34.44           | 8.31          | 0           | 19.61           | 12.24       | 3.88          | 10.32 |

Note: In 2009, in response to the financial crisis, App-China Forestry adopted measures to reduce expenditures and adjust its organizational structure. APP-China Forestry integrated videoconferencing meetings with training courses, which leads to a disparity with actual training hours and spending. In doing so, APP-China Forestry improved work efficiency, enabled energy savings and achieved low-carbon results. APP-China Forestry will increase employee training and development spending on a big scale and will endeavor to improve training programs to enhance the quality of its personnel, boost employee productivity and contribute to the overall corporate competitive advantages.



#### Cross-strait gold metal winner -- Wu Xiaotong

At the 4th Cross-Straits Innovations in Technology Exhibition held by the All-China Federation of Labor, Wu Xiaotong won the gold medal for innovation on June 18, 2009. Wu was recommended by SDA of MBOS for her outstanding performance at Ningbo Zhonghua, where Wu worked for Electric and Instrument Section 2. It was her work there that led to the innovation project, entitled 'Replacement of locally produced pulp reject valve of PM2 & PM3 cleaner.' Wu shared her experience at the exhibition, which featured staff achievements in economic and technological innovation across the straits. Altogether, 1,157 projects and 229 case studies were displayed, including new inventions driven by local R&D teams. The exhibition was developed to promote bilateral idea exchanges and encourage employees to be highly involved with technical advancement and corporate management.

### Employee complaints

APP-China respects the basic rights of each employee. And it set up an effective feedback system to collect opinions, suggestions and complaints from employees. Employees may file complaints in opinion mail boxes and email boxes set up by the human resources department. Employees may also send complaints to the public email box of top management. Alternatively, employees can go to the company's internal audit channel for transparent and effective communication.

### Employee satisfaction survey

Employees gave APP-China's most important corporate assets. Production efficiency and service quality depend on employee satisfaction. Each year, APP-China collects employee opinions through its employee satisfaction survey, and addresses their

needs to mitigate potential problems and increase employee loyalty. In 2009, APP-China enjoyed a higher employee satisfaction rating throughout the business units and main mills included in the scope of report. For example, employee satisfaction of Hainan Jinhai Pulp & Paper rose substantially to 84.8 percent in 2009 from 66.0 percent in 2007.

### Ratio of employees taking part in satisfaction survey

In 2009, more employees took part in the employee satisfaction survey. Hainan Jinhai Pulp & Paper participation rose from 40.5 percent in 2007 to 85.7 percent in 2008, and climbed to 97 percent in 2009. Gold Hongye climbed from 36.9 percent in 2007 to 86 percent in 2008 and reached 100 percent in 2009.

**APP-China employee turnover rate**

|          | AFC   | Gold East Paper | Gold Huasheng | Gold Hongye | Ningbo Zhonghua | Ningbo Asia | Hainan Jinhai | HQ   |
|----------|-------|-----------------|---------------|-------------|-----------------|-------------|---------------|------|
| 2007 (%) | 19.12 | 5.45            | 24.98         | 33.97       | 10.73           | 17.35       | 9.75          | 20.1 |
| 2008 (%) | 62.06 | 4.24            | 21.92         | 29.84       | 11.38           | 20.13       | 9.77          | 17.7 |
| 2009 (%) | 13.41 | 4.42            | 10.69         | 27.75       | 10.87           | 25.43       | 11.44         | 8.91 |

Note: Maintaining a certain level of employee turnover rate is one of the important indices to make sure the company is operating well, to improve corporate development and to optimize its employee structure. All entities in the scope of report pay attention to employee turnover rates as an indicator of how well staff is being managed and how well human resources are being developed. For example, Gold Hongye put in programs to reduce assembly-line turnover rates. As a result, the employee turnover rate dropped from 33.97 percent in 2007 to 27.75 percent in 2009, showing effective management.

## 3. Product Safety and Quality

Product quality and safety are closely associated with customer satisfaction. APP-China views product quality and safety as the top priority and embodiment of corporate responsibility. It set up stringent inspection mechanism to scrutinize all steps of the production and shipping processes to minimize defects. As for paper products used for food packaging, APP-China applies the strictest quality control measures, to eliminating any threat to food quality and safety. In 2009, 14 on-site sampling inspections were conducted on APP-China's major product lines in various facilities by provincial and national audit teams. In addition, APP-China products passed 64 open-market sampling inspections. Assurance reports have been obtained for main mills under APP-China that passed third-party inspections by local disease control centers and technical supervision bureaus for microbiological and physical substances.



