

In 2019, we celebrated the 70th anniversary of the founding of the People's Republic of China. During those seven decades, China's industry has forged ahead at an unprecedented pace. The glorious course has witnessed the booming development of China's papermaking industry and APP China's impressive strides every step of the way. From introducing and gradually deepening the "Integration of Plantation-Pulp-Paper" industrial layout to establishing a model of clean production and green development, and to enabling transformation and upgrading through technological innovation, APP China has contributed to and accompanied China's transition from being an ancient paper manufacturer to a strong paper manufacturing power through concrete actions.

Nowadays, China's economic development is taking a historic turn from high speed to high quality. How to conquer challenges like oversupply, raw material shortages, and increasing regulatory scrutiny while ensuring high-quality development is a new issue that all companies in the papermaking industry have to learn to navigate. With full confidence and initiative, APP China thrives on pressure and steps up efforts in the three areas of intelligent manufacturing, environmental protection, and product innovation, endeavoring to join hands with the wider papermaking industry in China to boost high-quality development in the new era.

Embrace intelligent manufacturing to foster new drivers of high-quality development

Since Industry 4.0 was proposed in 2015, we have been systematically delving into intelligent manufacturing and continuously ramping up the construction of a technology-driven, intelligent industry chain to gain a first-mover advantage in the new round of technology-driven industrial revolution. We continue to automate the papermaking equipment and processes and strive for the realization of IT-based production data while improving the efficiency of large-scale production. Based on big data and other emerging technologies, we are gradually improving the company's information management capabilities and will eventually institute intelligent management throughout our entire business process. Moreover, we have started building intelligent industrial bases, fully integrating artificial intelligence, big data, 5G, and other cutting-edge technologies from the planning stage. We will join forces with companies of the upstream and downstream industry chain as well as our industry partners to quicken transformation and upgrading and boost industrial development in terms of both quality and speed.

Endorse environmental protection to provide the basis for high-quality development

We firmly believe that the rational use of the limited natural resources and the protection of the ecological environment on which human survival depends are the basis for achieving high-quality development. We respond promptly to the national call to reduce and ban plastic. Giving full play to our advantages as a modern papermaking company in terms of eco-friendly sourcing and technological leadership, we have developed a series of "zero plastic" degradable packaging solutions. We continue to increase the proportion of wood pulp procurement from certified forests and strongly advocate CFCC/PEFC forest certification labeling so that the concept of sustainable forest management reaches more consumers. At present, a growing collection of APP China products are joining the "labeling family". As regards clean production, we closely follow national and local environmental protection requirements, set strict environmental targets, and seek continuous improvements in our environmental protection practices and performance through measures like equipment renovation and process and technology optimization.

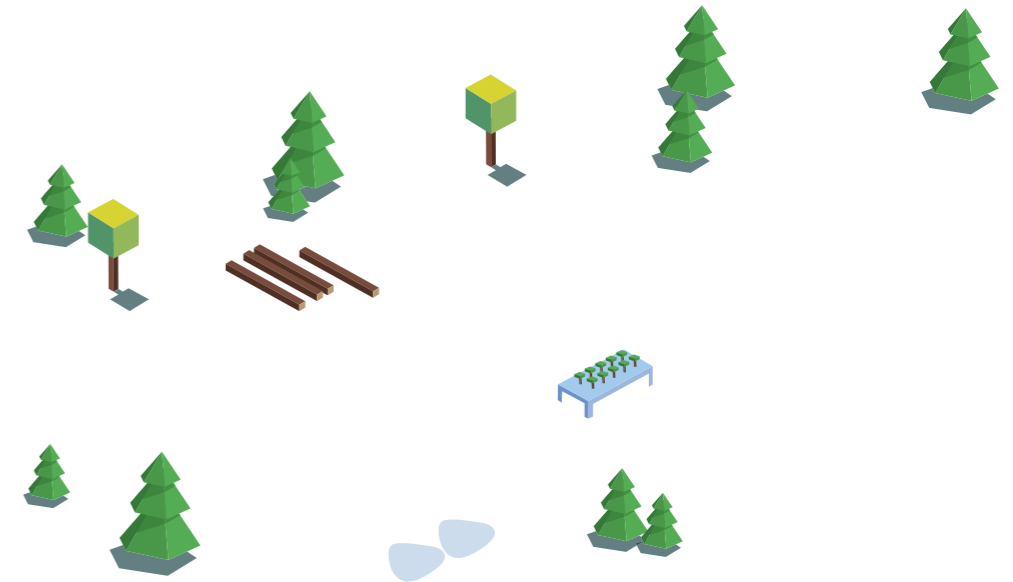
Innovate and upgrade products to guarantee sustained high-quality development

Relying on tremendous R&D strengths and forward-looking market deployment, we boldly innovate and gear up to build a beautiful, safe, and quality world of paper for people. Focusing on the real needs of the consumers and customers, we relentlessly explore products that are functional and innovative and continuously refine our product categories. Taking tissues as an example, we have continued to optimize our raw material composition and use ingredients that are safer for the human body in response to consumers' increasing concern for health and safety; meanwhile, we have used a number of patented technologies to produce products with moisturizing, anti-bacterial, and sanitizing effects to safeguard consumers' health.

In 2020, APP people have remained fully responsive and committed in the face of a raging epidemic, springing into action and demonstrating a deep sense of responsibility and duty at a critical time. We immediately donated RMB100 million and needed supplies to the Overseas Chinese Charity Foundation of China to aid in the epidemic control efforts. Meanwhile, we implemented strict epidemic prevention measures for reopening to ensure the health and safety of our employees; we managed to resume production against all odds and mobilized resources to ensure the smooth delivery of products to our customers; we provided care and assistance in ways that we could to the community residents and tenants of our commercial buildings who were affected by the epidemic, as well as overseas Chinese and Chinese students studying abroad. In this "smokeless war" against the epidemic, we have braved the hardships and forged ahead, working with our stakeholders to build a solid line of security.

The post-epidemic era presents both challenges and opportunities. APP China will continue to align efforts with its founding purposes and walk down the path of high-quality development with conviction. We will bravely embrace the new digital economy with our constantly open and innovative attitude, promote all-round digital transformation, and look forward to working with our stakeholders to make greater contributions to the sustainable development of the industry and wider society.

Chairman and President of Sinar Mas Group



With operations dating back to 1938, Sinar Mas Group was officially founded by the prominent Indonesian Chinese Mr. Eka Tjipta Widjaja in 1962. The Group currently has hundreds of legal entities and owns seven main business pillars: Pulp & Paper, Financial Services, Agri-business & Food, Real Estate, Energy & Infrastructure, Telecommunications, and Healthcare.

