

# A Better Life with Paper

APP - China Sustainable Development Report 2017



## Heaven Earth Mankind



Heaven, with its glittery stars spanning



Earth, home of lush endless beauty.



Mankind, standing through innovation and handing down a legacy from one

## Harmony among

Harmony among heaven, earth and mankind, including of traditional Chinese philosophy and the very fully implementing the green that APP-China delivers by "Integration of Plantations, Pulp, and Paper."

diversity, for everything things have their unique diversity and essential uniformity for business can work together to create a the world will become a harmonious whole." We are committed to exploring ways to advance great concepts collaboration to create a better life for all.

## win-win results

results. Stakeholders play a engage our stakeholder groups with openness and peer-to-peer dialogue, in in pursuit of inclusive growth. of economic globalization, innovation and collaboration.

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## Message from the Chairman

The year 2017 witnessed the successful convening of the 19th CPC National Congress and marked a key phase in the implementation of the 13th Five-Year Plan and a new era for China's economic and social development. 2017 also presented the papermaking industry with both opportunities and challenges. The people's need for a better life, the advancement of supply-side reform, increasingly higher environmental standards, and the growing cost of upstream materials and labor all contributed to a growing mismatch between the old development model and reality. The papermaking industry is faced with pressing challenges such as how to turn various forms of pressure into a driving force for growth, how to enhance competitiveness, how to provide more innovative quality products, and how to more fully advance toward a green future. These issues now demand our most urgent attention.

A quarter century has passed since APP entered China. All this time, APP-China has strictly adhered to the "Integration of Plantation-Pulp-Paper" model. We have also been a driving force for innovation, and transformation of China's papermaking industry, leading a revolution from old traditional to modern industry in this area and driving upgrades from manual labor to intelligent industry. In this way, APP-China has been making a continuous effort to help China achieve cooperation and development on a global scale, moving from the old way of "every man for himself" to a new paradigm of "win-win worldwide."

Guided by the call of the new era and new journey, we continue to champion and implement the sustainable green industry chain, and join hands with our value chain partners to carry forward the time-honored glory of China's papermaking technology in a responsible

#### We hone our expertise by providing quality paper products to improve the quality of life.

With the increasingly higher living standards, consumers have a much greater demand for diversified, customized, and function-oriented paper products. Meanwhile, new business models such as online shopping became new drivers for consumption growth. To meet consumers' differentiated demands, we are fully involved in areas such as household paper, cultural paper, and industrial paper production, and make an intensified effort to pursue R&D and product enhancements, explore intelligent production and logistics, and provide a more diverse and higher-quality line of paper products and services. We comply with relevant product criteria related to environmental protection, safety and health to ensure a worry-free user experience.

#### We integrate forest and paper and contribute to industry sustainability through green operations.

A sound ecological environment is central to realizing sustainable development, and lays the foundation for sustainable development of the papermaking industry. As a leading papermaking company, we have pioneered the "Integration of Plantation-Pulp-Paper" model in China to foster ecological forestry, help eliminate outdated capacity, and improve resource efficiency, thus contributing to energy conservation and emissions reduction. We continue to intensify supplier and safety management, and strive to create a "zero accident" production environment.

#### We value talent and improve employee well-being through shared growth.

Thanks to its rich reserve of talent, China has strengthened its technological innovation capacity remarkably in recent years. Likewise, a high caliber of talent helps companies remain competitive in the marketplace. We attach great importance to our human resources, and provide robust remuneration and benefit plans to facilitate the employees' career development. We pay attention to fostering an innovative corporate culture, and care for the well-being of our employees, ensure their work-life balance, and make them feel respected, supported, and motivated to work as part of the team.

#### We care about the community and fulfill our role in public welfare by acting in a responsible manner.

Active communication acts as the bridge for companies to gain social support, and giving back to society is a way for companies to respond to such support. We take community engagement as a key priority in our daily operations, and have established sound communication channels to ensure timely dialogue and mutual respect with the community. We leverage our strengths as a papermaking company to organize paper culture events and promote low carbon awareness and practice. We continue to support public welfare and deliver distinctive public welfare concepts and innovative ideas and volunteer efforts.

2018 is the first year for implementing the spirit of the 19th CPC National Congress and marks the 40th anniversary of China's reform and opening-up. Responding to China's domestic and overseas strategic layout, the needs of the people, and a new round of reform and upgrading in management, technology, and industry, we look forward to joining hands with our stakeholders to explore sustainability throughout the entire papermaking industrial chain. In doing so, we expect to fulfill the significant historic mission that our time has bestowed on us by helping to upgrade China from paper manufacturing focused on quantity to paper manufacturing focused on quality, and further enabling a happy life for the people in harmony with a healthy environment.





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## **About APP-China**

**Total Assets** 

Sales Revenues in China for 2017



Full-time Employees in China



30,862

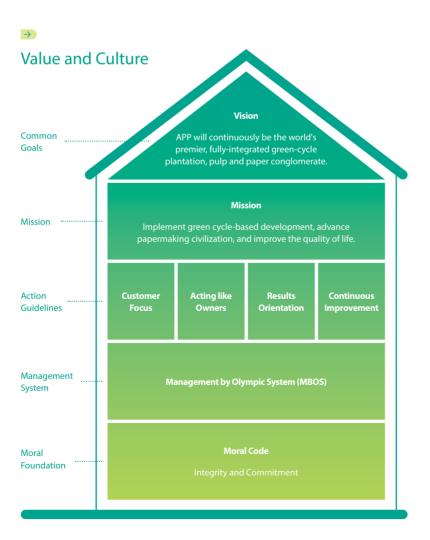
#### APP-China at a Glance

APP-China is synonymous with Sinar Mas Paper (China) Investment Co., Limited and the group of companies under its direct investment in China. Since entering China in 1992, APP-China has always adhered to sustainable development strategy, and has strived to realize a green cycle by implementing the "Integration of Plantation-Pulp-Paper" model that underpins sustainable papermaking. APP-China owns business units such as forestry, pulp, industrial paper, cultural paper, and household paper, etc.

In addition, APP-China and its parent company Sinar Mas Group are working to promote municipal and technology park projects related to corporate sustainable

development. We have developed five large-scale city complex projects in Shanghai and the Yangtze River Delta Region, including the Shanghai White Magnolia Plaza, the Shanghai Golden Bund Center, the Shanghai Jin Hongqiao International Center, the Shanghai Landmark Center, and the Ningbo Golden Center.

As of the end of 2017, APP-China owned over 30 pulp and paper mills as wholly owned subsidiaries and holding companies and 19 forestry companies, with total assets valued at about RMB158.2 billion and sales revenue of RMB52.7 billion, and over 30,000 full-time employees.





**Our Vision** 

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

Integrated

Increase the overall benefits to the business by operating acrosss the industry chain from plantation, pulp and paper to converted paper products and related industries.

The Largest

Be the leader in the industry and number one in the world, equipped with the largest production capacity, the most state-of-the-art technology and the most thorough customer service network.

The Strongest

Manufacture high-quality products to maximize profitability through the most effective management team and the strongest R&D.

Green Cycle

Take care of the large cycle from afforestation to pulp & paper making, as well as the small cycle of using recycling paper for production.



**Our Mission** 

Implement green cycle-based development, advance papermaking civilization, and improve quality of life.

Implement green cycle-based development

Achieve the harmonious development of company people, and environment by adhering to the principle of sustainable development, developing the circular economy, and building ecological

Advance papermaking civilization

Advance papermaking civilization, and promote the modernization and innovation of papermaking industry through continuous effort.

Improve the quality of life Provide high quality and diverse products to satisfy people's needs and improve their quality of life.



#### **Our Values**

Customer Focus

We will thoroughly understand our customers, including their future and hidden needs, as we continuing to create long-term value for customers in win-win relationships.

Act Like Owners

Maintain the entrepreneurial mind, place corporate interests first, work hard and smart, and never give up. Energetically take the initiative as if owners and grow with the Company.

**Results Orientation** 

Clear objectives, quick action, collaboration, mutual support and cross sharing. Let results speak for themselves under the Company's value framework.

Continuous mprovement

Maintain an open mind, steadily apply industry benchmarks, use systematic thinking and scientific decision-making, pursue innovation and breakthroughs. Constantly strive for higher goals and achieve sustainable development.



**Moral Code** 

**Integrity and Commitment** 

Abide by national laws, regulations and moral codes. Keep faith with others

Abide by company regulations.

No abuse of power for personal gain; no deception to harm company's interest.

Demonstrate integrity; promote and defend equal opportunities.

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#### **Achievements and Honors**

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Gold East Paper

Hainan Jinhai Pulp & Paper

Gold Huasheng Paper

Honors & Awards	Issuers
Responsible Enterprise of 2017	China Newsweek, China News Service
2017 Best Practices Award on Sustainable Development Goals for Chinese Enterprises	Global Compact Network China
Responsible Enterprise of Green Development	China Green Times
2017 Green Exemplary Annual Award	The 7th China Charity Festival
Top 500 Enterprises of China, and Top 500 Manufacturers of China	China Enterprise Confederation/China Enterprise Directors Association
Certificate for China Environmental Labelling (Type II)	China Environmental United Certification Centre (Beijing)
Top 10 Papermaking Enterprises of Light Industry in China	China Light Industry Council and China Paper Association
Products of Green Raw & Auxiliary Materials	China Association for Printing Technologies
High-tech Enterprise	Science and Technology Department of Jiangsu Province, Department of Finance of Jiangsu Province, Jiangsu Provincial State Administration of Taxation, and Jiangsu Province Local Taxation Bureau
First Batch of Water Efficiency Leaders of Jiangsu Province	Jiangsu Economic And Information Technology Commission, Department of Finance of Jiangsu Province, Department of Housing and Urban-Rural Development of Jiangsu Province, Jiangsu Provincial Quality and Technology Supervision Bureau, Jiangsu Provincial Government Offices Administration, and Jiangsu Provincial Bureau of Energy
2017-2019 World-renowned Brand of Jiangsu Province: "Space Shuttle"	Department of Commerce of Jiangsu Province
Famous Trademark of Jiangsu Province: "NEVIA"	Jiangsu Provincial Administration for Industry and Commerce
2017 Jiangsu "Double Hundred Brand" Product	Jiangsu Promotion Commission for Famous Brand Strategy
Zhenjiang Charity Award	Zhenjiang Municipal People's Government
Top Ten Model Employees' Homes	Zhenjiang General Labor Union
Water Efficiency Leader of Key Water Use Enterprises	Ministry of Industry and Information Technology, Ministry of Water Resources, National Development and Reform Commission and General Administration of Quality Supervision Inspection And Quarantine
Top 100 Enterprises of Hainan	Hainan Province Enterprise Confederation and Hainan Province Enterprise Directors Association
Products of Green Raw & Auxiliary Materials	China Association for Printing Technologies
Certificate for China Environmental Labelling (Type II)	China Environmental United Certification Centre
Provincial Level First Batch of Water Efficiency Leaders	Jiangsu Economic and Information Technology Commission, Department of Finance of Jiangsu Province, Department of Housing and Urban-Rural Development of Jiangsu Province, Jiangsu Provincial Quality and Technology Supervision Bureau, Jiangsu Provincial Government Offices Administration and Jiangsu Provincial Bureau of Energy
2017-2019 Jiangsu Province Key Brand for Cultivation and Development (Global)	Department of Commerce of Jiangsu Province
The 1st "Water Efficiency Leader" of Suzhou	Suzhou Water Resources Bureau, Suzhou Municipal Development & Reform Commission, Suzhou Economic & Information Technology Commission, Suzhou Finance Bureau, and The Bureau of Quality and Technical Supervision of Suzhou
First Batch of Suzhou Industrial Park Teenager Extra-school Education Bases	Suzhou Industrial Park Education Bureau

Ningbo Zhonghua

Honors & Awards

Issuers Brand Products of Zhejiang Province Zhejiang Provincial Administration of Quality and Technology Comprehensive Top 100 Enterprise of Ningbo, and Top 100 Ningbo Municipal Enterprise Confederation and Ningbo Manufacturers of Ningbo Municipal Commission of Commerce Authorized Economic Operator Ningbo Customs District Ningbo Municipal Enterprise Confederation and Ningbo

Ningbo Asia

Ningbo Demonstration Enterprise for Innovative Development of Processing Trade Municipal Commission of Commerce **Authorized Economic Operator** Ningbo Customs District Individual Champion Nurturing Enterprise of the Manufacturing Ningbo Municipal Economic and Information Technology Industry of Ningbo Committee Outstanding Contributor of Foreign Investment in Zhejiang Department of Commerce of Zhejiang Province 2017-2019 World-renowned Brand of Jiangsu Province: "Breeze" Department of Commerce of Jiangsu Province

Suzhou Gold Hongye

Guangxi Jingui

Pulp & Paper

Vice-president Unit of Guangxi Paper Association Guangxi Paper Association Hi-Tech Enterprise Guangxi Science and Technology Department, Department of Finance of Guangxi, Guangxi Taxation Bureau, and Guangxi Local Taxation Bureau Leading Enterprise of Modern Forestry Industry of Guangxi Department of Forestry of Guangxi Zhuang Autonomous Region Award for Extraordinary Science and Technology Contribution of Qinzhou Municipal Science and Technology Bureau Qinzhou

Hainan Gold Hongye

Authorized Economic Operator	Haikou Customs District
Top 100 Enterprises of Hainan	Hainan Province Enterprise Confederation and Hainan Province Enterprise Directors Association
Integrity Demonstration Enterprise of Hainan Province	Association for Credit Construction and Promotion of Hainan

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# Papermaking throughout History



## Carrier of Ancient Civilization

From the ancient use of knotted ropes for record keeping to the legend of Cangjie for inventing Chinese characters, and to the birth and evolution of modern characters, every single character leaves an indelible mark on the long history of mankind.

From pottery and tortoise shell to silk and bamboo slips, and to the advent of paper, every carrier of information has provided splendid depictions of ancestral wisdom and cultural heritage.

Thanks to paper, we can travel through time and space and experience every spectacular event throughout thousands of years of the ups and downs of history by quietly immersing ourselves in a book.

This is the miracle paper creates in the history of human civilization.

The story of paper dates back to the early Western Han Dynasty. Inspired by the formation of flakes from flying catkins, people invented paper. Later in the Eastern Han Dynasty, Cai Lun improved papermaking by introducing materials like bark, hemp, silk, and fishing net, as recorded in Heavenly Creations, a publication from the Ming Dynasty. Papermaking was later acclaimed as one of the four great inventions by ancient Chinese people.

Improved papermaking has resulted in significant cost savings and facilitated the popularization and inheritance of cultural knowledge, thus playing a unique role in the development of world civilization. Papermaking has also gradually gained prosperity as an industry, continuously propelling human civilization forward.

**Necessity for** Modern Life

Tissues, white, soft and pliable, wipe away stains and leave behind cleanliness. Sheets of paper, blank but full of possibility for imagination, invite the most unconstrained drawings. Packing paper, delicately designed, is loaded with best wishes to our loved ones.

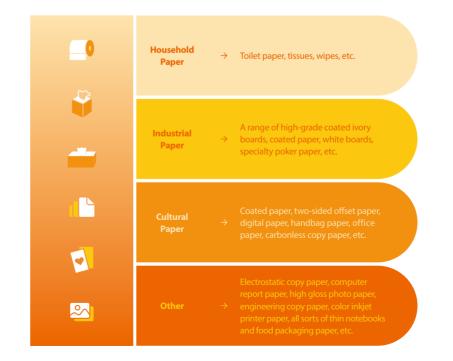
Since the advent of paper more than two thousand years ago, the papermaking industry has continued to advance. The traditional way of papermaking by hand has gradually been replaced by mechanical production. As consumers' attitudes towards paper products continue to evolve, paper products of all types find ever-broader use in our daily life and work, encompassing areas like painting, catering, packaging, printing, and accommodation, and have become a necessity that is portable and elegant.

In modern times, the consumption level of paper and cardboard is often an important indicator of a country's level of modernization and civilization, and a telling witness of people's pursuit of a beautiful and healthy life. The rich variety of paper products has made people's lives happier, and reflects sustained economic growth and marked improvement in

people's lives. China currently boasts the world's largest volume of total paper and cardboard consumption. While the per capita consumption of 78 kilograms is higher than the global average, there is still much room for growth compared with that of developed countries, which stands at over 200 kilograms.

> The aging population and the general longing for a quality life create a growing demand in China for paper products in areas closely related with the quality of life such as elder care and medical care. This presents the papermaking business with both a significant array of challenges and a unique range of market opportunities, and requires companies to adapt to the diversified market needs through continuous exploration of new technologies and products.

Since entering China, APP-China has always adhered to the "Integration of Plantation-Pulp-Paper" model to implement a green papermaking approach. Every piece of paper is produced incorporating the concept of sustainability and the wisdom of the craftsmen to be safer, more competitive and environmentally friendly.



## **Driving Transformation** and Upgrading of **Papermaking Industry**

The report to the 19th CPC National Congress calls for "working faster to build China into a manufacturer of quality" and "supporting traditional industries in upgrading themselves". This sets a strategic direction for the sustainable development of the papermaking industry in China. In response to the "new goals" and "new journey" set

Intelligent manufacturing through transformation and upgrading

forth, APP-China stays true to its original aspirations and strives to grow into a modernized pulp and paper company committed to all-round innovation and upgrading through active exploration of papermaking technologies, corporate governance, environmental protection, and other areas.



## Becoming a More Innovative Industry

We have established our own Industry

automation transformation as a focus area and aims to replace part of the manual labor in manufacturing with machines by promoting transformation and upgrading of papermaking facilities, to gradually unify all data systems, step up artificial intelligence applications, and push towards intelligent manufacturing.

