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2016

## ABOUT THIS REPORT

This is the tenth Sustainability Report published by Sinar Mas Paper (China) Investment Co., Ltd. (hereafter referred to as APP-China). APP-China is synonymous with Sinar Mas Paper (China) Investment Co., Ltd. and the group of companies under its direct investment in China. Through this report, we aim to keep stakeholders informed of our policies, management, initiatives and key achievements in sustainable development.

The report discloses and responds to key stakeholder concerns by identifying and analysing material issues. This report was prepared in accordance with the Global Reporting Initiative (GRI) G4 Guidelines.

### Language

The report is published in Chinese and English; for any difference, the Chinese version shall prevail;

### Period

January 1, 2016 – December 31, 2016;

### Frequency

Annual report. The last report was published in October 2016;

### Assurance

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

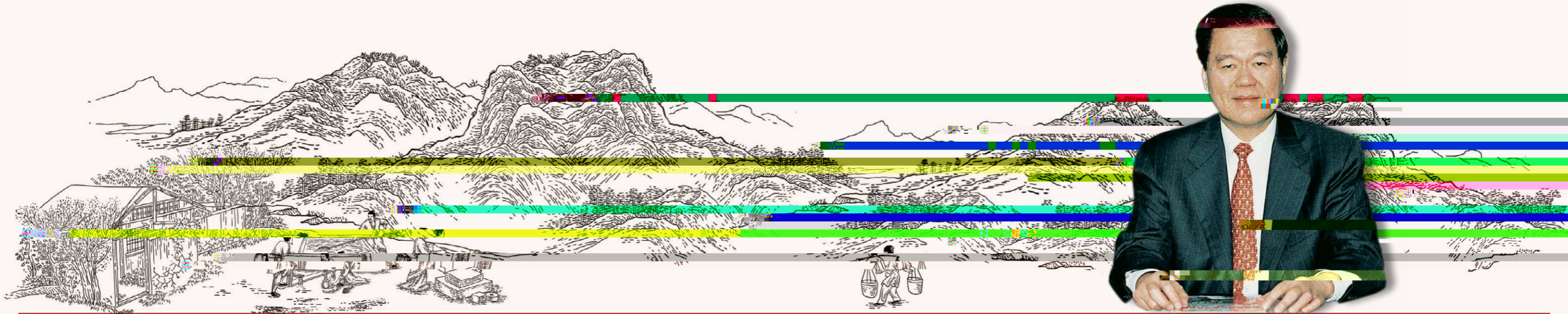
### Reporting Method

In accordance with GRI materiality, stakeholder engagement, sustainable development principles and professional judgement, APP-China produced this report based on the following methods:

APP-China has conducted a stakeholder survey to confirm the perceptions, expectations and recommendations of APP-China's key stakeholders. Combining quantitative and qualitative analysis, APP-China facilitated comprehensive scrutiny and evaluation of stakeholder concerns and communication channels, which ultimately aim to improve stakeholder engagement and cooperation. In 2016 the report was based on the 2015 survey of the stakeholders' model, using a combination of online and offline approaches to information gathering and face-to-face interviews with key stakeholders to ensure its substantiveness and comprehensiveness. Please refer to the Stakeholder Engagement section for further details.

The business units and entities covered in the scope of this report include APP-China Head Office, 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 Park) Co., Limited (Gold



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For APP-China, sustainable development has never been so important as today. Our employees who have worked here for more than 20 years since our company's birth have endured certain changes in their work, lives and roles. For us, APP-China, dedicated to becoming the most important global Chinese paper manufacturer, has come to the threshold of a new era where clarity of purpose and vision is needed.

The "integration of Plantation-Pulp-Paper" has been proven in the past as a repeatable model that can become widespread and meets the needs of social development. Based on this process, we need to drive the whole papermaking industry including APP-China toward a more sustainable direction, which is the most important demand concerning paper products in today's society. However, what we need to change should be our reflection on the changing roles of paper in our lives. We have laid a solid foundation to meet new needs in a sustainable way in the future by increasing our

investment in innovation, further integrating innovative resources, proposing our own "Industry 4.0 Planning", and strengthening the management and control of procurement. What we need to change should also be our reflection on the changing role of APP-China in the paper industry. China's 13th Five-Year Plan for the paper industry states that China will push this industry toward energy-saving, environmentally friendly and green development principles, and increase the functions and variety of paper and paper products in line with improvement of quality. Following this plan, we will leverage our global resources to better lead China's paper industry toward a brighter future.

The 13th Five-Year Plan for Environmental Protection sets out a directly measurable environmental standard and the forthcoming national carbon trading market will cap energy consumption for enterprises. APP-China will ensure that the standards applied to all of its subsidiary plants are stricter than

both national and local standards. However, we need to constantly improve our environmental equipment and minimise our impact on the environment. In 2016, we enhanced the sustainability of the paper industry by continuing to promote desulphurisation and denitri cation, upgrading technology in our sewage treatment plants, using more clean energy such as photovoltaic power, and deepening our communication with external environmental protection agencies and organisations.

It is our consistent belief that our employees and support from the community are the foundation of our success. Thus, APP-China has done its utmost to meet the needs of both employees and the community. However, we are making efforts to take into account more internal and external voices. In 2016, we strengthened communication with employees, widened channels to collect complaints and feedback, and gradually improved the employee performance review. At the same time, we increased the

influence of our development on local areas by deepening communication with neighbouring communities and local governments as well as by our volunteer services.

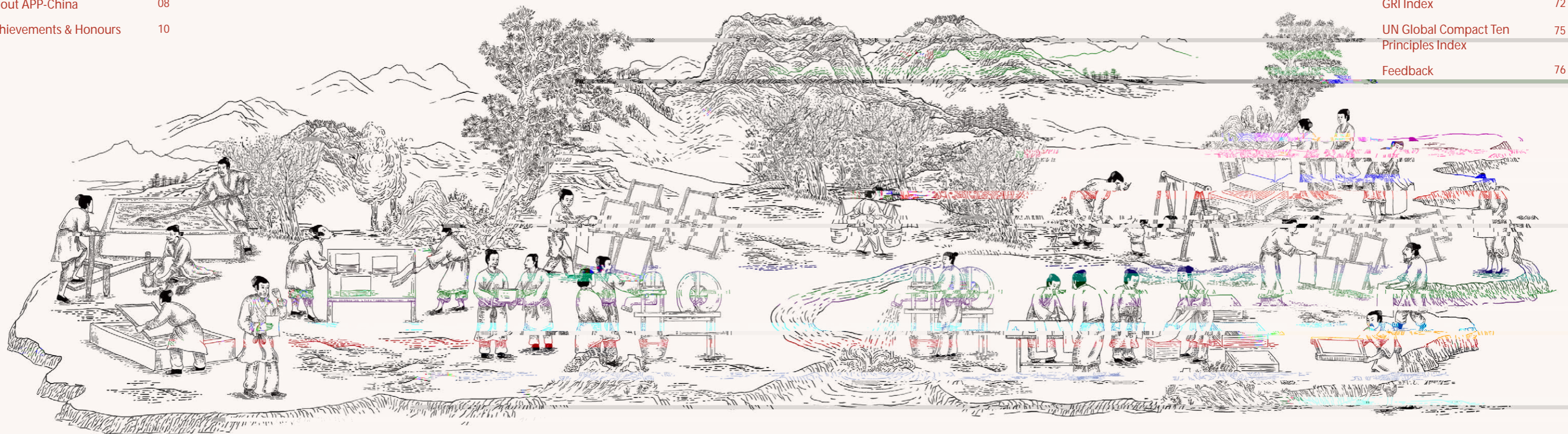
Finally, it is impossible for any enterprise to realise sustainable development without support from all of society. Faced with changes in both our internal operations and the external environment, we have made concerted efforts to improve and develop with the mutual beneficiary being all of society. This is what APP-China adheres to. However, we need to exert more influence on more people and on a broader scope through our practices. In this regard we hope for all people to join together to march forward into the new century.

**Teguh Ganda Wijaya**

Chairman and President

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APP-China is synonymous with Sinar Mas Paper (China) Investment Co., Limited and the group of companies under its direct investment in China. APP-China began investing in manufacturing sites in China in 1992 focusing primarily on the Yangtze and Pearl River Deltas. APP-China has established Gold East Paper, Ningbo Zhonghua, Ningbo Asia, Gold Huasheng, Gold Hongye, Hainan Jinhai Pulp & Paper and Guangxi Jingui Pulp & Paper with state-of-the-art technology and equipment and modern fast growing, large-scale plantations. Gold East Paper is the largest paper mill in China and the world's largest art paper producer, while Ningbo Zhonghua and Ningbo Asia are two of the

largest industrial paper producers in China today. Gold Huasheng is a diversified special paper producer. Gold Hongye is a well-known modern household paper maker in Asia. Hainan Jinhai Pulp & Paper is one of the largest pulp producers in China. Guangxi Jingui Pulp & Paper is the largest chemical mechanical pulp producer in China.

By the end of 2016, APP-China owned over 30 pulp and paper mills as wholly owned subsidiaries and holding companies and 18 forestry companies, with total assets valued at about RMB161.83 billion, sales revenues of RMB47.4 billion and with approximately 33,000 full-time employees.