### Gold Hongye eyes on product quality

Gold Hongye produces household paper products whose quality and safety have a direct impact on the public health. Gold Hongye took total control of quality and safety for its products by focusing on three critical stages: raw materials, production and shipping. High-quality household paper is made of 100 percent virgin world pulp to ensure the products are safe, hygienic and harmless to people. First, paper products of Gold Hongye are processed from raw paper without adding hazardous substances during production, ensuring the quality of raw materials. Second, all-out efforts ensure safety in product shipping. For household paper products, the company scientifically and strictly manages production, packaging, transportation, storage to point-of-sales to ensure total quality control of the products. Gold Hongye takes effective means to guarantee safety and hygiene in the shipping process to prevent second-hand contamination. The household product brand *Breeze* has been recognized as a "Famous Brand of Jiangsu Province", special government recognition of the products. In 2009, Jiangsu Province recognized Gold Hongye as an enterprise to abide by agreements with high credibility, another government honor.





#### 4. Industry Development

APP-China is devoted to industry development to organize exchange programs, set industry standards, take the lead in technology innovation and advocate best practices. APP-China organized the Sinar Mas Print Award to accelerate innovation within the printing and papermaking industry and took the lead to actively engage related industry associations to encourage sustainable development.

##### Sinar Mas Print Award

The third Sinar Mas Print Award was organized by APP-China in 2009. In total, 841 printing companies submitted 1,835 entries with different themes and genres from Japan, Australia, Singapore, Thailand, Malaysia, India, Israel and Russia. The Sinar Mas Print Award is an effort to elevate overall standards and performance within China's printing and paper industry.



##### Actively involved in stipulating national standards

APP-China made R&D investment and standardization a priority with its active involvement in setting such national standards as *Coated Paper and Board – Coated Ivory Board*, *Coated Paper and Board – Coated Art Paper*, *Coated Paper and Board – Lightweight Coated Paper*, *Technical Requirements for Environment Labeling* and industry standards for *The First Section of Printing: Offset Printing* to advance technical levels for the paper industry in China. To take part in the standard setting companies will become industry leaders to promote technology and standard innovation, which is meaningful to optimize industry structure, strengthen competitive edge and pave the way for sustainable development of the industry.

##### Promote free trade to address anti-dumping duties(AD) and countervailing duties (CVD)

In September 2009, the U.S. Department of Commerce (DOC) accepted a petition jointly filed by three U.S. paper companies, NewPage Corporation, Sappi Fine Paper North America, Appleton Coated LLC, and the United Steelworkers of America to launch AD/CVD investigations on certain coated paper imported from China and Indonesia. Under the AD/CVD statutes,

the International Trade Commission (ITC) made a preliminary injury determination in November 2009 and the DOC is expected to issue preliminary determinations in the AD/CVD cases in December 2009 and March 2010, respectively. In October 2010, the final determinations will be formed based on whether the U.S. paper industry was harmed by such cases. Until then, certain types of coated paper imported from China and Indonesia will be subject to duties to offset Chinese and Indonesian government subsidies and dumping.

As a matter of fact, APP-China didn't receive any Chinese government subsidies that violate WTO trade regulations. APP-China did not dump paper in the U.S. market. Having adhered to global fair trade and competition standards, APP-China will actively engage with the Department of Commerce, China, and related industry associations to address AD/CVD cases. APP-China is steadfast in fighting any form of trade protectionism that threatens sustainable development for the paper industry both at home and abroad.



##### PCwC Sustainability Forum 2009

In Jun 2009, APP-China gave full support to the PCwC Sustainability Forum 2009, which was co-hosted by China National Pulp and Paper Research Institute (CNPPRI), Forest & Paper Branch of China Plantation Industry Association (CFIA) and China Pulp and Paper Magazine. Some 200 representatives from government agencies, research institutes, academic groups and private sectors attended the forum in Suzhou. Given global development trends and market opportunities for China, Plantation-Pulp-Paper integration and best practices of clean production have been reviewed against a backdrop of the development and expansion of paper industry in China for six decades. Moreover, the forum addressed how to speed up sustainability and the challenges globalization pose to long-term success.

Wu Xingfang, General Manager of Gold East Paper, discussed collaborative industry development and environmental protection. Wu pointed out that Gold East Paper has invested 1.15 billion RMB in environmental projects, accounting for 5 percent of its total investment. Despite increasing operation costs, Gold East Paper introduced state-of-the-art clean production technologies to significantly reduce waste discharge far ahead of national standards. The move paid off by reducing pollution control costs. Moreover, it reduced considerable resource consumption throughout the lifecycle, which minimized demand for natural resources. In addition to significant environmental investment, Gold East Paper vowed to adhere to PCwC in clean production, energy savings, resource and emission reductions. Jiang Guoshen, General Manager of APP-China Forestry, took part in the discussions of "Plantation management Is the Critical Step for Plantation-Paper Cycle", and how to promote sustainable development in the Plantation-Paper cycle in the face of rising globalization.