4.0 roadmap, which identifies

We have signed major project investment agreements with Nantong and Yancheng, Jiangsu Province respectively, and will build the world's largest APP household paper production and R&D base in Nantong and the world's largest production and R&D base for industrial paper and viscose fiber in Yancheng by adopting

the most advanced "Industry 4.0 +

Artificial Intelligence" technology. In doing so, we aim to lead the market in circular economy and promote the development of China's pulp and paper industry as a whole

#### Information-led global management Stepping up global strategic planning

The rapid development of the Company produces an urgent need for us to effectively integrate a scientific management approach with our improve the management model. We

the A+ project, which will adjust and reform the system on all fronts to cove all our business processes worldwide.

Together with our parent company. we continue to promote industrial upgrading and invest heavily in building industrial bases both at home and abroad. Moreover, we will capitalize on the strengths of "Belt and Road"

with neighboring countries through the



have partnered with IBM to launch

The project is scheduled to be first launched in China in 2018 and gradually expanded globally to help achieve our strategic vision and value. countries and realize mutual benefit

import of raw materials and export of finished products.

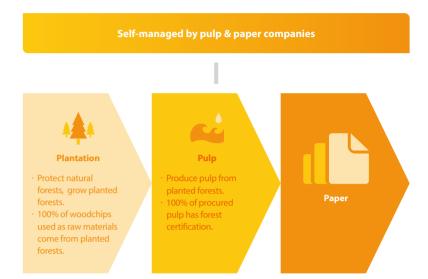


#### More Sustainable Green **Operations**

In the face of the severe challenges posed by global climate change and increased scarcity of forest resources in China, APP-China has been aligning its efforts with the "Integration of Plantation-Pulp-Paper" model since the 1990s to bring operational sustainability to life.

The "Integration of Plantation-Pulp-Paper" model is derived from the experience of the pulp and paper industry in developed countries. It aims to integrate the three separate segments of plantation, pulp, and paper so that papermaking companies play their due part by addressing the issue of raw timber resources and promote ecological papermaking. This ultimately leads to an industrial structure in which we advance the sustainable development of the papermaking industry with forests supporting paper and the paper industry nurturing forests in an integrated, holistic approach.

#### APP-China "Integration of Plantation-Pulp-Paper" Model





### **Forest Policies**

In keeping with the approach of "scientific, ecological, and legal forestry", APP-China has developed a range of forestry management systems such as those described in our Handbook of Forestry Laws and Regulations, Employee Management Manual, Forestry Policy, and Environmental Policy to bring our operations up to higher standards than set by national laws and regulations. APP-China also established standard operating procedures in terms of logging, afforestation, and forest security to guarantee the quality of forestry and sustainability of forest resources.

As the operator and manager of planted forests of APP-China, APP-China Forestry implements the Forest Conservation Policy (FCP) to strictly source from planted forests only, banning operations involving natural forests to prohibit their entry into the supply chain.



## **Green Transformation**

As socialism with Chinese characteristics crossed the threshold into a new era, people's need for a better life continues to grow. As an integral part of a better life, the ecological environment is not only a matter of great national and public concern, but also an imperative for realizing sustainable development of mankind. Environmental stewardship deeply ingrained in the Company's DNA drives APP-China to be fully committed to developing an ecological civilization and push towards industry-wide green development in a respectful, pragmatic and innovative manner.

We strongly support work in areas like forest certification, energy conservation and emissions reduction, water and air pollution treatment, resource recycling, and carbon sink, etc., to promote clean production and sustainable consumption in China. Based on mutual recognition between China Forest Certification Council (CFCC) and the Programme for the Endorsement of Forest Certification (PEFC), we have launched products carrying the combined logo of CFCC and PEFC to help raise awareness of green consumption on the part of the market and consumers.

# Cultural Paper: Advancing Diverse Cultures

Found in varied forms, cultural paper is often closely related with the printing industry and plays an important role in transmitting information and advancing culture. APP-China offers an extensive line of products worldwide that center around diversified customer needs, including coated paper, two-sided offset paper, digital paper, handbag paper, office paper, carbonless copy paper and more







3 Packs of office paper



Deputy Manager of IT Department, Gold Huasheng Paper

Li Juan

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We pride ourselves immensely on being able to leave a mark among the countless papermaking technologies and allow paper, which is thousands of years old, to continue to carry forward human civilization and history.

## Making More Impossibilities Possible

"Mom, someone from your company was at our school today teaching us about environmental protection!" Li Juan's daughter told her with excitement one day after school. She knew where mom worked. Li Juan was glad to sense the pride in her daughter's tone.

Li Juan joined Gold Huasheng shortly after graduating with a master's degree, and went on to spend the last 14 years with the Company. With great dedication and diligence, she has become the IT manager she is today, and witnessed firsthand the development of the Company.

Li Juan believes that with specialty paper as the key product, the Company must demonstrate competitive advantages in product quality and customer service, and that research and development shall not be conducted behind closed doors, but should be closely integrated with market and marketing needs so as to identify opportunities for innovation.

We provide not just paper, but all-round ervices," said Li Juan. Whether it regards ustomer needs for quality or difficulty with pplications, the IT department works with ne business, manufacturing, maintenance, ustomer service or other departments to rovide technical marketing services and n-the-spot solutions. Even in the case of otential problems detected with customer utilities, Li Juan and her colleagues would ollaborate with the engineering department of deliver solutions, which has won customer procedition.

goes without saying that product inhovation and quality enhancement are a paramount part if R&D. Li Juan remembers teaming up with er colleagues to visit customers in different dustries by means of technical marketing envices in order to meet customers' upgraded eeds for coated paper products. By doing so, ney were able to optimize the manufacturing andition of machines and the coating formuland come up with "art paper" products



which, unlike regular coated paper products, featured natural hues and textures and a unique feel. Not only do these products meet rustomer needs for superb color rendition and printability, they also bring the drying time down from 24 hours to three, helping rustomers improve their efficiency, and bring the Company handsome financial returns. In 2017, their newly developed "book insides" under the "Art Paper" category got showcased at the National Palace Museum for the artwork Palace: The Empires' Garden. Moreover, with the patents obtained, Li Juan won First Prize for the Dutstanding Inventions Award in the APP-China Outstanding Patent Competition 2017.

evercoming difficulties and challenges is ever easy, and that makes success exceedingle leasing and honorable. Back in 2016, Li Juan's eam was tasked with producing delivery nvoices on a large scale using curtain coating or its ability to coat a uniform layer with excellent coating coverage. Due to the special unctional additives typically used in curtain coating, printed barcodes on the invoices, when made with curtain coating, tended to be quite blurred. Therefore, the hard work was of in producing the delivery invoices itself, but in guaranteeing clarity in printed barcodes in order to solve this problem, Li Juan and her team spent six months consulting nearly me hundred supplier experts and a thousand sublications and conducting oil-water balance experiments thousands of times. In the end, hey developed a new "oil-water balance id" to successfully print delivery invoices on urtain coated paper with clear barcodes that net customer demands. The technology has ielded the Company strong financial returns while also filling the gap in the domestic narket in this area.

taying dedicated to her responsibilities to turn he impossible into the possible, and providing he public with delicately designed products nd services - those are the things that Li Juan eeks to do and has consistently been doing.

## Driving the Modern Industry

The ever growing market demand, technological advances in packaging and printing, and the development of new products will give paper an increasingly broader industrial use and lead to higher requirements for both quantity and quality. APP-China provides customers with a full array of high-grade industrial paper products, including a variety of coated ivory boards, coated paper, white boards, specialty poker paper, etc., to satisfy diverse needs for production and reprocessing.







3 Showcase of finished products



Deputy Section Supervisorlevel Specialist of Paper R&D Team, R&D Division, IT Department, Guangxi Jingui Pulp & Paper

Xi Yinyin

'Integration of
Plantation-PulpPaper' plays an
indispensable role in
realizing sustainable
development for the
Group. We try our best
to achieve cost and
energy savings while
ensuring product
quality.

## Achieving Sustainability through Cost and Energy Savings

ne term "industrial paper" may be confusing a glance, but a closer look reveals how biquitous it is – desktop calendars, paper ups, paper handbags, clothing tags, boarding asses, instant noodle bowls, cigarette packs, and makeup boxes. The list goes on.

Behind these increasingly modern and beautiful paper products are the efforts and dedication of papermaking artists, and Xi Yinyi is one of them.

Xi Yinyin is a girl who does not like playing by the rules. An Environmental Engineering major with a keen interest in doing experiments, she somehow joined the R&D team with Guangxi Jingui Pulp & Paper and has since started down a journey in industrial paper R&D.

Xi Yinyin gave full play to her strong flexibility and learning capacity, and quickly won recognition for her work. As the construction of an ecological civilization progresses nationwide, the Company puts an ever-growing emphasis on resource efficiency and reducing emissions. This megatrend, together with the "Integration of Plantation-Pulp-Paper" model, offered Xi Yinyin an unexpected opportunity to effectively combine her work with her major.

oated ivory boards are widely used for making rt prints or high-grade packaging cartons. he typical bulk found on the market ranges om about 1.3 to 1.4cm³/g in a first range, and om 1.4 to 1.5cm³/g in another range. It took Xi inyin and her teammates only 14 days in 2017 to develop the IVH, a new type of coated ivory oard with an ultrahigh bulk of over 1.6cm³/g and a monthly production and sales volume of 0,000 tons. Compared with one-sided coated vory boards with a bulk of 1.4cm³/g, the new roduct helps save 9,000 tons of wood pulp month, amounting to RMB324 million in natual cost reductions for 108,000 tons of pulp aved. Given the same thickness and stiffness, can serve as a substitution for other ligh-weight products to increase the usable rea by 10~20%, which represents a 10~20% eduction in cost, thus making the products nore competitive.

Pulp is an important part of paper.

Chemi-mechanical pulp is a type of high-yield pulp that has such advantages over chemical wood pulp as low pollution and low cost. It thus remains an important objective of the Company to increase the proportion of chemi-mechanical pulp for producing coated ivory boards so as to bring into full play the strengths of the "Integration of Plantation-Pulp-Paper" model. In 2017, Xi Yinyin led her R&D team to successfully increase the proportion of chemi-mechanical pulp by 8% based on major technological breakthroughs and innovations. This also helped bring down the unit consumption of pulp, resulting in marked savings in wood pulp that equaled over RMB70

septic packaging is a high-tech method or food preservation, and sees mounting opularity and market demand for being conomical, environmentally friendly, and ortable. Aseptic packaging has an array of the enefits including low cost, high resource efficiency, ease of recycling and regeneration, iodegradability, adaptability to high-speed nechanical production, ease of printing and diverservation, and non-toxicity, etc. Xi Yinyin and her team collaborated with Lami Packaging Kunshan) Co., Ltd. to understand the quality equirements for aseptic packaging paper in order to inform the optimization and technical eform of facilities and procedures then in se. The trial production succeeded in June 017, propelling the Company to a leadership iosition in domestic aseptic packaging paper narket in terms of technology and capacity.

Ki Yinyin firmly believes that adherence to the "Integration of Plantation-Pulp-Paper" concept and environmental friendly practices featuring ow cost and energy efficiency would ultimately help APP-China reap full benefits of sustainable development.



# Household Paper: Delivering Quality Life

Every individual and every family longs for a better life and is paying increasing attention to the comfort and safety of household products. Household paper such as facial tissues, toilet paper, and wipes has become an indispensable part of a quality life, be it for domestic or outdoor use. With a wide variety of household paper products that serve a huge number of families, APP-China is committed to guaranteeing product quality from the source to deliver a safe, comfortable, and tender experience for consumers and satisfy their needs for a quality life.

Major Household Paper Brands





Rear-end product packaging

Household paper display

Total investment

Annual output of base paper for household products

Annual output of finished products

Number of countries and regions for distribution





WW



4.3

1.15
million tons

0,000

43



Global R&D Director, Suzhou Gold Hongye

Pat Chen

The development of household paper is closely tied with public health, and is an embodiment of a country's level of civilization. APP is striving to create a greener and more attractive world. I am proud to be part of such efforts.

••

# Traveling Across the Ocean to Deliver Healthiest Experience

Pat Chen impresses people around him as a person with a high level of energy and a tender but firm tone of voice, who often show confidence and passion about his job. It is difficult to tell from his energetic demeanor that he is already a grandfather to seven grandchildren who reside overseas.

As an ethnic Chinese who had never been to China before, Pat struggled for a year over the decision to leave the United States and work in China. While there were still many uncertainties, a strong curiosity about China and the aspiration to make a contribution overcame everything else, and Pat finally came to China in 2007, thus embarking on a journey of exploration at Suzhou Gold Hongye.

Upon entering Pat Chen's office, one's eyes are immediately drawn to the product display stand by the door. On the stand is a full stack of household paper products like facial tissues and wipes with such brands as Breeze<sup>™</sup>, Virjoy<sup>™</sup>, and Emporia<sup>™</sup>.

R&D is the bridge that connects consumers and production, and its primary objective is to support the Company's sustainable development in the future, "according to Pat. Gold Hongye mainly produces household paper, such as dry wipes, wipes, sanitary pads, and adult diapers. The fast moving consumer goods (FMCG) industry is distinctive in that it is highly relevant to consumers' subjective invareness, and offers a diversified but often short-lived range of products. Over the past ew years, household paper products have become increasingly similar. Meanwhile, he social progress has been accompanied by a growing demand for high-quality and diversified products and augmented attentio o issues such as environmental pollution and product health and safety.

suznou Gold Hongye launched the Chemical safety & Application Compliance (CSAC) syster pack in 2011, and became the first household papermaking company in China to have in integrated product safety management mechanism and a commitment to product afety for all consumers. In this case, all the chemicals used in producing the various ypes of tissues and wipes, such as softeners, disinfectants, humectants, and refrigerants, and equired to be CSAC-certified to ensure that he products are safe for use. As people grow increasingly hygiene-conscious vipes have become a necessity for daily life and their cleansing ability remains a basic equirement. Wipes can pose a great threat o the environment after use as the fibrous aw materials for wipes are mostly viscose and polyester, etc., which do not break up in water, while the synthetic fiber contained is also not biodegradable. In response, Pat Chen led his team to successfully introduce a dispersible base material, which was then used to develop a new series of wipe products, for instance wet toilet paper and toilet cleansing vipes. They use 100% biodegradable fiber as the base material which would degrade after a while even if conveniently discarded, thus having no serious impact on the environment. Additionally, their dispersible nature allows them to be disposed directly into the toilet after use without leaving stains or clogging the

TWe developed and upgraded environmentally friendly consumer products in 2017 by targeting different user groups and markets so as to help promote the welfare of the society as a whole, "said Pat Chen enthusiastically. The Breeze™ Baby Soft Basic Skin Cleanse Wipes and Wipes Hand & Mouth, both gentle and fragrance-free, protect babies' delicate skin, and the latter is safe to be used directly on babies' hands and mouths. The Emporia™ series targets high-end users and offers a range of products from ultra-soft facial tissues to durable and flushable paper in roll form, all of which highlight a luxurious lifestyle. The newly aunched natural color series uses unbleached virgin fiber, which is close to nature and biodegradable, and offers an exceptional user experience.

China has a huge market and vastly diverse consumer groups. Pat Chen firmly believes that all types of consumers can find a product they need or like with APP-China to enjoy a healthy and pleasant life.



# Tracing the Life Cycle of Paper



#### Sustainable Development Background

and defines the direction for the long-term development of the pulp and paper industry.

#### **Management Approach**

"Integration of Plantation-Pulp-Paper" industry sustainable development in the Company's production and operations. We attach great importance to sustainable development of our own forestland, and actively carry out CFCC/PEFC and raw material quality control mechanisms in place to guarantee the traceability and quality of raw materials. We have built sound environmenta management and performance in terms of water to improve the safe production management system to keep pushing towards the "zero accident" goal during production.

#### **Alignment with SDGs**



- Formulating Forest Conservation Policy to standardize forestry work
- Conducting forest High Conservation Value (HCV) evaluation and environmental monitoring, highlighting biodiversity and water and soil
- · Continuing to carry out CFCC/PEFC forest

CFCC/PEFC certification rate of

88.36

Total area of forest certification

254,660.01







- · Driving up the use of clean energy such as biomass energy and solar energy
- · Minimizing use of clean water through reuse of reclaimed water and water saving measures, etc.
- · Continuing to intensify sewage treatment, with several mills
- obtaining the new pollution discharge license
- Renovating boilers to have ultra-low emissions
- · Exploring innovation in waste recycling and reuse

95.69

6.35

13.9

ton of pulp produced

Sewage discharge per of paper produced

0.26

ton of pulp produced



photovoltaic power

23.56

# Sustainable Forestry to Protect Forest Ecology

Forest Ecology



Forester, Chenglin Forestry Farm, Lin' gao, Hainan

**Wang Heng** 

## ------

Green eucalyptus leaves spread out as far as the boundless sky. Plant the trees. Then they will have the chance to reach the sky.

#### **Guarding this Greenness**

Upon graduating from Nanjing Forestry
University in the summer of 2004, Wang
Heng did not hesitate to become a forester
in charge of taking care of over 7,000 mu
of eucalyptus forest at his hometown in
Lincheng, Lin'gao County, Hainan, away from
the hustle of the city.

trees. He would travel for dozens or even hundreds of kilometers on his motorcycle, through the numerous wooded trails, to be on the lookout for signs of fire, illegal felling or other abnormal conditions. His work also includes providing instructions on the daily operations on the forestland. The work of a forester is mundane and taxing, and can sometimes even be dangerous. During his first year as a forester, Wang Heng was personally involved in a dreadful illegal felling incident, when he was knocked over by the fellers' car while still on his motorcycle and got wounded. But the good news is that such incidents have declined notably in number in recent years as a result of the government's intensified efforts to crack down on illegal felling.

To guarantee the safety of trees, Wang Heng and his team need to make an all-out effort to prevent fires and fight against natural disasters. During forest patrols, they also collaborate with the local Forestry Bureau to popularize knowledge among villagers on fire prevention by putting up banners and billboards. Their continued efforts have led to a steady decline in the number of forest fires each year.