As a core business sector of Sinar Mas, Asia Pulp & Paper (APP) was set up in 1972 and its line of business ranges from pulp, industrial paper, cultural paper, and tissues to various types of paper products. APP started investing in China in 1992. With the establishment of two seedling research centers, 17 forestry companies, 267,400 hectares of plantations, and seven major pulp & paper mills, APP China implements green-cycle development based on the concept of "Integration of

Plantation-Pulp-Paper", where forests support paper, the paper industry nurtures forests, and forests and paper are integrated.

Together with its parent company Sinar Mas Group, APP China has long been actively responding to China's Belt and Road Initiative (BRI), fully leveraging its advantages to contribute to BRI development. In January 2019, the Cooperation Agreement on APP Science and Technology Park & MOU on China-Indonesia "Belt and Road" Science and Technology Park was officially signed. It further finalized details of cooperation laid out in the Framework Agreement on Suzhou APP Science & Technology Park signed between the two sides a

year before while confirming the goal of jointly building the China-Indonesia Science and Technology Industrial Park in Indonesia.

In August 2019, four major projects, including the APP Science and Technology Park, were launched at the opening ceremony of the China (Jiangsu) Pilot Free Trade Zone. With a focus on biomedicine, artificial intelligence, integrated circuits, high-end equipment, and other fields, Suzhou Industrial Park (SIP) and Sinar Mas Group would spend the next three to five years completing the early-stage construction of the high-tech industrial park which integrates R&D, manufacturing, and headquarters management.

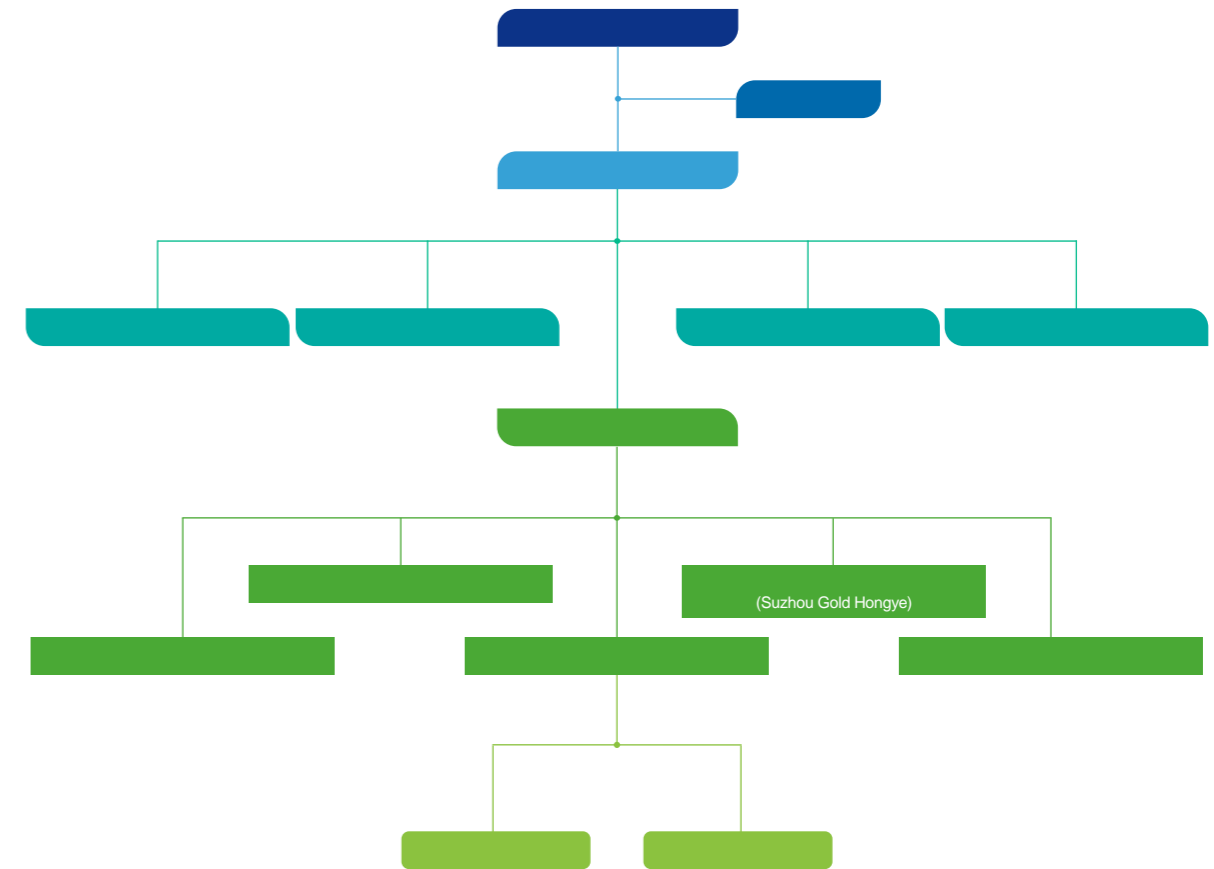
As of the end of 2019, APP China has

Products marketed in over **160** countries/regions across **6** continents

About **11.78** million tons of annual capacity

RMB **65.1** billion in annual sales revenue

RMB **191.4** billion in total assets



1992 Ningbo Zhonghua was formed through joint investment by APP of Sinar Mas, China Strategic Holdings Limited from Hong Kong, Ningbo Duplex Board Factory, and China Paper and Pulp Import and Export Co., Ltd. and is the first mill invested in and set up by APP in China.

1992

1996 Gold Huasheng Paper (Suzhou Industrial Park) Co., Ltd. was established, and has become one of the largest diversified cultural paper product providers in China and Asia.

1996

1998 Gold Hongye Paper Group Co., Ltd. located in Suzhou started operation. Its Breeze™ Tissue (Qingfeng) has become a leading brand in China's tissue market. In the same year, APP China Headquarters was established in Shanghai.

1998

2005 Hainan Jinhai Pulp & Paper, APP China's first pulp mill, was officially put into operation.

2005

2004 Ningbo Asia Pulp & Paper, equipped with one of the world's largest single-machine production capacities and most advanced industrial paperboard production lines, was put into operation.

2004

2010 With an annual chemi-mechanical pulp (CMP) production of 300,000 tons, the first phase of Guangxi Jingui "Integration of Plantation-Pulp-Paper" project started operations, and its 600,000-ton papermaking production line had a grand opening.

2010

2012 APP announced the Sustainability Roadmap Vision 2020, placing natural resources conservation at the center of its business strategy.

2012

2014 APP China announced plans to make full use of existing plant buildings for rooftop photovoltaic (PV) power generation with an overall capacity of over 200MW.

2014

2017 APP China responded actively to the Belt and Road Initiative and signed a strategic agreement to build intelligent production and R&D bases by adopting Industry 4.0 and artificial intelligence.