By the end of 2016  
Total Assets

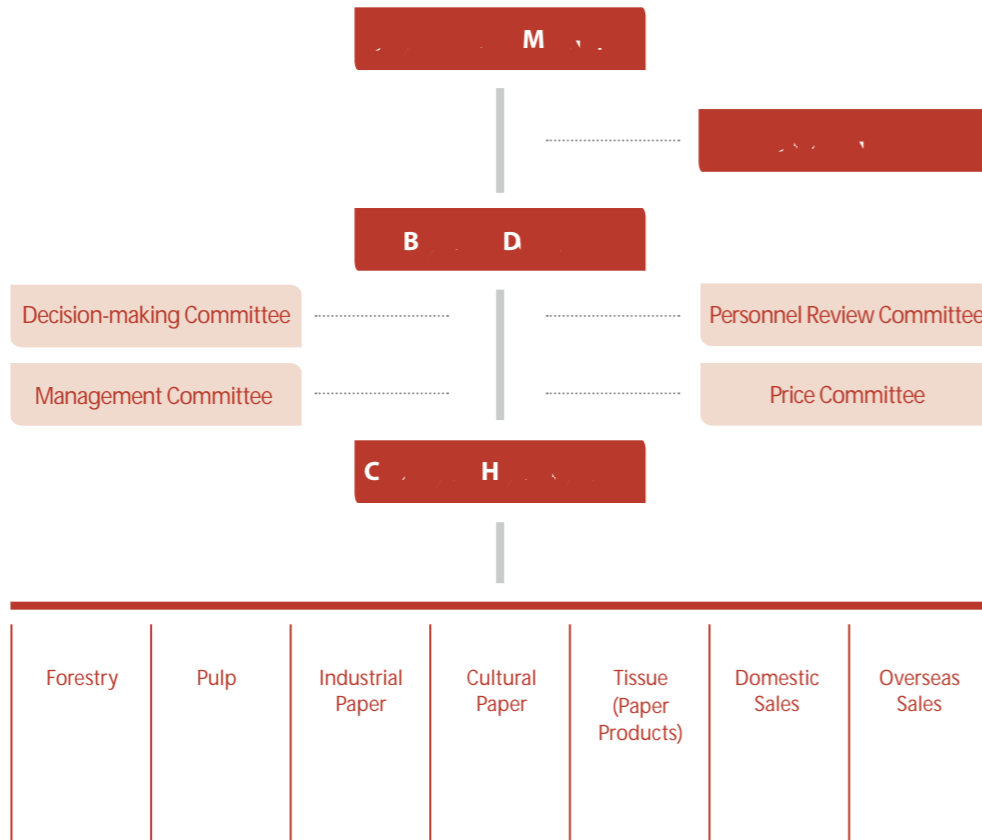
**161.83** RMB billion

Sales Revenues  
in China of 2016

**47.4** RMB billion

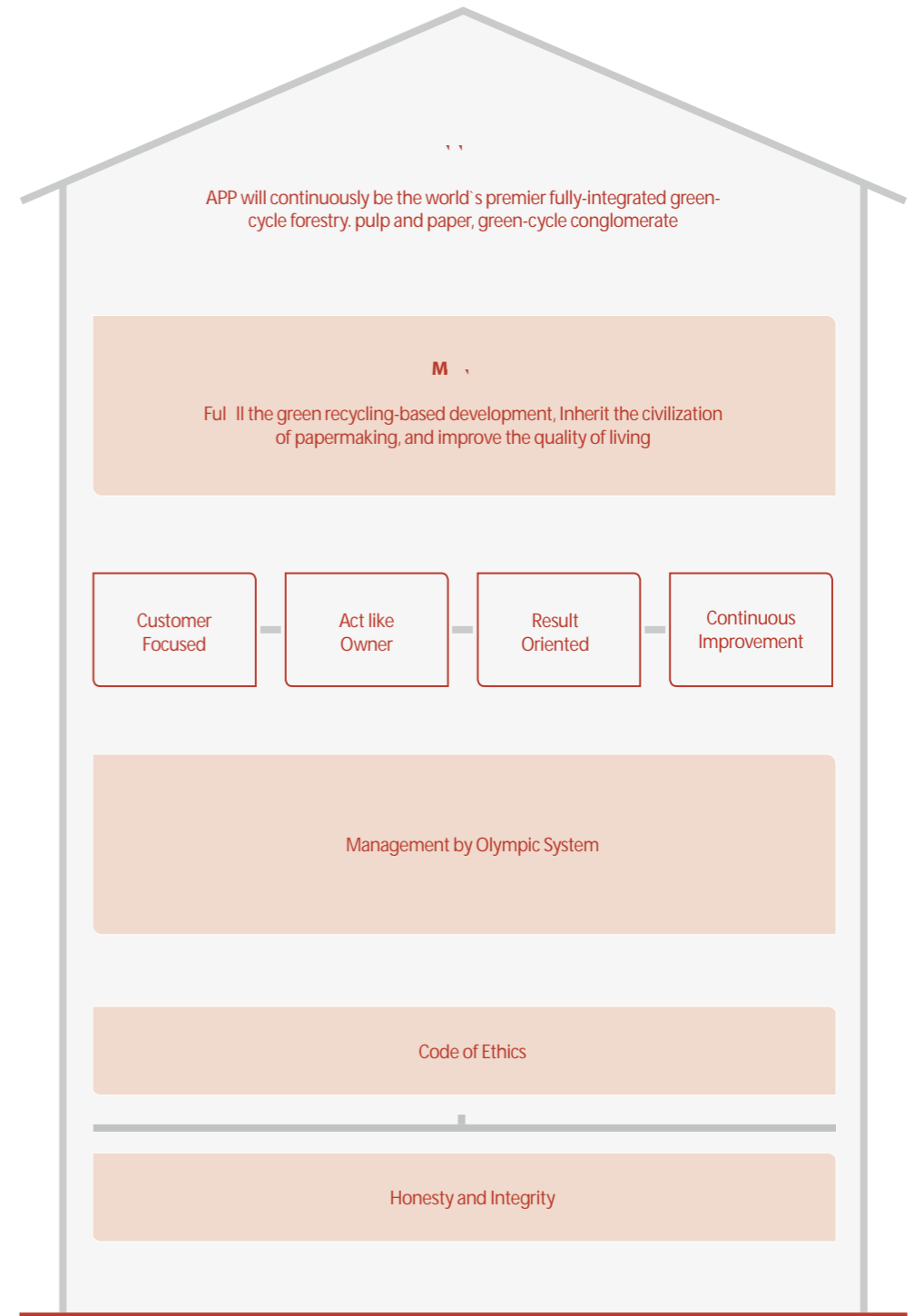
Full-time employees  
of 2016

**33,000**

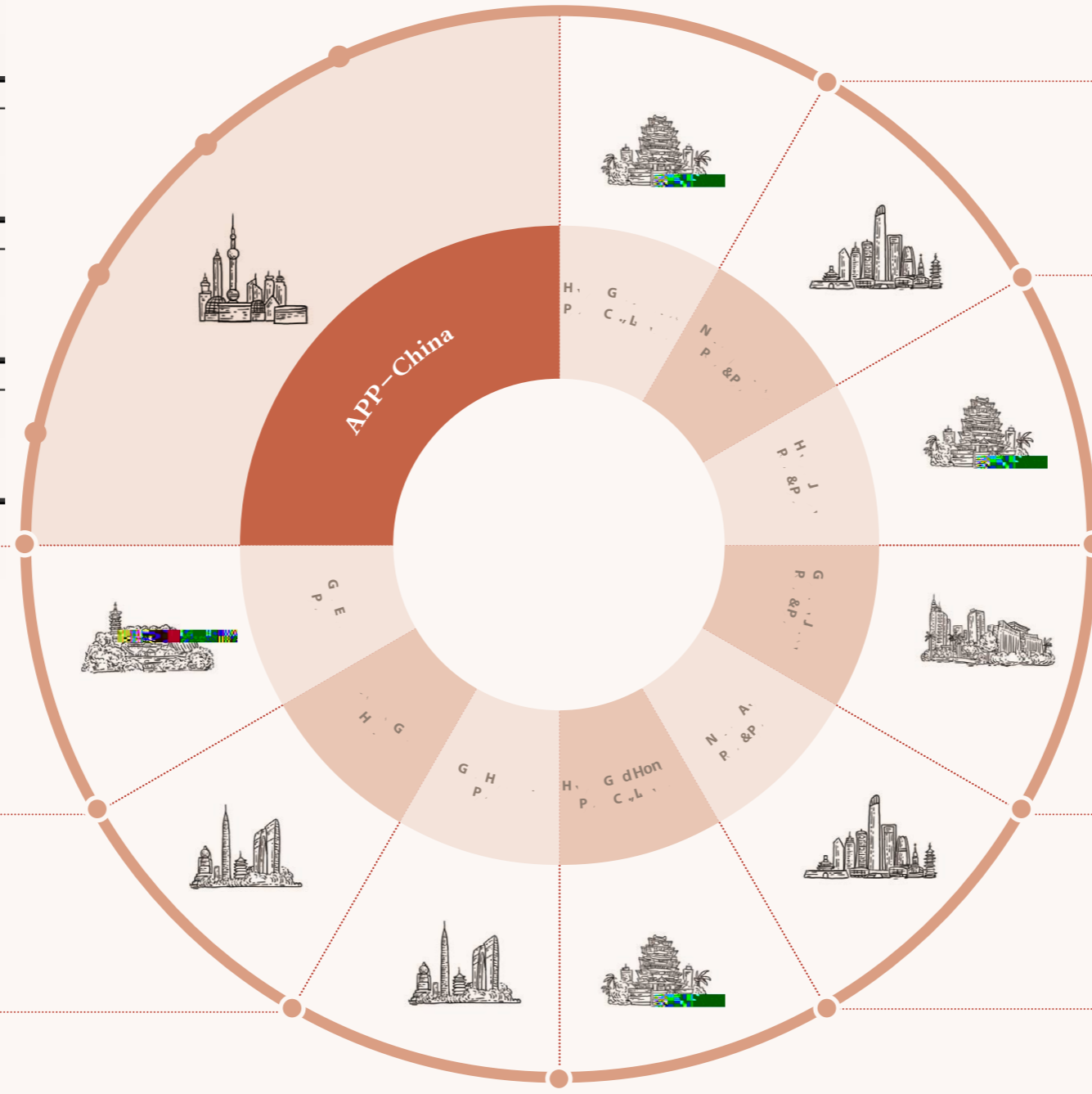


## Corporate Culture

- Corporate Vision
- Corporate Mission
- Corporate Values
- Management System
- Management Philosophy



# A & H



- Benchmark of the Jiangsu Paper Industry for the Twelfth Five-Year Plan, by the Paper Industry Association of Jiangsu Province
- Certificate for China Environmental Labelling (Type II), by the China Environmental United Certification Centre
- Top 500 Enterprise for Foreign Trade of China, by the Statistical Society for Foreign Economic Relations and Trade of China
- Top 10 Enterprise for Papermaking of Light Industry in China, by the China Light Industry Council and China Paper Association
- Top 100 Enterprise of Light Industry in China, by the China Light Industry Council
- 434th on the list of Top 500 Enterprises of China and 216th on the list of Top 500 Manufacturers of China, by the China Enterprise Confederation/China Enterprise Directors Association

- Benchmark of the Jiangsu Paper Industry for the Twelfth Five-Year Plan, by the Jiangsu Province Paper Industry Association

- Benchmark of the Jiangsu Paper Industry for the Twelfth Five-Year Plan, by the Jiangsu Province Paper Industry Association
- Outstanding Enterprise for Green Raw & Auxiliary Materials, by the China Association for Printing Technologies
- Excellent Enterprise of Environmental Labelling in China, by the China Environmental United Certification Centre

- Water-Saving Enterprise ( 1st batch) of Hainan, by the Bureau of Industry and Information Technology of Hainan and the Water Department of Hainan Province

- Top 100 Enterprise with Fastest Growth in Zhejiang, by the Zhejiang Enterprise Confederation

- Water-Saving Enterprise ( 1st batch) of Hainan, by the Bureau of Industry and Information Technology of Hainan and the Water Department of Hainan Province
- Provincial Exemplary Enterprise for Intellectual Property Management, by the Intellectual Property Office of Hainan Province
- Top 10 Enterprise for Papermaking of Light Industry in China, by the China Light Industry Council and China Paper Association
- Top 100 Enterprise of Hainan, by the Hainan Province Enterprise Confederation/Hainan Province Enterprise Directors Association
- Award for Extraordinary Contributor of the Third China Forestry Conference, by the State Forestry Administration of China and the Agricultural, Forestry, Water Conservation and Meteorological Worker's Union of China

- Pilot for System Integration, Industrialisation and Information in 2016, by the Office for Ministry of Industry and Information Technology of China
- Demonstration project for the Internet+ Manufacturing Industry of Guangxi in 2016, by the Guangxi Committee of Industry and Information Technology
- Guangxi Famous Brand for Export, by the Department of Commerce of Guangxi
- Deputy Director of the Guangxi Association for Paper Industry, by the Guangxi Association for the Paper Industry
- Top 10 Best Manufacturer of Guangxi in 2016, by the Department of Commerce of Guangxi

- Excellent Foreign Investor in Zhejiang, by the Committee of Zhejiang Investment & Trade Symposium

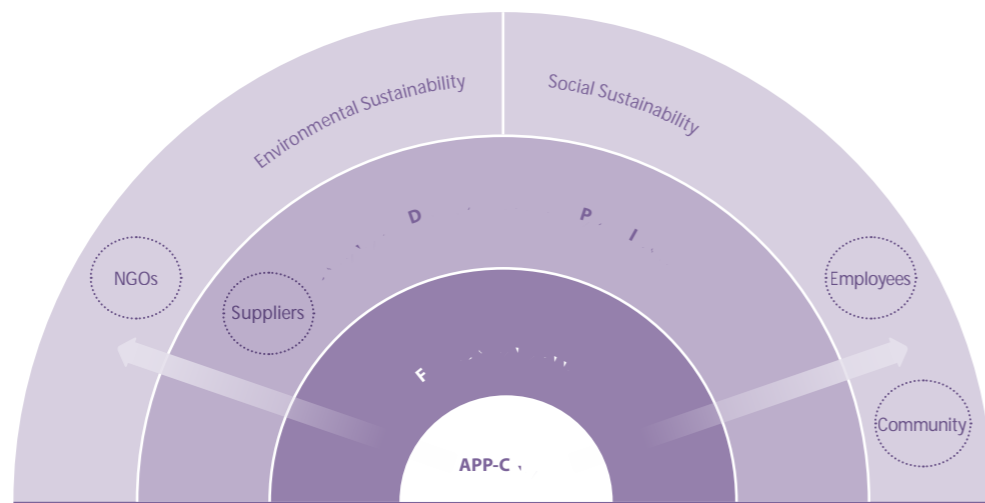
- Water-Saving Enterprise ( 1st batch) of Hainan, by the Bureau of Industry and Information Technology of Hainan and the Water Department of Hainan Province
- Top 100 Enterprise of Hainan, by the Hainan Province Enterprise Confederation/Hainan Province Enterprise Directors Association



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This change in the concept of sustainable development has not only impacted APP-China's direction and the decision-making basis for all of its actions, but also represented our new thinking on how to achieve sustainable development, including our position in the big picture of the whole of sustainable development. As China has already attached great importance to sustainable development, a series of new policies and new standards have been released to transform the development modes of a variety of industries. All of these have provided APP-China with new insights into the change in its concept of sustainable development.

In 2016, the changes in our corporate environment were diverse in origin and deeply affected the business base of the paper industry. Compared to implementation of new regulations in separate spheres in the past, such as steadily improving environmental protection standards, in 2016 the State's policies were more oriented toward guiding the overall level of social sustainable development. For example, 1) after signing the Paris Agreement on Climate Change, a series of energy-saving and emission reduction policies were released; 2) the "13th Five-Year" Plan for Ecological Protection for the first time set quantifiable assessment indicators; and 3) supply-side reform and cutting excess industrial capacity have impacted a number of traditional energy-intensive industries including the paper industry. Now, China has assumed responsibility for sustainable development at the global and national level by beginning to implement realisable and specific measures. Facing these changes, APP-China needs to determine and pursue a more comprehensive concept of sustainable development.



APP-CHINA'S SUSTAINABLE DEVELOPMENT MODEL

With the sustainable operation of forests as its base, APP-China will drive the sustainable development of the paper industry by creating a sustainable process for paper production and influencing its suppliers and clients, thus leading its stakeholders to achieve sustainable development.

On the other hand, we are also faced with demands for sustainable development from more and more stakeholders, including clients, NGOs, media outlets, local governments and communities. As the first paper manufacturer proposing of the "Integration of Plantation-Pulp-Paper", APP-China hopes that it can meet the standards set in the national sustainable development goals at the macro level, as well as guide and influence more stakeholders to achieve sustainability in their own development by spreading our understanding of sustainable development throughout our industry chain.

In 2012, APP-China proposed the "Sustainable Development Roadmap Vision 2020", which defined specific goals and paths for the sustainable management of papermaking raw materials including forest operation. As a part of the APP-China global operating network, over the past several years, APP-China has carried out specific projects to drive the sustainable operation of forests and achieved phased goals (for more information, please refer to the "Forest operation" chapter in this report). On this basis, APP-China will make efforts to drive its sustainable development goals for the industry, environment and society in the future.

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As a member of the UN Global Compact, APP-China has long aligned its sustainable development goals with global sustainable development goals and contributed to the global goals through its actions. After the UN's millennium development goals were due and achieved in 2015, 17 new sustainable development goals (SDGs) were proposed and passed, to which APP-

China intends to contribute, so that it can drive the sustainable development of APP-China and society. In 2016, after reviewing the relationship between its own operating scope and the 17 new SDGs, APP-China worked out its sustainable development strategy at four levels, and defined specific strategies and clear-cut indicators to ensure its goals can be achieved.

L	C	R
Sustainable Operation	Sustainable profitability is the cornerstone on which the enterprise can fulfil its corporate social responsibilities. APP-China will strictly abide by business ethics standards, fight against corruption, dumping and monopolies, and under the premise of compliance and integrity, continue to enhance the transparency of supervision mechanisms and build self-value, as well as actively contribute to community development and push for a win-win situation by developing local economies, creating new job opportunities and building rural infrastructure.	<ul style="list-style-type: none"> <li>Sustainable profitability</li> <li>Creating economic value</li> <li>Transparent management mechanism</li> </ul>
Innovative Development	APP-China will achieve sustained development in the new normal state of economy and meet the customised needs of the market through diversification, technology upgrading, product innovation, and other means. By improving product quality, it will at the same time increase added value and support independent tests, verification and certification of products, so as to provide its clients with more qualified, safer and environmentally friendly products and solutions.	<ul style="list-style-type: none"> <li>Diversification</li> <li>Technology upgrading</li> <li>Creating highly value-added products that meet the market needs.</li> </ul>
Sustainable Production Pattern	Sustainable production refers to promoting highly effective use of resources and energy, and provision of green and sustainable job opportunities with an aim to "reduce consumption, increase quantity and improve quality", namely, it tries to reduce resource consumption, environmental degradation, and pollution during the entire life cycle, while at the same time improving life quality. APP-China is dedicated to integrating the concept of green environmental protection into its production pattern of "Integration of Plantation-Pulp-Paper" by practicing responsible procurement, seeking and providing solutions to sustainable forest management and environmental protection, vigorously implementing its energy-saving and emission reduction policies in its production lines and supply chain, and consistently improving its products' resource utilisation. Meanwhile, APP-China will strive to help its employees to realise their individual value by providing them with a healthy and safe working environment, and respecting their interests and rights.	<ul style="list-style-type: none"> <li>Sustainable forest management</li> <li>Responsible procurement</li> <li>Mitigating the greenhouse effect</li> <li>Green production</li> <li>Providing decent job opportunities and creating a healthy and safe working environment</li> </ul>
Healthy Lifestyle	To fulfil its long-held mission of preserving our living environment and improving life quality, APP-China will strive to reduce the negative impact of the use of dangerous chemicals in its operation; APP-China is also dedicated to providing consumers with healthy products so that people can live healthy and comfortable lives.	<ul style="list-style-type: none"> <li>Reducing the use of dangerous chemicals</li> <li>Providing consumers with healthy products</li> </ul>



Defining the concept and goals of sustainable development has determined a new direction to APP-China's sustainable development. To ensure our goals can be achieved, APP-China has made adjustments to its management structure to meet the needs of its development in line with new trends in the industry.

There are also new challenges for us. APP-China's sustainable development has faced complex situations, partly because comprehensive policies should be made from the perspective of the whole enterprise in response to both the content of sustainable

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### APP-C R E DG

In August 2016, in the "Lighting the Beautiful Future--2016 China Summit for Achieving Sustainable Development Goals", APP-China was recognised as a "Pioneering Enterprise for SDGs". The summit, sponsored by the UN Global Compact Network China, and supported by the National

Development and Reform Commission and China Enterprise Confederation, aimed to showcase the contributions made by Chinese enterprises in the spheres of economic development, service to society and environmental protection when actively responding to the UN's SDGs. A total of 16



### APP-C 2016 C

After winning the same award in 2013 and 2015, APP-China won the "2016 Most Responsible Company" award for the third time at the 12th "International Forum for Corporate Social Respectability in China", sponsored by China News Service and China News Weekly.

With the theme as "rewarding good will, and identifying the original responsible force", the forum brought together hundreds of guests from government, enterprises and academia to discuss the original intentions and goals of enterprises, as well as challenges that the enterprises are faced with in the new normal state of economy.



As a global leading pulp and paper manufacturer, APP-China has vigorously carried out a sustainable development strategy for many years. While we provide consumers with quality paper products, we are also dedicated to solving the contradiction between growing demand for paper and environmental protection and scarcity of resources. APP-China will continue to make China become a 'powerful paper making country' by sharing our experience, exchanging technologies, spreading expertise, leading peers to take a 'green development' approach, and driving paper manufacturers to become plan makers and practitioners to solve the problems of scarcity of resources, environmental pollution, economic challenges, etc.






— Mrs. Zhai Jingli Vice President, APP-China

# E

As our critical partners on the path to realisation of sustainable development, stakeholders are able to help us understand the impact of our actions and make proper evaluations. APP-China has long maintained a variety of channels to keep in close contact with stakeholders and collect feedback and information from all parties in a timely fashion. APP-China, through its efficient internal management system, uses the feedback and information to inform its decisions on sustainable development. Also, feedback from stakeholders provides straightforward responses to our rapidly adjustment of operation and management strategies, and changes in stakeholder demand reflect changes in their specific goals in sustainable development, thus helping us revise our sustainable development in a timely manner.

There are two communication channels between APP-China and its stakeholders. One is the HQ functional departments, mills and forests. They, in their daily operation, directly work with different stakeholders according to their own functions and responsibilities. This is our most straightforward approach to getting to know the demands of all parties. After collecting daily information, APP-China identifies the types and demands of key stakeholders, and then meets the demands from all parties through targeted responses. This report on the annual sustainable development of APP-China also responds to stakeholder demands through information disclosure.