Communicating with the local community is another important part of Wang Heng's daily work. Having known Wang Heng for years, the villagers all have a strong faith in him. As they become increasingly environmentally conscious, they would sometimes work alongside Wang Heng to plant trees, manage the forestry, and join the fight against natural

During over one decade spent guarding the trees, Wang Heng breathes in the fresh air they provide, and is proud to witness their growth from planting to mature trees over 30 meters tall before being turned into paper for the marketplace. Wang Heng believes that it is thanks to planted forests that more natural and old-growth forests are now better protected. He also points out the equal importance of protecting the biodiversity of planted forests, and receives regular training on high conservation value animals and plants with his colleagues and contractors.

protect the forests to create value unseen to other people. They are the guards at the very beginning of the supply chain of paper, saving nature from sacrifice. Wang Heng firmly believes that by taking good care of this lush, green mountain of forests, he is leaving behind treasures for future generations.

Every time Wang Heng looks at the exuberant eucalyptus forests, he feels happy and content, as they are the fruits of his dedication and care.

#### Forest Management

#### **Sustainable Forestry**

Not only are forests an integral part of the ecosystem, but they also provide mankind with invaluable natural resources and contribute to the legacy of human civilization. As a step towards the vision of "building the world's largest and most robust green cycle industry through Integration of Plantation-Pulp-Paper", APP released the Forest Conservation Policy (FCP) in 2013. The Company committed itself to taking such measures as implementing High Conservation Value forests and High Carbon Stock assessments, reducing GHG emissions, and practicing responsible supply chain and procurement. To facilitate the implementation of the Forest Conservation Policy measures, APP-China Forestry formulated the Sustainable Development Policy, Social Employment Policy, and Environmental Policy with the assistance of The Forest Trust (TFT).

As trees grow, they are moved from seedling nurseries to forestland. APP-China owns two large seedling nurseries in Hainan and Guangxi, with an annual seedling output of 60 million



Picking out buds and placing them in culture medium to form root groups for cultivation

Transplanting young plants from rooting bottles to fertile soil





Seedling manageme

Local workers grading seedlings



and 30 million respectively. APP-China Forestry made a handsome investment in building a modern R&D center in the seedling nurseries, where research on forest breeding, forestry diseases and insects, and soil and fertilizer is carried out, and quality breeding lines suitable for making paper and pulp are collected, explored and developed. All those are done to promote scientific forestry and guarantee the growth quality of planted trees. Moreover, the Company has formulated a complete sustainability-based forestry management system and standard operating procedures for the whole forestry process from logging, plantation, and planting with green fertilizers to forestry safety, and introduced the Forestry Management System (PMS) back in 2009 to realize efficient management and remote monitoring of forestry.

Regarding suspicion of the negative impacts caused by planted eucalyptus forests on the environment, we believe that besides developing technologies to enable sustainable management of planted forests, measures should also be taken to promote sustainable land utilization and ecological preservation in clear keeping with the positive and negative environmental impacts of large-scale planted eucalyptus forests and to minimize the negative impacts, thus creating a genuinely ecological industry.

We invite professional organizations, including the Research Institute of Tropical Forestry, Chinese Academy of Forestry (RITF, CAF), to regularly conduct monitoring of the ecological and environmental impact of planted eucalyptus forests so as to detect and address the environmental issues in forestry in a timely manner. Additionally, we provide employees and contractors with training in several forms including training on eco-protection to continuously raise their awareness of forest and environmental protection and minimize the impact of forestry operations on the environment.

#### Carrying on Ecological Monitoring and the Preservation of Planted Eucalyptus Forests

Hainan Jinhua Forestry has commissioned the RITF to conduct environmental monitoring on its planted eucalyptus forests at the production base since 2007, and to provide corresponding reports on indicators such as biodiversity, small watershed water quality, soil fertility, and soil erosion.

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Preservation of the sample areas is key to ensuring consistency of the monitoring data. Therefore, the Company, together with a few senior engineers from RITF, performed GPS positioning of the sample areas and drew maps. Responsibility provisions were formulated to appoint the primary responsible person for sample area preservation. A buffer zone is set up in the forestry process, especially during logging, to maintain the integrity of the sample areas. Special care is taken to protect the sample areas during routine patrols, and effective protection measures are implemented under unusual conditions.

The National Eucalypt Plantation Industry Development and Seminar was hosted in Liuzhou, Guangxi in September 2017. As the primary sponsor, APP-China made a theme report at the seminar on "cultivating middle and large timber eucalypt, and accelerating industry transformation and upgrading," and showcased its latest products and technologies. The seminar promoted the communication and cooperation between APP-China and government departments, management bodies, and research institutions, and played a significant role in pushing forward the transformation and upgrading and sustainable development of the eucalypt plantation industry in China.

#### **Management of High Conservation Value Regions**

High Conservation Value (HCV) regions have special biological, ecological, social or cultural value which are significant or critically important. Forest managers need to determine the HCV regions in their forest operation units, maintain or enhance the attributes of such regions, and monitor the results of their management. Based on their functions, HCV regions fall into six categories, namely biodiversity, landscape-level ecosystems and ecosystem mosaics, ecosystems and habitats, basic ecosystem services, necessities of local communities, and cultural significance.

APP-China formulated the *Regulations* for *Management of High Conservation*Value Regions to perform measurement and evaluation of the HCV regions in forests for corporate operations. So far, we have completed HCV evaluation on our forestland in Guangxi and Hainan, which accounts for 48.78% of the total forestland we own. The results showed that HCV regions were not found in those forests. However, given that a small part of our forestland is on the adjacency of natural forests, we think that potential eco-risks can be avoided by aligning our forest management with the requirements

of HCV regions. In the future, we will continue to implement HCV evaluation on more of our forestland.

We have been offering training to employees and contractors on HCV regions since 2013. In 2017, we compiled the *Inventory of Protected State-level Animals and Plants in Hainan*, which covers 71 different animals and 48 different plants. The document assists our employees and contractors to know and recognize rare animal and plant species in our forestland to provide them with better protection.

#### **Forest Certification**

Total area of self-managed forests with CFCC/PEFC certification



254,660.01 hectares

Proportion of self-managed forests with CFCC/PEFC certification



88.36

Proportion of self-managed forests supplied to paper and pulp mills with CFCC/PEFC certification



Forest certification aims to guarantee the legitimacy and sustainability of forest operations and utilization. It demonstrates to the government, customers, and consumers not only the sustainable operations and management of forests, but also the legitimacy of sources for the raw materials and products. The Programme for the **Endorsement of Forest Certification** (PEFC) represents the world's top-level practice for forest management, and fully incorporates the local factors of each country such as forest ecosystem, legal and administrative systems, and social and cultural background.

APP-China played a key part in bringing about the mutual recognition between CFCC and PEFC. This means that CFCC is officially recognized internationally, which is a significant step in improving the competitiveness of China's forest products. The CFCC/PEFC certification provides forests owners and managers with recognition for their responsible management practices, showing that such practices meet the requirements

for best sustainable forest management practices with respect to biodiversity, ecosystem service scope, use of chemicals, labor rights, indigenous rights, and compliance with laws and regulations, etc.

APP-China started to label its household paper and copy paper with the CFCC/PEFC certification logo in 2015 to give them a "green passport". More brands under APP-China, such as Breeze™, will be bearing the logo in the future. By doing so, we expect to further enhance market awareness of green consumption, and call for more peer companies to join the club and work together to promote sustainable forest management.

As of the end of 2017, over 250,000 hectares of APP-China's self-managed forests had been CFCC/PEFC-certified, accounting for 88.36% of total owned area, and the CFCC/PEFC certification rate of self-managed forests supplied to paper and pulp mills reached 100%.

# Controlling Raw Materials to Build a Responsible Supply Chain



Technical Department, Gold East Paper

Yin Lijuan

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This role involves huge

responsibilities, and staying scientific, fair and just in raw material examination is a key part of it. Timely identification and prevention of fraud and corruption risks is another. We believe in shared growth with our suppliers through honest, dedicated and professional work.



We have to watch for what we eat in order to stay healthy. In the same token, the health of a company begins with preventing defects and poor quality in raw materials.

This is what Yin Lijuan has been doing since joining the Raw Material Team of Quality Assurance Section, Gold East Paper in 2016, namely ensuring quality of the raw material before their entry into the mills, on which subsequent production depends.

Before this, Yin Lijuan had been working for 17 years at the Company's R&D center to perform all sorts of tests and precise analysis of paper. The role has equipped her with a robust knowledge base, strong operations adeptness, outstanding data analysis ability, and a meticulous work attitude. Her experience enables her to approach demands for raw materials from the product perspective, and her dedication has instilled in her an increasingly strong passion for her job as a "goalkeeper" for product quality.

guarantee, Yin Lijuan and her team believe firmly in science and facts. They devise and strictly apply corresponding standards to the examination of different raw materials by working with the headquarters and production department and coordinating the work of procurers and suppliers, always remaining fair, just, and impartial. Besides guaranteeing quality of raw materials that meet production needs, they also need to ensure their strict compliance with the national environmental standards and rigid control over the level of toxicants and pollutants contained.

In order to help suppliers understand the Company's requirements for the quality of raw materials, Yin Lijuan seeks constant communication with them and offers explanation by citing the demands of end customers for printing and processing technologies and the requirements set out in national environmental policies. Her efforts

made the suppliers more open to raising thei standards to make a joint effort to improve product quality.

Changes made to the standards for mechanical pulp testing is one of the examples. Mechanical pulp suppliers provided only a limited number of product indicators, and there was a broad difference between the product quality indicators they provided and the test results at Gold East Paper. Quality that fell short of expectations became a common cause of customer complaints and disputes. To ensure consistent standards, Yin Lijuan and her team studied a wealth of materials and the historical testing results, and conducted a great number of experiments for comparison with suppliers' results. Their argument was supported by international standards and detailed data, and finally helped remove the technical gaps in-between. As a result of the joint efforts with the purchase department to consistently engage suppliers in communication about the quality requirements for the raw materials, three suppliers agreed to raise their standards to match the Company's requirements and add more management and control items necessary for production, thus achieving win-win cooperation.

Having worked at Gold East Paper for nearly 20 years, Yin Lijuan is a witness to the Company's growth, which is imbued with innovation. To her, this is also a process of enhancing her own values. Yin Lijuan still clearly recalls attending the award ceremony for the 3rd APP Printing Technology Award in 2009. While assisting the experts in candidate assessment, she not only saw works showcasing high-end printing technologies, but also acquired knowledge on printing, design and other areas. Yin Lijuan marvels at the beauty of expertise when developed to its fullest. Pursuit of professionalism and seeking to attain the ultimate is the greatest expression of Yin Lijuan's dedication to her job.

Certified wood fiber

accounts for

of total wood fiber

2017

purchased

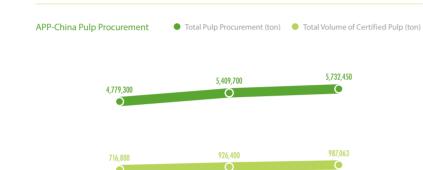
### Raw Material Procurement

As one of the largest paper product suppliers in China, APP-China incorporates sustainability into the entire process of raw material procurement, dedicated to promoting the sustainable operations of suppliers through responsible procurement. Our procurement mainly covers important raw materials for production, such as chemicals, woodchips, wood pulp and waste paper, as well as services in areas like sewage treatment and new energy facilities. We have formulated a series of supplier screening and assessment standards in place to ensure the quality and legitimate sourcing of raw materials at the origin, and give priority to certified raw materials.

We updated our supplier risk assessment process in 2017 by including verification of the reports and certificates provided by suppliers. We also followed the latest status of our suppliers to help them obtain PEFC certification. In addition, we launched the supplier registration system, where suppliers are asked to provide detailed information on everything related to the supply chain in terms of products and services, production, technology, health, safety, environmental protection, etc. The system improved the efficiency of our procurement while also facilitating our communication with the suppliers.

#### As of the end of 2017

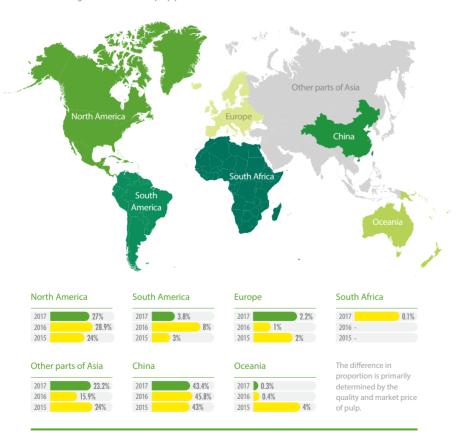
The number of enterprises subordinated to APP-China that have obtained PEFC CoC certification is



2016

#### Places of origin for APP-China's pulp procurement

2015



#### PEFC Chain of Custody (CoC) Certification

The PEFC CoC certification requires that the procurement planning and production control for timber and pulpwood comply strictly with the PEFC Chain of Custody (CoC) standards, and that the sourcing of raw materials follow local, national, or international laws and regulations. It also

includes a risk assessment on the source of raw materials to avoid controversial procurements. The PEFC CoC certification can prepare products for entering the global market and push towards ecological equilibrium, thus facilitating the harmonious development between companies and the

society, environment, and economy.

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In 2017, 16 companies subordinated to APP-China had passed the certificate-renewal review for the PEFC CoC management system.

#### Hainan Jinhai Pulp & Paper Passing the BV DDS Certification Review

Bureau Veritas (BV) is a supervisory body officially recognized by the European Union. The Bureau Veritas Due Diligence System (BV DDS) not only provides business solutions to the EU Timber Regulation (EUTR), but also satisfies the compliance framework requirements set out in the U.S. Lacey Act and the Australia Illegal Logging Prohibition Act. The review conducts an in-

depth risk analysis on the supply chain, place of origin for raw materials and other aspects. This is performed based on the records for legitimacy and traceability of virgin timbers or woodchips, and paper & pulp supply chain, etc., that are collected during field surveys of the upstream forests and supply chain. Hainan Jinhai Pulp & Paper consistently implements the wood

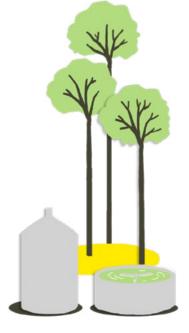
raw material legitimacy and traceability certification. Having passed the BV DDS certification review indicates that the Company is recognized by third-party verification for the "ultra-low risk" status of its current wood raw material for making pulp and paper products, laying a sound foundation for building industry chain of circular economy.

### Raw Material Quality Control

In order to ensure consistent product quality, APP-China standardized specifications of its pulp and paper products in 2017. A number of senior experts in pulp making were invited to the Company, and established a consistent set of standards for pulp product testing by using professional analysis tools and world-class testing equipment. At the

same time, we look to market-leading pulp making processes and technologies to inform our own, and have achieved cost savings and quality improvement through upgraded production technologies.

Thanks to consistent pulp quality, the pass rate for our paper products was further improved.







Deputy Director, Safety and **Environmental Protection** Department, Hainan Jinhai Pulp & Paper

Li Bin

In the future, we will continue to make progress in water conservation, sewage reduction, and ultra-low exhaust emission, and we hope to participate more in industrial construction to contribute to the healthy development of the pulp and paper

industry.



#### **Making Papermaking Cleaner**

and looked forward to putting his professional knowledge to use someday. In

how Jinhai Pulp & Paper has improved its thinks that the achievements of Hainan Jinhai Pulp & Paper today are closely related to the Company's environmental stewardship.

Take sewage discharge as an example. China began to implement the COD emissions limit of 100 mg/L in 2011. Since its establishment actively supported the work of the Ministry Paper are only one-fifth to one-quarter of the national standard limit. In 2017, Hainan 38% compared with the previous year.

when they occur, and always try their best to analyze the causes and come up with

As a backbone of the environmental communicate with the government, social the Company to the public.

always responded to visitors' questions with protection. At the meantime, they should be open to public supervision, and contribute

## **Environmental** Management

Total Environmental Investmen of APP-China



RMB10,000

Note: In 2017, some mills made more investments in boiler ultra-low emission upgrades and maintenance of alkali recovery boilers.

## **Water Resources** Management

APP-China has established an effective water resources management system to enhance water recycling and reuse by continuously improving the water recycling and reclaimed water reuse systems. Also, the Company further increased the use of reclaimed water in greening irrigation, equipment washing, fire protection facilities, and reverse osmosis and backwashing to reduce sewage discharge. So far, China Cultural Paper Mill and Hainan Household Paper Mill have fully implemented the recycling of reclaimed water, recycling 46,000 tons of sewage per day and saving more than 16 million cubic meters of water per year, equal to the water capacity of the West

Meanwhile, the mills are actively exploring possible water-saving approaches, and seek to minimize direct withdrawal of water resources by setting water-saving targets, conducting regular water-saving assessments, and improving watersaving equipment. In terms of sewage treatment, we have introduced the world's top-class sewage treatment system and continuously improve the technical and technological level of our sewage treatment. The sewage discharge performance of our mills far exceeds requirements of the national emission standards.

Resource and environmental protection have become one of the key issues in global sustainable development. China is now at a crucial stage of low-carbon development and transformation. In recent years, companies face increasingly stringent environmental protection requirements due to the ever-strengthened environmental supervision and governance. As a leading company in paper and pulp industry, APP-China has always integrated environmental protection into its production and operation processes, and strives to change the stereotype of the paper and pulp industry of high consumption, severe pollution, and inefficiency. We think that only by taking firm environmental protection actions can we turn pressure into opportunities and remain competitive as a sustainable company.

APP-China's mills have established their own environmental management systems in line with the ISO14000 environmental management system standards, and

continue to make improvement by taking into full consideration the environmental impacts of water, energy, air emission, and waste, etc. Each mill has developed a detailed environmental data indicator system based on its own operations, where the headquarters collects data periodically and pushes for the fulfillment of the environmental targets. At the same time, we make vast investments every year in improving environmental protection equipment and technology, and are continuously moving towards modern large-scale industry that features low-consumption, environmental friendliness, and efficiency.