2017

2019 The high-grade tissue industrial base of Gold Hongye was officially launched and will be built into a world-leading paper base that is intelligent and environmentally friendly. In the same year, APP China Headquarters settled in the Shanghai Magnolia Square, opening a new era.

2019

1995 APP started plantations in China, embarking on a progressive journey of modernized papermaking.

1995

1997 Gold East Paper was officially established and is today one of the world's largest coated paper mills in terms of single product capacity. In the same year, Yalong Paper Products (Kunshan) Co., Ltd. was officially put into production and is now one of the most important paper product fine-processing companies in China.

1997

2013 APP published the Forest Conservation Policy (FCP), imposing a moratorium on all-natural forest clearance across its supply chain. For forests that are of high conservation value and high carbon stock, APP would take targeted protective measures based on assessment results.

2013

2015 APP China moved its headquarters to Shanghai ARCH and in the same year became a global partner of the China Pavilion at the Milan Expo 2015.

2015

2018 APP appeared at the first China International Import Expo with the concept of green-cycle "Integration of Plantation-Pulp-Paper".

2018

2020 Standing united with Wuhan and the whole China, Sinar Mas Group donated RMB100 million and also RMB350,000 worth of Breeze™ hygienic cleansing wipes to the Overseas Chinese Charity Foundation of China to fight against COVID-19. It is thus the first overseas-Chinese-funded enterprise to respond to the call of the All-China Federation of Returned Overseas Chinese to make donations to the affected areas.

2020



A company's success is inseparable from the hard work of all its employees. The power of role models can be seen everywhere at APP. Ordinary as their roles may be, a large group of APP people have made extraordinary achievements by upholding honesty, diligence, and novelty at work. Those shiny stars gather to form a splendid galaxy that illuminates APP's way ahead.

Wang Wei impresses everyone as an optimistic and upbeat person. However, an accident happened to him in November 2007 when he was handling a failure in the boiler ash system at work, costing him his right arm. Never weakened mentally by the physical loss, he rose to his feet again with a strong will.

In 2008, Wang Wei returned to the Heat & Power Division but turned down the "special treatment" offered by his superiors. He started as an Industrial Safety Officer and used his own experience as an example to raise his colleagues' awareness of safe working practices. After that, he gradually took on new roles as well, including Officer of the Total Productive Maintenance (TPM) Group and Hourly Worker Manager at the Heat & Power Division. As the manager, he takes the initiative to help supervise cleaning of the boilers. He is always seen offering help every time a boiler is closed down for maintenance, even late at night. In those two new roles, Wang Wei gets actively involved in tasks like environmental cleanup, safety hazard correction, labor protection supplies management, and employee support – no work is too trivial for him. The results have been impressive under his management, with zero work-related injuries recorded for over three consecutive years. "He's got our back and our full trust," said his colleagues.

Yan Guilin works at Gold East Paper's Maintenance Pulping Division of Maintenance Department and has been in the line of mechanical maintenance for 27 years. He is the owner of two utility model patents and has received an array of honors from the company such as Advanced Manufacturing Worker and Outstanding Employee of the Year. With a heightened focus on technical innovation, Yan Guilin has submitted a total of 60 rationalization suggestions. He has made notable contributions to the company in terms of energy conservation and consumption reduction and helped it win the High-Tech Enterprise Achievement Award for developing a new drive system for GCC (Ground Calcium Carbonate) grinding mills.

To his colleagues, Yan Guilin is a mentor and friend. As a humble and sincere person, he maintains smooth communication with his colleagues; as a skillful worker, he has helped the company solve one technical challenge after another. Every department has benefited from his services.

He lives the craftsmanship spirit of being professional, meticulous, and grounded. Apart from delivering solid work in technical research and innovation, he also makes a point of "teaching, helping, and guiding". He has formulated various rigorous equipment maintenance plans, actively conducts on-the-job training, and passes on his own technical experience to his colleagues to help train more accomplished craftsmen.

Li Zhisheng is in charge of work related with the on-site devices and vehicles and TPM in the Packaging Team of the Organizing Department of Hainan Jinhai Pulp & Paper. Others may see those duties as too trivial to bear fruits, but Li Zhisheng has managed to shine through those small things by putting in relentless work.

There are a number of handheld scanning guns at the Organizing Department, which are very important single small devices. They are used for organizing information and closely tracking the paper products. Therefore, once they break down, the work efficiency would be undermined. By conducting online research, studying how the scanning gun is structured and designed to work, and taking apart the broken ones, Li Zhisheng managed to acquaint himself with all of its components. Now fully prepared, he started to purchase parts to take on the repair himself and fixed eight scanning guns in four months. More than that, he also shared his experience with other groups to pass on his repair skills.

Li Zhisheng's constant attention to detail has allowed him to make many improvements at the site. For instance, he attached reflective strips to the columns that the devices might bang into when carried in and out of the site; he made a rake that was light, practical, and easy to use to sweep sawdust from under the devices, which was a tough spot. It is roughly estimated that those small improvements can help reduce expenses by about RMB100,000 a year.

Usually, Xu Zhaozhi does not give the impression of being a salesperson upon first meeting. He does not appear to be eloquent or diplomatic; rather, he is highly trusted and liked by the customers for his diligence, sincerity, and perseverance.

During product sampling, Xu Zhaozhi would often stay with the press operators through the night shifts at the customers' factories; by day he would be communicating with workers from production, technical, or other departments, which enables him to understand and solve the sampling problems in a timely manner. Whether it is pharmaceutical packaging, handbags, business cards or blister cards, every time he sees a good paper product, Xu Zhaozhi would tear it open to find out how and where it is made; every time he sees a product made from APP paper, he would make sure to introduce it to everyone. Small efforts like those have translated into an outstanding sales record for Xu Zhaozhi and won him the honor of Excellent Employee for three consecutive years.

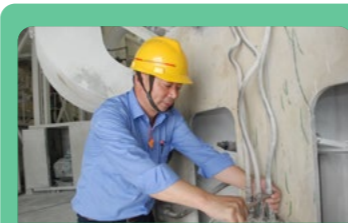
As the mill manager, Yang Huizhan is always on the frontline of exploring "production-marketing integration". He actively drives the effective collaboration between production and marketing so that there is mutual understanding between the two and sales can constantly reach new heights.