## APP-CHINA'S COMMUNICATION CHANNELS

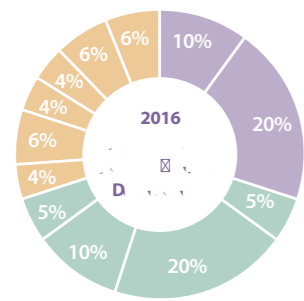
	C	K	C
<p>Employees</p> 	<ul style="list-style-type: none"> <li>• Internal website</li> <li>• Internal journals</li> <li>• Staff congress</li> </ul>	<ul style="list-style-type: none"> <li>• Water management</li> <li>• Occupational health and safety</li> <li>• Product quality and safety</li> </ul>	<ul style="list-style-type: none"> <li>• Please refer to Water Resource Management</li> <li>• Please refer to Occupational Health and Safety</li> </ul>
			
			

The number of valid returned questionnaires rose to 624 in 2016 from 173 in 2015

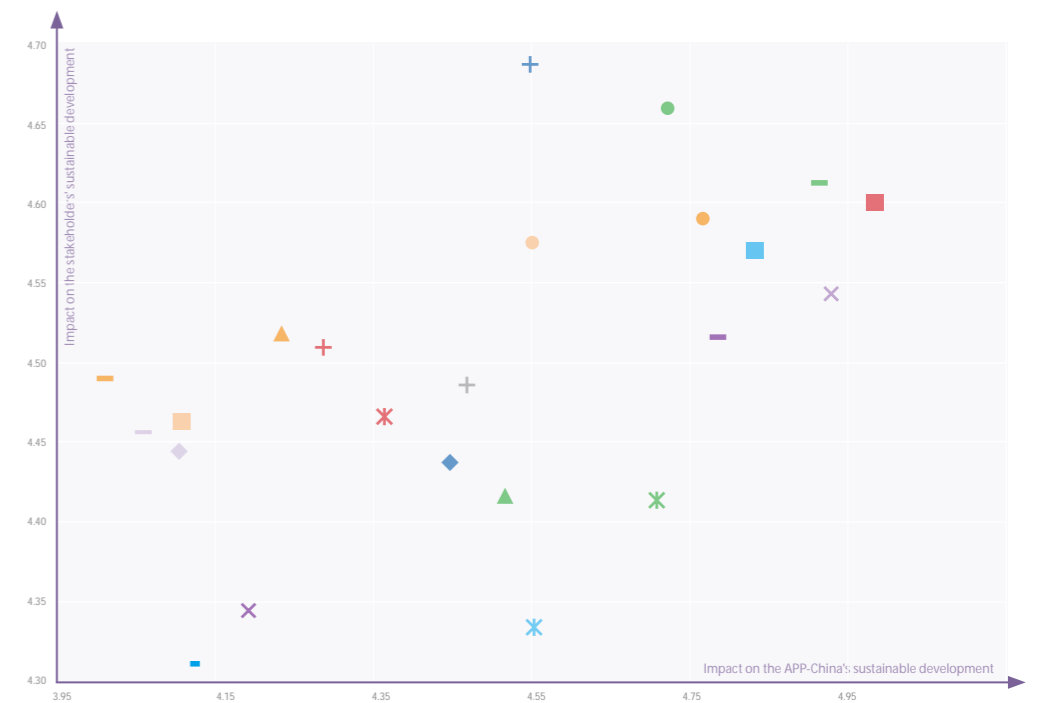
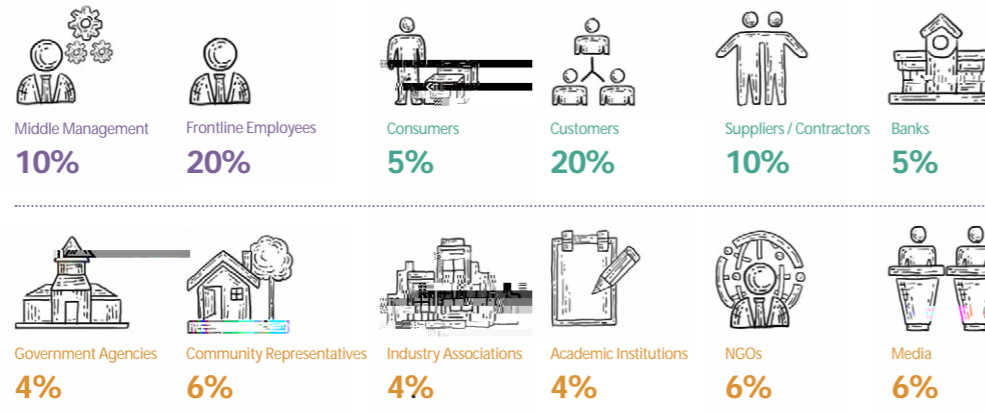
**624**

As an important complement to its daily communication with stakeholders, since 2009, APP-China has conducted a stakeholder survey every year. The survey has helped us systemically review our stakeholders' responses to related issues in sustainable development, identify key issues in sustainable development, make appropriate judgements, and then determine our annual focus. In 2016, in order to maintain the unity of the survey, we kept the weighting for the stakeholders unchanged, but in response to the development

of the domestic mobile internet industry, we only used an online survey. By taking advantage of our adjusted sustainable development management system, the subjects of our questionnaire could be more varied. As a result, the number of valid returned questionnaires rose to 624 in 2016 from 173 in 2015, which made the evaluation and feedback received from the stakeholders more accurate and richer in content. All these factors drove the improvement of APP-China's sustainable development actions in terms of effectiveness and comprehensiveness.



■ Employees  
■ Partners  
■ Community



## Compliance

For all business activities carried out by APP-China, we have insisted on compliance as the bottom line. Continual improvement of staff awareness of anti-corruption measures is one of our major priorities regarding compliance management. Within the enterprise, APP-China optimises internal compliance management, provides rules and regulations training, has created an anti-corruption reporting mailbox, requires employees to sign the Employment Professional Ethics and Probity Code of Conduct, and provides a bulletin board and other channels to strengthen communication on internal controls, anti-corruption and anti-commercial bribery with employees to raise their awareness. In 2015, no significant legal risk events occurred within APP-China.

Meanwhile, APP-China has published anti-corruption announcements on its corporate website and printed its anti-corruption mail box address on business cards to communicate anti-corruption information to keep external stakeholders such as suppliers and contractors informed of our anti-corruption policy and code of conduct, to help them maintain a healthy, fair and transparent business environment.

## APP-C

1.	Risk control for decision-making	unified decisions issued by the Board of Directors and General Manager
2.	Risk control on contract management	the legal department at headquarters is responsible for reviewing important contracts for all departments (e.g., important contracts from the departments of procurement, logistics, finance and propaganda) and contract management system establishment. The legal department of each mill is responsible for its own contracts review
3.	Risk control on legal disputes and lawsuits	unified risk management and control on lawsuits is determined by headquarters according to the subject and its importance
4.	Legal risk control on investment projects	legal assessment on all investment projects and review of all legal documents
5.	Legal risk control on operations	review of all subsidiary establishments, alteration, cancellation and operational legitimacy
6.	Legal risk control on corporate leaders	legitimacy review of all legal documents signed on by the company's legal representatives, legal liability exemptions and change of legal representatives
7.	Legal risk control on corporate corruption	implement prevention and control regulations against corporate "corrupt behaviours" with the department of internal control

# Industry Integration and Diversification

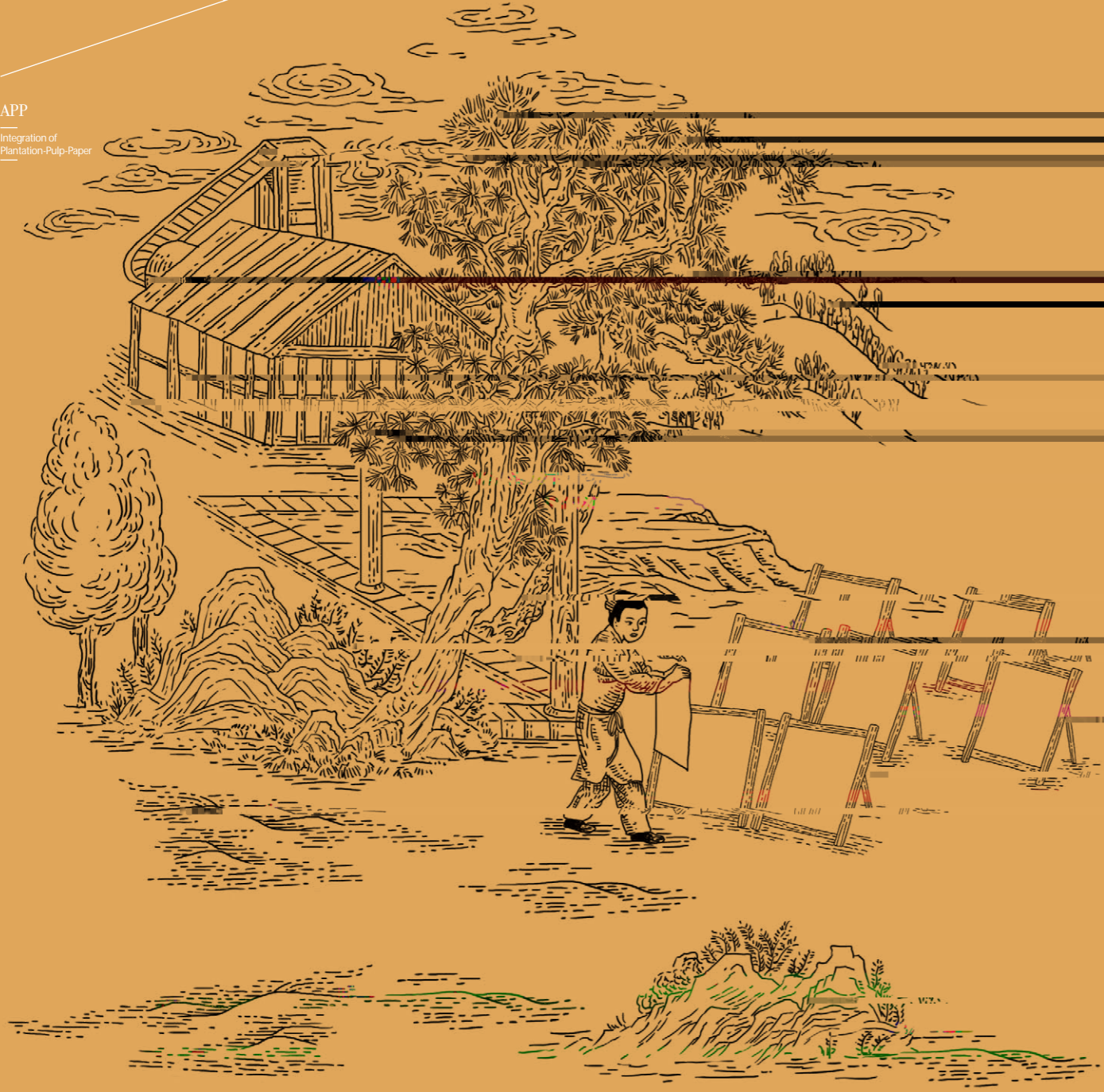
Industry Integration and Diversification is a key strategy for APP to achieve sustainable development. It involves the integration of different business units and the diversification of the company's product and service portfolio. This strategy helps APP to reduce risk, improve efficiency, and create new growth opportunities. APP has successfully implemented this strategy in various markets, including China, Southeast Asia, and Europe. The company's focus on sustainable development is reflected in its commitment to environmental protection, social responsibility, and good governance. APP's industry integration and diversification strategy is a key driver of its long-term success and sustainable growth.

I	P	-P	-P	24
F	P			26
	F			27
P	☒	P		29
F	C			32
D	D			34
	C	D		35
	P	I		38
	P			41



# Integration of Plantation-Pulp-Paper

APP  
Integration of  
Plantation-Pulp-Paper

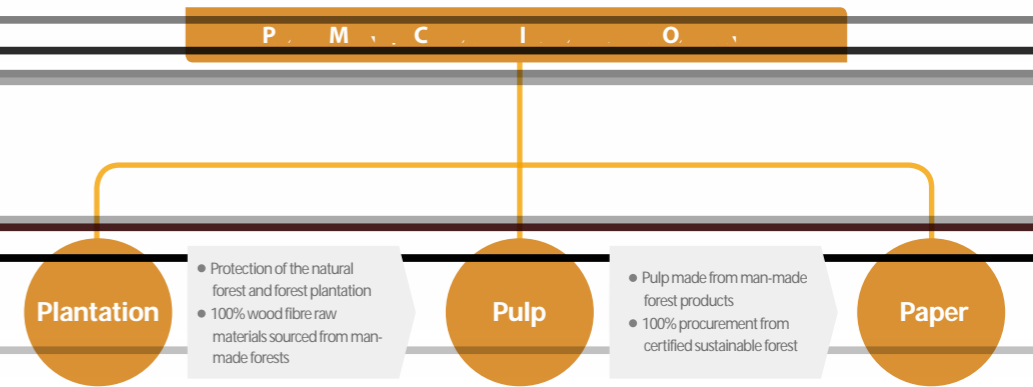


As the first domestic enterprise to propose the "Integration of Plantation-Pulp-Paper" model, APP-China advocates a recyclable green paper industry

chain model, which minimises the papermaking industry's impact on natural resources, changes the traditional small-scale papermaking enterprises'

"aggressive" mode of production, and back feeds the ecological environment at the same time.

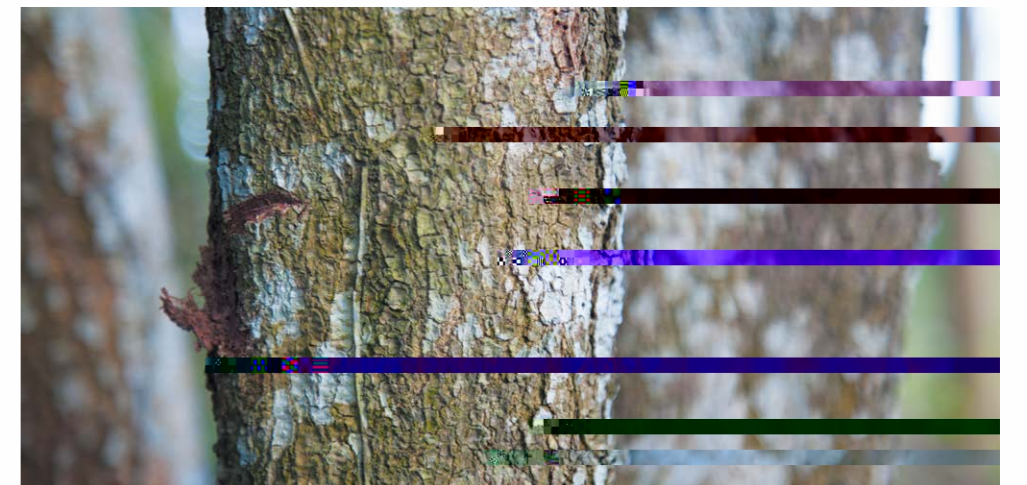
APP-CHINA'S INTEGRATION OF PLANTATION-PULP-PAPER MODEL



Unlike asset-light industries such as the IT industry and clothing industry, paper enterprises need to adjust their own mills' production models to adapt to changes in external demand. 2016 was a new starting point for the Chinese paper industry. Facing an increase in environmental inspections, small paper businesses which

consumed enormous natural resources became unsustainable due to the structure adjustment brought by supply-side reformation. The paper industry will move toward a more efficient and sustainable direction, and we have proven that the "Integration of Plantation-Pulp-Paper" is feasible. In the past two years, we have been delighted to

find that more and more modern papermaking enterprises have adopted this model, and APP-China is also willing to share its own experience to make the industry chain more sustainable.



### Forest Policies

As the basis of "Integration of Plantation-Pulp-Paper", APP-China ensures the sustainability of this business model starting at the operation of plantations and the protection of natural forests. Since the end of the last century, the APP-China has adhered to the

concept of "scientific and technological forests, ecological forests, and legal forests", ensuring the sustainable development of forests while improving the supply of forest resources.

APP-China is dedicated to boosting the common progress of the company and local communities and sharing the fruits of its development. In the operation of woodland areas, APP-China Forest gives priority to the residents of surrounding communities

**APP-CHINA PARTICIPATES IN IUFRO REGIONAL CONGRESS**

**APP-CHINA PARTICIPATES IN IUFRO REGIONAL CONGRESS**

In October 2016, the first IUFRO (International Union of Forest Research Organization) Regional Congress was held in Beijing, and APP-China as the main sponsor of the event discussed forestry research in response to global climate change and sustainable management with representatives from nearly 60 countries and regions.

The conference hosted by IUFRO and the Chinese Forestry Academy, aimed to reach a consensus on scientific research on sustainable forestry development and collaboration on trends and other changes. In the end, demand for forest management and operation under the current changing environment can be met. This was the first regional conference held by IUFRO in China.

**APP-CHINA FOREST**

**APP-CHINA FOREST**

The percentage of local employees amount in forest operation has reached

**86%**

A sound system is the premise of forest sustainable development. As APP-China's plantation operator and manager, APP-China Forest has implemented forest protection policies, uses plantations as sources of raw materials not involving natural forests, and has put an end to the use of natural forest timber in the supply chain. APP-China formulated the "Manual of Forestry Laws and Regulations", "Standard Management Manual", "Forest Managing Policy" and "Environmental Policy" as part of its forestry management system. It operates under a higher standard than national laws and regulations. APP-China develops standard operating procedures to ensure the quality of forests in the areas of logging, afforestation, green manure and forestry security. A set of scientific methods for the management of forests have also been developed on grounding, seedling, afforestation, nursing, growth monitoring, logging, COC production and marketing supervision chain, and forest operation acceptance check.

APP-China Forest has developed a mature standard education management method to standardise the company education training to ensure that employees receive a unified and standardised sustainable forest education. In addition to specific skills training, the company also requires employees to understand the basic knowledge of ISO14001EMS, to master the company's environmental policy and identify major environmental factors. The human resources department will also track and assess the training effects, which will affect the performance evaluation of employees.