## 5. Community relations

APP-China played an active role in community building for long-term cooperation and sustainable development. By means of public scientific education, APP-China helped local farmers to improve their lives. Through education programs and sponsorships of Huang Yi Chong Foundation offered education support for the needy and for disaster-hit areas, to advocate community culture, build new rural villages, and organize charity

programs to be in harmony with community development.

### Care about community

All APP-China business units and major pulp and paper mills included in this report cared much about life in their neighboring communities by organizing a variety of activities to be a good corporate citizen.



#### Easy access to public movies in rural areas, Hainan

Since 2007, Hainan Jinhai Pulp & Paper contributed 9 million RMB to finance a public movie campaign to show 16,000 movies for an audience of more than 8 million people in 18 cities, towns, agriculture exploration areas and Yangpu Industrial Development Zone, in Hainan Province. The program reached about 72 percent of the Hainan Province population, including more than 1 million Li and Miao ethnic minority groups. On average, audiences watched one movie in each town each month. This campaign was very popular and has built good community relations.

"For the past three years, this campaign has brought public movies to tens of thousands of rural households. Farmers got to understand benefits of planting *Eucalyptus*, which not only increased their income and led them onto the track of prosperity, but also developed the economy and created jobs in new rural villages. Showing of public movies enabled people born in the 1960s and 1970s to review the inspiring movies that recalled their childhood. At the same time, youngsters and kids opened their eyes and enjoyed themselves for happy hours as well. It fostered their humanistic consciousness, which played an important role in enriching culture and life in the remote areas," said Zhang Yumei, Section Chief of Culture and Sports Department, Hainan Provincial Government.



#### Gold East Paper carried the torch of volunteers

To be a good corporate citizen, APP-China tailor made community programs to meet local needs. Gold East Paper promulgated *The Volunteer Management Rules for Employees*, urging staff to take an active part in community activities, serve for the community and show their love and care. The volunteer service network supports homes of senior citizens and orphans, railway stations, streets and roads with busy traffic, schools and hospitals. Gold East Paper used employee's volunteer work as key reference for performance reviews and promotions. For employees to be promoted to deputy group leaders, they must volunteer at least eight hours each year. To qualify for promotion, employees must enroll in at least four hours of volunteer work each year. For deputy section chief, they must perform at least eight hours of volunteer work each year. In 2009, Gold East Paper offered 3,933 different occasions, representing more than 29,247 service hours or 1,200 full days!

### Boost economic development

In response to government policies, business units and main mills of APP-China in the scope of report helped to boost community development.

By improving forest plantations, App-China Forestry increased production volumes and created job opportunities. Statistics from Guangdong and Fujian Provinces show that 22.5 workers are required for each hectare of forest plantations. With more than 300,000 hectares of forest plantations, APP-China provided significant job opportunities in local communities, enabling farmers to reap direct benefits from these jobs.

App-China Forestry staff visited each household in rural areas near the forest plantations, delivering technical know-how, on-

site coaching and technical information for rural workers to earn their own living. These efforts showed farmers how to improve crop quality and productivity. Many may begin to use green manure to fertilize the land and begin raising poultry to increase income.

APP-China set up scholarships for students and teachers near the plantation areas to promote next-generation education and re-build villages in rural areas. APP-China activities promote educational and cultural activities in poverty-stricken areas. In addition, APP-China invested in infrastructure and health systems, financing the construction of roads, water systems and other infrastructure.



#### ACF donated seedlings to local forest authorities and conducted training for its work force

Effective 1997, Hainan Jinhai Pulp & Paper began to co-operate with local forestry bureaus reporting requirements for the Hainan Provincial Government. From 2003 onwards, Gold Hualin promoted forest plantations. To encourage local farmers to convert their lands to forest plantations, Gold Hualin provided seedlings free of charge to the Forestry Bureau, Hainan Provincial Government, and to forestry bureaus at municipal or county levels. Since then, Gold Hualin has donated seedlings for forest authorities to grow trees yearly, and conducted training for local farmers.

## 6. Contribution to the Society

In addition to charity events and education support initiated by Huang Yi Cong Foundation on behalf of APP-China, business units and main mills under APP-China engaged in philanthropic activities to contribute to a better world.

### Donation to build schools and grants individual support

Gold East Paper donated money and tuition including community scholarships and R&D sponsorship of the Pulp and Papermaking Foundation of Nanjing Forestry University. In addition, Gold East Paper donated stationery, books, scholarship, as well as nearly 50,000 RMB to build new shower facilities at Gulin Elementary School in Gulin, Guizhou, so the boarding students had a place to shower. In October 2009, Gold East Paper invited teachers and students from Gulin Elementary School to meet with other nearby schools to exchange latest teaching concepts and methodologies, and encourage Gulin students to study hard in pursuit of excellence.