When working at the Xianyang mill, Mr. Yang invited the marketing team to take a tour at the manufacturing site. Through consulting and product training sessions, he helped the frontline marketing team gain a better knowledge of the company's products and instilled in them a stronger sense of belonging and confidence in the company. Before the back-to-school sales campaign kicked off, he invited the business director to give mill staff a training session on marketing skills; he made a "100% pure base paper shelf" that allowed customers to try out the products; he also personally drove over 100 kilometers to bring company staff to the campus sales outlet in Xi'an to carry out sales activities. Thanks to a number of initiatives such as experience sharing and sales reward system, the sales campaign was a big success. During the peak hours on weekends and holidays, Mr. Yang would often be seen at sales events in major stores in Xi'an with his team, and the sales performance of the Northwest KA (Key Account) stores has thus been greatly improved.



As long as you stay, I will never leave your side.

Heat & Power Division Gold Huasheng



We should be driven by the craftsmanship spirit, stay committed to our work duties, and be responsible and also good at it so that we can be truly accountable for our own roles and deliver reliable work.

Maintenance Department Gold East Paper



I will learn with modesty and continue to fulfill my duties conscientiously and to be a fighter who shines.

Packaging Team of Organizing Department Hainan Jinhai Pulp & Paper



A good salesperson needs to be attentive, sincere, and observant.

Industrial Paper Business Unit of Wuxi Domestic Trade Co., Ltd.



The road ahead is bound to be full of bumps and obstacles, but I am confident that success will be achieved in the end!

Tianjin Mill (currently) Gold Hongye



APP announced the "Sustainability Roadmap: Vision 2020" in 2013, which set forth 19 targets to be achieved by 2020 in ten key impact areas. They include fiber sourcing, reforestation, conservation & biodiversity, human rights & indigenous people, community empowerment, climate change, emissions, water management, solid waste, and employee welfare. Sixteen targets had been achieved by the end of 2019, with targets concerning climate change project implementation, energy intensity reduction, and safety incidents still in progress.



Scan the QR code to learn about the detailed progress of 2020 targets

APP attaches great importance to the United Nations Sustainable Development Goals (SDGs) and actively leverages its own business to contribute to their implementation and achievement. Based on a comprehensive benchmarking against the SDGs, APP hopes to make further sustainability commitments and plans to expand the goals further under "Sustainability Roadmap: Vision 2030". Vision 2030 focuses on three main areas closely related to APP, namely production, forest, and people.



Scan the QR code to see 2030 targets

Target Area	Production	Forest	People
Overall Target	30% reduction in carbon footprint	Continuously improving the percentage of sustainable fiber sourcing	Improving the lives of millions
Specific Issues As regards every issue, APP sets specific goals for 2030. For more information, scan the QR code.	Low Carbon Product Innovate Products	Fiber Sourcing Forest Protection Integrated Fire Management	Sustainable Livelihood Workforce Management Business Ethics & Conduct

Research & Development



Continuously optimizing and developing seedling strains; actively participating in industry exchanges to support the innovative development of the forestry and grassland industry; setting up a center at all the pulp and paper production bases to continuously introduce innovative solutions to environmental protection and health based on a product life-cycle perspective.

- Producing more than 10 million seedlings annually from two large nurseries
- RMB1.835 billion in annual R&D investment
- Filing 117 patent applications (45 invention patents, 41 utility model patents, and 31 design patents)
- Successfully developing a series of "Paper for Plastic" products

Forest Management



Conducting forestry in strict accordance with the APP Forest Conservation Policy (FCP); continuing to perform CFCC/PEFC-FM (forest management) certification, high conservation value (HCV) assessment, and ecological impact monitoring; continuing to strengthen protection of forests against risks like fires and illegal logging to keep them safe.

- Owning 246,700 hectares of certified plantations
- 92.27% plantations certified
- 145,500 hectares of plantations HCV-assessed
- Providing training on forest carbon sink calculation to lay the groundwork for implementing carbon-neutral projects in the future

Production



Building intelligent industrial bases to improve efficiency and reduce consumption; promoting sustainable procurement to drive responsible operations of suppliers; continuing to perform CFCC/PEFC-CoC (chain of custody) certification; committed to clean production and continuous review, optimization, and innovation of production processes and technologies; providing training on carbon emissions calculation and related areas to be fully prepared for entering China's carbon trading market; continuing to reinforce production safety to create a secure work environment for employees.

- 16 affiliated entities obtaining CFCC/PEFC-CoC certification
- Water reuse rate of 95.94%
- 6.37 tons of waste water discharge per ton of paper produced
- 11.62 tons of waste water discharge per ton of pulp produced
- 0.29 kg of COD emission per ton of paper produced
- 0.63 kg of COD emission per ton of pulp produced

Sustainable Consumption and Reuse



Actively engaged in promoting CFCC/PEFC forest certification labeling and spreading the concept of forest certification, and calling on the public to help protect forests through sustainable consumption; launching the "Paperback" waste paper recycling program to drive public attention to and participation in waste paper recycling.

- The number of APP China products with the forest certification label continuing to grow
- Procuring 198,100 tons of waste paper as raw material
- The "Paperback" program cumulatively recycling 7.91 tons of waste paper

Community and Philanthropy



Driven by a passion for and commitment to philanthropy, continuing to make a positive impact on education, youth capacity building, paper culture promotion, and other aspects; improving community communication and participating broadly in community construction.

- RMB31.97 million in total external donation
- 18,618 hours of volunteer time clocked
- Gold Huasheng Paper Culture Experience Center receiving over 3,100 person-times of visits from students of all ages

In January 2020, the sudden outbreak of a novel coronavirus disease (COVID-19) caught the whole society off guard. When disasters hit, help rolls in from all directions. Enterprises are a powerful force in the fight against the epidemic. During this special period, Sinar Mas Group lost no time in becoming part of the fight; the company has put in place comprehensive prevention measures to keep its employees and the communities safe; everyone has worked together to overcome difficulties and resume work and production, thus ensuring continuous supply of products. The epidemic will eventually pass, but we will go forward with a sense of responsibility and do our best to give back to society.

After the outbreak of the epidemic, APP President Teguh Ganda Wijaya, who was then in Indonesia, paid close attention to its development. On January 26, Sinar Mas Group announced a donation of RMB100 million and also RMB350,000 worth of Breeze™ hygienic cleansing wipes to the Overseas Chinese Charity Foundation of China. It is thus the first overseas-Chinese-funded enterprise to respond to the call of the All-China Federation of Returned Overseas Chinese to make donations to the affected areas. Meanwhile, APP China management promptly set up an

emergency response team for leading epidemic prevention and control. APP China Headquarters joined hands with all its business units and mills and mobilized all the staff to be part of the national fight against the epidemic.

Locally, APP China mills also played an active part, making donations of money and supplies to aid the respective regions in their efforts to control the epidemic. Hainan Jinhai Pulp & Paper donated 6 tons of disinfectant produced by the company itself to the Yangpu District Center for Disease Control and Prevention (CDC) to be used in local communities, public places, streets, and other places. Ningbo Asia and Ningbo Zhonghua cumulatively donated 3,000 masks to neighboring communities to give the grassroots community workers better protection. Chinese Communist Party (CCP) members from Guangxi Jingui Pulp & Paper all took the initiative to donate money to make their own contributions.