APP-China has implemented an afforestation, cultivation, management & protection, logging and PHIP model to establish a long-term, mutual trust partnership with managing contractors, and prefers to choose local contractors. We also pay attention to the training and auditing of our contractors in order to realise mutual benefit and win-win situations on the premise of environmental protection and security.

Sustainable forests depend on the support and synergy with local communities. In order to standardise the company's communication with local communities, APP-China Forest, according to the principle of FPIC (Free, Prior and Informed Consent), established and formally implemented the "Community Communication Management Measures" on January 1, 2017. For disputes in forestry operations, the company has issued the "Managing Measures of Forestland Complaints and Disputes", which require clear responsibilities, positive attitudes, and procedure-based and legal solutions. As part of communication, APP requires staff to encourage residents to participate in a fair, open and transparent way. Attention should be paid to the accuracy and effectiveness of the information transmission, and to choose the right way to communicate with community residents. Special attention should be given to encouraging the participation of ethnic minorities, women, the elderly and children, and to listen to their recommendations. Respect should be paid to the traditional cultural habits of ethnic minorities, and the thoughts and recommendations of the residents should be responded to or given within two weeks. At the same time, APP publishes its annual and quarterly business activities on forestry networks (<http://www.acf.com.cc>), which involve forest management plans, forest monitoring result reports, management methods, etc.


### Sustainable Forestry

Per its effective management policy, APP-China is committed to stopping all natural forest production, and working with The Forest Trust (TFT), a third-party appraisal institution, to ensure its forest protection policy is effectively implemented.

As for plantations, APP-China has set up a modern breeding centre, cultivating superior strains for paper pulp production, and in 2009 introduced a forestry management system (PMS) for efficient forestry management and remote monitoring. The forestry management system, forest operation management system, material management system and financial system are integrated into the SAP system for unified management. APP-China Forest carries out standard operating procedures and quality monitoring for the whole forest cycle, tests all processes and procedures, and sets these factors as the standard. At the same time, APP-China Forest also entrusts qualified units to assess the environmental impact of projects to ensure that the forest operations meet the national laws and regulations and the requirements of sustainable development.

### High Conservation Value (HCV) Forest

High Conservation Value (HCV): A value that is significant or extremely important in biological, ecological, social, or cultural terms. The concept of HCV was first proposed by the Forest Stewardship Council (FSC) in 1999, which stated that "operations in HCVF should maintain or strengthen the characteristics of these forests and the decisions made on HCVF should be developed from the precautionary approach."



**HCVF Criteria:**

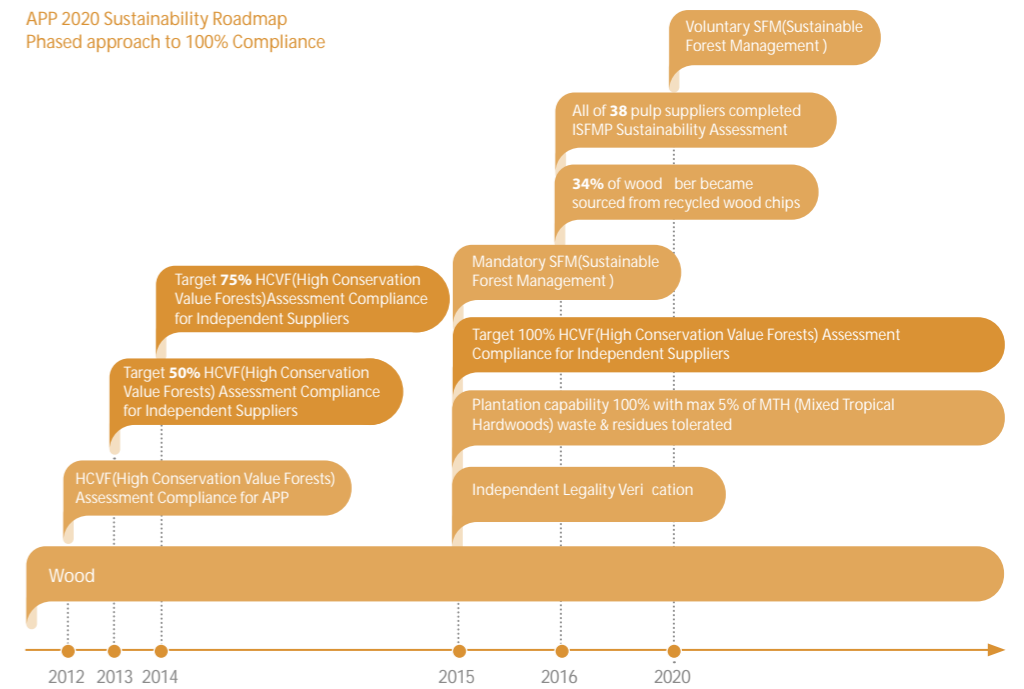
- 1 Concentrations of biological diversity including endemic species, and rare, threatened or endangered species, that are significant at global, regional or national levels.
- 2 Landscape level ecosystems and ecosystem mosaics.
- 3 Rare, threatened, or endangered ecosystems, habitats or refugia.
- 4 Basic ecosystem services in critical situations, including protection of water catchments and control of erosion of vulnerable soils and slopes.
- 5 Sites and resources fundamental for satisfying the basic necessities of local communities or indigenous peoples (for livelihoods, health, nutrition, water, etc.), identified through engagement with these communities or indigenous peoples.
- 6 Sites, resources, habitats and landscapes of global or national cultural, archaeological or historical significance, and/or of critical cultural, ecological, economic or religious/sacred importance for the traditional cultures of local communities or indigenous peoples, identified through engagement with these local communities or indigenous peoples.

## Procurement of Wood and Pulp

As the direct raw material of paper production, APP-China uses effective control to guarantee the sustainability of the sourcing of wood and pulp, which has a huge impact on realising sustainable development. In 2012, APP-China put forward the "Sustainability Roadmap Vision 2020" and presented specific goals for related suppliers in sustainable

development. APP-China, as an important component in the global operating network, has always been engaged in enhancing the sustainable development requirements for external raw material suppliers regarding obtaining wood materials from plantations based on independent management.

APP 2020 Sustainability Roadmap  
Phased approach to 100% Compliance



From forest land planning to the reuse of logging leftovers, APP-China Forest has made reasonable plans for every step of its life cycle, including choosing tree species which are suitable for local conditions, using organic fertiliser as much as possible, reducing the use of herbicides, returning logging leftovers to woodland to increase soil organic matter content, retaining undergrowth, maintaining good forest ecological systems and preventing soil erosion.

APP-China Forest has launched a five-year ecological environment monitoring program for plantation, covering biodiversity, soil and water conservation, soil fertility and other projects, and completed the

first cycle of ecological monitoring in 2014. The monitoring results show that APP-China's forest operation measures effectively avoid adverse effects on local soil and water and biodiversity. In 2016, APP-China Forest and the Chinese Academy of Forestry (CAF) released the "Annual Report on Eucalyptus Plantation Ecological Environment Monitoring", which reviewed the natural ecological status of plantations and the impact on the local ecosystem. In the future, APP-China will entrust third parties to conduct ecological monitoring of its plantation, evaluate the risks of sustainable development, and ensure that its operational activities have a positive impact on the local environment through scientific management.

From the perspective of purchasing wood, the pulp mills of APP-China give priority to purchasing certified wood to assure the legality and traceability of the wood materials. As at the end of 2016, 17 enterprises subordinated to APP-China had obtained PEFC/CoC certification and adopted a wood circulation accounting system to guarantee their wood met the requirements of PEFC/CoC. The newly-purchased quantity of the certified wood fibre accounted for 21.91% of the total with a year-on-year increase of 3.85 percentage points, and Vietnam became one of the biggest wood suppliers.

At the end of 2016, the number of enterprises which subordinated to APP-China obtained PEFC/CoC certification is

**17**

At the end of 2016, the newly-purchased quantity of the certified wood fibre accounted for

**21.91 %**

APP-CHINA PEFC-CERTIFIED SUPPLIERS

NO.	NAME	CERTIFICATION
1	Gold East Trading (Hong Kong) Co., Limited	SGS-PEFC / COC-0249
2	Gold East Paper (Jiangsu) Co., Limited	SGS-PEFC / COC-0263
3	Gold Huasheng Paper Gold (Suzhou Industrial Park) Co., Limited	SGS-PEFC / COC-0328
4	Ningbo Zhonghua Pulp & Paper Co., Limited	SGS-PEFC / COC-0334
5	Ningbo Asia Pulp & Paper Co., Limited	SGS-PEFC / COC-0360
6	Gold Hongye Paper Group Co., Limited	SGS-PEFC / COC-0462
7	AXA Pu Paper Products (Suzhou Industrial Park) Co., Limited	SGS-PEFC / COC-0533
8	Jinfengyuan Paper (Shanghai) Co., Limited	SGS-PEFC / COC-0628
9	Yalong Paper Products (Kunshan) Co., Limited	SGS-PEFC / COC-0787
10	Hainan Jinhai Pulp & Paper Co., Limited	SGS-PEFC / COC-0805
11	Hainan Gold Hongye Paper Co., Limited	SGS-PEFC / COC-1733
12	Gold Hongye Trading (Hong Kong) Co., Limited	SGS-PEFC / COC-1463
13	Gold Huasheng Trading (Hong Kong) Co., Limited	SGS-PEFC / COC-1464
14	Ningbo Asia Pulp Trading (Hong Kong) Co., Limited	SGS-PEFC / COC-1465
15	Hainan Jinhai Trading (Hong Kong) Co., Limited	SGS-PEFC / COC-1467
16	Guangxi Jingui Pulp & Paper Co., Limited	SGS-PEFC / COC-1543
17	Sinar Mas Paper (Shenzhen) Co., Limited	SGS-PEFC / COC-1640

From the perspective of purchasing pulp, APP-China carries out unified procurement management. Pulp is procured from the pulp mills subordinated to APP-China as well as external suppliers and the pulp quality needs to meet the unified standard. Meanwhile, APP-China has strengthened the

management and control of pulp inventory, optimised the allocation of commodity sources and reduced ineffective inventory. In 2016, newly-purchased certified pulp accounted for 17.1% of total procurement. APP-China strove to rely on local supplies to reduce greenhouse gas

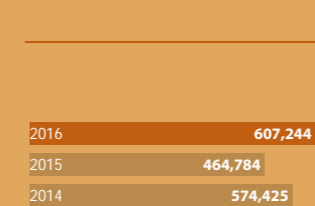
In 2016, newly-purchased certified pulp accounted for

**17.1%**

RECYCLED PAPER MANAGEMENT

Statistics show that 1 ton of recycled paper can produce 800 kg of good paper, which can save 17 trees, 3 m<sup>3</sup> of land fill waste, 240 kg of sodium carbonate, 75% of papermaking pollutants and 40-50% of energy consumption for papermaking. Every piece of paper can be recycled at least twice and the use of recycled paper has become more and more popular. APP-China, as a leading enterprise in the industry, recycles waste paper to

RECYCLED PAPER MANAGEMENT



## Forest Certification

For all raw materials including forest, wood and pulp products, independent third-party forest certification plays an important role in promoting the sustainable development of the industry, apart from effective management and control. Especially for consumers and the paper users, forest certification can guarantee paper's sustainability, which plays a role in helping paper makers to improve production.

Driven by APP-China, the CFCC (China Forest Certification Council) and PEFC (Program for the Endorsement of Forest Certification Schemes) have realised mutual recognition to further increase the supply of certified products in the global market, promote sustainable operation and strengthen the international competitiveness of forest products in China.

CFCC and PEFC also provide a "green passport" and "market access certificate" for conducting international trade smoothly, and facilitate Chinese products to enter the international market.

In 2016, the certification rate of APP-China Forest's self-managed forests reached 100% for the first time and the total certified area reached 223,057.5 hectares, which was a milestone in the sustainability of APP-China's self-managed forests.

In 2016, the certification rate of APP-China Forest's self-managed forests for the first time reached

**100%**

In 2016, the total CFCC/PEFC certified area which supplies paper and pulp mills reached

**254,660.01** hectares

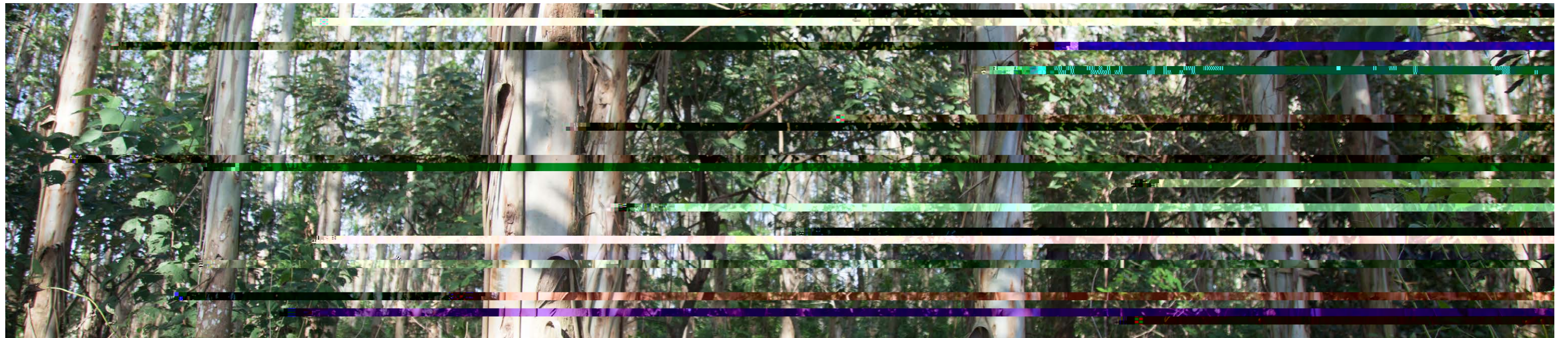


N	APP-CHINA FOREST CERTIFICATION	CERTIFIED AREA (hectares)	CFCC/PEFC FMC CERTIFICATION
1	Hainan Jinhua Forestry Co., Ltd.	68,583	CFCC/PEFC-FM-ZTFC-000003
2	Guangxi Jingui Forestry Co., Limited	42,873.9	CFCC/PEFC-FM-ZTFC-000005
3	Guangxi Jin Qin High-Yield Forest	44,076.1	CFCC/PEFC-FM-ZTFC-000006
4	Guangxi Xing Gui Forest	3,820.4	CFCC/PEFC-FM-ZTFC-000031
5	Guangxi Jintayang Forestry Co., Ltd.	1,389	CFCC/PEFC-FM-ZTFC-000031
6	Jinqingyuan High-Yield Forest (Paper Material) Base Co., Ltd.	11,072	CFCC/PEFC-FM-ZTFC-000007
7	The First Shaoguan Jinshaoguan High-Yield Forest (Paper Material) Base Co., Ltd.	14,240	CFCC/PEFC-FM-ZTFC-000008
8	Leizhou Jintayang Forestry Technology Co., Ltd.	746.97	CFCC/PEFC-FM-ZTFC-000030
9	Yangjiang Jintayang Forestry Technology Co., Ltd.	2,456.91	CFCC/PEFC-FM-ZTFC-000030
10	Huizhou Jintayang Forestry Technology Co., Ltd.	3,086.63	CFCC/PEFC-FM-ZTFC-000030
11	Wenshan Jinwenshan High-Yield Forest	19,642.5	CFCC/PEFC-FM-ZTFC-000017
12	Simao Jinlancang High-Yield Forest	42,672.6	CFCC/PEFC-FM-ZTFC-000018
		<b>254,660.01</b>	

In recent years, APP-China has made clear its desire to rebuild its connection with the FSC (Forest Stewardship Council) and obtain the FSC certification again. In 2016, the FSC, APP-

China and other 2 stakeholders discussed draft roadmaps for rebuilding the connection between APP-China and the FSC and the negotiation made substantial progress. The parties

hope to reach consensus within one to two years, which would further help APP-China to receive more recognition for its sustainable development.



The "Integration of Plantation-Pulp-Paper" production model provides a basis for the sustainable development of papermaking enterprises, including APP-China. With the change in use of paper from information carrier to materials, demand for paper is becoming more diverse. In particular, with the rapid rise of China's internet technology, people's lifestyles have changed

fundamentally within a few years, which has brought challenges to the existing industrial structure but also provided new opportunities for the future. Given the ongoing transformation of the paper industry, APP-China believes that the paper industry will enter a new stage of development through the collaboration of all the industry chain partners.

M... D... D... P... P... C...