The mills have installed online environmental monitoring instruments at pollutant outlets including sewage discharge points and boiler flue gas emission points to comprehensively monitor COD, ammonia-nitrogen, sulfur dioxide, nitrogen oxide, and smoke dust etc., thereby managing exhaust gas and sewage discharge more effectively.

#### **Guangxi Jingui Pulp & Paper Carrying Out Water Saving Action**

Guangxi Jingui Pulp & Paper has long led the industry in water efficiency. In order to make further progress in water conservation, the Company set up a water-saving action group, requiring each plant to clearly understand the relationship between water consumption and yield at each water use point in order to determine whether there is potential for water efficiency improvement. The action achieved good results, saving 5,000 cubic meters of water per day merely by filtration and recycling of sewage condensate from the alkali recovery plant and by reuse of water in the pulp plant.

84,968,795 tons

Sewage discharge per ton of pulp produced

















Sewage discharge per ton of

of paper produced

(National standard limit is 1.6 kg)

118,173,907 tons

COD emissions per ton

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In 2017, Guangxi Jingui Pulp & Paper, Hainan Jinhai Pulp & Paper, Gold East Paper, Hainan Gold Hongye, Hainan Gold Shengpu and other mills obtained the new pollutant discharge permit issued by the Ministry of Environmental Protection. Unlike the previous permit, the new permit requires information disclosure. The public can easily access the national pollutant permit information platform by scanning the QR code on the website and the permit, where the companies' pollutant outlets can be clearly viewed on the satellite map. The platform also provides information on the types of major pollutants such as exhaust gas and sewage, corporate self-monitoring, execution reports, information disclosure, and environmental management accounting records, etc. The new permit imposes higher requirements on companies, which in some way plays a positive role in helping our mills further improve their environmental management.

#### Hainan Jinhai Pulp & Paper Selected as the 2017 Water Efficiency **Leader of Key Water Use Enterprises**

In 2017, Hainan Jinhai Pulp & Paper was recognized as the Water Efficiency Leader of Key Water Use Enterprises for its innovative water-saving management system and technology. In terms of water-saving management system, the Company allocates water-saving targets every year based on the key performance indicator tracking system, and each department makes annual water-saving plans to achieve the targets assigned  $\,$ to them. In addition, the Company has established a mill water metering network to implement segmented water consumption management. In terms of water-saving technology, the Company adopted clean condensate water reuse for pulping, intermediate condensate water reuse, domestic white water reuse after air floatation, household paper reclaimed water reuse, raw water plant backwash drainage reuse, pure water plant recycling conventional well-flushing renovation and other actions.

Total Reuse of Recycled Water of APP-China Mills ton					
	2015	2016	2017		
Gold East Paper	488,100,000	283,152,000	283,152,000		
Hainan Jinhai Pulp & Paper	908,608,007	1,210,049,099	1,046,378,081		
Ningbo Zhonghua	129,942,465	134,535,550	135,358,599		
Ningbo Asia	254,805,840	220,452,737	219,904,179		
Gold Huasheng *	259,164,007	240,569,716	368,663,480		
Guangxi Jingui Pulp & Paper	451,802,163	489,439,287	445,290,787		
Hainan Gold Hongye	71,687,661	64,712,622	65,982,500		
Hainan Gold Shengpu	64,178,333	57,168,302	56,721,070		

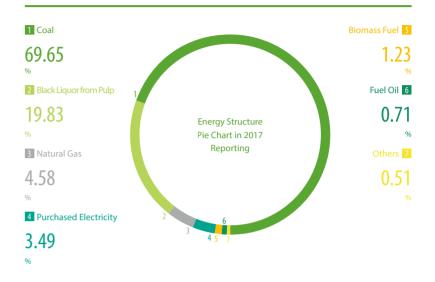
Note: \*Gold Huasheng' s total reuse of recycled water includes that of Suzhou Gold Hongye.



### Addressing Climate Change

Climate change has become one of the most severe challenges facing the human society. To address climate change, China has been strengthening energy conservation and emission reduction, optimizing energy structure, encouraging clean energy use, and reducing greenhouse gas emissions. APP-China continues to improve its energy management system, reaching energy-saving targets by strengthening energy measurement and statistics, regularly analyzing energy consumption data, conducting energy-saving education and promoting energy efficiency. The Company commits itself to reducing the use of fossil fuels and promoting the use of new energy sources such as biomass and solar energy. Mills such as Hainan Jinhai Pulp & Paper, Gold East Paper, Ningbo Asia, and Guangxi Jingui Pulp & Paper have developed sludge drying equipment, which significantly reduces coal use by utilizing the residual heat from steam turbine to dry and burn sludge.

APP-China mills actively cooperate with the government to carry out greenhouse gas emission reviews. In 2017, Guangxi Jingui Pulp & Paper audited its energy use of 2016. The greenhouse gas emissions in 2016 and 2017 were calculated in accordance with requirements, and the emissions report passed the on-site third-party audit. Gold East Paper participated in training sessions on carbon trading, prepared greenhouse gas emission reports according to requirements, and also passed on-site third-party audit. In addition, Gold East Paper discloses information every year on the greenhouse gas emissions in its manufacturing process to overseas customers and third-party organizations in need of such information.





Following the energy policy of "optimizing energy structure, rationalizing resource use, developing circular economy, and achieving sustainable development", Gold Huasheng has determined its annual target of "saving total coal consumption". The Company strictly controlled coal consumption by replacing coal with biomass fuel, increasing coal calorific value, purchasing municipal electricity to reduce self-generated power, and appropriately reducing production by paper machines. As a result, the coal consumption decreased from 691,000 tons in 2016 to 654,000 tons in 2017, with a total reduction of 37,000 tons, achieving both economic and environmental benefits.

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#### **Gold East Paper Promoting Photovoltaic Power Generation**

In response to the national policy of accelerating the development of new energy industry, Gold East Paper vigorously promoted energy conservation and emission reduction measures, and built large-scale solar power demonstration plants by taking full advantage of its high-quality roof resources. The project adopted the scheme of continuous construction and simultaneous grid connection, where all electricity was spontaneous and used for self-consumption and residual electricity was connected to the power grid. The 1st phase project of the 20MW rooftop photovoltaic power station and 2nd phase project of the 10MW rooftop photovoltaic power station have been completed and put into operations in June 2016 and November 2017 respectively. The average annual on-grid power is expected to reach 20 million kWh.

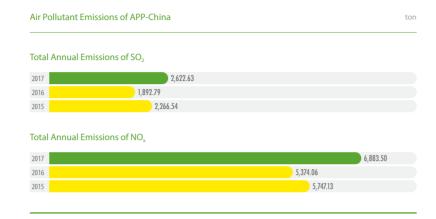


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#### **Air Pollutants Emission** Reduction

Air pollution has caused increasingly significant negative impacts on human health. The regulatory authorities have continuously raised the requirements on manufacturing enterprises for the concentration of air pollutants. "To make the skies blue again" requires companies to work together to effectively reduce the total amount and concentration of air pollutants by optimizing the industry structure, adjusting energy structure, and modifying and upgrading manufacturing equipment.

In recent years, APP-China has increased the use of clean energy, thus contributing to the reduction of air pollutants. Meanwhile, Ningbo Asia, Guangxi Jingui Pulp & Paper, Gold East Paper, and other major mills have carried out ultra-low emission upgrades of boiler equipment in thermal power plants, thus significantly reducing the concentration of emissions including smoke, dust, sulfur dioxide, and nitrogen oxides, etc., and satisfying the national ultra-low emission requirements. The mills plan to meet the natural gas emission standards in 2018 or 2019. Due to the latest construction of sludge incinerators and increased yields in some mills, the total emissions of relevant air pollutants increased in 2017.



#### Ultra-Low Emission Project of Ningbo Asia Pulp & Paper **Thermal Power Plant Completed**



Adhering to national and municipal policies of ultra-low emission and energy saving renovation on coal-fired power plants, Ningbo Asia implemented upgrades for the ultra-low emission of nitrogen oxides and particulate matter from boilers in 2017. Before the upgrade, the boiler flue gas was treated by electrostatic dust removal, limestone injection into furnace, and ammonia desulfurization outside the furnace, etc., and the emission concentration of sulfur dioxide already met the ultra-low emission requirements. The two renovated boilers further reduced the concentration of flue gas emissions from thermal power plants by a great deal and contributed substantially to the treatment of air pollutants. The concentration of smoke and dust emission has been lowered from less than 20mg/Nm<sup>3</sup> to less than 5mg/Nm<sup>3</sup> so far.





### **Exploring Waste Reuse**

Based on the principle of "Reduce, Reuse, Recycle", APP-China disposes of wastes generated from manufacturing in a scientific and effective manner and maximizes the reuse of wastes to turn them into useful resources. APP-China mills have been actively seeking possible ways of waste reuse, such as making bricks using the ash and slag generated from boilers, incinerating and composting by sludge from sewage treatment, and putting marble waste residue into the boilers of the self-supplied power plants for flue gas desulfurization, which has not only reduced the use of industrial raw materials, but also mitigated environmental pollution from solid waste.

#### Gold East Paper Actively Implementing Comprehensive Use of Waste



Solid waste generated from the production of Gold East Paper includes sludge cake from the sewage plant and ash from the power plant, etc. Through comprehensive efforts and shared responsibility, the Company's total use rate of solid waste has reached 99.8%.

The Company uses primary sludge from sewage treatment as the raw material for producing paper covers, which contributes to waste recycling and reuse and a reduction in solid waste generation and resource use. The production line of sludge paper covers has an annual sludge treatment capacity of 3,000 tons and COD treatment capacity of 25 tons, and monthly paper cover production of 40,000, which represents RMB1.2million in cost savings per year.

In order to control the dust concentration of fugitive emissions, the Company directly  $\,$ transported the ash generated from the production by closed tankers to professional ash utilization companies to produce block bricks. The product has passed the evaluation of provincial experts and been awarded as a key recommended product by the Zhenjiang Wall Materials Reform Office.

## Staying Vigilant to Improve Safety Management

Lost Hours per Million Working Hours of APP-China

**Intensifying Safety** 

Management



Safety is a key management priority for a manufacturer. APP-China implements the "people-oriented" safety management concept, and strives to create a "zero accident" production environment. We have the OHSAS18001-based safety management system and a progressive safe production responsibility system in place to continue to intensify safety control.

We take each and every work-related injury seriously, and follow up with a meticulous investigation and

cause analysis to implement timely rectifications. We incorporate the analysis and lessons in subsequent safety training to prevent similar incidents from happening again. Injured employees are immediately sent to the medical office or hospital for treatment, and are provided with work injury identification and insurance payment. In 2017, the number of work-related injuries in the mills and units within the reporting scope totaled 79 incidents, and there was one work-related death.

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In 2017, APP-China continued to intensify efforts to enhance safety management system construction and potential risk identification. The mills summarized and improved their organizational framework for safety management according to their own business operations, and followed up and promoted safety implementation term by term to ensure all sections of dangerous operations are covered to enhance rectification of potential risks.

On the contractor front, we fulfilled our responsibility for safety supervision, management, and guidance, and formulated the Regulations for Contractor Safety Management to enforce more strict supervision and management regarding the safe production of contractors and minimize safety incidents. We perform on-site inspection of the contractors' own production facilities and safe production behaviors and a monthly appraisal of their safe production behavior and safety performance. We also push for full compliance with the safe production provisions and engage our contractors in thorough communication on safety technologies prior to operations, all in an effort to help them improve capacity for safe production management.

## Gold Huasheng Establishes a Comprehensive Safety Management System



The Company improved its capacity for safety management by designing a progressive safe production responsibility system that specifies role-based responsibilities, and by organizing a rich variety of safety awareness-raising events. Moreover, the Company signed the *Management Agreement on Safe Production* with all contractors that requires them to attend a monthly safety meeting, thus taking their work under our scope of safety management. The Company also invited a number of experts to provide contractors with training on safety education, and conducted in-depth communication on the improvement of safety.

All those efforts and measures helped Gold Huasheng avoid any serious work-related injuries or death in 2017, and reduced the number of minor injuries to 5, down 55% compared with the previous year. There were zero fires and zero occurrences of occupational disease in 2017.

# Safety Education and Training

APP-China provided a wide array of safety training and education activities that covered industrial safety, occupational health and fire control, etc., with a view to enhancing the safety awareness of all employees and contractors. The mills organized daily "safety morning meetings" and routine safety meetings and hosted many safety activities to deeply ingrain safety into the minds of employees and contractors.

## Ningbo Asia Hosting "Safety Management Reinforcement Training for Leaders"



areas. The leaders who participated all spoke highly of the training, saying that they

learned a great deal from it and will put it to practice to improve their level of safe

Gold Huasheng Hosting Various Safety Activities

production and management.

Gold Huasheng hosted various safety activities in 2017, including 43 activities in the Safety Month, such as the safety knowledge contests and the fire control techniques contests, to delve deeply into the potential causes of safety incidents. During this process, employees joined hands with contractors and discovered 125 potential safety problems through brainstorming. 20 suggestions for improvement have been selected for successful implementation. Those activities played an important role in improving the safety knowledge and skills of the employees and contractors.



Fire drills

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# 02

# Joining Hands to Create a Happy Future



#### Sustainable Development Background

People are the cornerstone of a business, and one of the core resources fueling business development. A high caliber of talent helps companies remain competitive in the marketplace. In recent years, China has stepped up formulating policies to eliminate outdated industrial capacity and generating increased concentration of production capacity in the pulp and paper industry. The trend in China now is to pursue large scale production, new technologies, new facilities and modernized management. The development of the pulp and paper industry gives rise to a growing need for high-performing, versatile talent. For this reason, it is crucial for businesses' sustainable development to give priority to the coaching, encouragement, and retention of talent with papermaking expertise.

#### Management Approach

APP-China values every dedicated employee. The Company provides competitive remuneration and benefits, and supports employees' professional development by offering training and competitions that expand their skillsets and horizons. Corporate culture construction is an important objective for the Company, which is intended to guide the behavior and continued growth of every employee. Moreover, the Company pays close attention to guaranteeing work-life balance for all employees.

#### Alignment with SDGs



Starting planning the construction of corporate university Adopting post-based skill and ability model; undertaking vocational training; encouraging employees to participate in skills competitions Promoting corporate culture system, taking diverse measures to ingrain corporate values into employees

Employee training investment

3.97

nillion yuan

Employee training time

762,556.9

hours



- roviding employees with competitive remuneration
- Having a multi-channel communication mechanism in place to encourage employees to voice their opinions
- Caring for employees and their families; organizing rich recreational activities; sending wishes and greetings on holidays and festivals

Number of employees in China

30,862

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Maintenance Department,
Gold East Paper

Su Jianshi

It shows a professional attitude to treat craftsmanship and work selflessly. Sharing experience with others not only shows my respect to craftsmanship, but also makes me proud.



## Honoring Commitment and Honing Craftsmanship

"Craftsmanship" became a buzzword in 2016. Su Jianshi, Maintenance Section Supervisor and Senior Technician of Gold East Paper, would often hear his colleagues and friends say to him, "Master Su, you are the best example of 'Craftsmen of the Nation'!" To this Su Jianshi would always respond with a humble smile. Su Jianshi was named "Manufacturing Craftsman of Zhenjiang" in 2017. Never someone to show off honors, ever since Su Jianshi started working at APP 29 years ago, he has consistently shown his commitment to learning, giving, sharing, and lived the spirit of craftsmanship.

Back in 1988, 20-year-old Su Jianshi started his career at the Gansu Power System. Guided by his interest, he worked as a welder in a variety of posts. Talented and diligent, Su Jianshi was promoted to coach after only two years working as an apprentice. He remained an elite technician and won numerous awards in national competitions.

Su Jianshi' s level of mastery drew the attention of the APP' s Jambi Pulp Mill in Indonesia, which was in dire need of such talents. Su Jianshi arrived in Indonesia in 1995, and took over welding projects for titanium and titanium alloys, as well as nickel and nickel alloys. These projects were so challenging that no welder in Indonesia was good enough. However, it only took 70 days for Su Jianshi to move from planning to seeing the successful output of 1,600 welders, 100% qualified, which made a significant contribution to the mill's operations. The Jambi Pulp Mill truly marveled at Su Jianshi's skills, and he went on to stay in Indonesia and started a career in the papermaking industry, weaving APP into his career path.

In 1998, the admiring Gold East Paper, which was then still under construction, invited Su Jianshi to work in China as their technical adviser. Su Jianshi agreed without hesitation, and started his new job in Zhenjiang New Area, where road construction was still unfinished.

To keep up with the progress of the mill construction, Su Jianshi taught himself equipment maintenance and pipe installation, etc., areas all new to him, and



made the gradual transfer from being a welder to a professional equipment maintenance technician through continual exercises. With years of practice, he was able to achieve radical innovations based on traditional welding and equipment maintenance techniques, and successfully addressed numerous technical challenges. His contributions, from repairing the screw wood chip feeder from Germany and a large screw shaft to troubleshooting the mill's power plant, have helped the mill save tens of millions of RMB.

Of all those achievements, Su Jianshi finds the greatest pride in the daily maintenance and repair of the high-consistency refiners, which are the core pulp line facilities. Given that any problem involving high-consistency refining facilities could cause pollution to the equipment on a weekly basis to ensure the facilities are safe and environmentally sound. However, major repair of high-consistency refiners is extremely complicated, delicate, and costly, with a labor cost of up to RMB1.2 million alone for repair at the original factory. After studying a wealth of foreign materials, Su Jianshi and his teammates accomplished major repairs in-house. At present, Gold East Paper is the only paper mill in China capable

Su Jianshi is well aware that the development of the mill and China's papermaking industry at large calls for a huge number of outstanding technicians. For this reason, he started to pay attention to training talent from the outset, and gradually established a rolling training system that ranks welders into junior, intermediate, and senior levels. Su Jianshi finished rounds of training using the "mentoring, helping, and guiding" method, and in this way supplied 22 senior technicians and 16 technicians for the Company in the last three years.