From January 24 to March 31, 2020, Shanghai Huashan Hospital sent a total of 273 medical staff to aid Wuhan in the battle against the epidemic, the largest number that any hospital in China dispatched in support of Wuhan. Ten percent of our RMB100 million donation was directed to Huashan Hospital to be used as solatium to frontline medical workers and for setting up a fund for training young physicians and renovating the hospital's infectious diseases building.



Suzhou Gold Hongye urgently producing protective equipment needed for containing the epidemic ▲



Ningbo Asia and Ningbo Zhonghua providing nucleic acid testing for returned employees ▲

APP China puts its employees' safety and health first. As a responsible employer, we promptly developed comprehensive epidemic control measures for safe reopening after the outbreak to ensure a safe and healthy workplace for our employees.

We have drawn up detailed regulations and behavioral guidelines on employee return, employee commuting, temperature checking, office disinfection, meeting arrangements, meal arrangements, visitor control, and other matters and provided our employees with protective equipment such as masks and alcohol cotton as well as flexible work hours. Moreover, we publish daily epidemic briefings and work to keep our employees updated, equip them with a proper knowledge of the epidemic, and take care of their mental wellness. Ningbo Asia and Ningbo Zhonghua promptly responded to the call of the People's Government of Ningbo Municipality for giving returned employees free, rapid nucleic acid testing so that they felt safe back at work.

To guarantee sound customer service during this special period, APP China Paper Business Unit launched the "Little A Online Classroom". It allows customers to interact with the company in real time through means like video, voice and text messaging and to take customized courses focused on a variety of topics such as product introduction, technical communication, information sharing, and strategic thinking.

Shutdowns during the epidemic weighed on many industries. Some tenants in APP's two major commercial complexes in Shanghai, namely the Shanghai ARCH and the Shanghai Magnolia Plaza, were also affected. In response, we offered them a rent reduction and free protective supplies such as disinfectant cotton balls and disinfectant tissues to tide them over this difficult time.

With the epidemic's accelerated spread overseas, we are also paying close attention to the safety of overseas Chinese and Chinese students studying abroad. Of the RMB100 million donation we made, RMB10 million has been directed to the Overseas Chinese Charity Foundation of China in support of their efforts to work with local federations of overseas Chinese to give away health packages to those groups. The packages contain disposable masks and gloves and Chinese medicine (grains or capsules), among other infection control items.

Paper is of high relevance to the epidemic. Tissues, pharmaceutical packaging, food packaging, etc. are all essential paper products during an epidemic. Therefore, besides efforts to contain the epidemic, resuming production as soon as possible became another key task for APP China during this time. The company had to do this by overcoming staff shortages

caused by quarantine orders as well as the challenge with logistics and the upstream and downstream supply chain. In this context, all APP China employees have shown great cohesion and we achieved a nearly 100% resumption rate in less than two months by going all out to coordinate resources, optimizing work patterns, etc.

In February 2020, when the epidemic was at its worst, Gold East Paper's own port completed a total throughput of 229,000 tons, an increase of 26.71% over the same period last year. Behind this number were the unremitting efforts made by the company to overcome the obstacles of road closures. Road closure is a conventional measure for epidemic prevention and control, but materials are needed to feed factory production. For this reason, the

company instituted a multi-departmental coordination and cooperation mechanism. While maintaining active communication with the administering department for epidemic control, the company arranged for its logistics personnel to take turns to pick up trucks at the highway entrances every day so that a steady supply of raw materials continued to pass through the "epidemic defense line" and reach the mill, thus ensuring continuous production.