### Response to Customer Demand

For APP-China, the most direct manifestation of the diversified demand is that the number of customer orders is on the rise, while the amount of each type is decreasing. The paper terminal market, including that of printing plants, is changing from mass production to small-scale customisation. In order to meet this change, APP-China is beginning to collaborate with downstream customers to explore a rapid response mechanism together.

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collaborate with downstream custltidindout of each t (minal mar)fa is be(e 18.409 v)10 (e6 (o met)6ogether)53 (. ) .1eting th

M... P...



Another important manifestation of the diversified social demand is that the application range of paper products is gradually increasing. APP-China performed an investigation to understand the requirements of special product users. Moreover, in

the development process, APP-China has established a cooperative relationship with suppliers of chemicals, fragrances and spices by obtaining the support of external institutions, to ensure that products meet the needs of users for different materials.

The demand for sustainable products is also increasing. In recent years, with customers paying more attention to sustainable development, regular verification of the plants by customers themselves or third-party companies is becoming increasingly common.

Customers' complaints and suggestions not only indicated their high quality requirements for our products, but also were an important driving force helping APP-China promote product and service quality. Facing existing problems and responding to customers' demand is one of the

methods. Through customer satisfaction measurement and message processing, customers' requirements on the company's products and service were timely and properly handled. In addition, the company actively conducted corrective measures, and improved product quality to avoid the re-occurrence of quality issues and improve customer satisfaction.



**G O L D H U A S H E N G P A P E R C O . L T D .**

Because of the need of anti-counterfeiting, security and fast speed, welfare lottery and sports lottery use paper as the only voucher. The requirement of paper quality is extremely stringent. China welfare lottery needs to get Chinese paper Quality Testing Center's Lottery Paper Quality Certificate; China sports lottery needs to obtain the Chinese Anti-Counterfeiting Quality Testing Center's Quality Certificate.

In 2016, Gold Huasheng Paper visited various lottery printing factories and testing organisations in Beijing and Shanghai, and learned the testing content of the two testing

organisations, including standards, methods, indicators, requirements, time period, processes, etc. Gold Huasheng Paper categorized and compared the testing methods and standards. After understood the requirements for certified paper, Gold Huasheng Paper developed ultra-high quality lottery paper, searching for advanced high level heat-sensing materials, designed paper production plans especially for the mill's production equipment and established a series of quality management SOPs. Finally, Gold Huasheng Paper successfully developed ultra-high quality lottery paper, and received the China welfare lottery quality certificate and China sports lottery quality certificate.

**B E I J I N G G O L D H U A S H E N G P A P E R P R O D U C T I O N C O . L T D .**

As people are paying more attention to health and sanitation, the need for antibacterial and bacteriostatic products has gradually increased. However, ordinary paper for daily use is only ensured as safe and clean, and that it does not have adverse effects on wiped surfaces (such as skin). In addition, paper discarded after use is a source of pollution, which would bring hidden dangers to sanitary safety.

**A N T I M I C R O B I A L B A C T E R I O S T A T I C P A P E R**

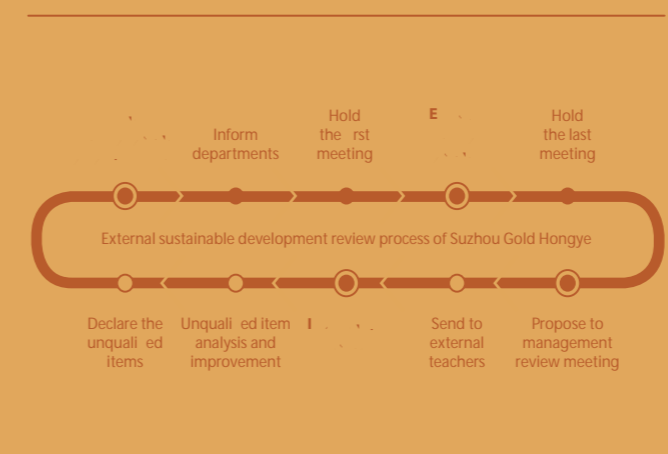
In order to meet consumers' demand for antimicrobial and bacteriostatic products, especially in the flu season, and to reduce the use of ordinary paper for nose wiping which could spread infection, Suzhou Gold Hongye cooperated with well-known chemical suppliers to jointly develop antimicrobial and bacteriostatic products conforming with international standards. The application technology was also used to develop an antimicrobial and bacteriostatic paper product for daily use. This product effectively killed up to 99% of bacteria, including *Escherichia coli* and *Staphylococcus aureus*, and also greatly reduced pollution. Suzhou Gold Hongye applied for a number of patents for the antimicrobial and bacteriostatic product and the application technology.

**C O S M E T I C S G O O D M A N U F A C T U R I N G P R A C T I C E ( G M P C ) S Y S T E M**

According to the "Audit Control Procedures of Key Customer Visiting Mill", Suzhou Gold Hongye clarified the responsibility of each department and the detailed procedures for audit control. Regular and irregular internal audits of the company's various systems were carried out, including the quality management system, environmental management system, occupational health and safety management system, forestry product production and marketing chain, China forest certification production and marketing chain, original ecological product certification of paper for daily use, measurement system, energy system, Good Manufacturing Practice of Cosmetics (GMPC System), and FSC production and marketing chain. The abnormalities found in the external

audit were addressed, and the effective operation of each management system was validated and ensured.

In 2016, Suzhou Gold Hongye received 10 on-site customer audits with good results, including Coca-Cola, Starbucks, Disney, Xiabu Xiabu, Tropical Rain Forest, ASKUL and AEON.



As an important measure to understand the needs of customers, APP-China's business units have carried out customer satisfaction surveys each year. The quality, logistics, customer service staff's attitude, etc., are compared with those of the last year's survey results. Problems reflected by large regional customers are extracted, and the relevant departments are asked to provide improvement plans.

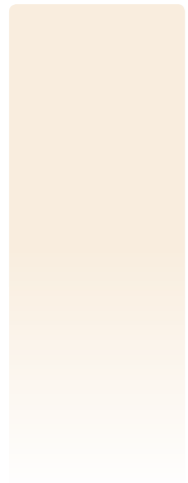
Timely and effective customer communication is also an important measure to respond to customers' needs. Gold Huasheng timely forwarded customers' complaints to relevant units and discussed improvement measures through daily WeChat communication and weekly WAR (Workshop) sessions.

### Technology and Product Innovation

Research and development is a source of energy for sustainable development, and also provides a continuous driver for APP-China to meet more requirements. In particular, facing the social innovation demand for paper products, we need to integrate more internal and external R&D resources, and constantly promote industry innovation. The positioning of APP-China's R&D department is turning toward enterprise development. It is expected to technically innovate in the traditional industry, actively promote industry-government-academia-research cooperation, and actively introduce governmental resources and academic talent.

In 2016, with the gradual advancement of the national industry 4.0 strategy, the continuous strengthening of environmental policy requirements and the changing needs of the market, APP-China strengthened communication with the government, introduced international prospective requirements, set an example by carrying out a demonstration project, led the circular economy, and promoted the overall development of the domestic paper industry. APP-China established its own industry 4.0 roadmap regarding automation transformation as the current key work, through digital operations, vertical integration and end-to-end integration, APP-China ultimately achieved the goal of industry 4.0 horizontal integration. In 2016, by promoting machinery manufacturing, the company replaced part of its manpower with machines in the production process, gradually unified all data systems, and met national requirements on environmental protection and energy consumption.

The key to successful R&D is talent. APP-China understands the importance of listening to staff. Every quarter, a treasure-presenting assembly, R&D cross-plant KPI competition, cross-plant excellent project-sharing competition and cross-plant Cross-SDA mutual help activities were regularly held in the mills. An inter-mill technology and information exchange platform was established rewarding winning staff and mills, which built enthusiasm for R&D innovation, and effectively enhanced the group's overall technical strength.



APP-China's Industry 4.0 Roadmap

APP-China's annual R&D investment reached

**788** million Yuan

In 2016, focusing on optimising the department APP-C... &D.



We have created a favourable external environment for the research and development of technologies and products by strengthening communication with governments. In the case of Suzhou government, with the introduction of a new policy of promoting innovative urban construction in Suzhou, the support for R&D projects was greatly strengthened. An inclusive fiscal policy was fully implemented, the additional deduction of R&D costs was promoted, and high-tech enterprise income tax was reduced. In 2016, based on its R&D status, Suzhou Gold Hongye received a number of government subsidies and incentives in accordance with its understanding and interpretation of these policies, including 23 R&D additional deduction projects, acceptance of the Suzhou Living Paper Engineering Technology Research Centre, and the establishment of a foreign expert laboratory. Moreover, Suzhou Gold Hongye won the 2016 high-value patent awards supported by the government, Suzhou 2016 awards for enterprises obtaining invention patent authorisation, Suzhou Industrial Park Science and Technology Development Funds, etc.

Effective patent management and intellectual property protection is one of the fundamental measures protecting APP-China's technology and product innovation. In 2016, APP-China instituted intellectual property management at the group level, and integrated the originally distributed intellectual property management of mills to the legal department at the company's headquarters. The legal department now directly serves all

Varying customer needs require the diversification of raw materials. As an important partner to meet social needs, APP-China values common growth with suppliers. They work together to build a green supply chain that is healthy, positive and sustainable via strengthening communications in multiple ways.

Based on the principle of "being open, fair and impartial", APP-China has built a strict procurement process for quality assurance. The company clearly outlines requirements and indicators on environmental and social responsibility for both suppliers and contractors. Auditing is regularly performed on the quality and social responsibilities of suppliers and contractors in the process of selection and cooperation, and therefore social responsibility of suppliers is continuously improved.

With tight control over procurement, APP-China gives priority to suppliers that have already implemented the concept of sustainable development, especially those that are qualified in this area.

H A I N A N J I N H A I P U L P & P A P E R

With the principle of "complying with laws and regulations, and improving its intellectual property management mechanism", Hainan Jinhai Pulp & Paper established an intellectual property management system, formulated the "Intellectual Property Risk Management and Dispute Handling Procedures of Jinhai Pulp & Paper", "Intellectual Property Management Approach of Jinhai Pulp & Paper" and "Intellectual Property Target Assessment Approach of Jinhai Pulp & Paper", and stipulated the relevant intellectual property responsibility of each department. Through target setting, competition training, and

P R O M O T I N G I N T E L L E C T U A L P R O P E R T Y M A N A G E M E N T

dispute handling procedure, with its complete intellectual property management structure and mechanism, the company's overall intellectual property management was promoted. The company adheres to the principles of "based on talents, to create a learning and incentivised work environment; guided by science and technology, to pursue scientific and technological leadership and efficiency; supported by MBOS management, to continuously improve and promote scientific research transformation"; developed short, medium and long-

P R O C U R E M E N T

A sustainable supply chain and procurement requires scientific and efficient management. In order to achieve this by enhancing procurement efficiency and HR management, APP-China's procurement department adopts work-shifting in its headquarters while launching an overall talent pool plan for both the headquarters and its branches. The department shifts staff from procurement offices for different materials. To illustrate, staff in charge of procurement of chemicals take shifts with those buying wood chips. This also helps bridge differences within the

procurement department, thus laying a solid foundation for coordination. Corruption is also largely inhibited. Meanwhile, by shifting their working positions, the staff become more aware of the correlation between their jobs and others, equipping themselves with multiple skills and capabilities in assuming sole responsibility. The talent pool initiative first prepares staff as alternates for procurement positions both in the headquarters and its branch plants and also provides them with training needed for the target position in advance.

# E

## Energy and Ecology

2016年，公司积极响应国家“双碳”目标，深入贯彻绿色发展理念，持续推进能源管理、节能减排、生态保护等工作。通过优化能源结构、提升能效水平、加强生态保护等措施，有效降低了碳排放和能源消耗，为公司的可持续发展奠定了坚实基础。

E	M	44
E	M	45
☒	M	46
M	E	48
M	☒	49



### G H M A M E C E

In 2016, Suzhou Gold Hongye adopted a variety of energy-saving technical modification measures, and effectively reduced the use of energy and resources. The mill uniformly regulated the production process, and part of the equipment was shut down or removed. For example, two white water recovery systems, TM7 & 8, were combined, and the light beating process, high energy-consuming motors, etc., were

eliminated. The energy consumption per unit decreased from 945kWh/ton in 2015 to 855kWh/ton, and water consumption per unit decreased from 13 ton/ton to 9.5 ton/ton. In the case of natural gas reduction, the calorific value per unit was decreased from 733 MCAL/ton (2015) to 623 MCAL/ton (2016) by achieving economic-speed operation and reducing the rejection rate.

Suzhou Gold Hongye also developed major plans for further energy-saving work in the future, including dryer end cover insulation, replacing the TM9 burner and dryer heat pump, and optimising the water recovery equipment to reduce the use of water resources.

### G H P G D O B D I

In 2016, Gold Huasheng actively adjusted the power generation load of steam turbines to meet user requirements and reduce the use of diesel generators. Compared with that in 2015, the amount of diesel oil used was reduced by about 400 tons. On the

other hand, there were several boiler malfunctions in the past, resulting in an increase of boiler restart times and a large amount of unnecessary diesel consumption. The mill found that these malfunctions were due to the high water content of coal, which

led to boiler tube breakage. In 2016, a water content control requirement for coal provided by suppliers was created, which effectively reduced the start-stop times of boilers, and decreased the consumption of diesel by about 200 tons.

## M

In recent years, China has vigorously promoted the conservation and protection of water resources, and the implementation of strict water resources management systems. Water pollution control was constantly improved, and the national environmental protection standard for sewage discharge was also significantly improved. APP-China has established a sound water resources management mechanism. It developed a strict internal monitoring mechanism

at the mill level, and regularly reported to the headquarters on water use performance indicators. Based on advanced pulp and paper technology and facilities, by adopting strict management measures, the water consumption in all the pulp mills was constantly reduced. Near-term and long-term water-saving targets were set up in each mill. The water resources management capability was gradually improved, and the water consumption per unit was reduced.

### Water APP-C 2014-2016

Year	Water (Unit: tons)
2016	124,417,318
2015	120,477,308
2014	121,733,245

### H J P & P H G H P

Hainan Jinhai Pulp & Paper has actively implemented the "The State Council's Opinions on the Implementation of the Strictest Water Resources Management System", constantly strengthened the enterprise's water management, improved water use efficiency and developed water use indicators which were stricter than the national standard. In 2016, thanks to the tireless efforts of all the mills, Hainan Jinhai

Pulp, Hainan Gold Shengpu, Hainan Gold Hongye became the first water-saving enterprises in Hainan Province,

serving as the province's water-saving industry benchmark.



### 2014-2016 APP-C Wastewater Discharge (Unit: tons)

	2014	2015	2016
Gold East Paper	462,905,343	488,100,000	283,152,000
Hainan Jinhai Pulp & Paper,	985,113,985	908,608,007	1,210,049,099
Ningbo Zhonghua Pulp & Paper	134,695,427	129,942,465	134,535,550
Ningbo Asia Pulp & Paper	151,286,064	254,805,840	220,452,737
Gold Huasheng Paper	384,789,253	259,164,007	240,569,716
Gold Hongye Paper Group	94,273,367	121,349,989	172,286,875
Guangxi Jingui Pulp & Paper	475,860,000	451,802,163	489,439,287
Hainan Gold Hongye Paper	75,970,000	71,687,661	64,712,622
Hainan Gold Shengpu Paper	36,191,596	64,178,333	57,168,302

APP-China regards sewage discharge as the top priority of the company's environmental management. In order to minimise the emission of pollutants, including COD and BOD, APP-China has introduced international top sewage treatment systems to improve the treatment technology, reduce water consumption and chemical use in the production process, continuously improve the sewage purification capacity, and ensure that sewage emission is far better than the national standard. Its mills conducted real-time monitoring of sewage emission, and synchronised the data with

the company's official website and the website of the Environmental Protection Agency, achieving data transparency. APP-China accepted public supervision, and its management level was constantly improved.

In the last three years, APP-China's sewage discharge rate has fluctuated, which was related to the change in each mill's production and operation status, and the total product output. Meanwhile, the annual average sewage discharge of 1 ton of paper showed an obvious decreasing trend; the annual average sewage discharge of 1 ton of pulp

and COD emission fluctuated, which was due to the phased production commissioning in the pulp technology transformation process, resulting in the emission of sewage and COD increasing in a short time. With the end of commissioning, the sewage discharge index returned to the normal level in 2016. Influenced by the combined factors of paper output, water emission, and changes of COD emission concentration, the annual average sewage discharge of per ton of paper in 2016 increased slightly compared with that in 2014.