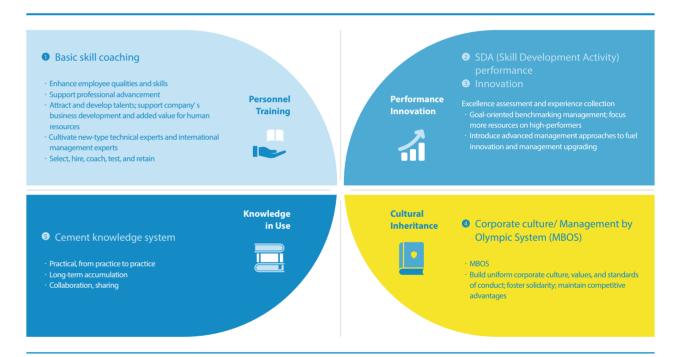
The story of Su Jianshi is the epitome of thousands of dedicated employees at APP-China. They are the shining stars of the Company and their hard work is at the heart of the Company's success.

## Providing Training to Unlock Employee Potential

APP started the planning of corporate university construction in 2017.
Personnel in charge of the project visited and surveyed mills in China and Indonesia to understand the training needs of employees, managers, lecturers, and reserve leaders in great detail, and used the survey results as basis for the corporate university planning.

Dual-channel career development training and staged training schemes are in place to ensure comprehensive training and skill development for all employees. Additionally, the Company developed the APP Online Academy, which offers employees access to solutions and expert opinions at all times and places.

#### **APP Corporate University Planning**



APP-China started to implement the post-based skill and ability model on a full scale in 2016. The model officially entered the training stage that covers all employees in 2017. At the same time, diverse training schemes have been formulated at different mills and units to address the actual development needs of employees and improve their work skills and overall qualities.



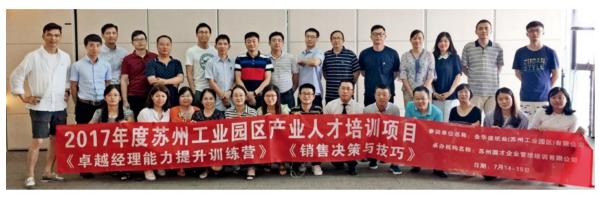
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#### **Gold Huasheng Supports Employees' Career Advancement**

In 2017, Gold Huasheng invited professors from Nanjing Forestry University to host a training and communication event on paper production and papermaking technologies targeting R&D personnel and front line supervisors. The event effectively enhanced their ability to solve work problems in a scientific way. The Company has successfully registered with Suzhou Industrial

Park for the Training Scheme for Professionals in Short Supply. Employees were offered a series of choice courses including *Financial Management for Non-financial Manager* and *Public Speaking and Presentation Skills for Managers*, etc. In addition, the Company entered employees in the "Jinji Lake Entrepreneurship Mentoring Service Program – A Trip of Leading Enterprises

to Shenzhen" organized by the Park. During the trip, employees studied the philosophy and approach underpinning Tencent's continuous creation of successful products and how Huawei builds a customer-centric management system based on processes, systems and culture.



Training on paper production and papermaking technologies organized by Gold Huasheng

#### **Competitions for Employees**

Vocational skills competitions are an important form of technical talent training and cultivation and play a unique role in talent team building. Many mills and units under APP-China actively implement the MBOS spirit of "comparing, learning, advancing, helping and outperforming", and make a point of using competitions for improving skills and training management to provide employees with a sound platform for growth.

APP-China Forestry organized a series of MBOS-centered competitions such as the SDA Competition, the Specialty Experience Sharing Competition, the Outstanding Forestry Farm and Forestry Station Experience Sharing competitions, and the Outstanding Strivers' Competition, etc. Gold East Paper hosted the Fitters' Skills Competition and the Production Skills Competition, and entered into the 9th Joint Port Mechanical Skills Competition. Gold Huasheng hosted a variety of competitions

including the Paper Sorting and Selection
Competition for paper grade and defect
assessment, the in-house R&D Competition that
encourages innovation, and the Forklift Pallet
Competition focused on skills enhancement.
Guangxi Jingui Pulp & Paper organized 45 skills
competitions and events covering woodchip
sample moisture detection, visual assessment
of pulp whiteness, changing of packaging
paper, Siemens Variable-frequency Drive (VFD)
parameters setting and motor debugging, and

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1 APP-China Forestry MBOS Conference 2 Gold East Paper Fitters' Skills Competition 3 Gold Huasheng Paper Sorting and Selection Competition





## Engaging Employees to Create an Inclusive Environment

#### **Conveying Corporate Culture**

The sustainable development of a company is rooted in an excellent corporate culture, inseparable from the joint efforts of all employees. Based on the new APP-China corporate culture system, we expect every employee to abide by the moral standards of "Integrity and Commitment" and act in line with the action guidance of "Customer Focus, Acting like Owners, Results Orientation, and Continuous Improvement." By implementing its original Management by Olympic System(MBOS),

APP-China encourages employees to shoulder the mission of "implementing green cycle-based development, advancing papermaking civilization, and improving quality of life" to materialize the vision of "continuously being the world's premier, fully-integrated green-cycle plantation, pulp and paper conglomerate. "Toward these ends, we carried out a variety of cultural communication activities in 2017, laying a sound basis for the implementation and materialization of our cultural concepts.

Stepped up building a culture of customer-centricity, innovation, and integrity; built a strivers' platform to host experience sharing and exchange events.

Internally, communicated corporate culture to employees via WeChat subscription account, cultural columns, and communication mailbox, etc.; externally, conveyed the Company's mission and values to the public and other stakeholders through the stories of APP people.

Themed culture construction

Cultural training

Building internal and exteri

Popular employee engagement activities

60 trainers passed corporate culture certification by the end of 2017; provided managers and junior-level employees with cultural training and online learning and test: achieved 100% participation and pass rates.

A rich variety of inspirational cultural activities were organized at different mills to make employees truly perceive the close connection between corporate culture and personal development.

### $\rightarrow$

## Boosting Employee Communication

APP-China makes a continued effort to improve the employee communication mechanism and build a sound complaint and supervision system. The Company has various channels in place to ensure that employees' most relevant life and work concerns are heard and addressed, including employee representative meetings and whistleblower mailbox, etc.





Guangxi Jingui Pulp & Paper Department employee
 exchange meeting

Gold East Paper employee symposium

#### **Building Sound Employee Communication Channels**

APP-China mills organize diversified employee exchange events on a regular basis to safeguard employees' legitimate rights. They provide employees with the opportunity to have their voice heard and strive to make them feel supported for contributing to the Company's democratic systems.

In 2017, 105 employee representatives from Ningbo Asia attended the employee representative meeting, where they engaged in thorough communication with senior leaders, and received detailed replies for each of their wide-ranging proposals.

Guangxi Jingui Pulp & Paper uses multiple means to communicate with employees, such as employee communication meetings, performance talks, and complaint boxes. The human resource department collects questions from employees on a quarterly basis and requires relevant departments to implement improvements. The results for improvement are published on the Company's internal website after being reviewed by the management.

At Gold East Paper, the senior management and Party organization representatives sat down with over 100 employee representatives and heard their comments on production, maintenance, safety, remuneration, benefits, logistics support, and other areas. Every question was given a complete and detailed reply.

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## **Delivering Care to** Enable a Balanced Life

We pay close attention to our employees' personal needs and strive to create a relaxing and open work environment that fosters employee engagement. We encourage employees to participate in recreational activities, and hosted a series of billiards, table tennis, and badminton friendlies that deepened communication among employees and enriched their

A number of APP-China mills implemented the "Scholarships and Grants for Employees' Children" event to reward academic achievers. Moreover, the Company visits employees on a regular basis and provides those in difficulty with needed material and spiritual support.

#### **Gold East Paper: Making the Company a Home to Employees**







#### **Scholarships and Grants for Employees' Children**

The program rewarded 112 children in 2017, and has benefitted nearly 300 students since its inception in 2012, totaling over RMB350,000 in investment.

#### **Employee Family Open Day**

The Company invited employees and their families, 97 in total, to participate in the Gold East Paper Employee Family Open Day to help them learn more about the Company at a close range.

#### Visiting employees in difficulty

The Deputy General Manager and Chairman of the Labor Union visited 43 employees at their homes shortly before the 2017 Spring Festival, and brought gifts and financial aid to families in difficulty.







## Ningbo Asia: Addressing Employees' Difficulty with Their Children's Schooling Children's schooling is a top priority for every family. The migrant employees at Ningbo

Asia are no exception. Despite their wish to have their children live with them, it is not always easy for their children to receive school education locally due to particular local

In order to provide those employees with needed assistance regarding this issue, the Company invited experts from the Qijiashan Sub-district Office to give a lecture on local schooling policies for migrant workers' children so as to equip those employees with knowledge necessary for making timely plans, thus effectively addressing their difficulty and worries.



#### Gold Huasheng: Celebrating the Dragon Boat Festival Together

With the Dragon Boat Festival approaching, a dozen employee volunteers from Gold Huasheng personally prepared over 500 exquisite scented sachets using medical herbs like lavender and wormwood, and

made traditional Chinese rice puddings together with community workers. Led by Chairman of the Company's Labor Union Committee, the volunteers paid a visit to live-in employees on the day of the festival to bring them the sweet-smelling sachets, love-filled rice puddings, and authentic-tasting salted duck eggs. The joyous greetings and wishes brought great warmth to the employees' hearts.







03

# Uniting to Aid Community Development

#### Sustainable Development Background

According to the report to the 19th CPC National Congress, "As socialism with Chinese characteristics has entered a new era, the principal contradiction facing Chinese society has evolved. What we now face is the contradiction between unbalanced and inadequate development and the people's ever-growing needs for a better life. " As a significant economic driver, enterprises are capable of helping the government and society address the issue of unbalanced and inadequate development in various ways. Pulp and paper companies belong to the traditional manufacturing industry, and a great part of their operations and production is closely related with stakeholders. Therefore, it is an important obligation and responsibility for pulp and paper companies to maintain thorough communication with and actively give back to the community.

#### **Management Approach**

APP-China pays close attention to community engagement during daily operations, and has established barrier-free communication channels to keep neighboring residents updated about the Company's environmental performance. Leveraging its strengths, the Company takes the initiative to organize activities to educate the public about paper culture and sustainable development. The Company commits itself to charitable causes led by the concept of "Benefiting Everyone", and gives back to the society through the Huang Yicong Foundation and the various public benefit activities at its mills.

#### Alignment with SDGs





- · Hosting activities such as "Paired Financing", "Little Sun Children' s Classes", and "APP Lighting up Dreams" to improve education for vulnerable groups and in remote areas
- Awarding and helping outstanding students in remote areas through programs such as "Yicong Scholarship", "Fujian Yicong Academy Teachers & Students Fund ", and "Yicong Capacity Building Summer Camp"
- · Building public benefit platforms for young people through "APP Youth Public Benefit Internship" and "College Student Society Public Benefit Activities"
- · Taking an active part in blood donation and corporate donation events

External donation

18.69

million yuan

Volunteer service time

26,645



- Formulating the Regulations for Community Communication Management and Regulations for Management of Complaints and Disputes to regulate community communication and dispute handling Intiming community residents and students to visit mills; setting up the voluntary environmental supervisors' team to improve transparency of environmental operations
- Publicizing papermaking culture by organizing papermaking classes and mill visits, etc.

## Staying Devoted to **Build a Harmonious** Community



Wang Wei

**Engagement and** communication with stakeholders help us achieve sound development, while also laying a robust basis for joint community construction and realizing sustainable development of the environmental protection industry.

## **Respecting Community** Rights and Interests

#### **Building a Beautiful Community** with Stakeholders

worked at Ningbo Asia, and for ten years, his

and residents in the neighborhood are heavily Asia invites neighboring residents to visit its

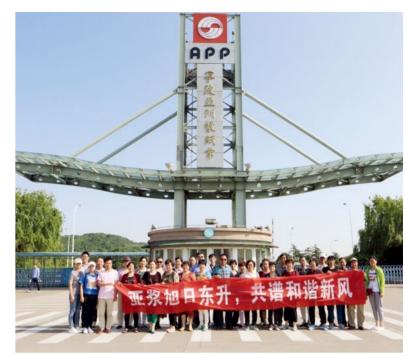
regarding the Company's work in environmental protection, Wang Wei and Department of Energy, the External Relations serves as a platform bridging communication between the Company and neighboring implement an unfailing environmental

Wei also thinks highly of the government's face growing pressure from ever-heightened expert team comprising experts from local third-party organizations with market-leading technologies, such as Zhejiang Environmental

steward-like service can be very effective in assistance. It not only helps improve companies By doing so, they better understand relevant

The sustained development of a company depends on respect for the community where it operates, and more importantly the understanding and support from the community. In 2017, APP-China Forestry put into effect the Regulations for Community Communication Management based on FPIC (Free, Prior and Informed Consent) principles. The document specified division of responsibility at all the forestry farms and departments, stipulated a detailed communication mechanism and a regular monitoring and assessment mechanism, and offered instructions for communication. It further standardized the channels and means for community engagement for all the business units and sub-business units under APP-China Forestry, and played a positive role in pushing toward harmonious community construction and harmonious forestry.





Donashena community residents visiting Ningbo Asia

In an effort to manage stakeholder advice, complaints, and needs more effectively and guarantee barrier-free communication, APP-China makes constant revisions to its Regulations for Management of Complaints and Disputes, requiring employees to respect vulnerable groups and prioritize stakeholder interests when handling complaints and disputes, so as to safeguard the civic and traditional rights of stakeholders.

On the production front, the environmental performance of the pulp mills and paper

mills under APP-China is often a matter of major concern to the neighboring community. The mills make a consistent effort at pollution treatment for improved environmental performance. At the same time, they attach great importance to engaging in transparent communication with local residents about the environmental issues. In an earnest attempt to promote environmental protection through sound collaboration with local community, they would invite the residents from time to time to visit the mills and stay open to their supervision and suggestions.



Voluntary Environmental Supervisors Symposium

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#### **Volunteer Tree Planting Makes the Earth Greener**

Implementing the idea of "You use paper,

we plant trees", the mills under APP-China

participate in a rich variety of tree planting

activities. Together, APP-China employees

and community residents contributed to

the construction of a greener society and

Hainan Jinhai Pulp & Paper, together with

teachers and students from Yangpu Middle

school and Yangpu Vocational High School

in Hainan, totaling over 150, planted 1,200

seedlings as volunteers at the Danzhou

ecological civilization.

invited different stakeholder groups to

The experience gave the students a deeper understanding of both the planting of raw wood materials for the production of pulp and paper at APP and the Company's green

Ningbo Asia partnered with children from Qijiashan Central Kindergarten and planted a variety of fruit trees such as kumquat trees, jujube trees and pear trees. The activity helped the children learn more about the planting and growth of fruit trees, and enhanced their awareness of environmental protection and ecological sustainability.

"Integration of Plantation-Pulp-Paper" model.

To celebrate the Tree Planting Day, Gold Huasheng joined hands with about 300 people, including journalists from Suzhou Daily and government staff, and planted 540 seedlings at the Wanghuwan Wetland Park. A majority of the seedlings planted were landscape trees, which fittingly matched with the construction planning of the park.



1 Hainan Jinhai Pulp & Paper tree planting event 2 Ningbo Asia tree planting event 3 Gold Huasheng tree planting event











#### **Promoting Education on** Sustainable Development

APP-China actively explores ways to give back to the community by leveraging its strengths, and has organized a series of cultural activities for students. Acclaimed as a "Garden Factory," Gold East Paper hosted over 1,000 individual visitors in 2017 from higher education institutions including Nanjing Forestry University, Jiangsu University, Jiangsu University of Science and Technology, and some Swedish universities.



#### **Helping Realize Dreams**

APP-China kicked off the "Dream Plan" Outstanding Talents Joint Training Program in Guangxi and Jiangsu, where the Company works in partnership with local schools to provide students from poor families with needed help. APP-China supports students from remote mountainous areas and poverty-stricken families by paying their tuition while providing monthly allowance. Besides taking lectures in school, the students will also be invited to visit APP-China's mills on a regular basis and offered employment opportunities upon graduation.



#### **Ningbo Asia Organizing Summer Vacation Practice for Students**

Ningbo Asia has been organizing summer vacation practice events for students for over 10 years, with a view to equipping teens and kids with fun knowledge. The 2017 event was carried out as scheduled, and very well received.





1 Papermaking class

2 Visiting the Beilun Eco Museum

Watching Spirited Away

Organized children to watch the animated fantasy film Spirited Away to convey to them such valuable qualities as caring for nature, diligence, and bravery found in the innocent world Miyazaki Hayao depicts.

/isiting Beilun Eco

Showed children to the Beilun Ecological and Environmental Protection Education Museum, where they learned about the ecology and environmental protection at a close range by watching films, learning on the e-screens, and touching the models and equipment themselves, etc.

Designed a class on how to make solar powered fans and automobiles, allowing the students to have great fun from the process of assembling parts and stimulating their interest in clean

Class

Gave the novel lecture to students at Qijiashan Central Kindergarten and Weidou Primary School to help them learn more about papermaking history and the reuse of wastepaper.



#### **Gold Huasheng Among the First Teenager Extracurricular Education Bases**

Together with 27 other units, Gold Huasheng became one of the first enterprises to be named "Suzhou Industrial Park Teenager Extracurricular Education Base" by the Suzhou Industrial Park Education Bureau in March, 2017. This is an acknowledgement of the Company's performance in fulfilling its social responsibilities.

Since the beginning, Gold Huasheng has leveraged the characteristics and strengths of its mills to bring together paper, environmental protection, and education. By doing so, the Company provides teenagers with a "second classroom" for learning about papermaking technology, environmental

protection, and traditional papermaking art. Those activities help them understand the process of modern papermaking, the categorization of paper, and its use in different life scenarios, offering a horizon-broadening experience.