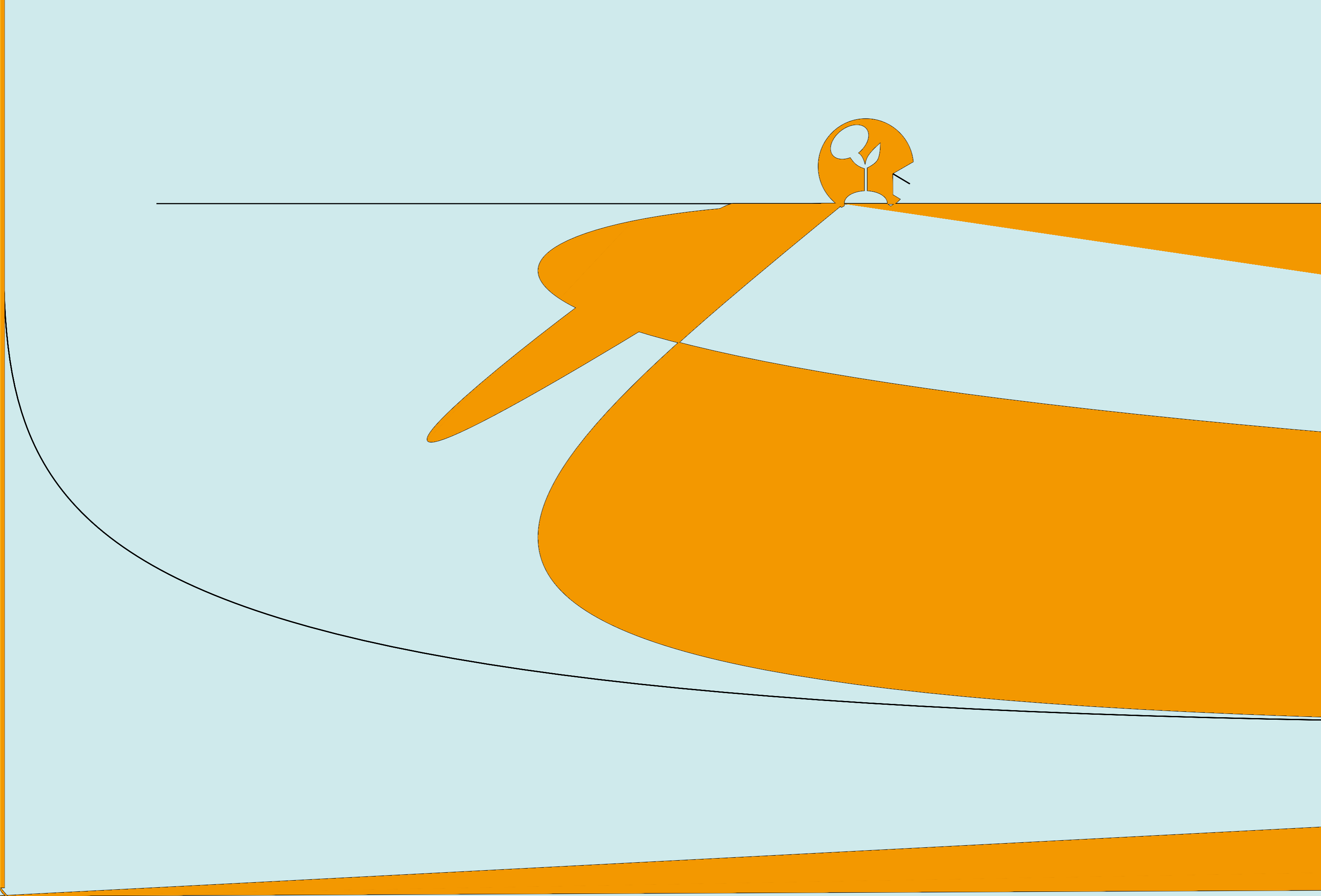
Employees working at the port ▲

To ensure that the products reached customers on time, Gold Huasheng employees took the initiative to work overtime to overcome the short-handedness. The production and engineering management teams held daily communication meetings to coordinate various matters. The supervisors sacrificed their personal time to work on tough problems in the workshop, such as tracking and coordinating the arrival of raw materials and helping employees with the various aspects of their life. All of the employees of Gold Huasheng have exhibited responsibility and commitment through concrete actions.

In February 2020, toilet paper in supermarkets across Hong Kong was sold out as a result of the epidemic. To meet the needs of Hong Kong citizens, Hainan Gold Hongye resumed production with urgency on February 7, cumulatively shipping 583 tons of tissues to Hong Kong in February. The Logistics Department went all out to coordinate various related parties, managing to have the shipping company increase their frequency of shipment to Hong Kong from once a week to every three days so as to ensure that tissue products were delivered to Hong Kong as soon as possible.

One top priority for Suzhou Gold Hongye during the sudden outbreak of an epidemic is to deliver products to customers fast with the logistics system being limited. On the evening of February 13, the company called on the employees to use their own cars for delivery, to which they responded actively. Within 16 hours, a delivery squad of more than 1,200 employee volunteers was formed. What they delivered to the customers was not just the products but the company's sense of responsibility as well, and it was praised highly by the customers.

Jinli white cardboard produced by Ningbo Asia and Jin Die Lan white cardboard produced by Guangxi Jingui Pulp & Paper are the primary paper used for pharmaceutical packaging in China. Jin Cai antibacterial white cardboard, Jin Bei whiteboard, and Chieftain white cardboard produced by Ningbo Mills are also the primary packaging paper for making medical masks. As part of the epidemic control efforts, the container yards had all been closed as required by the government, so no containers were available for logistics. To fulfill the paper needs of pharmaceutical packaging companies and mask manufacturers, Ningbo Mills managed to have four container yards reopened after repeated communication with the government and local government agencies like the Municipal Bureau of Commerce, thus successfully resuming product shipping.





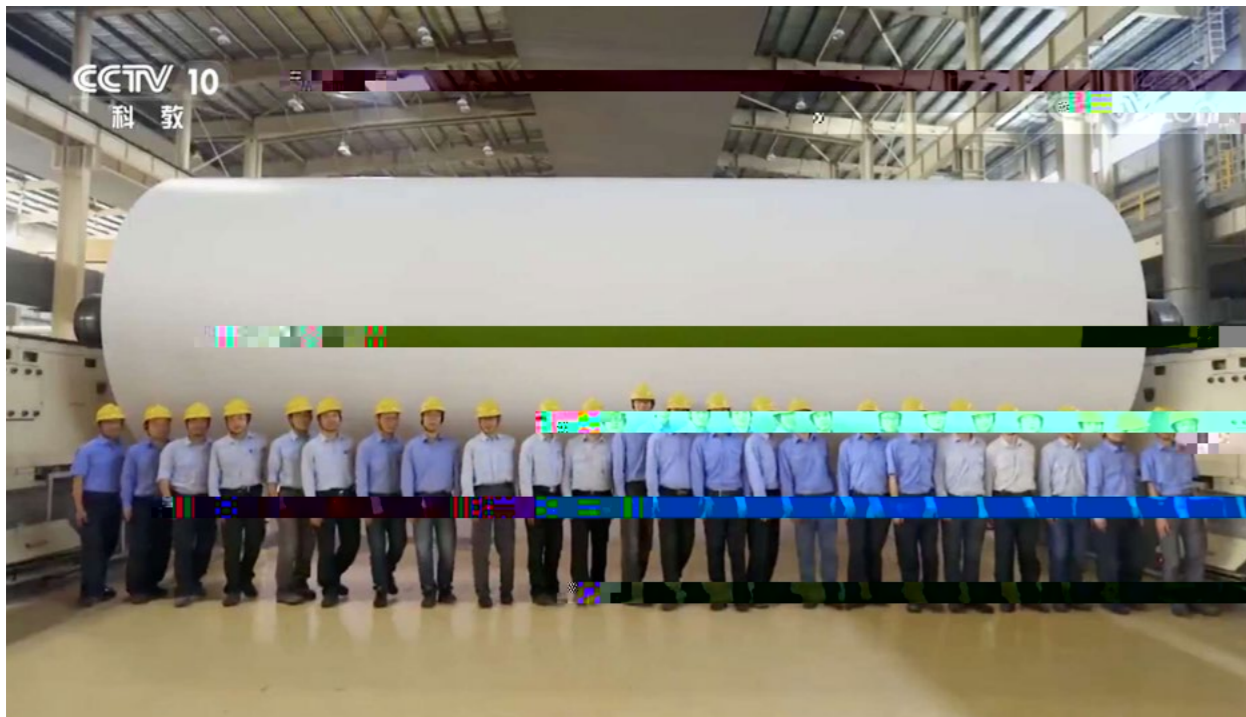
Throughout history, paper has been integral in the development and preservation of human civilization. To celebrate the 70th anniversary of the founding of the People's Republic of China, China Central Television (CCTV) released *The Story of Chinese Paper*. It is a documentary that captures the invention, popularization, and application of paper and the papermaking industry of the present day, portraying an epic picture that spans paper's past and present. As an important witness of and participant in the development of China's modern paper industry, APP China took part in the shooting, using as the setting its numerous affiliations such as Gold East Paper, Ningbo Asia, Suzhou Gold Hongye, Hainan Jinhai Pulp & Paper, and APP China Forestry. APP China has demonstrated the advanced manufacturing technologies and strong R&D capabilities of today's papermaking companies in China and the dedication of generations of papermakers who have worked hard to create a better life.

From bringing the "Integration of Plantation-Pulp-Paper" model to China in the 1990s to large-scale production following the 12th Five-Year Plan, and to the exploration of intelligent production and management, APP China continues to innovate and improve. By doing so, the company helps propel China's paper industry towards high-quality development and contributes to the preservation of China's paper civilization.