### Virjoy caring for the young generation campaign

To answer the government's call to promote hygiene education for young people, APP-China and Huang Yi Cong Foundation launched *Virjoy* Caring for the Young Generation Campaign on November 20, 2009, with joint efforts of All-China Federation of Returned Overseas Chinese and Shanghai Federation of Returned Overseas Chinese.

This initiative is designed to build hygiene awareness, prevent epidemics and promote appropriate hygiene habits. On behalf of APP-China, Mr. Xu Xitu, General Manager of Gold Hongye, donated *Virjoy* germ-free handkerchiefs and *Breeze* paper tissues to student representatives. At the event, experts delivered hygiene knowledge and measures of flu prevention and timely treatment, in particular, hand washing and sterilization, to reduce the spread of contagious diseases in communities and schools.



### Voluntary blood donation

Given charity and community programs, APP-China also advocates voluntary blood donation. The event is well organized by the labor union with strong support by all departments and management. On June 9, 2009, the annual voluntary blood donation was held at Ningbo Zhonghua. After health check-up and blood testing, 77 of 100 employees were qualified; 18 volunteered to donate 400CC per person. Since 1997, 1,405 employees from Ningbo Zhonghua and Ningbo Asia have participated in the voluntary blood donation, resulting in donations of 304,000CC of blood throughout the years.

## Operation of Huang Yi Cong Foundation in 2009

In 2009, Huang Yi Cong Foundation advanced philanthropic programs with innovative ideas and actions. The Foundation explored new activities to make the most of donations by its founder and his family business. By the end of 2009, APP-China and Huang Yi Cong Foundation have donated more than 600 million RMB to education, poverty alleviation, disaster relief and community support. Its contributions make difference in China and have been highly recognized by government and society alike.

### Main activities in 2009

#### Education/study sponsorship:

**Joy of Reading Project:** Promoted reading by providing books to schools in remote and disaster-stricken areas in Gansu, Inner Mongolia, Hebei and Sichuan.

**APP-China 'Shanghai Here We Come!' Expo Summer Camp:** Expo book donation, Expo knowledge sharing and Expo creativity competitions paved the way for the kick off of 2010 APP-China 'Shanghai Here We Come!' Expo Summer Camp.

**Fujian Yi Cong School Teaching and Student Scholarship:** Since 2008, the Foundation has offered teaching and student scholarships to provide incentives for outstanding teachers and pupils, provided financial support to students in need, furthered school development and helped to raise the education level in local communities.

**Quangxi Hope Star Class:** Assisted high-performing junior high school students from very poor families to register in senior high schools to help prepare them for colleges and universities.

**Sponsorship of Beijing Chinese Language and Culture College Building:** The Foundation committed to donating 100 million RMB to the Chinese Language and Culture Education Foundation of China, and assisted in the construction of the Beijing Chinese Language and Culture College building and to promote Chinese linguistics and cultural education.

**University Scholarship and Promotion of Recycling Economics:** Established a scholarship program in eight universities, i.e., Beijing Forestry University, Huazhong Agriculture University and Southeast Forestry University, and continued to advocate knowledge of environmental protection and recycling economics in universities when appropriate.

**Inauguration of Guangxi Tinghong Elementary School:** In 2008, with funding of 300,000 RMB, the Foundation help to build a new





classroom building for Tinghong Elementary School at Huaxiang Town, Donglan County. It became a complete elementary school for local children in communities to attend. In 2009, the Foundation offered another 150,000 RMB to help decorate the building's interior and prepare it for opening.

#### Post-disaster re-construction

Huang Yi Cong Foundation provided construction assistance to assist Tongji Middle School in Pengzhou, Sichuan: After the Wenchuan earthquake in 2008, Tongji Middle School built by APP-China donations was completed in 2009, enabling 1,500 students to go to the new campus. The Foundation continued to care about school development.

Psychological Consulting Program: At disaster-stricken and rebuilt Pengzhou Tongji High School and Pengzhou Xiao Yu Dong 9-Year School, the Foundation worked with the Good Will Social Workers Team of Sichuan University to provide counseling to children in the area, making them smile again after the trauma.

#### Community/poverty alleviation/volunteer work in 2009:

Sponsored Sanlin Expo Homestead of Shanghai by organizing community events to create a favorable atmosphere for book, painting and calligraphy lovers. LOHAS Community was commenced in 2009 to bring environmental concepts into daily life at each household through public speeches, "Return Waste to Be Green" activities, garbage sorting, resource recycling and other activities.

Employee Volunteer Team Building: Located at the APP-China Head Office, Huang Yi Cong Foundation launched various employee volunteer activities and set up volunteer teams. Employee volunteers were involved in various activities, and provided ideas and suggestions about its charitable programs. In 2007, 2008 and 2009, total hours volunteered stood at 6,404, 16,311 and 30,272 hours, respectively.