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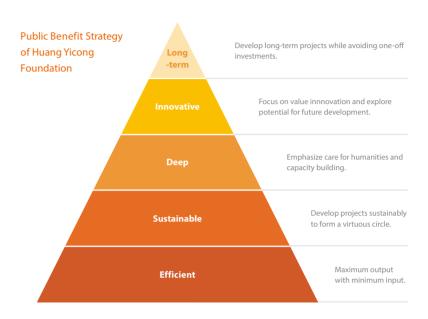


#### Gold Huasheng organizing practical education activities for teenagers

# Fostering Public Spirit to Help the Community Thrive

Since its entry into China in 1992,
APP-China has remained public-spirited
and encouraged its employees to do
volunteer work for the community. The
Company strives to be a responsible
corporate citizen, and gives back to society
by contributing to a wide range of areas
such as disaster relief, helping the needy,
education, care for the elderly and kids, and
civilization construction, etc.

Mr. Huang Jiesheng, grandson of Mr. Huang Yicong (Eka Tjipta Widjaja), the founder of the Sinar Mas Group, and his wife
Ms. Yu Heng started the Huang Yicong
Foundation in 2006. During the 11 years
since its inception, the Foundation has
established a quite complete public
benefit strategy and management system,
highlighting work in areas including
poverty alleviation, public benefit
platform construction, and community
development facilitation, etc.



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# Helping the Poor and the Needy

APP-China and the Huang Yicong
Foundation are committed to promoting
the development of education in remote
areas and the countryside and strongly
supporting vulnerable groups. In 2017,
the Foundation organized various
activities such as "Yicong Scholarship,"
"Yicong Capacity Building Summer
Camp," "Paired Financing," "Little Sun
Children's Classes," and "APP Lighting up
Dreams."



Has been successively set up in eight high schools in Guangxi and Gansu since 2011. RMB452,000 in scholarships for 135 high-achieving high school students were distributed in 2017, and a total of 321 students in seven years received awards. For the 2017-2018 scholarship, the Foundation donated RMB8,000 to a student born with hearing impairment and bought him a laptop and voice-to-text system to facilitate his study.



The Huang Yicong Foundation has been working with employees from APP-China (Shanghai) to pair with and provide financing for schools in Dingxi and Huining, Gansu since 2012. Employees support primary and secondary school students from poor families through monthly donation, and the Foundation allocates funds to help improve school facilities. Total donations exceeded RMB1.8 million as of the end of 2017.



Set up children's classes in Ximeng County and Fu'ning County, Yunnan by renovating abandoned or idle houses. The classes enroll children of mixed ages and provide both traditional and experience-based lectures for children aged between 3 and 6 in both Mandarin and dialects of local ethnic groups. Moreover, parents are involved in class management in the capacity of a Parents Committee. The Foundation currently runs 34 classes that enroll a total of 620 students.

Uniting to Aid Community Development Report

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## Building a Public Benefit Platform

To involve more young people in public benefit causes is an important objective for APP-China and the Huang Yicong Foundation. To this end, APP-China is actively engaged in building public benefit platforms, and has implemented various programs for years, such as the "APP Youth Public Benefit Internship," and "College Student Society Public Benefit Activities," to encourage young people to play a more salient role in public benefit.

## College Student Society Public Benefit Activities: Seeing the Power of Young People

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The "College Student Society Public Benefit Activities" jointly hosted by APP-China and the Huang Yicong Foundation provided funding for student societies in 14 colleges in 2017 to support their activities in volunteer teaching, TCM (traditional Chinese medicine) diagnosis and treatment of AIDS, cultural inheritance of ethnic groups, training of countryside teachers, and other areas. In October 2017, some societies that had received funding got together to reflect on and share their work and achievements during the summer vacation practice. Experts from the public benefit area were also invited to offer advice on the management and operation of student societies.

In the past seven years, 42 student societies have received direct funding from the Foundation, with over 600 student volunteers directly involved and over 2,000 people directly benefited. The program has effected real changes in the communities it supports.







Public benefit activities organized by college student societies

#### **Looking into the Future Together**







- Camp members listening to a drama lecture intent
- 2 Camp members visted the mill of Suzhou Gold

On July 18~31, 2017, APP-China and the Huang Yicong Foundation hosted the 2nd "Yicong Capacity Building Summer Camp" in Shanghai. The 15 camp members came from seven high schools, and had been picked out based on rounds of assessment including written application, video interview, and face-to-face communication. They hardly had the opportunity to set foot outside their hometowns before the summer camp.

The theme for the 2017 summer camp was "Looking into the Future." In an effort to help the camp members grow into more forward-looking, innovative, and courageous future leaders, the camp designed a series

of classroom lectures and visit & exchange activities. Classroom lectures covered such diversified training as brainstorming, communication with foreign teachers, drama experience, outward bound, and market research. Visit & exchange activities took the students to famous universities, recognized enterprises and mills, and also promoted interaction with their peers.

The two-week summer camp went by quickly, but implanted seeds in the members' hearts for hope and responsibility that will give them stronger confidence when facing challenges in the future.

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#### Participating in Community Construction

The Huang Yicong Foundation has been supporting the Shanghai Sanlin LOHAS Homeland community program since 2008. Every year, the Foundation introduces new ideas to its partnership with the LOHAS Public Service Center, and designs community activities by closely following social events. By integrating popular concepts such as green planting, organic ecology, and community environment protection, they organized activities under the theme of "Green Space" in 2017. This notably enhanced family engagement and inspired wider involvement in local

environmental management, thus facilitating the creation of a green space.

Additionally, the Foundation donated RMB500,000 for the "Qiaoai Project – Lighting up New Life for Herdsmen in Tibetan Area" Qinghai Project initiated by the Overseas Chinese Affairs Office of the State Council. The Foundation donated portable solar-powered televisions to farmer and herdsman families in the three Tibetan Autonomous Prefectures of Yushu, Guoluo, and Huangnan in Qinghai. Those televisions, solar-powered and easy to carry

on horsebacks, allow the herdsmen, who normally do not have a permanent abode, to stay connected with the outside world at any time and place.



Ms. Qiu Yuanping (The then Office Director of Overseas Chinese Affairs Office of the State Council) presenting Ms. Su Qianghua (Secretary-general of Foundation) with a donation certificate

#### **Gold East Paper Actively Involved in Volunteer Activities**



Gold East Paper started implementing the Regulations on Management of Employee Volunteer Activities in 2008, providing pre-service training and constantly pushing towards more institutionalized services. In 2017, the Company carried out volunteer activities such as assisting poor students, and took an active part in events such as the 1st Zhenjiang New Area Volunteer Public Welfare Cultural Festival.

As of the end of 2017, participation in volunteer activities had amounted to 4,748 person times and blood was donated by unpaid volunteers 1,940 times. The company was presented with the "Zhejiang Charity Award" and recognized as the "Best Charitable Volunteer Team" and "Best Support Unit for Charitable Volunteer Service Organization."



Gold East Paper employee making a blood donation

#### Hainan Jinhai Pulp & Paper Contribution to Education







- 1 Qiongtai Normal University "APP Scholarship" Award Ceremony
- 2 "Support Students' Dream for College" Paired Financing Initiative

Caring for basic community education

Supporting vocational education

Helping poor students realize their dream for college Provided funding for 23 outstanding university students from across the country to support their participation in volunteer teaching in countryside areas in Yangpu and Danzhou in an effort to help improve the basic education there.

Set up the "APP Scholarship" at Qiongtai Normal University and Yangpu Vocational High School in Hainan, which awarded 225 students in 2017. The partnership with Qiongtai Normal University goes back to 2010, and has accumulatively distributed RMB1.05 million in support of 805 high-achieving students.

Has responded actively to the call of Yangpu Social Development Bureau and Communist Youth League Yangpu Working Committee for paired financing initiatives since 2015. Provided financing for 20 poverty-stricken students in Yangpu to help them finish school.

### **GRI Report**



#### **About this Report**

This is the eleventh Sustainability
Report issued by Sinar Mas Paper (China)
Investment Co., Ltd. and the group of
companies under its direct investment
in China (hereafter referred as "APPChina"). The report is released in both
Chinese and English versions. The
Chinese version is the official version
while the English version is a translation
of the official Chinese version.

#### **Reporting Boundary and Scope**

The time span of this report is from January 1, 2017 to December 31, 2017, while some data reflected our work in 2018 due to the ongoing nature of our relevant work. We report annually on our sustainability performance. Our last Sustainability Report was published in November 2017. Unless otherwise specified, the cases and data in the report are all from APP-China Head Office, its nine pulp and paper mills, and APP-China Forestry:

- · APP-China Head Office
- · Gold East Paper (Jiangsu) Co., Limited (Gold East Paper)
- · Hainan Jinhai Pulp & Paper Co., Limited (Hainan Jinhai Pulp & Paper)
- · Guangxi Jingui Pulp & Paper Co., Limited (Guangxi Jingui Pulp & Paper)

Ningbo Zhonghua Pulp & Paper Co., Limited

- (Ningbo Zhonghua)

  · Ningbo Asia Pulp & Paper Co., Limited
- (Ningbo Asia)

  Gold Huasheng Paper (Suzhou Industrial
- Gold Hongye Paper Group Co., Limited
  (Suzhou Gold Hongye, including Suzhou
  Mill and Sales & Marketing)

Park) Co., Limited (Gold Huasheng)

- · Hainan Gold Hongye Paper Co., Limited (Hainan Gold Hongye)
- · Hainan Gold Shengpu Paper Co., Limited (Hainan Gold Shengpu)
- APP-China Forestry Business Unit (APP-China Forestry, including Forestry Business Headquarters, Hainan, Guangxi and Guangdong BUs, and Lancang, Ganzhou, Wenshan and Henan Sub-BUs)

#### **Reporting Reference**

The report was prepared in accordance with the core option of the GRI Standards issued by the Global Commission on Sustainable Development Standards (GSSB). In addition, the report also refers to the Global Compact Ten Principles and relevant industry clean production and emissions standards. The disclosure of indicators can be found in the Report Indexes section of this report.

#### **Content and Indicator Selection**

This report was prepared in accordance with the GRI principles of materiality, stakeholder inclusiveness, sustainability context, and completeness. During the preliminary work of the report, APP-China has conducted policy analysis, industry issues analysis, stakeholder surveys, and field visits to its Head Office, pulp and paper mills, and forestry BUs so as to better understand and collect the management approaches, specific practices and performance indicators of its most relevant sustainability issues.

#### **Report Assurance**

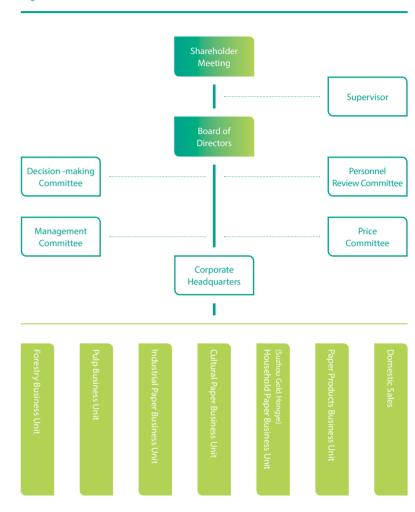
APP-China commissioned SGS-CSTC Standards Technical Service Co., Ltd. (SGS) to assess the reliability, objectivity, and transparency of this report. Please refer to the Assurance Statement for further details.

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#### **Company Profile**

Since its entry into China in 1992, APP-China has been investing heavily in the Yangtze and Pearl River Deltas, establishing a number of large state-of-the-art pulp and paper companies including Gold East Paper, Ningbo Zhonghua, Ningbo Asia, Gold Huasheng, Suzhou Gold Hongye, Hainan Jinhai Pulp & Paper, and Guangxi Jingui Pulp & Paper, etc., and planting vast areas of modern fast-growing forests. Among them, Gold East Paper is one of the largest art paper producers in the world. Ningbo Zhonghua and Ningbo Asia are two of the largest industrial paper manufacturers in China. Gold Huasheng is one of the largest suppliers of diversified specialty paper in China. Suzhou Gold Hongye is one of the largest household paper manufacturers in China and in Asia. Hainan Jinhai Pulp & Paper is one of the largest pulp producers in China, and Guangxi Jingui Pulp & Paper is China's largest manufacturer of chemi-mechanical pulp. There were no major changes in our organization or supply chain in 2017.

#### Organizational Structure





# Sustainability Strategy and Management

#### **Sustainability Concepts and Management System**

APP attaches great importance to its sustainability management and holistically embeds the concept of sustainable development into its strategies and operations. The Company constantly optimizes its operations and management through effective stakeholder engagement, which ensures the aligned development of the Company and its stakeholders economically, socially and environmentally.

As the first enterprise in China to propose the "Integration of Plantation-Pulp-Paper" model, APP-China advocates a circular, green papermaking industry chain with integrated management of the paper industry from its source of forestry operations to pulping, procurement and other operations. In 2015, we established a new top decision-making body based on the existing Chairman General Office, which consists of a number of management committees such as the Safety Health and Environment Committee, the Technology and Quality Assurance Committee, and the Personnel and Administration Committee, etc. It was authorized to make comprehensive decisions on sustainability issues related to our business operations, formulate sustainability management policies and ensure their implementation in our operations.

#### APP-China Forestry Certification

No.	APP-China Affiliates	Area Certified (hectare)	CFCC/PEFC FM Certificate No.
1	Heyuan Jin Mei Technology Forestry Co., Ltd.	3,086.63	CFCC/PEFC-FM-ZTFC-000030
2	Leizhou Gold Sun Science and Technology Forestry Co., Ltd.	746.97	CFCC/PEFC-FM-ZTFC-000030
3	Yangjiang Gold Sun Science and Technology Forestry Co., Ltd.	2,456.91	CFCC/PEFC-FM-ZTFC-000030
4	Guangxi Jingui Forestry Co., Ltd.	42,873.90	CFCC/PEFC-FM-ZTFC-000005
5	Hainan Jinhua Forestry Co., Ltd.	68,583.00	CFCC/PEFC-FM-ZTFC-000003
6	Simao Gold Lancang High Yield Forest Co., Ltd.	42,672.60	CFCC/PEFC-FM-ZTFC-000018
7	Guangxi Gold Qinzhou High Yield Forest Co., Ltd.	44,076.10	CFCC/PEFC-FM-ZTFC-000006
8	Jinqingyuan High Yield Forest (Paper Material) Base Co., Ltd.	11,072.00	CFCC/PEFC-FM-ZTFC-000007
9	Shaoguan Gold Shaoguan First High Yield Forest (Paper Material) Base Co., Ltd.	14,240.00	CFCC/PEFC-FM-ZTFC-000008
10	Wenshan Gold Wenshan High Yield Forest Co., Ltd.	19,642.50	CFCC/PEFC-FM-ZTFC-000017
11	Guangxi Xingguilin Agricultural Technology Co., Ltd.	3,820.40	CFCC/PEFC-FM-ZTFC-000031
12	Guangxi Gold Sun Forestry Co., Ltd.	1,389.00	CFCC/PEFC-FM-ZTFC-000031
Total		254,660.01	

#### APP-China Affiliates 2017 Sustainability Management System Certification Overview

	ISO9001	ISO14001	OHSAS18001	PEFC CoC
Gold East Paper	Periodic audit	Periodic audit	Periodic audit	Renewal of certificate
Gold Huasheng	Periodic audit	Renewal of certificate	Periodic audit	Periodic audit
Suzhou Gold Hongye	Periodic audit	Renewal of certificate	Periodic audit	Periodic audit
Ningbo Zhonghua	Periodic audit	Periodic audit	Periodic audit	Periodic audit
Ningbo Asia	Periodic audit	Periodic audit	Periodic audit	Periodic audit
Hainan Jinhai Pulp & Paper	Periodic audit	Periodic audit	Periodic audit	Renewal of certificate
Guangxi Jingui Pulp & Paper	Renewal of certificate	Renewal of certificate	Renewal of certificate	Renewal of certificate

#### APP-China Affiliates with PEFC CoC Certification

No.	APP-China Affiliates	Certificate No.
1	Gold East Paper	SGS-CFCC/PEFC-COC-001002
2	Gold Huasheng Paper	SGS-CFCC/PEFC-COC-001026
3	Ningbo Zhonghua	SGS-CFCC/PEFC-COC-001030
4	Ningbo Asia	SGS-CFCC/PEFC-COC-001031
5	Hainan Jinhai Pulp & Paper	SGS-PEFC/COC-0805
6	Suzhou Gold Hongye	SGS-CFCC/PEFC-COC-001032
7	Hainan Gold Hongye	SGS-PEFC/COC-1733
8	Jin Hongye Trading (Hongkong) Co., Ltd.	SGS-PEFC/COC-1463
9	Guangxi Jingui Pulp & Paper	SGS-CFCC/PEFC-COC-001013
10	Hainan Jinhai Trading (Hong Kong) Co., Ltd.	SGS-PEFC/COC-1467
11	Jindong Trading (Hong Kong) Co., Ltd.	SGS-PEFC/COC-0249
12	Jinshengpu Paper Products (Suzhou Industrial Park) Co., Ltd.	SGS-CFCC/PEFC-COC-001037
13	Yalong (Kunshan) Paper Products Co., Ltd.	SGS-PEFC/COC-0787
14	Gold Huasheng Trading (Hong Kong) Co., Ltd.	SGS-PEFC/COC-1464
15	APP Paper (Shenzhen) Co., Ltd.	SGS-PEFC/COC-1640
16	Ningbo Asia Pulp Trading (Hongkong) Co., Ltd.	SGS-PEFC/COC-1465

#### **Sustainability Strategy**

In 2012, APP announced the Sustainability Roadmap Vision 2020, which set specific targets for ten key sustainability areas, including climate change, emissions, solid waste, reforestation, water management, conservation and biodiversity, fiber sourcing, employee welfare, community empowerment, and human rights and indigenous people. By the end of 2017, 94.4% of these targets had been achieved or in steady progress. The only target missed was zero work-related fatalities for employees and contractors. The main challenge was the personnel safety behavior management of our contractors. In 2015, APP launched the Safety Culture Project to reinforce safety management through intensified efforts in safety personnel and safe production process management, real-time accident warning, investigation of accident causes and effective rectification measures, and stronger disciplinary actions against safety violations, etc., thus taking a further step towards achieving the target.