In 1992, APP entered China with the mission of "Implementing green cycle-based development, advancing papermaking civilization, and improving the quality of life". While the concept of "Integration of Plantation-Pulp-Paper" was still quite new in China, APP China was already making efforts to put this green, circular development model into practice. Since 1995, APP China has been growing plantations in Guangdong, Hainan,

Guangxi, Yunnan, and other provinces to gradually map out the forestation industry. APP China's first pulp and paper plant, the Hainan Jinhai Pulp & Paper, was officially opened in 2005. This has announced the official formation of an integrated industry chain combining plantations, pulping, and papermaking, initiating a virtuous cycle where forests support paper, the paper industry nurtures forests, and forests and paper are integrated. The completion

and maturity of this industry chain have enhanced APP China's comprehensive capabilities of resource security and risk resistance, thus ensuring sound and robust operations. Moreover, this model embeds low-carbon and environmental considerations throughout the entire industry chain, thus ensuring a balance between social and environmental benefits.



APP China mills participating in documentary shooting ▲

The year 2000 marks the beginning of a "golden decade" for China's paper industry, witnessing its rapid development and the near tripling of annual paper output. APP China continues to upgrade the industry chain and manages to make the "Integration of Plantation-Pulp-Paper" model truly excel by continuously improving its core strengths in production and management technology, product quality, customer service, etc. This has set a prime example of development with constantly improving quality and effect for modern papermaking companies in China.

APP China has established industrial bases in Jiangsu, Hainan, Guangxi, Zhejiang, and other places and continues to increase investment. In 2019, APP China launched the construction of a high-grade tissue industrial base in Rudong, Jiangsu Province. Combining technology-based manufacturing with circular economy, the base will adopt the world's best manufacturing technologies, equipment, and control systems and fully apply the principles of clean production as it strives for the goal of green development

with high efficiency and low consumption. In addition to the Rudong Industrial Base, 2019 also saw us initiate the construction of new projects in Ningbo (Zhejiang) and Qinzhou (Guangxi). While expanding the Group's industry chain deployment, we do this to continue to boost local economy and industrial upgrading.

To further facilitate holistic development and optimized industrial structure, in 2019,

Sinar Mas Group started the acquisition of Bohui Group, a leading white cardboard paper company in China, to explore more innovations and breakthroughs in this field. In the future, we will continue to follow the industry trend of integrated development and join hands with more Chinese paper companies to seek new opportunities in the new era.



Concept plan of Rudong High-Grade Tissue Industrial Base ▲

As China's economy phases into a new normal where the quality of growth outweighs the speed, papermaking companies now need to be more innovative and embrace transformation and upgrading in order to adapt. APP China continues to deepen R&D and innovation and strengthen cooperation and communication with industry partners to explore advanced ideas, technologies, and products. In 2019, we had in-depth dialogues with industry associations on topics such as China's plastic ban and companies' strategic restructuring and structural adjustment and made suggestions to the 14th Five-Year Plan regarding the papermaking industry.

Following its first appearance, APP China attended the 2nd China International Import Expo (CIIE) again in 2019, where we signed a deal with many companies on the use of the APP Foopak Bio Natura™

As China's economy phases into a new normal where the quality of growth outweighs the speed, papermaking companies now need to be more innovative and embrace transformation and upgrading in order to adapt. APP China continues to deepen R&D and innovation and strengthen cooperation and communication with industry partners to explore advanced ideas, technologies, and products. In 2019, we had in-depth dialogues with industry associations on topics such as China's plastic ban and companies' strategic restructuring and structural adjustment and made suggestions to the 14th Five-Year Plan regarding the papermaking industry.

In recent years, China has been prioritizing the improvement of ecological conditions and green development while continuing to implement a new mode of development. Such development is driven by industrialization and information technology and embraces circular economy and a low-carbon and energy-efficient approach. As an important provider of basic raw materials in the national economy, the modern paper industry is also making a gradual transition to highlight the use of renewable resources, clean production, and pollution control. APP China has long been taking concrete actions to help build a beautiful China, including actively exploring models of resource conservation and recycling and continuing to strengthen the management of clean production.

Based on the principle of "reduce, reuse and recycle", the circular economy is designed to maximize resource efficiency and recycling. It is a fundamental shift away from the traditional way of economic development that is high-pollution and high-consumption. APP China embeds the concept of circular economy throughout its manufacturing process, thus effectively reducing its environmental footprint while operating at a lower cost and higher efficiency.

With a commitment to sustainability, APP China actively explores green and circular solutions. By developing new technologies and improving and innovating the processes, APP China manages to reduce the use of raw materials and become resource-efficient, doing its utmost to put all resources to good use.

Separating the cellulose required for paper from the raw materials by cooking is an important step in the pulping process. This process produces a large amount of waste liquid containing lignin and alkali. Dark in color and smelly, the liquid is often referred to as "black liquor". If discharged directly without being treated, the black liquor can cause serious environmental pollution.

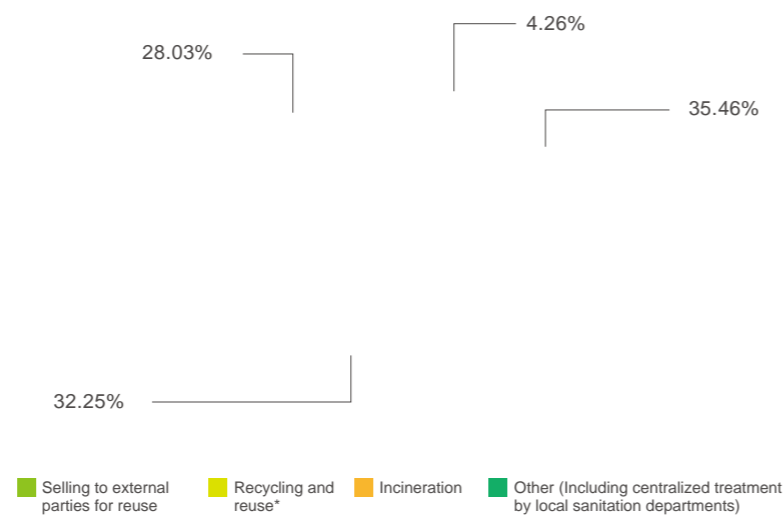


Long fibers from conifers lend the main toughness to paper. They are consumed in large quantities in the production of tissues, and reducing their use would lead to significant savings in resources and costs. In 2019, we successfully reduced the amount of long fibers used per unit of product through means like upgrading technology and improving the process, thereby reducing the use of trees.