### 2014-2016 APP-C Wastewater Discharge (Unit: tons)

Year	Wastewater Discharge (Unit: tons)
2016	92,621,594
2015	88,522,504
2014	107,303,658

### APP-C Wastewater Discharge (Unit: tons)

Year	Wastewater Discharge (Unit: tons)
2016	12.23
2015	6.74
2014	8.46

### APP-C Wastewater Discharge (Unit: tons)

Year	Wastewater Discharge (Unit: tons)
2016	21.87
2015	15.12
2014	21.91

### APP-C Chemical Discharge (Unit: kg/ton)

Year	Chemical Discharge (Unit: kg/ton)
2016	0.69
2015	0.33
2014	0.276

### APP-C Chemical Discharge (Unit: kg/ton)

Year	Chemical Discharge (Unit: kg/ton)
2016	1.36
2015	1.20
2014	1.54

National standards implemented starting from Jul 1st, 2011. Data stems from GB3544-2008 Discharge Standards for Water Pollutants from Pulp and Paper Industry.

MEASUREMENT

In recent years, China has increased its efforts in comprehensive air pollution management aiming to reduce the emission of various pollutants, and accelerate desulphurisation, denitrication and dedusting in key industries. In order to meet the emission requirements, APP-China carried out a number of technological innovation and equipment upgrades, spent huge sums of money on desulphurisation and denitrication transformation of thermal power plants, and achieved significant reductions in the emission of air pollutants. In 2016, the company's actual sulphur dioxide emission decreased by 19.4% compared with that in 2015, the emission of nitrogen oxide decreased by 6.5%, and the transformation effect was remarkable. In addition, APP-China's subsidiary mills transformed carbon dioxide in boiler emissions into light calcium carbonate through an advanced technology, and synthesised sulphur dioxide into ammonium sulphide fertiliser. This process did not produce any waste water, solution or residue, which further reduced the emission of air pollutants while reusing resources to the greatest extent.



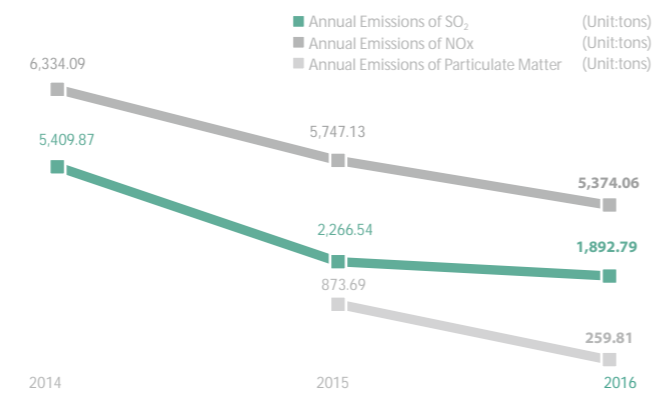
In 2016, the company's actual Sulphur dioxide emission decreased by

**19.4%**

In 2016, the company's nitrogen oxide emission decreased by

**6.5%**

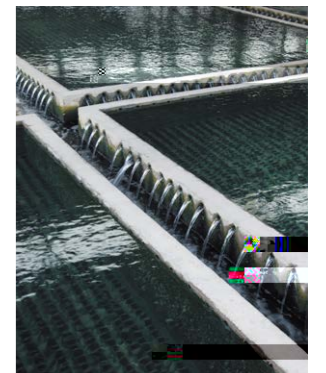
2014-2016 APP-CHINA AIR POLLUTION EMISSION



MANAGEMENT

APP-China strictly follows the 3R principle of waste disposal, and deals with the solid waste generated in the production process scientifically and effectively (mainly including fly ash, slag, scrap material, sludge and other general waste produced in sewage treatment, waste oil drums, waste batteries, waste light bulbs and other hazardous waste). APP-China's subsidiary mills uses fly ash and slag for brick making, and sludge produced in sewage treatment for incineration power generation and composting. The rest of the waste paper, waste pulp sheet, packaging materials, scrap iron, scrap iron wire and engineering materials are all recycled or sold to qualified companies as raw materials. All the hazardous waste of APP-China's subsidiary mills is entrusted to a third party qualified for hazardous waste disposal and treatment. The domestic waste is sent to a local municipal waste disposal unit for processing. In this manner full compliance for waste disposal was achieved. The reclamation, harmlessness and minimisation of waste disposal have been realised.

In 2016, the amount of hazardous waste generated by APP-China was 379.61 tons and the disposal amount was 507.15 tons, mainly including waste oil, waste oil drums, waste batteries, waste asbestos and waste light bulbs. The general waste generated by APP-China in 2016 mainly included fly ash, slag, sludge and other general waste. The disposal amount of each waste type is listed in the following table.



2016 APP-CHINA WASTE DISPOSAL

Sludge	(Unit:tons)
Production Amount	712,372.43
Recovery Amount	581,076.1
Disposal Amount	423,747.33

Slag	(Unit:tons)
Production Amount	101,078.92
Recovery Amount	88,811.17
Disposal Amount	53,088.75

Ash	(Unit:tons)
Production Amount	601,998.34
Recovery Amount	483,768.14
Disposal Amount	463,279.2

Other General Waste Produced	(Unit:tons)
Production Amount	116,587.44
Recovery Amount	78,628.41
Disposal Amount	18,809.03

Other General Waste Produced(Waste Paper, Waste Pulp, Production Package Materials, Scrap Iron, Scrap Wire, Engineering Supplies, Etc.)

DEVELOPMENT OF APP-CHINA

To meet the latest "Thermal Power plant atmospheric pollutant emission standard" of the national Ministry of Environmental Protection, the desulphurisation and denitrication transformation project of Ningbo Asia Pulp & Paper thermal power plant received environmental acceptance from the Environmental Protection Agency, Beilun District, Ningbo City. After project implementation, the original flue gas emission concentration was greatly reduced, as the emission concentration of sulphur dioxide decreased from less than

400mg/Nm<sup>3</sup> to less than 50mg/Nm<sup>3</sup>, the emission concentration of nitrogen oxide decreased from less than 450mg/Nm<sup>3</sup> to less than 100mg/Nm<sup>3</sup>, and the emission concentration of smoke dust decreased from less than 30mg/Nm<sup>3</sup> to less than 20mg/Nm<sup>3</sup>. The actual reductions in pollutants (mentioned above) also decreased by more than 50%, 60% and 20%, respectively, significantly reducing the pollutant emissions and costs, which contributed to the management of atmospheric emission reduction.



GENERAL

Based on the operation status of the waste water treatment system, Jingdong Paper started the construction of a 10,000 m<sup>3</sup> waste discharge buffer pond. The buffer pond was used to collect waste water, and when the system became stable, waste water was slowly discharged into the mixing pool and entered the waste water treatment system after mixing with daily domestic waste water, in order to reduce the impact on the system. Meanwhile, because the material concentration time was too long, the plate-and-frame filters could



not continuously operate. Moreover, the residual sludge could not be totally disposed of, which would affect the operation stability of the waste water system after long-term accumulation. In order to solve these problems, a 150 m<sup>3</sup> sludge adjusting pond was added to the waste water system to concentrate the sludge reserve material and ensure that the three plate-and-frame filters could operate continuously. The waste water sludge and clear water mud was 100% disposed of, and thus the risk of mud accumulating in the system was eliminated.

# Internal and External

) APP-C

M	52
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O H	56
E C	59
C C	60
C F E	61
P C	63

# Talents and Motivation

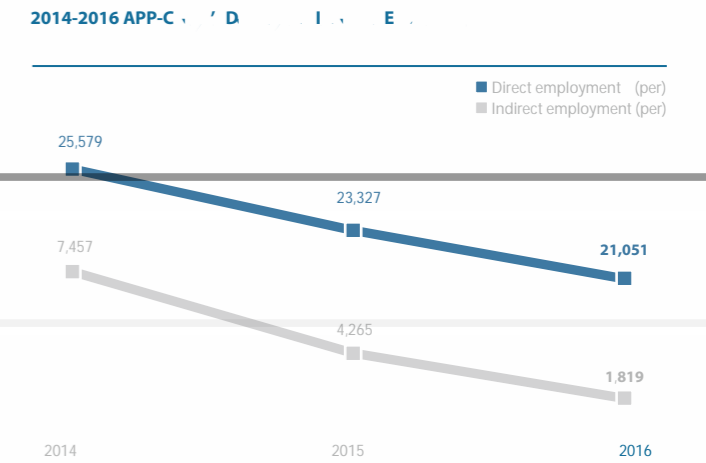
APP  
Talents and Motivation



As at December 31, 2016, the total number of employees of APP-China in this report was

**22,870**

APP-China always adheres to the "people-oriented" business philosophy. It adopts a variety of measures to attract and retain talent, optimise the talent structure, inspire employees, and share the achievements of enterprise development. As at December 31, 2016, the total number of employees of APP-China in this report was 22,870, of which 21,051 were directly employed and 1,819 were indirectly employed. Among the directly employed staff, 5,886 are women, accounting for 28.0% of total employees. Female employees hold 364 management positions, 22.5% of the total.



2014-2016 APP-China Female Employees

(Unit: %)

Year	Female Employees
2016	28.1
2015	25.25
2014	26.86

2014-2016 APP-China Female Employees in Management Positions

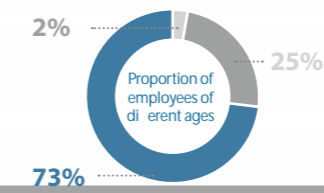
Year	Female Employees in Management Positions (%)	Female Employees in Management Positions (per)
2016	22.5	374
2015	18.46	326
2014	21.64	484

2016 APP-China Employees that Resigned after Maternity/Paternity Leave

Year	Male Employees	Female Employees
2016	868	47
2015	640	44

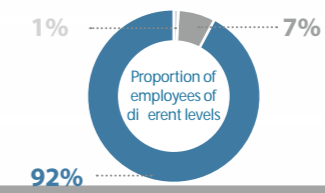
2016 APP-China Age Structure

- 30-50 years old
- Younger than 30 years old
- Older than 50 years old



2016 APP-China Employee Level

- Junior Management Level
- Middle Management Level
- Top Management Level



2014-2016 APP-China Turnover Rate

- Turnover rate (%)
- Male turnover rate (%)
- Female turnover rate (%)

Year	Turnover rate (%)	Male turnover rate (%)	Female turnover rate (%)
2016	18.00	16.20	13.40
2015	24.56	25.08	23.04
2014	26.57	26.21	27.55

## Protection of Employees' Rights and Interests

APP-China gives top priority to all employees' rights and interests. The company strictly complies with the "Labour Law of the People's Republic of China", "Law of People's Republic of China on Employment Contracts" and "Trade Union Law of People's Republic of China", and all other laws and regulations. The company signs contracts with all employees. In recruitment, remuneration, training and promotion, APP-China is committed to eliminating discrimination on the basis of sex, ethnic background, religion, age, and political belief, and all

other forms of discrimination. Employment of child and forced labour is strictly prohibited. With all these measures, all employees can enjoy the same access to due rights and fair opportunities at work.

Amid tough market conditions from 2014 to 2016, APP-China adjusted its employment plan prudently and by following the new plan each business unit conducted recruitment and dismissal. Communication with and compensation for dismissed employees are required. The company also actively contacted relevant organisations to make

arrangements for the dismissed employees. For retained employees, the company moderately raised remuneration and benefit standards to ensure that employees have a good salary and equal pay for equal work, and remain satisfied. Implementation of the new employment plan was an inevitable choice made by APP-China in the new business situation. The process was rigorous and effective, which placated employees and protected their interests. Widespread understanding and recognition was received from the majority of employees.

## Career Development and Capacity Upgrading

In 2016, APP-China has constantly improved the means of employee promotion, and the employee development channel, motivating primary level employees to strive for self-development. We focus on improving all employees' work ability. Each unit of APP-China set up and implemented

a technology model for staff development in 2017, which is beneficial for employees' training. The total cost of staff training of APP-China was 4,235,000 Yuan in 2016.

In 2016, The total cost of staff training of APP-China was **4,235,000** Yuan

### HAINAN JINHAI PULP & PAPER COMPANY LIMITED

Hainan Jinhai Pulp & Paper always attaches great importance to the protection of the legitimate rights and interests of employees, in addition to providing a good working environment for employees, it also actively promotes legal knowledge to the general staff. On January 5, 2016, Hainan Jinhai Pulp & Paper invited leading experts from the Judicial Office of Hainan Province and the Yangpu Political Committee to provide law popularisation. Experts praised Hainan Jinhai Pulp & Paper for operating and managing its business legally, paying close attention to employees' needs, and safeguarding the rights and interests of employees. Hainan Jinhai Pulp & Paper will continue to strengthen its staff law education activities, and reach new achievements.

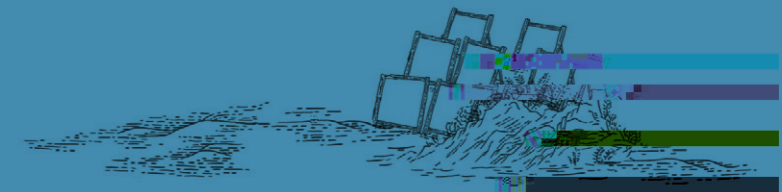


### GUANGDONG EAST PAPER COMPANY LIMITED

"Gold East Paper" culture is practiced in Gold East Paper. The employees' work performance, work attitude, attendance and many other factors are evaluated to select the monthly, quarterly and annual "Gold East Paper Star" who win first place are rated as "Gold East Paper Stars". About 50 "Gold East Paper Stars" are named each month, accounting for 1 to 2 percent of the workforce. The designation as a "Gold East Paper Star" can be used as a bonus point in employee promotion.



In order to further improve the middle-level and above directors' sense of responsibility, in May 2016, Ningbo Asia Pulp invited EMBA visiting professors from Peking University, Tsinghua University and Zhejiang University to carry out "QBQ Responsibility and Professional Attitude" training. By emphasising the relationship between responsibility and ability, this training session helped improve these employees' sense of responsibility and mission to the company.



APP-China is dedicated to providing competitive compensation and benefits to employees. Subsidiary companies formulate and adjust the specific compensation scheme according to the headquarters' general principle and their own operating situation. These companies should establish a mature performance management system, ensure that

employees enjoy competitive compensation, pay pension, unemployment insurance, medical treatment insurance, employment injury insurance and housing fund contributions, and buy commercial insurance for employees. In 2016, APP-China's direct employees' social insurance coverage was 100%, and the commercial insurance coverage for direct employees was also 100%.

### 2016 APP-CHINA EMPLOYMENT DATA

2016 APP-China's Average Training Hours (Unit: Hour)

Senior Management	33.90
Middle Management	31.34
Other Employees	40.22

### 2014-2016 APP-CHINA TRAINING COSTS

Total Training Costs (Unit: Yuan)

2016	423.5
2015	488.89
2014	793.05

Total Time Spent on Training (Unit: hour)

2016	685,562.5
2015	720,404.65
2014	1,035,031.72

Number of Employees Participating in Company Paid for Diploma Based Continuous Education Program (Unit: per)

2016	63
2015	65
2014	73

Amount of Money Spent on Employees Participating in Company Paid for Diploma Based Continuous Education Program (Unit: Yuan)

2016	16.68
2015	7.37
2014	11.16

## Occupational Health and Safety



APP-China has continuously improved its industrial security mechanism, strengthened the management of equipment maintenance, identified potential hazards in a timely manner, strengthened employees' safety training, improved employees' safety consciousness, conducted regular fire drills, improved contingency ability, and prevented major emergencies. To prevent

and reduce accidents, APP-China has encouraged employees to timely discover and report potential safety hazards in production work, increased the financial input in personal protective equipment, strengthened the employees' occupational health and safety management, and protected the employees' occupational health and safety.

APP-China's headquarters set up evaluation indicators of occupational health and safety for the pulp mills, including lost hours due to workplace injury, total number of work-related injuries and occupational disease, number of potential hazards, economic loss due to workplace injury, fire and accident prosecution and other indicators. Safety related data is collected

from each mill each week, including workplace injury, fire, potential hazards and safety training. APP-China also organises quarterly communication meetings. Each mill's safety management departments are gathered to share their experiences and carry out key index assessments to improve the safety management level.



Each pulp mill and business unit of APP-China has adopted OHSAS18001 as the fundamental tool and platform for occupational health and safety management. According to the characteristics of the equipment and production environment, safety inspections and potential hazard checks are regularly carried out to ensure the employees' occupational health and safety. At the same time, each mill has developed a tracking system for potential hazards. In this system, the safety director will upload the details of the potential safety hazard with a photo and the corresponding department

is required to make improvements and monitor them until the security department confirms the rectification in the system. This system improves the efficiency of the safety hazard management, ensures the rectification and improvement of hidden dangers, and effectively safeguards quality by identifying potential safety hazards.



APP-China has implemented a three-tier safety education and training system for all staff. The content includes industrial safety, occupational health and fire control. APP-China requires all new employees to finish safety training and pass a test before starting in their position. Pulp mills and other business units will hold similar training programs to raise the safety awareness of all employees. These training programs include joint inspections of firefighting equipment, exchanging of safety related experiences, employee safety knowledge competitions, and seminars on on-site first aid and prevention of common occupational hazards and occupational diseases.