In 2010, Huang Yi Cong Foundation will better position and operation of its charity programs and will expand different horizons to cooperate with and further communicate with stakeholders to be a good corporate citizen in harmony with economic, environmental and social development.

# Facts and Figures

|                                                                  | 2007       | 2008       | 2009       |
|------------------------------------------------------------------|------------|------------|------------|
| <b>Environmental Performance</b>                                 |            |            |            |
| Total investments in environmental performance (100 million RMB) | 3.63       | 4.68       | 3.27       |
| Total water discharge (ton)                                      | 39,433,498 | 37,416,882 | 34,528,699 |
| Total COD emissions (ton)                                        | 2,736.69   | 2,551.09   | 2,109.75   |
| Solid waste proposal volume (ton)                                | 1,606,643  | 1,667,584  | 1,611,265  |
| Solid waste treatment rate (%)                                   | 100%       | 100%       | 100%       |
| Energy consumption per ton of pulp (100 million joules)          | 64.46      | 64.46      | 81.52      |
| Energy consumption per ton of paper (100 million joules)         | 142.41     | 139.53     | 137.54     |
| Annual average water consumption per ton of paper (ton)          | 28.28      | 28.58      | 25.38      |
| Annual average water consumption per ton of pulp (ton)           | 9.816      | 9.270      | 9.139      |
| Annual average wastewater discharge per ton of pulp (ton)        | 13.83      | 16.05      | 16.22      |
| Annual average wastewater discharge per ton of paper (ton)       | 9.235      | 8.470      | 7.669      |
| COD emissions per unit of product (kg per ton of paper )         | 1.29       | 1.61       | 1.51       |
| COD emissions per unit of product (kg per ton of pulp)           | 0.64       | 0.58       | 0.47       |
| <b>Social Performance</b>                                        |            |            |            |
| Donations to charity (10,000 RMB)                                | 4,398      | 5,608      | 3,300      |
| Total number of employees (person)                               | 22,431     | 20,367     | 21,332     |
| Number of local employees (person)                               | 16,762     | 14,894     | 12,986     |
| Percentage of female employees (%)                               | 22.8       | 25.7       | 24.7       |
| Percentage of employees from ethnic minorities (%)               | 3.7        | 2.9        | 2.9        |
| Number of females in the management level (person)               | 326        | 359        | 417        |
| Employee turnover rate (%)                                       | 16.57      | 18.62      | 13.53      |
| Average training time per employee (hour)                        | 32.83      | 38.39      | 33.12      |
| Average training costs per employee (RMB)                        | 347        | 343        | 295        |
| <b>Economic Performance</b>                                      |            |            |            |
| Total profits (100 million RMB)                                  | 36.52      | 20.60      | 30.12      |
| Total taxes paid (100 million RMB)                               | 13.35      | 14.19      | 13.66      |
| Total production capacity (10,000 ton)                           | 427.01     | 441.75     | 450.21     |
| Sales revenues (100 million RMB)                                 | 274.95     | 281.81     | 258.42     |
| Total asset value (100 million RMB)                              | 633.11     | 700.87     | 764.46     |

Note 1: The data and information disclosed in this chart refer to the sum of those entities specified in the scope of report

Note 2: Because 2009 data and information are based on new definitions, units, standards and formulas, there may be variations compared with those of 2007 and 2008 in the previous sustainability reports

# Outlook of 2010 APP-China Sustainable Development

|                                                     |                                                                                                                 |
|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Sustainable Development Strategy and Implementation | Improve sustainable development management system                                                               |
|                                                     | Establish sustainable development indicator system step by step                                                 |
|                                                     | Strengthen implementation of sustainable development strategy                                                   |
|                                                     | Integrate sustainable development strategy and business strategy                                                |
|                                                     | Consolidate and optimize MBOS management system                                                                 |
|                                                     | Plan and activate sustainable development training                                                              |
| Sustainable Plantation Management                   | Improve forest plantation management, increase yield and stabilize operating performance                        |
|                                                     | Refine organizational structure, improve productivity and overall competitive advantages                        |
|                                                     | Continue to reinforce research and technology development of sustainable forest plantations                     |
|                                                     | Continue to monitor and evaluate environmental impact                                                           |
|                                                     | Strengthen plantation risk management and safety education, reinforce management of unlawful felling            |
|                                                     | Improve the utilization rate of land and resources through scientific management                                |
|                                                     | Balance ecological and economic performance                                                                     |
|                                                     | Consolidate the long-term and stable relation building with communities                                         |
|                                                     | Reinforce the implementation of MBOS                                                                            |
|                                                     | Continue to implement changes to our practices according to ISO14001 and other environmental management systems |
| Sustainable pulp and paper production               | Further promote clean production                                                                                |
|                                                     | Increase environmental protection investments and introduce advanced environmental protection technologies      |
|                                                     | Strengthen cross-mill exchanges and improve organizational learning                                             |
|                                                     | Increase safe production management efforts                                                                     |
|                                                     | Continue to improve production efficiency and enhance energy and resources utilization rates                    |
|                                                     | Reinforce the application and innovation of MBOS                                                                |
| Stakeholder engagement                              | Improve management system of stakeholder engagement and communication                                           |
|                                                     | Strengthen communication and cooperation with stakeholders                                                      |
|                                                     | Improve philanthropic management system                                                                         |
|                                                     | Strengthen the management of employee benefits and establish training system step by step                       |
|                                                     | Improve service quality, ensure product safety and pre-empt customer satisfaction                               |