With the continuous improvement of its management structure and mechanism, APP-China has gradually clarified the strategic direction of sustainable development in the future, and is in the process of setting a new round of strategic targets for the 2040 to 2050 period. We also benchmarked our sustainability strategic directions with the United Nations Sustainable Development Goals (SDGs) and prioritized the high-relevance goals for APP-China. In the future, we will fully integrate the prioritized SDGs into our own sustainability strategic planning, so that the Company better aligns its development with the sustainability trends at home and abroad. In addition, we also reported the relevance of our operations to different SDGs in this report.

We conducted a research on waste paper recycling. For one thing, circular economy is an important part of APP-China's sustainability strategy. APP-China mills can recycle waste paper, and we believe that efficient waste paper recycling and the effective integration of recycling and reuse are beneficial efforts that will push forward the circular economy. For the other, both the domestic recycling rate of waste paper and proportion of recycled waste paper entering the reproduction chain are very low. Waste paper is used by papermaking companies as their raw material, but most of it is still imported. In 2017, the government issued the Implementation Plan for Prohibiting the Entry of Foreign Garbage and Advancing the Reform of the Solid Waste Import Administration System, which drastically reduced the quotas on imported waste paper for major paper companies and left much room for future improvement in waste paper recycling. Based on the above considerations, we plan to launch a waste paper recycling project in 2018 to further contribute to promoting the green

#### APP-China Sustainability Issues Mapped to SDGs

Strategic Area	Forest Stewardship	Responsible Supply Chain	Responsible Production	Responsible Consumption	Recycling and Reuse
	Forest certification	Supplier code of conduct	Occupational health and safety	Sustainability education for consumers and customers	Waste materials, sewage, and energy use during production
Actions	Forest stewardship policy	Responsibility requirements for upstream suppliers	Energy conservation and emission reduction	Green, high-quality products	Recycling and reuse of post-consumer products
	Forests and local communities and government	Relationship with partners and NGOs	Carbon sink / neutralization	Cooperation with the government and media relations	Disposal of waste paper and waste materials that are not recycled
SDGs	8 ECCAT WORK AND 15 DE ON LAND  12 RESPONDE 16 AND STREME AND PRODUCTION AND STREME AND RECORD 17 PARTICIPATION FOR THE FIRE THE GALLS  13 CLIMATE 17 PARTICIPATION FOR THE GALLS  14 PARTICIPATION FOR THE GALLS  15 PARTICIPATION FOR THE GALLS  16 PARTICIPATION FOR THE GALLS  17 PARTICIPATION FOR THE GALLS  18 PARTICIPATION FOR THE GALLS  19 PARTICIPATION FOR THE GALLS  19 PARTICIPATION FOR THE GALLS  19 PARTICIPATION FOR THE GALLS  10 PARTICIPATION FOR THE GALLS  11 PARTICIPATION FOR THE GALLS  12 PARTICIPATION FOR THE GALLS  13 PARTICIPATION FOR THE GALLS  14 PARTICIPATION FOR THE GALLS  15 PARTICIPATION FOR THE GALLS  16 PARTICIPATION FOR THE GALLS  17 PARTICIPATION FOR THE GALLS  18 PARTICIPATION FOR THE GALLS  19 PARTICIPATION FOR THE GALLS  10 PARTICIPATION FOR THE GALLS  10 PARTICIPATION FOR THE GALLS  11 PARTICIPATION FOR THE GALLS  12 PARTICIPATION FOR THE GALLS  13 PARTICIPATION FOR THE GALLS  14 PARTICIPATION FOR THE GALLS  15 PARTICIPATION FOR THE GALLS  16 PARTICIPATION FOR THE GALLS  17 PARTICIPATION FOR THE GALLS  18 PARTICIPATION FOR THE GALLS  18 PARTICIPATION FOR THE GALLS  18 PARTICIPATION FOR THE GALLS  19 PARTICIPATION FOR THE GALLS  10 PARTICIPATION FOR THE GALLS  10 PARTICIP	11 SISSUAMME CITIES 16 PEACE JUSTICE AND STRING INCITITIONS 12 RESPONSEE 12 CONSIDERATION AD PRODUCTION AD PRODUCT	3 GOOD HEALTH 3 AND NELI-GENG  TO RELEGENCE  TO REALTH AND PRODUCTION AND PRODUCTION AND PRODUCTION AND PRODUCTION AND PRODUCTION AND PRODUCTION AND COMMANDES  TI MAN COMMANDES	3 GOOD HEALTH 3 MAD WELL-STRIP  11 SISTEMMENT OTES  11 SISTEMMENT OTES  12 RESPONSEDE AND PRODUCTION	11 SISTEMMENT CITIES 11 AND COMMUNITIES 12 RESPONSIBLE 12 OBSIGNATION AND PRODUCTION AND PRODUCT

2017 APP-China Sustainable Development Report GRI Report 59

#### **Stakeholder Engagement**

Based on interviews and communication with our headquarters, mills, and forestry units, as well as routine information gathering APP-China identified ten key stakeholder groups. Each of our functional departments deals with a range of stakeholders during their daily operations. They maintain good communication with the various stakeholder groups through a variety of channels and keep deepening the level of engagement to better understand stakeholder expectations and needs. On average, we posted 10 articles every month in our Wechat official account to share our latest practices wth stakeholders.

We launch an online materiality survey to various stakeholders every year to better identify the key sustainability issues and their relevance to our growth. In preparing the 2017 Sustainability Report, we consulted experts from the government, domestic NGOs, universities, and external consulting agencies to communicate and exchange ideas on the practices and strategic development regarding corporate sustainability, which provides valuable references for implementing sustainable development in the future.

In 2017, we engaged in effective communication with the domestic environmental protection agency Institute of Public and Environmental Affairs (IPE). IPE sent us reports and notifications on the environmental violations by APP-China mills. We forwarded the information to the mills involved and learned about their corrective actions, requesting provision of supportive documents including replies and approvals from the government. After that, we met with IPE to discuss the causes of such violations, their solutions, and the final results, and exchanged ideas on environmental protection practices. We were very pleased to conduct transparent, neutral, and fact-based interaction and communication with NGOs, and to take the initiative to face up to and solve problems when they occur. In this way, we have established sound cooperation with

APP is committed to implementing forest conservation policies as regards High Conservation Value Forests, High Carbon Stock assessments, and peatland management, etc. APP-China forestlands do not involve peatlands and should cause no major impact on biodiversity. Nonetheless, we continue to conduct HCV assessments to minimize potential ecological risks while highlighting community engagement and management in this process.

#### **Top Five Concerns**

- Environmental compliance Water resources management
- Product quality and safety
- · Air pollutant emissions
- Water resources management
- · Greenhouse gas emissions
- Waste management
- · Product quality and safety
- · Occupational health and safety · Environmental compliance
- Waste management
- · Customer relationship management
- Environmental compliance
- Product quality and safety
- · Compliance and risk management
- · Economic performance
- Forest stewardship
- R&D and innovation
- Product quality and safety
- · Compliance and risk management
- Forest stewardship
- Water resources management
- Waste management
- Environmental compliance Water resources management
- Greenhouse gas emissions
- Air pollutant emissions
- Compliance and risk management
- · Fnvironmental compliance
- Forest stewardship Product quality and safety
- R&D and innovation
- · Occupational health and safety Product quality and safety
- Responsible procurement of raw materials
- Air pollutant emissions
- · Water resources management
- Environmental compliance
- Product quality and safety Compliance and risk management
- Water resources management
- · Air pollutant emissions
- Product quality and safety
- Economic performance
- R&D and innovation
- Waste management Environmental compliance

#### Stakeholders

- Company intranet Internal communication

  - Staff communication meetings WeChat official account
  - Employee engagement activities

**Engagement Channels** 

- Customer visits and communication
  - Product launch events
  - Customer satisfaction surveys Complaint handling

  - WeChat official account



Suppliers / Contractors

Customers and

- - Contractor training
    Daily communication meetings
  - Cooperative R&D mechanism



#### Banks

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Government Agencies

- Daily communication meetings Cooperation agreement
- Company website
- WeChat official account
- Government communication conferences Government regulatory inspections
- Information disclosure and

Handling and responding to

Community representatives'

supervision and engagement

Philanthropy and volunteering

opinions from community members

- Regular visits
- Work cooperation
- · Company website



- Representatives
- Industry communication conferences Regular visits Industry exhibitions and forums



#### Cooperative R&D mechanism



Staff training Company website



- Communication on specific topics Work cooperation
- NGO feedback Company website
- WeChat official account

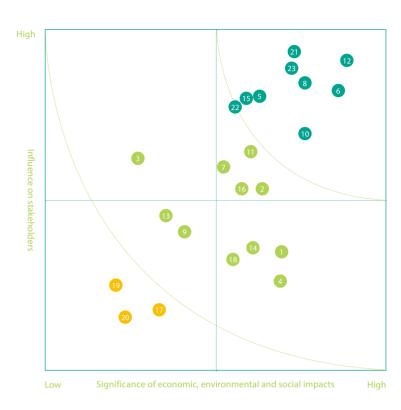


Media

- Media coverage
- Participation in meetings and forums Press conferences
- Company website
- WeChat official account

#### **Materiality Analysis**

Drawing reference to the GRI Standards, the Global Compact Ten Principles, key industry sustainability issues, and China's 13th Five-Year Plan, we have identified 23 issues that are closely related to the development of the Company. Compared to 2016, the major changes in materiality include the addition of "environmental compliance" and the deletion of "information disclosure"; no significant changes have taken place in issue boundaries. To address these issues, we conducted online and offline surveys regarding their significance to various stakeholder groups, including management staff, employees, consumers, customers, suppliers/contractors, banks, government agencies, community representatives, industry associations, academic institutions, NGOs, and media. A total of 1,808 valid questionnaires were collected. Based on discussions with both internal and external experts, these issues were prioritized by their materiality and addressed in this report accordingly.





Issues	Chapter Content	Internal Boundaries	External Boundaries		
High Materiality Issues			Customers and	Suppliers	Communities
riigir materiality issues	Controlling Day Matarials to Build Despansible Cumply Chain		Consumers	Барриего	
Environmental compliance	Controlling Raw Materials to Build Responsible Supply Chain				
Environmental compliance	Adhering to Green Production through Multiple Measures	•		•	•
	GRI Report: Environmental Performance				
Responsible procurement of	Household Paper, Delivering Quality Life				
raw materials	Controlling Raw Materials to Build Responsible Supply Chain	•	•	•	
	GRI Report: Environmental Performance  Cultural Paper, Advancing Diverse Cultures				
	Industrial Paper, Driving Modern Industry				
Product quality and safety	Household Paper, Delivering Quality Life	•	•	•	
	Controlling Raw Materials to Build Responsible Supply Chain				
	Cultural Paper, Advancing Diverse Cultures				
Customer relationship	Controlling Raw Materials to Build Responsible Supply Chain				
management	GRI Report: Social Performance	•	•		
Water resources management	Adhering to Green Production through Multiple Measures  GRI Report: Environmental Performance	•			•
	<u></u>				
Air pollutant emissions	Adhering to Green Production through Multiple Measures	•			•
	GRI Report: Environmental Performance				
Forest stewardship	Focus: Papermaking throughout History  Sustainable Forestry to Protect Forest Ecology				
rolest stewardship		•	•		•
	Sustainability Strategy and Management  Staying Visilant to Improve Sefety Management				
Occupational health	Staying Vigilant to Improve Safety Management				
and safety	Delivering Care to Enable a Balanced Life	•		•	•
	GRI Report: Social Performance				
	Cultural Paper, Advancing Diverse Cultures  Industrial Paper, Driving Modern Industry				
DOD and innovation					
R&D and innovation	O and innovation Household Paper, Delivering Quality Life	•		•	
	Controlling Raw Materials to Build Responsible Supply Chain				
	GRI Report: Social Performance		Customers and		
Moderate Materiality Issues			Consumers	Suppliers	Communities
Waste management	Adhering to Green Production through Multiple Measures	•			•
	GRI Report: Environmental Performance				
Compliance and risk control	Sustainability Strategy and Management	•	•	•	•
Energy management	Adhering to Green Production through Multiple Measures	•			•
	GRI Report: Environmental Performance				
Employee training	Joining Hands to Create a Happy Future	•			
and development	GRI Report: Social Performance				
Economic performance	About APP-China	•			•
	GRI Report: Economic Impacts				
Employment	GRI Report: Social Performance	•			
Anti-corruption	Sustainability Strategy and Management	•			
Sustainability strategy	Engaging Employees to Create an Inclusive Environment				
and management	Staying Devoted to Build a Harmonious Community	•		•	•
	GRI Report: Social Performance				
Greenhouse gas emissions	Adhering to Green Production through Multiple Measures	•			•
	GRI Report: Environmental Performance				
Supplier environmental	Controlling Raw Materials to Build Responsible Supply Chain			•	
assessment	GRI Report: Economic Impacts				
Promoting regional	About APP-China				•
development	Uniting to Aid Community Development				
Low Materiality Issues			Customers and Consumers	Suppliers	Communities
Diversity and equal opportunity	GRI Report: Social Performance	•			
Community engagement	Uniting to Aid Community Development	•			•
Supplier social assessment	GRI Report: Economic Impacts	•		•	

#### **Compliance Management**

"Integrity and Commitment" is the moral code of APP-China. It lays the foundation for its corporate culture, and is paramount to the healthy and sustainable development of the Company. We adhere to and continue to strengthen anti-corruption, anti-fraud and other compliance management, and strive to create a clean, self-disciplined, fair and transparent business environment.

Our Code of Ethics and Integrity for Employees provides a sound reference for employee compliance, and all APP-China employees who deal with suppliers are required to abide by it. In late September 2017, we issued the Regulations on the Prohibition of Receiving Gifts

and Hospitality for Employees of APP-China and asked employees to report their cases retrospectively starting from September 1, 2017. Within four months, 55 employees reported that they had received gifts, mostly in the form of mooncake coupons, notebooks, and calendars, and returned most of them. During this period, we asked the employees to report via email at first. Then we established a dedicated online reporting platform to further promote integrity and compliance management.

In 2017, we conducted 50 business ethics and anti-corruption training for the sales, management, accounting, finance, and procurement departments of the Company headquarters, subsidiaries and branch companies. With a participation of 2,568 person-times, these training events received positive feedback from both the management and the staff. Meanwhile, we published an internal monthly on honesty and integrity for six consecutive months, which focused on providing precaution for possible violations and raising the awareness of honesty and integrity. Besides regular administrative reporting channels, we have also established an independent whistleblowing channel accessible to both internal and external personnel.



#### **Economic Impacts**

#### **Economic Performance**

We take honesty and compliance management as the foundation for the sustainable development of the Company and deliver continuous innovations in business operations so as to ensure the steady growth of our business and create shared value and positive impact for our stakeholders.

Total assets	RMB100 million	1,531	1,618.32	1,582
Total taxes paid	RMB100 million	22.40	22.52	26
Sales revenues	RMB100 million	454	473.73	553
Total profits	RMB100 million	23.80	31.68	36
Net profits	RMB100 million	21	24.19	26
Donations	RMB10,000	2,516.78	1,326.70	1,869

#### **Indirect Economic Impact**

Indicator	Unit	2015	2016	2017
Employee volunteer services	hour	36,923	33,784	26,645
Donations	RMB10,000	2,516.78	1,326.70	1,869

#### **Procurement Behaviors**

In order to promote the sustainable operations of suppliers, APP-China requires all new suppliers to sign the *CSR Statement and Commitment Form* formulated based on relevant domestic and international laws and regulations and the SA8000 Social Responsibility Standards, which lays out

specific requirements for suppliers on business ethics, human rights, environmental protection, and intellectual property rights, etc. APP-China also carries out regular evaluations for all suppliers, making a comprehensive assessment as regards their code of conduct and management system, the sustainability of the sources of raw materials, supplier risks, and their environmental performance. In 2017, there was no incident of termination of supplier cooperation due to major negative social impact.



# Environmental Performance

#### Materials

Timber and pulp are the direct raw materials for the papermaking industry. They affect not only the quality of products, but also the sustainability of the supply chain. We actively implement forest certification to ensure sustainable timber supply from the forests operated by ourselves; we also give priority to certified timber and pulp in procurement to promote the traceability of raw materials.

Through recycling and reuse of packing materials such as wood pallets, our subsidiaries achieved reduced material us and considerable cost savings at the same time. In 2017, Gold Huasheng recovered 55,230 wood pallets, which represents RMB2.92 million in cost reduction.

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t savings at the same
uasheng recovered

#### Energy

The use of energy is directly related to the volume of greenhouse gas and pollutant emissions in the air. Following the development of the low-carbon economy, we actively improved our energy management system, adjusted the structure of our energy use, and explored energy-saving technologies and solutions. We also plan to incorporate specific quantitative indicators into our sustainability strategic plan based on the specific energy structure of our subsidiaries, so as to further reduce the use of non-clean energies such as coal and improve energy efficiency.

Indicator	Unit	2015	2016	2017
Total volume of pulp purchased	10,000 tons	477.93	540.97	573.25
Total volume of certified pulp purchased	10,000 tons	71.68	92.64	98.71
Proportion of certified pulp in total pulp purchased	%	18.05	17.12	17.22
Proportion of certified wood fiber in total wood fiber purchased	%	25.48	21.91	16.9
Volume of waste paper purchased	ton	464,784	607,244	440,839

#### **Reducing Logistic Energy Consumption**

We strove to minimize our energy consumption and emissions during transportation and logistics by optimizing the logistics layout, shortening the transportation routes, and changing the storage and transportation methods, etc.

Suzhou Gold Hongye merged the three warehouses in Suzhou and Shanghai into one central warehouse in Suzhou and realized direct distribution in Shanghai, thus effectively reducing the transportation distance. In addition to Shanghai, the direct distribution model has been introduced to Tianjin, Hefei, Fuzhou, and Nanchang, and will be implemented in more regions in the future.