In 2016, APP-China provided a total of 313,700.2 hours of safety related training for its employees. In addition, to improve the professional skill of outsourcing personnel and strengthen the contractors' safety and health management, some mills of APP-China provide the full coverage of work safety training for contractors. Trainees must pass the examination to operate in the company, which effectively prevents and reduces safety accidents in outsourcing and maintenance construction projects.

### APP-CHINA'S OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT

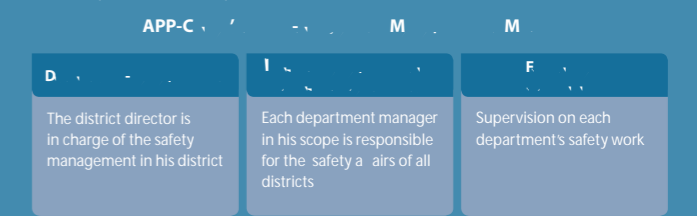


### APP-CHINA'S OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT

In 2016, Suzhou Gold Hongye insists on the policy "safety first, prevention foremost, comprehensive management" and the director in charge of production is also responsible for safety. The system of responsibility in safe production is implemented at each position and each level. The principle is the subsidiary mill's self-management, unified management in departments and safety supervision. On the one hand, the production and business units within the same value stream work as network nodes, among which every zone in the value

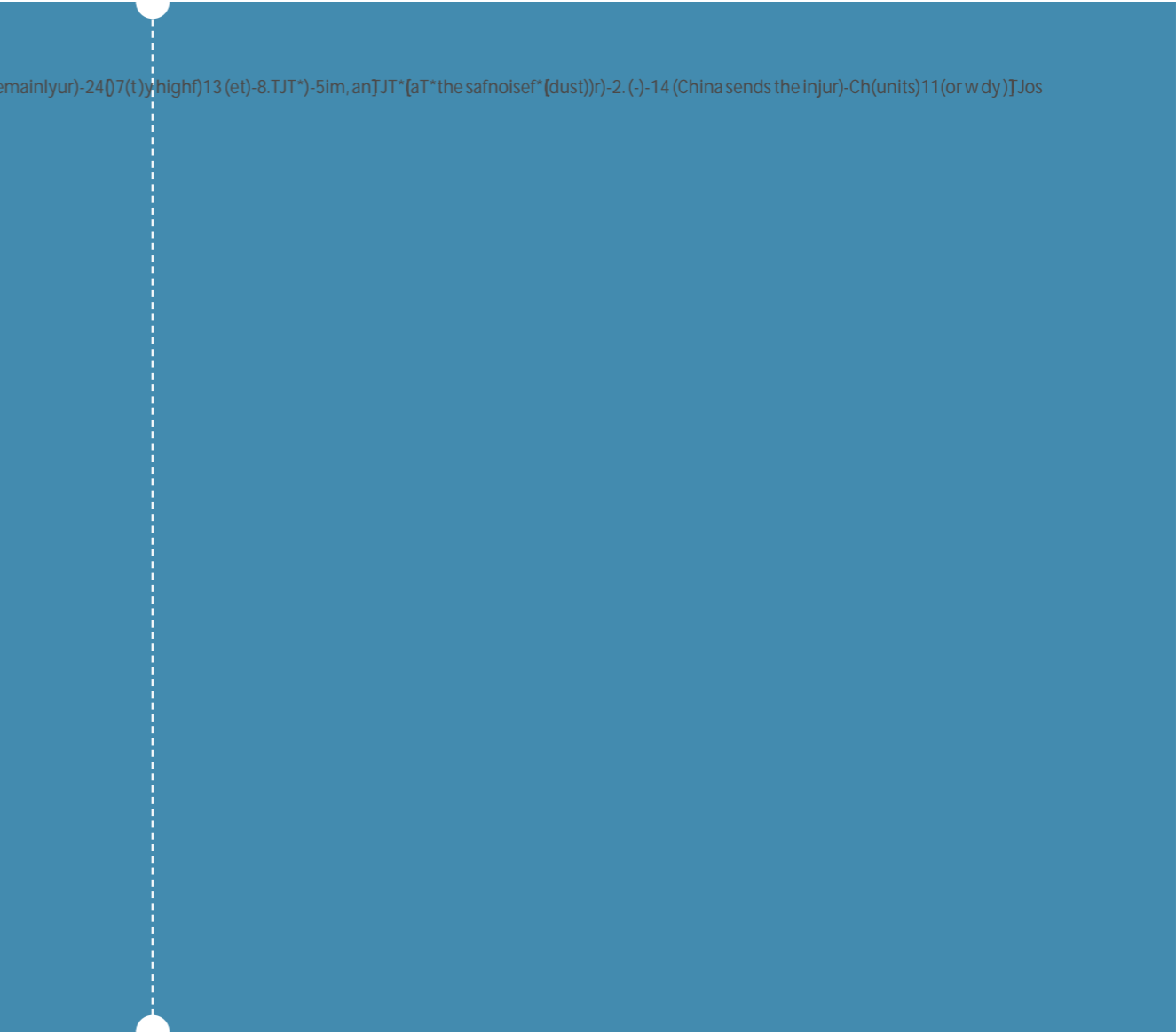
stream can effectively exchange information and share resources. On the other hand, by constructing a horizontal line among departments and a three-dimensional grid which covers supervision in all aspects, the

company can integrate organisational resources and improve the level of safety management.



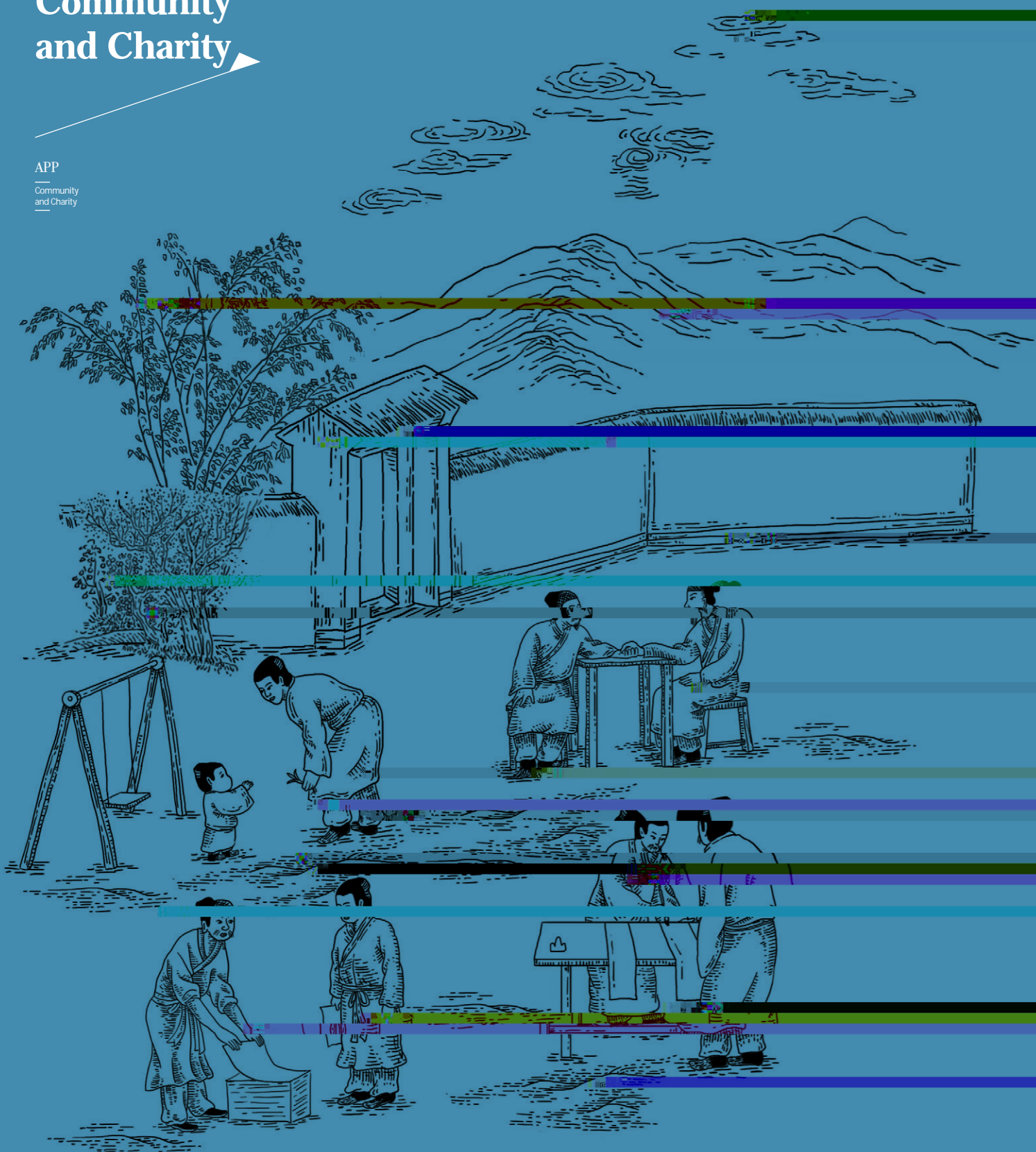
APP-China has set up a process for dealing with work injury accidents and functionary and compensation standards for all the pulp mills and business units. For workplace injuries, APP-China sends the injured employee to the onsite clinic or local hospital for immediate medical attention, submits all related information for determination of the nature and cause of the injury and for insurance claim, and makes sure the injured employee has immediate access to financial assistance and speedy compensation. Meanwhile, the safety personnel on the spot inform the relevant departments to assist in the investigation of the incident.

China sends the injured employee to the onsite clinic or local hospital for immediate medical attention, submits all related information for determination of the nature and cause of the injury and for insurance claim, and makes sure the injured employee has immediate access to financial assistance and speedy compensation. Meanwhile, the safety personnel on the spot inform the relevant departments to assist in the investigation of the incident.



# Community and Charity

APP  
Community and Charity



As a Chinese enterprise, APP-China has always been dedicated to Chinese papermaking culture. At the same time, we also concerned about the development of China's public welfare undertakings and the construction of a harmonious society. In 2016, we actively

explored new means of community participation and took advantage of our own professionals and talent to solve community problems. At the same time, we strove to create a fairer social environment for rural adolescent children, relying on the power of professional

organisations to promote the employment of disadvantaged groups. Moreover, we firmly believe that developing a new generation of public welfare personnel will help make the development of China's public welfare sustainable.

## Community Engagement

APP-China's operation is rooted in multiple regional hinterlands. The growth of the company cannot be achieved without the local government and community support. Each mill strictly implements its social responsibilities for production, promoting employment, ensuring the safety of the community, and supporting the needy and disadvantaged. Thus the surrounding communities

and related institutions have accepted APP-China's contribution to society. At the same time, APP-China takes giving back to the community as a responsibility, considers the urgent needs of local society and uses our professional abilities to maximise our value to the community.

APP-China's contribution to society  
2014-2016  
(Unit: People-Hour)

2016	33,784
2015	36,923
2014	43,660

Due to the adjustment of the HR of APP-China and the adjustment of the community plans of its enterprises, the volunteer time in 2014-2016 decreased.

### G E P

Gold East Paper has encouraged its employees to volunteer in the local community for over ten years. In 2008, Gold East Paper formulated its corporate policy "Regulations on Volunteer Activities". On a voluntary basis, it states employees' job responsibility, implementing process, evaluation and incentive measures. These incentive measures are associated with employees' internal promotion opportunities, and criteria for awards to excellent employees. Gold East Paper has set up fixed volunteer programs in local communities to ensure that there is a volunteer available for support every day. These volunteer programs cover hospitals, railway stations, communities, nursing homes,

welfare homes and other regions and organisations. In addition, the company regularly collects feedback on volunteer activities from the community, and makes improvements.

Gold East Paper in 2016 was awarded a "Loving Care Company" in the first volunteer exchange conference in Jiangsu province. It also won the "Charity Volunteer Team" award and the "Organising and Supporting Charity Volunteer Service" award in the second activity of "Charity Volunteer Selection", sponsored by the Civilisation Office of Zhenjiang and the Charity Federation in Zhenjiang.



### G E P , A B A B

In 2016, in order to repair paper documents, Gold East Paper was entrusted by the Archives Bureau in Zhenjiang to conduct a project on saving acidified paper archives and conducting research on batch deacidification. It provided strong technical support for the project's successful application in the National Archives Bureau.

### H J P & P O E H P

Education support for Hainan province is one of the social responsibilities of Hainan Jinhai Pulp & Paper. To help students complete their studies, Hainan Jinhai Pulp & Paper set up scholarships in colleges and universities.

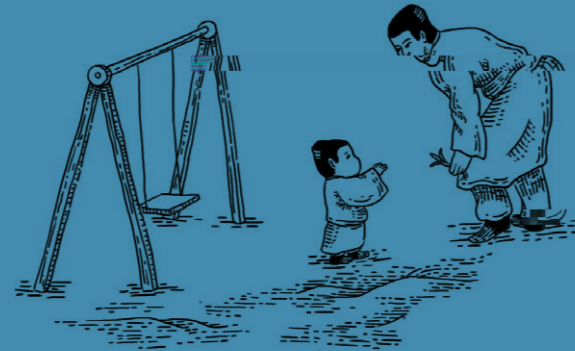
In order to strengthen occupational education of economics and business in Hainan, Hainan Jinhai Pulp & Paper, Jinguang Scholarship and the Foundation for Environmental Protection started the "Jinguang Scholarship in Hainan College of Economics and Business" to provide scholarships to financially disadvantaged students with excellent grades. At the end of 2016, it had been implemented for seven years, with a cumulative contribution of 1.4 million.

### G J P & P O P C

For the Chongyang Festival 2016, the Qinzhou Erjie Tea Picking Opera Troupe was invited to perform in Luerhuan Community, Jiduntou Community in the Qinzhou Economic and Technological Development Zone. This is the fourth year in a row that cultural performers were sent to communities during the Chongyang Festival. The Tea Picking Opera of Qinzhou

# LITTLE SUN KINDERGARTEN

Young children at the age of 3 - 6 need love, adequate nutrition, health care and psychological counselling. Being born into a poor family means malnutrition during pregnancy and early childhood, an unsanitary environment, and inadequate spiritual motivation or education, which will significantly affect children's brain development, and their physical and mental health in childhood and their adult life. Concern for child development with early intervention is not only to help this group of children receive equal education and realise fair competition, thus breaking the inter-generational poverty cycle, but also to focus on the future development of the whole human being.



Since 2014, APP-China and the Huang Yicong Charitable Foundation donated 2.65 million Yuan, cooperating with Humana People to People, to establish the rural young children education program "Little Sun Kindergarten" in Yunnan. This program intends to provide preschool education resources to remote rural areas, and cultivate local teachers for preschool education, research and develop native teaching modes, promote the long-term development of the area, and gradually escape the poverty cycle. Since 2015, the project has been officially carried out in western Yunnan. By the end of 2016, 19 young children's classes had been provided, with 416 young children enrolled. APP-China and the Huang Yicong Foundation have invested more than 1 million Yuan in this program.



After nearly a year of study and activity, the children in the Little Sun Kindergarten have improved their communication and expression skills, and become more outgoing and willing to communicate with others. By participating in project activities, parents also greatly improve their communication skills, willingness and ability to provide high-quality companionship for their children. Young people selected from the local area as teachers not only master the professional knowledge and skills for preschool education from the project, but also discover their own value and confidence. Rather than leaving to find work, more and more young people would like to stay at home and make a difference.



Group visited eight children's classes, including Mowo and Banzhe.

# "JINGUANG LIGHTS UP A DREAM - CULTIVATION OF BLIND ENGINEERS"

There are about 30 million deaf people and 10 million blind people in China, and most of them fail to receive a full education. Even if they can get into a university, they find it difficult to find a stable job after graduation. Therefore, in 2015, APP-China and the Huang Yicong Charitable Foundation worked with non-profit organisations assisting the disabled to set up the "Jingguang Lights up a Dream" program. This program aims to change the situation regarding deaf and blind youths' employment and development.

The "Jingguang Lights up a Dream - Silent Classroom" project works with the Shanghai Xiaolongbao Deaf Cooperation Office to help deaf students with artistic skills realise their career dreams. The project takes place in winter vacation and summer vacation every year. Through explanation of the principles of photography and photography processes, students develop basic skills. Taobao lecturers were invited to teach how to run a shop on Taobao and help students learn the skills necessary to run stores by themselves. In 2016, the "Silent Classroom" provided skills training and employment guidance for 116 deaf people.