# Assurance Statement

**BUREAU VERITAS**  
Certification



## Assurance Statement

### Introduction and Objectives of Work

BUREAU VERITAS Certification has been commissioned by Sinar Mas Paper (China) Investment Co., Ltd., (hereafter referred to as "APP China,") to conduct an independent assurance to 2009 APP China Sustainability Report (hereafter referred to as "the Report"). This Assurance Statement applied to the related data and information included within the scope of work described below.

Data and information of the Report was provided by APP China. BV was not involved in the drafting of the Report. Our sole responsibility was to provide independent assurance of the Report.

### Scope of Work

- To review the objectivity of collected data and information and their management system for the Report period from January 1st, 2009 to December 31st, 2009;
- To evaluate the management system for data, information, analysis collected;
- To conduct site visits to APP China Head Office, Gold East Paper (Jiangsu) Co., Limited, Hainan Jinhai Pulp & Paper Co., Limited, Ningbo Zhonghua Paper Co., Limited, Ningbo Asia Pulp & Paper Co., Limited, Golf Huasheng Paper (Suzhou Industrial Park) Co., Limited, Golf Hongye Paper (Suzhou Industrial Park) Co., Limited, APP China Forestry Business Unit Head Office, Guangxi, Hainan, Yunnan, Guangdong, and Henan forestry business sub-units.

The following data and information was excluded from the scope of work:

- Activities outside the Report period;
- Stance, viewpoints, belief, goals, commitment and future intention of APP China;
- Much of the financial data which is taken from APP China Annual Reporting and accounts, which have been audited by an external auditor.

### Methodology

BV undertook the following activities as integral part of the independent assurance:

- To arrange on-site interviews with staff and selected stakeholders;
- To review documentation and evidence provided by APP China;
- To audit performance data and their records by sampling;
- To evaluate the process of data and information collection and related management system;
- Our work was conducted in accordance with the standard procedures and guidelines for External Assurance of Sustainability Reports of BV based on the best practice of independent assurance. For this assignment, we have used the verification rules and instructions of AA1000, GRI G3 and ISAE3000. This work was planned and carried out to provide reasonable, rather than absolute, assurance.

### Our Findings

Based on the methodology and the above-mentioned activities, we conclude that:

- The data and information of the Report are objective, reliable and free from systematic or material mistakes;
- BV has identified recommendations for APP China to be listed in details in the Key Areas of Improvement\* as below.

### Objectivity

The information and data presented in the Report is objective, reliable and traceable. APP China utilizes a sophisticated data and information collection system, facilitates relevant procedures to collect, analyse, check and compile information for the Report.



QUALITY

HEALTH

SAFETY

ENVIRONMENT

SOI  
ACCOUNT

Page 1 of 2

## BUREAU VERITAS Certification



### Completeness

The Report discloses sustainability strategies, management systems, actions and achievements in three chapters entitled "Scientific Development of Plantations," "Sustainable Pulp and Paper Manufacturing" and "Corporate Social Responsibility," including environmental, social and economic performance indicators.

### Appropriateness

For "Scientific Development of Plantations" and "Sustainable Pulp and Paper Manufacturing" sessions, the Report demonstrates the characteristics of forestry, pulp and papermaking industry. Language style and design layout of the Report represents corporate culture and core values of APP China.

### Materiality

APP China has identified most of the key indicators of environmental, social and economic indicators based upon GRI G3 requirements and have set up the sustainability data collection system, such as legal compliance of plantations, pollutant and emission data, environmental management system and operation procedures, OHS management, employee benefits and community charity programs.

### Responsiveness

APP China is responsive in the objective manner to some key issues to stakeholders in the Report. Moreover, the Report maps out future development strategies and how to face with challenges from the corporate sustainability standpoint.

### Key Areas of Improvement

This is to set forth our recommendations in key areas of improvement for APP China regarding management and drafting of the Report:

- To improve completeness of the data and information, we recommend APP China to disclose GHG emission, OHS data for pulp and papermaking industry (i.e., number of hours lost rate, number of injury cases with days lost ) and human rights protection;
- To improve precision of the data and information, we recommend APP China to reinforce the data and information collection system, to organize training for the personnel on data and information collection system and adopts internal audit to increase the correctness of the data and information.