By replacing a certain amount of land transportation from Suzhou to Shanghai with river transportation, Gold Huasheng achieved a reduction of 30 liters of diesel consumption per container shipped, which also helped alleviate local congestions on roads.

Indicator	Unit	2017
Coal	ton	5,195,476.17
Gasoline	ton	687.50
Diesel oil	ton	8,155.76
Fuel oil	ton	26,112.59
Natural gas	10,000 cubic meters	19,400.94
LPG	ton	7,350.49
Kerosene	ton	2.09
Biomass fuel	ton	272,813.88
Black liquor from pulp	ton	2,527,691.5
Solar power generation	10,000 kWh	2,355.62
Power purchased	10,000 kWh	149,857.23
Steam purchased	GJ	1,455,093.24

#### **Water Use and Sewage Treatment**

In recent years, the government has been stepping up efforts to protect the environment and promulgated a number of new environmental policies such as the "Water Ten Plan", subjecting businesses to an increasingly stringent "ecological red line". Water is one of the top priorities of APP-China's sustainability management and our subsidiaries strive to minimize the consumption of clean water through measures such as using reclaimed water and implementing water-saving initiatives. In 2017, we used a total of 118,173,907 tons of water, of which 99.68% came from surface water, 0.19% came from municipal water supply, and 0.13% came from recovered rainwater. Meanwhile, we actively adopted advanced sewage treatment technologies and processes and applied sewage discharge indicators that are well above the national standards. In 2017, there was no occurrence of major water pollution in our subsidiaries.

Indicator	Unit	2015	2016	2017
Total water withdrawal	ton	120,477,308	124,417,318	118,173,907
Total sewage discharge	ton	88,522,504	92,621,594	84,968,795
Sewage discharge per ton of paper produced	ton	6.74	12.23	6.35
Sewage discharge per ton of pulp produced	ton	15.12	21.87	13.90
COD emissions per ton of paper produced	kg	0.33	0.69	0.26
COD emissions per ton of pulp produced	kg	1.20	1.36	1.99

#### **Emissions**

Our paper and pulp mills have their own thermal power plants, whose boiler combustion generates air pollutants such as sulfur dioxide, nitrogen oxides and particulates. We actively responded to the government's requirements on the control of air pollution and transformation towards ultra-low emission operations, and continuously invested in desulfurization, denitrification, and dust removal transformation efforts to reduce pollution.

Indicator	Unit	2015	2016	2017
Annual total SO <sub>2</sub> emissions	ton	2,266.54	1,892.79	2,622.63
Annual total NO <sub>x</sub> emissions	ton	5,747.13	5,374.06	6,883.50

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#### Waste

APP-China follows the principle of "Reduce, Reuse and Recycle" and devotes itself to the scientific treatment of general waste and hazardous waste generated in the production process. Ash and slag from boilers were used to make bricks. Sludge from effluents treatment was incinerated to generate power, used in compost, or sold to a qualified third-parties for disposal. General waste such as cardboard, timber, plastic, scrap metal, and used woven bags were handed over to qualified recycling or disposal third-party companies with treatment capabilities for disposal. Hazardous wastes such as mineral oil, greases, batteries, chemicals, chemical containers, and catalysts were required be handed over to qualified treatment companies. We also required that only qualified transportation companies were allowed to handle the shipping of hazardous wastes to prevent the risk of environmental pollution during transportation. In 2017, there was no major environmental incident related to the handling and shipping of hazardous wastes during transportation or operations.

#### **Environmental Compliance**

Our affiliated mills continuously monitored their pollutant emissions and took prompt actions to identify and rectify the problems after irregularities were found regarding excessive emissions. In 2017, four fines were issued to our affiliated mills covered in this report, totaling RMB977,400, for emission violations including excessive discharge of odorous gases, smoke and dust, and sewage. All of the mills fined have made rectifications accordingly.

Indicator	Unit	2017
Sludge generated	ton	701,828.73
Sludge recycled	ton	219,112.58
Sludge disposed of	ton	482,716.15
Ash generated	ton	513,254.12
Ash recycled	ton	232,004.87
Ash disposed of	ton	281,249.25
Slag generated	ton	134,760.72
Slag recycled	ton	90,274.04
Slag disposed of	ton	44,486.68
Other general wastes generated	ton	85,483.89
Other general wastes recycled	ton	32,026.06
Other general wastes disposed of	ton	53,456.29
Hazardous wastes generated	ton	1,032.55
Hazardous wastes disposed of	ton	914.78



#### **Social Performance**

#### **Employment**

APP-China strictly abides by the Labor Law, Contract Law, Trade Union Law, Collective
Contract Provisions, and other national laws and regulations, carries out equal consultation with employees, and signs labor contracts with all employees in accordance with the requirements of the laws. The Company ensures equal pay for equal work and strictly forbids all forms of child labor, and forced or compulsory labor. Gold East Paper, Ningbo Zhonghua, Ningbo Asia, Gold Huasheng, and Gold Hongye have signed collective contracts with the employees, with 100% employees covered by collective bargaining agreement.

The Company has established a comprehensive performance-based remuneration system and regularly adjusts the salary standards by benchmarking with industry averages to ensure that its employees are paid competitive salaries. The Company provides a wide range of employee benefits as required by law, including pension, unemployment insurance, medical insurance, occupational injury insurance, maternity insurance, and housing fund, while offering complementary commercial insurance coverage as well.

#### **Employment Data**

Indicator	2017
Number of employees directly employed	21,746
Number of male employees directly employed	15,779
Number of female employees directly employed	5,967
Number of employees indirectly employed	1,887
Number of male employees indirectly employed	1,156
Number of female employees indirectly employed	731
Number of new employees	2,259
Number of new male employees	1,473
Number of new female employees	822
Employee turnover (number)	3,786
Number of male employees who resigned	1,274
Number of female employees who resigned	698
Number of male employees dismissed	638
Number of female employees dismissed	264
Number of male employees who retired	23
Number of female employees who retired	30
Number of male employees who left for other reasons	663
Number of female employees who left for other reasons	196

#### Employee turnover rate

Indicator	Unit	2015	2016	2017
Employee turnover rate	%	24.56	18	15.77
Male employee turnover rate	%	25.08	16.2	15.09
Female employee turnover rate	%	23.04	13.4	17.5

#### Employee retention after maternity/paternity leave

Indicator	2017
Number of female employees who took maternity leave	634
Number of female employees who returned to work after maternity leave	568
Number of female employees who resigned after maternity leave	50
Number of male employees who took paternity leave	991
Number of male employees who returned to work after paternity leave	943
Number of male employees who resigned after paternity leave	31

#### **Employee Structure**

Indicator	Unit	2015	2016	2017
Percentage of senior management staff	%	1	1	1
Percentage of middle management staff	%	8	7	9
Percentage of grass roots employees	%	91	92	90

#### **Occupational Health and Safety**

In order to prevent, control and eliminate occupational hazards, APP-China pays close attention to employees' health and rights, and strictly abides by the Occupational Disease Prevention Law, the Regulations on Occupational Health Supervision and Management in Workplaces, and other relevant laws and regulations. The main health hazards of the papermaking industry include noise, dust, and high temperature, etc. We monitor these occupational hazards in real time and continue to invest heavily in protective gears

Indicator	Unit	2015	2016	2017
Total investment in protective gears	RMB10,000	532.42	442.58	615.55
Lost hours per million working hours	hour	1,899.46	1,159.8	1,090.55

and safety training. Besides
pre-service, at-service, and post-service
physical examinations for all employees,
we also offer free occupational disease
examinations for employees exposed to
occupational hazards and reassign those prone

to occupational diseases to posts involving lower health risks. In 2017, we provided a total of 206,759.5 hours of safety training to our employees. There were 79 work-related injuries and one work-related fatality.

#### **Employee Training**

APP-China provides a variety of career development training for employees to facilitate their career growth. In 2017, we officially launched the post-based technical model, providing more systematic and professional training to employees in different positions.

#### **Diversity and Equal Opportunity**

We respect and safeguard the legitimate rights and interests of our employees and forbid any form of discriminatory provisions against fair employment, such as gender, ethnicity, marital status, religion, and hepatitis B virus, etc., fostering a fair workplace that guarantees equal development opportunities for all employees.

Indicator	Unit	2015	2016	2017
Total training investment	RMB10,000	488.89	423.5	396.50
Total employee training time	hour	720,405	685,563	762,556.9
Number of employees who participated in company-paid diploma programs	/	65	63	96
Total investment in company-paid diploma programs for employees	RMB10,000	7.37	16.68	29.51
Average training time for senior management	hour	76.47	33.9	28.77
Average training time for mid- level management	hour	40.06	31.34	32.71
Average training time for front- line employees	hour	35.69	40.22	34.39

#### Employee diversity data

Indicator	Unit	2015	2016	2017
Percentage of female employees	%	25.25	28.1	27.44
Number of female employees in management	/	326	374	528
Percentage of female employees in management	%	18.46	22.5	24.28

#### Employee composition by age group

Indicator	Unit	2015	2016	2017
Percentage of employees aged under 30	%	30	25	27
Percentage of employees aged between 30 and 50	%	67	73	70
Percentage of employees aged above 50	%	3	2	3

#### **Product Responsibility**

#### **Customer Relationship Management**

"Customer focus" is a basic principle that APP-China always adheres to. In 2017, APP-China mills conducted customer satisfaction surveys to fully understand their overall evaluation of our paper products, services, and logistics, and developed optimization schemes based on customer feedback to enhance the quality of our products and services.

We take customer complaints very seriously and continuously optimize our customer complaint processing procedures to deliver efficient and professional customer service. In 2017, Guangxi Jingui Pulp & Paper further improved its operational process for handling customer complaints on paper transportation and product quality. Hainan Gold Shengpu has listed product quality as one of its key performance indicators, and implements improvement plans based on regular analyses of customer complaint rate and causes. Hainan Jinhai Pulp & Paper has set up a team to facilitate the communication between department managers and customers nationwide, and provides technical support to solve customer troubles more effectively.

Meanwhile, we actively carried out a variety of customer engagement activities, such as organizing customer visits, participating in industry exhibitions, and hosting customer appreciation meetings, which not only enabled us to provide better services, but also effectively enhanced mutual understanding and trust, laying a solid foundation for winwin cooperation in the future.

#### **Technology and Product Innovation**

We continually strengthen innovation efforts to meet the growing demand for paper products in terms of both variety and quality. Effective management of patents and intellectual property rights has been essential to our technology and product innovation. To better protect the interests of the Company and encourage employee innovation, we issued the *Group Intellectual Property Management Measures* in 2017. From 2015 to 2017, we have cumulatively obtained 377 patents, of which 261 are invention patents, 54 are utility model patents, and 62 are design patents.

#### **Graphene Changing the World**

Ningbo Asia and the Ningbo Institute of Industrial Technology, CAS jointly applied for the Ningbo Graphene Project, aiming at developing a new multi-functional water-borne graphene nano-coating material for high-grade packaging. The new material was expected to be able to effectively improve the printing performance, grease-proof performance, antibacterial performance, and antistatic performance of cardboards. The joint research and development efforts have tested the application of graphene in papermaking. The technology has been patented in China and sets a good example for the application of new materials such as graphene in the transformation of traditional industries.

#### **Assurance Statement**



## **ASSURANCE STATEMENT**

SGS-CSTC STANDARDS TECHNICAL SERVICES CO., LTD. SHANGHAI BRANCH'S REPORT ON SUSTAINABILITY ACTIVITIES IN THE SINAR MAS PAPER (CHINA) INVESTMENT CO., LTD.'S SUSTAINABILITY REPORT FOR 2017

#### NATURE AND SCOPE OF THE ASSURANCE

SGS-CSTC Standards Technical Services Co., Ltd. Shanghai Branch was commissioned by SINAR MAS PAPER (CHINA) INVESTMENT CO., LTD. (thereafter as "APP-China") to conduct an independent assurance of the 2017 SUSTAINABILITY REPORT (2017 CSR Report). The scope of the assurance, based on the SGS Sustainability Report Assurance methodology, including the text and data in accompanying tables, contained in the 2017 CSR Report. Assurance data and information are including APP-China Head Office, Gold Hongye Paper Group Co., Ltd., Gold Huasheng Paper (Suzhou Industrial Park) Co., Ltd., Gold East Paper (Jiangsu) Co., Ltd., Guangxi Jingui Pulp & Paper Co., Ltd., Ningbo Asia Pulp & Paper Co., Ltd., APP-China Forestry Business Headquarters and Hainan Business Units, which were on-site assurance, as well as, Ningbo Zhonghua Paper Co., Ltd., Hainan Jinhai Pulp & Paper Co., Ltd., Hainan Gold Hongye Paper Co., Ltd., Hainan Gold Shengpu Paper Co., Ltd., Guangxi and Guangdong Business Units, and Lancang, Ganzhou, Wenshan and Henan Business Sub-BUs, which were off-site assurance. Data and information of other companies were not included in this assurance process.

The information in the 2017 CSR Report of APP-China and its presentation are the responsibility of the directors and the management of APP-China. SGS has not been involved in the preparation of any of the material included in the 2017 CSR Report.

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

The SGS protocols are based upon internationally recognized guidance, including the Principles contained within the GRI STANDARDS for accuracy and reliability and guidance for Assurance Providers.

This report has been assured at a moderate level of scrutiny using our protocols for:

- evaluation of content veracity
- evaluation of the report against the GRI STANDARDS.

The assurance comprised a combination of pre-assurance research, on-site verification and interviews with the management and employees, documentation and record review.

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

#### STATEMENT OF INDEPENDENCE AND COMPETENCE

SGS is the world's leading inspection, verification, testing and certification company that operating a network of over 1,650 offices and laboratories around the world, providing the services includes the certification of management systems and services; quality, environmental, social and ethical auditing and training;

environmental, social and sustainability report assurance. SGS affirms our independence from APP-China, being free from bias and conflicts of interest with APP-China, its subsidiaries and stakeholders.

The assurance team was assembled based on their knowledge, experience and qualifications for this assignment, and comprised auditors with CSR Lead Assuror, SAI Registered SA8000 Lead Auditor, CCAA Registered ISO 14001 Auditor and OHSAS 18001 Auditor.

#### ASSURANCE OPINION

On the basis of the methodology described and the verification work performed, we are satisfied that the information and data contained within 2017 CSR Report verified is accurate, reliable and provides a fair and balanced representation of APP-China's sustainability activities in 2017. The assurance team is of the opinion that the Report can be used by the Reporting Organization's Stakeholders.

We believe that the organization has chosen an appropriate level of option in accordance to all requirements in core option of GRI STANDARDS (2016), and disclosed part of indicators in comprehensive option according to the Standards

#### GRI STANDARDS CONCLUSIONS

In our opinion the APP-China CSR Report 2017 is presented in accordance with the core option for GRI STANDARDS (2016) and fulfills all the required content and quality criteria.

#### Stakeholder Inclusiveness

APP-China establishes a diversified stakeholder dialogue mechanism to ensure the effective engagement of stakeholders in sustainability management, and integrates sustainability behaviors into its decisions and activities. APP-China is focusing on biodiversity, effectively addressing community issues, and optimizing the supplier's sustainable development management, in order to ensure that the commitment to "APP's Sustainability Roadmap Vision 2020" is implemented in stages.

#### Sustainability Context

APP-China considers these factors in terms of data disclosure by analyzing from the economic, environmental and social stakeholders.

#### Materiality

APP-China continually conducts a stakeholder survey to identify current material aspects, in order to ensure the materiality and comprehensiveness of the concerned issues, which setting as the contents of sustainability report for the year and sustainability activities for the future.

#### Completeness

APP-China uses the social responsibility subjects as framework to disclose relevant information and data, and fully reflects the significant economic, environmental and social impacts.

#### Balance

APP-China actively discloses its own positive and negative performance based on the expectations of stakeholders, and gives stakeholders more objective performance of social responsibility performance.

#### Comparability

APP-China shows the historical data comparison to demonstrate the trends and forms that help readers well know the improvement of year-to-year performance.

#### Accuracy

APP-China's reporting mechanism is objective and complete, which can disclose more information to stakeholders and reveal that the concept of social responsibility management is consistent with the expectations of stakeholders.

#### Timeliness

The data APP-China disclosed are in the reporting cycle, and the stakeholders can obtain information to make a reasonable decision in a timely manner.

The report is clear and can be understood by stakeholders who have a reasonable understanding of APP-China and its industry. APP-China is taking into account the utilization and type of information, and using a number of descriptions, charts and pictures and other forms while disclosure of information.

#### Reliability

The data and information can be traced and verified by internal collection, recording, compiling, analysis and disclosure to ensure the quality and materiality of information. In addition, an independent external organization also provides the reliability of the report.

Signed: For and on behalf of SGS-CSTC Standards Technical Services Co., Ltd. Shanghai Branch



Ben Tsang Director, China and Hong Kong Certification and Business Enhancement 8 October, 2018

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## Reader Feedback

Dear Readers,
Thank you very much for sparing the time to read the APP-China 2017 Sustainable Development Report. We sincerely invite you to share with us your valuable comments and suggestions on this report, which will help us make improvement.

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☐ Community rep	resentatives	☐ Industry associ	iations	☐ Academic inst	itutions	□ NGOs	☐ Media
Please rate the foll	owing question	s on a scale of 1 to 5 (	1 being the l	lowest and 5 being	the highest).		
1. Your overall opinion	n of the APP-China	2017 Sustainable Develo	pment Report				
2. Your assessment of	the completeness	of the information in this	s report.				
3. Your comments on	the layout, design	, and story-telling of this i	report.				
4. Your comments on	our stakeholder ei	ngagement					
1. Tour comments on	our stancholder er						
5. Would you agree th	nat this report refle	cts the significant econo	omic, social and	d environmental impac	ts of APP-China?		
6. Your opinion on the	e credibility of the	report.					

You can send us your comments by mail, e-mail, or fax, or call us directly. We will give full consideration to your comments and suggestions.

APP-China Report Team October 2018





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