The "Jingguang Lights up a Dream - Cultivation of Blind Engineers" project cooperates with the Information Accessibility Research Centre in Shenzhen to build China's most professional, blind, full-time information accessibility engineer team. It aims to promote the construction of information accessibility in China through information accessibility testing, consulting, transforming outsourcing services, and realising information accessibility in technology. Since 2015, blind engineers from this project have helped improve the information accessibility of popular software like WeChat, QQ, Taobao, QQ Space, etc.



... website design, and started their e-businesses.





## Facts and Figures

### Environmental Performance

The Sum of Pulp and Paper Mills and Business Units Documented in the Scope of this Report

		2016
Total investments in environmental protection	RMB 10,000	47,111.28
Total water usage	ton	124,417,318
Wastewater treatment volume	ton	92,621,594
Annual average wastewater discharge per unit of product (per ton of paper)	ton	12.23
Annual average wastewater discharge per unit of product (per ton of pulp)	ton	21.87
COD emission for each ton of paper produced	kg/t	0.69
COD emission for each ton of pulp produced	kg/t	1.325
Annual total SO <sub>2</sub> emissions	ton	1,892.79
Annual total NO <sub>x</sub> emissions	ton	5,374.06

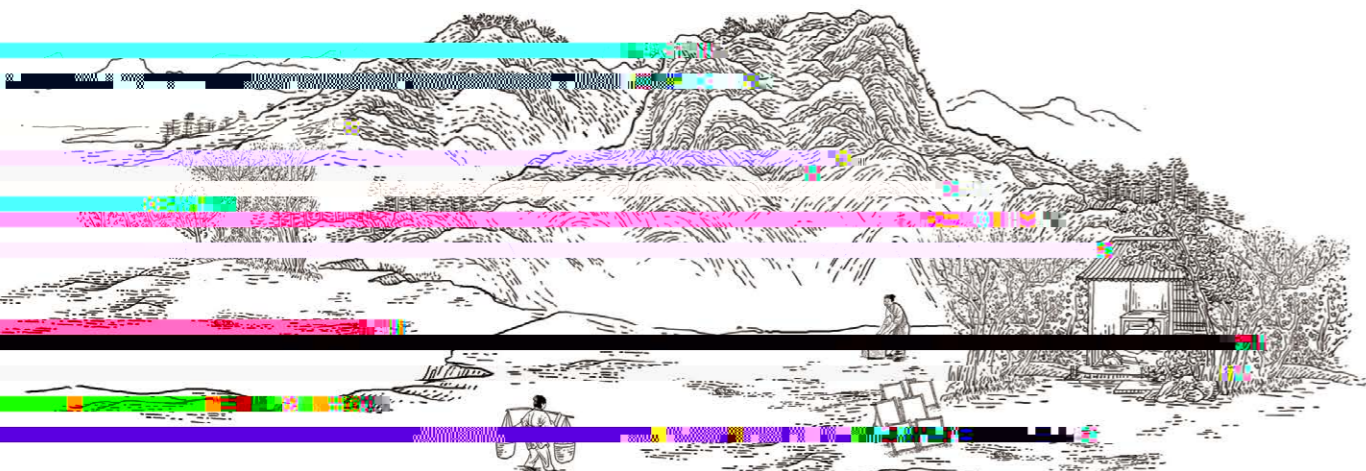
### Economic Performance

		2016
Total assets	RMB 100 million	1,618.32
Total taxes paid	RMB 100 million	22.52
Sales revenues	RMB 100 million	473.73
Total profits	RMB 100 million	31.68
Net profits	RMB 100 million	24.19

### Social Performance

The Sum of Pulp and Paper Mills and Business Units Documented in the Scope of this Report

		2016
Total number of directly employed staff	person	21051
Percentage of male employees	%	72%
Percentage of female employees	%	28%
Total number of indirectly employed staff	person	1819
Percentage of employees under 30 years old	%	24.8%
Percentage of employees from 30 to 50 years old	%	74.1%
Percentage of employees over 50 years old	%	2.1%
Percentage of women in the management team	%	22.5%
Percentage of employees in the senior management team	%	0.7%
Percentage of employees in the middle management team	%	7.3%
Percentage of front line employees	%	92.4%
Total turnover rate	%	18.0%
Male turnover rate	%	12.5%
Female turnover rate	%	5.5%
Number of female employees remaining after maternity leave	person	640
Number of male employees remaining after paternity leave	person	868
Number of female employees that left after maternity leave	person	44
Number of male employees that left after paternity leave	person	47
Total number of fatalities at work and by occupational diseases	person	1
Hours lost per million working hours	hour	1159.8
Total training costs	RMB 10,000	423.5
Total time spent on training	hour	685562.5
Average training hours per person – senior-level managers	hour	33.90
Average training hours per person – middle-level managers	hour	31.34
Average training hours per person – front line employees	hour	40.22
Number of employees participating in company paid for diploma – based continuous education programs	person	63
Amount of money spent on employees participating in company paid for diploma based continuous education programs	RMB 10,000	16.68



A



# 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 2016

### 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. (hereafter as "APP-China") to conduct an independent assurance of the 2016 SUSTAINABILITY REPORT (2016 CSR Report). The scope of the assurance, based on the SGS Sustainability Report Assurance methodology, including the text and accompanying tables, contained in the 2016 CSR Report. Assurance data and information are including APP-China Head Office, Gold East Paper (Jiangsu) Co., Ltd., Ningbo Zhonghua Paper Co., Ltd., Ningbo Asia Pulp & Paper Co., Ltd., Hainan Jinhai Pulp & Paper Co., Ltd., Hainan Gold Hongye Paper Co., Ltd., Hainan Gold Shengpu Paper Co., Ltd., which were on-site assurance, as well as, Gold Hongye Paper Group Co., Ltd., Gold Huasheng Paper (Suzhou Industrial Park) Co., Ltd., Guangxi Jingui Pulp & Paper Co., Ltd., APP China Forestry Business Headquarters, Hainan, Guangxi and Guangdong Business Units, and Lancang, Ganzhou. Data and information of other companies were not included in this assurance process.

The information in the 2016 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 2016 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.

- This report has been assured at a moderate level of scrutiny using our protocols for:
- evaluation of content veracity; and
  - evaluation of the report against the Global Reporting Initiative Sustainability Reporting Guidelines (2013).

The assurance comprised a combination of pre-assurance research, 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 with more than 80,000 employees, SGS operates 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 Auditor, ISO 14001 Auditor and ISO 9001 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 2016 CSR Report verified is accurate, reliable and provides a fair and balanced representation of APP-China's sustainability activities in 2016. The assurance team is of the opinion that the Report can be used by the Reporting Organization's Stakeholders.

We believe that APP-China has chosen an appropriate level of option in accordance to all requirements in core option of GRI G4 2013, and disclosed part of indicators in comprehensive option according to the Guidelines.



## GLOBAL REPORTING INITIATIVE REPORTING GUIDELINES (G4 2013) CONCLUSIONS, FINDINGS AND RECOMMENDATIONS

In our opinion the APP-China CSR Report 2016 is presented in accordance with the core option of GRI G4 2013 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, environment, assessing common issues, and optimizing the supplier's sustainable development management, in order to ensure that the "Sustainable Development Roadmap Vision 2020" is implemented.

### 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. In response to the "Made in China 2025" proposed by the Chinese Government, APP-China has developed an "Industrial 4.0 Roadmap" to promote the overall development of the domestic paper industry.

### 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 knows 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.

### Clarity

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, analyzing 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  
15 August, 2017

B-11/F, No.900, Yishan Road, Xuhui District, Shanghai, P. R. China  
[WWW.SGSGROUP.COM.CN](http://WWW.SGSGROUP.COM.CN)

# G II

## Governance

Disclosures	Indicator	Description	Materiality	Reporting	Assessment
Operational Aspects	G4-1	Provide a statement from the most senior decision-maker of the organization (such as CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and the organization's strategy for addressing sustainability	4	✓	
	G4-3	Report the name of the organization	8	✓	
	G4-4	Report the primary brands, products, and services	8	✓	
	G4-5	Report the location of the organization's headquarters	8	✓	
	G4-6	Report the number of countries where the organization operates, and names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the report	8	✓	
	G4-7	Report the nature of ownership and legal form	8	✓	
	G4-8	Report the markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries)	8	✓	
	G4-9	Report the scale of the organization	8	✓	
	G4-10	Report the statistics and classifications of the employees	53	✓	
	G4-11	Report the percentage of total employees covered by collective bargaining agreements	59	✓	
	G4-12	Describe the organization's supply chain	41	✓	
	G4-13	Report any significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain	8	✓	
	G4-14	Report whether and how the precautionary approach or principle is addressed by the organization	16	✓	
	G4-15	List externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses	16-17	✓	
	G4-16	List memberships of associations (such as industry associations) and national or international advocacy organizations in which the organization	16-17	✓	
	Information Assurance	G4-17	List all entities included in the organization's consolidated financial statements or equivalent documents and report whether any entity included in the organization's consolidated financial statements or equivalent documents is not covered by the report	3	✓
G4-18		Explain the process for defining the report content and the Aspect Boundaries and explain how the organization has implemented the Reporting Principles for Defining Report Content	3	✓	
G4-19		List all the material Aspects identified in the process for defining report content	18-21	✓	
G4-20		For each material Aspect, report the Aspect Boundary within the organization	18-21	✓	
G4-21		For each material Aspect, report the Aspect Boundary outside the organization	18-21	✓	
G4-22		Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements	None	✓	
G4-23		Report significant changes from previous reporting periods in the Scope and Aspect Boundaries	No significant change	✓	
Engagement	G4-24	Provide a list of stakeholder groups engaged by the organization	18-19	✓	
	G4-25	Report the basis for identification and selection of stakeholders with whom to engage	18-19	✓	
	G4-26	Report the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process	18-19	✓	
	G4-27	Report key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting. Report the stakeholder groups that raised each of the key topics and concerns	18-21	✓	
Reporting	G4-28	Reporting period (such as fiscal or calendar year) for information provided	3	✓	
	G4-29	Date of most recent previous report (if any)	3	✓	
	G4-30	Reporting cycle (such as annual, biennial)	3	✓	
	G4-31	Provide the contact point for questions regarding the report or its contents	77	✓	
	G4-32	Report the 'in accordance' option the organization has chosen, report the GRI Content Index for the chosen option, and report the reference to the External Assurance Report, if the report has been externally assured. GRI recommends the use of external assurance but it is not a requirement to be 'in accordance' with the Guidelines	3, 70	✓	
	G4-33	Report the organization's policy and current practice with regard to seeking external assurance for the report. If not included in the assurance report accompanying the sustainability report, report the scope and basis of any external assurance provided. Report the relationship between the organization and the assurance providers and report whether the highest governance body or senior executives are involved in seeking assurance for the organization's sustainability report	3, 70	✓	
Governance	G4-34	Report the governance structure of the organization, including committees of the highest governance body. Identify any committees responsible for decision-making on economic, environmental and social impacts	8	✓	
Essential Information	G4-56	Describe the organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics	9, 20-21	✓	

Disclosures	Indicator	Description	Materiality	Reporting	Assessment
Environmental Impacts	G4-EC DMA		8	N/A	✓
	G4-EC1	Development and impact of infrastructure investments and services supported	68	N/A	✓
Materials	G4-DMA		29-31	N/A	✓
	G4-EN1	Materials used by weight or volume	29-31	N/A	✓
	G4-EN2	Percentage of materials used that are recycled input materials	31	N/A	✓
Energy	G4-EN DMA		44	N/A	✓
	G4-EN3	Energy consumption within the organization	45	N/A	✓
	G4-EN4	Energy consumption outside of the organization	45	N/A	✓
	G4-EN6	Reduction of energy consumption	45	N/A	✓
Biodiversity	G4-EN DMA		46	N/A	✓
	G4-EN8	Total water withdrawal by source	46	N/A	✓
	G4-EN10	Percentage and total volume of water recycled and reused	47	N/A	✓
Biodiversity	G4-EN DMA		27	N/A	✓
	G4-EN11	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	27-28	N/A	✓
	G4-EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	27-28	N/A	✓
Emissions	G4-DMA		48	N/A	✓
	G4-En21	氮氧化物、硫氧化物和其他主要气体的排放量	48	N/A	✓
Emissions	G4-EN DMA		46-49	N/A	✓
	G4-EN22	Total water discharge by quality and destination	47	N/A	✓
	G4-EN23	Total weight of waste by type and disposal method	49	N/A	✓
	G4-EN24	Total number and volume of significant spills	N/A	N/A	✓
	G4-EN25	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally	49	N/A	✓
	G4-EN26	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the organization's discharges of water and runoff	N/A	N/A	✓
<b>Labor Practices and Decent Work</b>					
Essential Information	G4-LA DMA		53	N/A	✓
	G4-LA1	Total number and rates of new employee hires and employee turnover by age group, gender and region	53	N/A	✓
	G4-LA2	Benefits provided to full-time employee that are not provided to temporary or part-time employees, by significant locations of operation	54	N/A	✓
	G4-LA3	Return to work and retention rates after parental leave, by gender	53	N/A	✓

		D	P	O	E	A
<b>Labor Practices and Decent Work</b>						
<b>O</b> <b>H</b>	G4-LA DMA		56	N/A		
	G4-LA6	Type of injury and rates of injury, occupational diseases, lost days and absenteeism, and total number of work-related fatalities, by region and by gender	56	N/A		
	G4-LA7	Workers with high incidence or high risk of diseases related to their occupation	N/A	N/A		
<b>E</b>	G4-LA DMA		55	N/A		
	G4-LA9	Average hours of training per year per employee by gender, and by employee category	55	N/A		
	G4-LA10	Programs for skills management and lifelong learning that supportive continued employability of employees and assist them in managing career endings	55	N/A		
<b>D</b> <b>O</b>	G4-LA DMA		54	N/A		
	G4-LA12	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group memberships, and other indicators of diversity	53	N/A		
<b>Human Rights</b>						
<b>F</b> <b>A</b> <b>B</b>	G4-HR DMA		26-27	N/A		
	G4-HR12	Number of grievances about human rights impacts led, addressed, and resolved through formal grievance mechanisms	N/A	N/A		
<b>Society</b>						
<b>L</b> <b>C</b>	G4-SO DMA		26-17, 61-63	N/A		
	G4-SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs	26-27	N/A		
	G4-SO2	Operations with significant actual and potential negative impacts on local communities	N/A	N/A		
<b>A</b>	G4-SO DMA		20-21	N/A		
	G4-SO4	Communication and training on anti-corruption policies and procedures	20-21	N/A		
	G4-SO5	Confirmed incidents of corruption and actions taken	N/A	N/A		
<b>Product Responsibility</b>						
<b>C</b> <b>H</b>	G4-PR DMA		36-37	N/A		
	G4-PR 2	Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes	N/A	N/A		
<b>P</b> <b>L</b>	G4-DMA		35	N/A		
	G4-PR 3	Type of product and service information required by the organization's procedures for product and service information and labeling, and percentage of significant product and service categories subject to such information requirements	32-33	N/A		
	G4-PR 5	Results of surveys measuring customer satisfaction	37	N/A		

mentioned stipulation. In 2014, no child labor occurred at APP-China as well as at our suppliers and contractors.

F

Dear Readers,

Thank you so much for reading the APP-China Sustainability Report 2016. Your comments and suggestions are highly valued and appreciated. Please fill in the following form and mail/e-mail/fax to us, or directly provide feedback via a phone call. Thank you!

Add: 31F, II Tower, Shanghai Arch, No. 555 Loushan-guan Road, Changning District, Shanghai, 200051

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Fax: +86-21-2283 9063 Email: csr@app.com.cn

**1. 您对本次报告的评价如何？** **APP-C 评价表？**

- Customer  Community representative  Supplier/contractor  
 Industry association  Employee  School  
 Non-profit organisation (NPO) or non-government organisation (NGO)  
 Media  Bank  Others (Please specify)

**2. 您是否了解 APP-C 评价表？**

(Please ignore 3, 4 and 5 if your answer is no):

- Yes  No

**3. 您希望以何种方式接收报告？**

- Printed  Electronic

**4. 您对本次报告的评价如何？**

- Printed  Electronic

**5. 请对 APP-C 评价表 2016 年的可读性、可靠性和完整性进行评价。**

Readability (clear expression, quality design, excellent writing, easy to locate information)

- 3 (Better)  2 (Normal)  1 (Relatively Poor)

Reliability (information in this report is true and reliable)

- 3 (Better)  2 (Normal)  1 (Relatively Poor)

Completeness (disclosure of both positive and negative performance, provided information that you needed)

- 3 (Better)  2 (Normal)  1 (Relatively Poor)

In addition to the disclosed content, did you expect to find other information?

APP-China Sustainability Report 2016 Team

July, 2017