### Statement of Independence, Impartiality and Competence

BUREAU VERITAS Certification is an independent professional services company that specialises in Quality, Health, Safety, Society and Corporate Responsibility with almost 180 years of history to provide independent assurance services. None of the assurance team members has any conflict of interest with APP China. We have conducted this verification in an independent and fair approach.

**Wanze Zhang**  
Director for Greater China Region  
Bureau Veritas Certification  
2011-11-18

**May Huang**  
Assurance Team Leader  
Bureau Veritas Certification  
2011-11-18



QUALITY



HEALTH



SAFETY



ENVIRONMENT



SO  
ACCOUNTABILITY

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# GRI Index

| Clause | Relevance | Page       | Clause | Relevance | Page   |
|--------|-----------|------------|--------|-----------|--------|
| 1.1    | High      | 2          | 3.10   | N/A       | -      |
| 1.2    | High      | 2,6        | 3.11   | N/A       | -      |
| 2.1    | High      | 4          | 3.12   | High      | 61-62  |
| 2.2    | High      | 5          | 3.13   | High      | 59-60  |
| 2.3    | High      | 12         | 4.1    | High      | 12     |
| 2.4    | High      | Back cover | 4.2    | High      | 12     |
| 2.5    | High      | 5          | 4.3    | N/A       | -      |
| 2.6    | High      | 5          | 4.4    | High      | 15     |
| 2.7    | High      | 5          | 4.5    | High      | 12     |
| 2.8    | High      | 5          | 4.6    | High      | 14     |
| 2.9    | High      | 4          | 4.7    | High      | 12     |
| 2.10   | High      | 8          | 4.8    | High      | 9      |
| 3.1    | High      | 4          | 4.9    | High      | 12     |
| 3.2    | High      | -          | 4.10   | High      | 12     |
| 3.3    | High      | 4          | 4.11   | High      | 14     |
| 3.4    | High      | 64         | 4.12   | High      | 15, 53 |
| 3.5    | High      | 4          | 4.13   | High      | 15     |
| 3.6    | High      | 4          | 4.14   | High      | 16     |
| 3.7    | High      | 4          | 4.15   | High      | 15     |
| 3.8    | High      | 4          | 4.16   | High      | 15-16  |
| 3.9    | High      | 4          | 4.17   | High      | 16     |



| Indicator | Relevance | Page  | Indicator | Relevance | Page |
|-----------|-----------|-------|-----------|-----------|------|
| EC1       | High      | 7     | LA1       | High      | 50   |
| EC2       | High      | 6     | LA2       | High      | 50   |
| EC3       | High      | 50    | LA3       | High      | 50   |
| EC4       | N/A       | -     | LA4       | High      | 49   |
| EC5       | High      | 51    | LA5       | High      | 49   |
| EC6       | High      | 48    | LA6       | High      | 31   |
| EC7       | Middle    | 47    | LA7       | High      | 31   |
| EC8       | High      | 54-56 | LA8       | High      | 55   |
| EC9       | High      | 54    | LA9       | High      | 31   |
| EN1       | High      | 36    | LA10      | High      | 51   |
| EN2       | High      | 40    | LA11      | High      | 51   |
| EN3       | High      | 39    | LA12      | High      | 51   |
| EN4       | High      | 39    | LA13      | High      | 50   |
| EN5       | High      | 39    | LA14      | High      | 49   |
| EN6       | High      | 39    | HR1       | High      | -    |
| EN7       | High      | 39    | HR2       | High      | -    |
| EN8       | High      | 40    | HR3       | High      | 49   |
| EN9       | N/A       | -     | HR4       | High      | 49   |
| EN10      | High      | 40    | HR5       | High      | 49   |
| EN11      | High      | 28    | HR6       | High      | -    |
| EN12      | High      | 28    | HR7       | High      | 49   |
| EN13      | High      | 28    | HR8       | High      | 49   |
| EN14      | High      | 28    | HR9       | High      | 26   |
| EN15      | N/A       | -     | SO1       | High      | 54   |
| EN16      | High      | 41    | SO2       | High      | 14   |
| EN17      | High      | 41    | SO3       | High      | 14   |
| EN18      | High      | 41    | SO4       | High      | 14   |
| EN19      | High      | 41    | SO5       | High      | 53   |
| EN20      | High      | 41    | SO6       | N/A       | -    |
| EN21      | High      | 57    | SO7       | High      | 14   |
| EN22      | High      | 57    | SO8       | High      | 14   |
| EN23      | High      | 39    | PR1       | High      | 52   |
| EN24      | N/A       | -     | PR2       | Low       | 52   |
| EN25      | N/A       | -     | PR3       | Middle    | 52   |
| EN26      | High      | 28    | PR4       | High      | 52   |
| EN27      | High      | 43    | PR5       | High      | 50   |
| EN28      | High      | 34    | PR6       | High      | -    |
| EN29      | High      | 26    | PR7       | High      | -    |
| EN30      | High      | 57    | PR8       | High      | -    |
|           |           |       | PR9       | High      | 52   |

# Glossary

| No. | Term                                                                 | Definition                                                                                                                                                                                                                                                                                                                            |
|-----|----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | Programme for the Endorsement of Forest Certification Schemes (PEFC) | PEFC is an independent and non-profit non-government organization (NGO). Founded in 1999, it promotes sustainable forest management through independent 3 <sup>rd</sup> -party certification. PEFC provides wood and paper product buyers a guarantee that the products they buy were produced through sustainable forest management. |
| 2   | Chain of Custody (CoC)                                               | The step-by-step monitoring process through which products are traced from origin to end-products. In the case of paper, CoC encompasses all aspects from forest/pulpwood plantations to the finished paper products.                                                                                                                 |
| 3   | Chemical Oxygen Demand (COD)                                         | Under certain conditions, the amount of strong oxidant used to treat water samples.                                                                                                                                                                                                                                                   |
| 4   | Skill Development Activities (SDA)                                   | Activities which resort to out-of-box thinking and multi-functional teamwork to identify the most effective solutions for key, medium- and long-term issues concerning corporate operations and business development.                                                                                                                 |
| 5   | Mean Annual Increment (MAI )                                         | For forest plantations, it refers to annual average growth of timber volume per unit area.                                                                                                                                                                                                                                            |
| 6   | Volatile Organic Compounds (VOCs)                                    | Saturated steam pressure of VOCs is more than 133.32Pa with the boiling point between 50°C–205°C. Its toxicity, stimulus, and offensive smells may affect the skin and mucous membranes, potentially causing some harm to humans.                                                                                                     |
| 7   | Suspend Solids (SS)                                                  | Organic and inorganic particles that are suspended in water and cannot pass through a 0.45 μ m filter, such as sludge, clay, organic substances, algae and germs which are insoluble in water. It is one of the indicators used to measure of water pollution.                                                                        |
| 8   | Pulp                                                                 | Pulp is a dry fibrous material prepared by chemically or mechanically separating fibers from wood, fiber crops or waste paper.                                                                                                                                                                                                        |
| 9   | Mechanical pulp                                                      | Paper pulp that is produced by mechanically separating fibers from wood, fiber crops or waste paper.                                                                                                                                                                                                                                  |
| 10  | Chemical pulp                                                        | Paper pulp that is produced by chemically separating fibers from wood, fiber crops or waste paper.                                                                                                                                                                                                                                    |
| 11  | White water                                                          | Wastewater which is created in large volumes during the papermaking process contains small short fibers which give it a white appearance.                                                                                                                                                                                             |
| 12  | Reclaimed water                                                      | Wastewater which, after being treated to a certain standard, can be reused for other purposes.                                                                                                                                                                                                                                        |
| 13  | Recausticizing                                                       | Chemical reaction of recausticizing in the lime kiln: $\text{CaCO}_3 \xrightarrow{\text{calcine}} \text{CaO} + \text{CO}_2 \uparrow$<br>Chemical reaction in the slaker:<br>$\text{Ca}(\text{OH})_2 + \text{Na}_2\text{CO}_3 \rightleftharpoons \text{CaCO}_3 \downarrow + 2\text{NaOH}$ (please refer to p.44)                       |
| 14  | Green Manure                                                         | Cultivation of beneficial plants within a plantation system in order to improve soil fertility. Often used as a substitute for chemical fertilizers. The benefits of green manure intercropping include weed suppression and improved tree growth.                                                                                    |
| 15  | Climate Change                                                       | Change in climate which is attributed directly or indirectly to human activities to alter composition of the global atmosphere and which is in addition to natural climate variability.                                                                                                                                               |
| 16  | Greenhouse Gas (GHG)                                                 | Gas that can absorb visible light and give off infrared radiation, including CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O, HFC <sub>3</sub> and PFC <sub>3</sub> etc.                                                                                                                                                         |
| 17  | Carbon Footprint                                                     | A measure of the total amount of carbon dioxide (CO <sub>2</sub> ) and other greenhouse gases emitted by a human activity or accumulated over the full lifecycle of a product or service.                                                                                                                                             |

# Feedback

Dear Readers,

Thank you for taking time out of your busy schedule to read *APP-China Sustainability Report 2009*. Your comments and suggestions will be highly appreciated. Please send them to [csr@app.com.cn](mailto:csr@app.com.cn).

Thank you!

*APP-China Sustainability Report 2009* Working Team  
November 2010

All photos are shots of APP-China facilities,  
its products or taken for APP-China activities





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