We have formulated the *Solid Waste Management Procedures*, defining the scientific classification and orderly disposal of major wastes such as coal ashes, sludges, gypsum, pulp residues, and wood dust. Meanwhile, we actively optimize our production processes and technologies to do a continuously better job in waste reduction and recycling. In 2019, the recycling rate of general solid waste within APP China's reporting scope reached 32.25%, an increase of over 20% from 10.35% in 2018.

The production process generates waste gases such as biogas, carbon dioxide, and sulfur dioxide. By recycling and using chemical reactions to produce by-products, we have reaped good economic and social benefits while promoting resource recycling and reducing the emission of greenhouse gases and air pollutants.

Methods of Solid Waste Disposal in 2019 within Reporting Scope



To guarantee more effective harmless and recycling-based treatment of sludge, Ningbo Asia installed two circulating fluidized bed (CFB) boilers with a sludge incineration capacity of 1,600 tons per day. Meanwhile, the biogas generated during waste water treatment is recycled after being transported to the incinerator through the pipeline. The heat of the waste gas is also recycled to fuel production as the steam generated from sludge incineration gets transported to the company's papermaking workshops. In addition, Ningbo Asia actively communicates with local environmental protection departments to help surrounding companies with sludge incineration, thus contributing to the construction of green communities.

In 2019, Ningbo Asia incinerated a total of **215,027** tons of sludge, including **8,004** tons of social sludge; it recycled a total of **1,699,458.4** cubic meters of biogas, which translates into **1,189.6** tons of standard coal or RMB **946,300** saved.



Ammonia-based desulfurization is a process that uses ammonia as an alkaline absorbent to remove sulfur dioxide from boiler fume gas. It has such advantages as high reaction rate, high absorbent utilization rate, and high desulfurization efficiency. What's more, ammonium sulfate, a by-product of desulfurization, can also be used as agricultural fertilizer. Gold Huasheng uses ammonia-based desulfurization to manage exhaust gas emissions, which guarantees higher desulfurization efficiency and favorable sales revenue from the by-products. In 2019, Gold Huasheng sold 6,024.34 tons of ammonium sulfate.

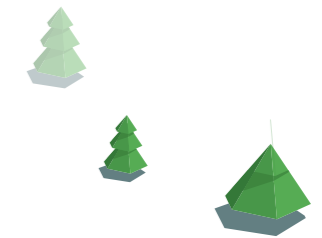
Adding water to quicklime produces hydrated lime, and carbon dioxide reacts with the

hydrated lime solution to produce light calcium carbonate, which can replace pulp as a raw material for cultural paper. With the assistance of a specialist company, Gold Huasheng recycled a total of 50 million cubic meters of carbon dioxide from the power plant's fume gas in 2019, using which it produced 66,600 tons of light calcium carbonate.



Based on data analyses and forecasts about customer demand, APP China continuously explores economic logistics models that are more efficient and lower-carbon as it institutes measures like optimizing transport routes, improving packaging recycling, increasing the vehicles' loading efficiency, and integrating operational processes. In 2019, we implemented the intermodal transport mechanism between sea and rail, effectively reducing packaging waste that would otherwise have been

caused by secondary loading and unloading; we introduced the "Bulk Cargo Containerization" mode to realize intensive transport, which improved the utilization of resources such as containers; we continuously recycled pallets among mills to minimize the use of wood and related resources; we mix-loaded different raw materials and products to improve the loading efficiency; and we reinforced circular transport over long distances between different regions to reduce empty backhauls.



China is quickening its transition to green manufacturing. It continuously tightens regulations on pollution control and environmental protection, releasing a series of policies and rules in recent years, such as the *Cleaner Production Promotion*

Law of the People's Republic of China, the Green Industrial Development Planning (2016-2020), and the Plan for Energy Conservation and Emission Reduction in the 13th Five-Year Plan Period. APP China's mills have amplified efforts to



The *Made in China 2025* strategy contains the demand to "seek innovation-driven development and apply smart technologies". Strategic documents since 2018 like the government work reports have repeatedly emphasized the need to strengthen "construction of new infrastructures", notably artificial intelligence, industrial Internet, and the Internet of Things. Those national policies are clear signals that the cultivation of the digital economy has become a new driver of national economic growth. For traditional manufacturing industries such as the papermaking industry, intelligent manufacturing will become the leading force driving industrial transformation and upgrading.

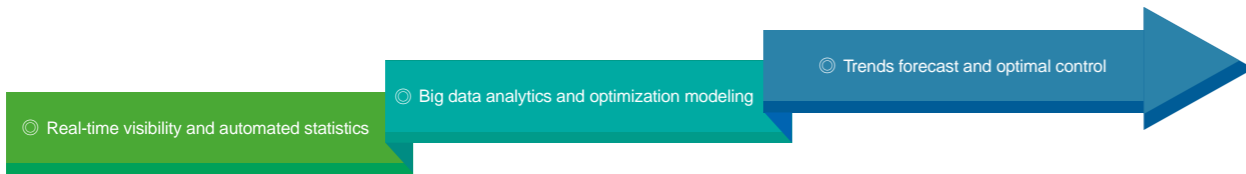
APP China focuses on digital transformation as a key development strategy and works to promote the construction of Industry 4.0 and intelligent manufacturing with an open and innovative attitude. We are taking advantage of emerging technologies to expand our industrial territory and quicken the transition of the papermaking industry to "intelligent manufacturing".

APP China thoroughly implements the *Made in China 2025* strategy and continuously advances to the goal of "intelligent equipment, digital management, and automated processes" by formulating and implementing the "Industry 4.0" roadmap. We take automation-oriented transformation as our current focus and make an all-out effort to promote the upgrading of papermaking equipment and processes; by virtue of big data technology

and scientific management, we manage to improve our information management capabilities and gradually foster the linking and integration of the various information systems for different parts of our operations.

Relying on a real-time database platform and a production execution management system, APP China is steadily pushing forward the trilogy for making production

data digital and intelligent. With improved efficiency and guaranteed product quality control, we strive to reduce material and energy consumption and thoroughly enhance the company's ability to pursue sustainability.



APP China Trilogy for Digitized and Intelligent Production Data

In 2019, APP China invested tens of millions of *yuan* developing dozens of automation projects. Using high technologies such as big data, cloud computing, and the Internet of Things, we have managed to digitize information collection throughout the full lifecycle from raw materials to finished products and to

recycling, leading to better product quality control and traceability. Meanwhile, the adoption of smart warehousing has greatly enhanced the efficiency of warehousing and logistics operations and management. We have also expanded the application of real-time data visualization and automatic statistics to cover more production and

operations processes. The pending 5G era will see us collect and analyze data on consumers' purchase behavior to gain a deeper insight into consumer needs and promote precise product R&D and innovation upgrades.



Automated papermaking workshop ▲



In traditional factories, the control and management systems of production equipment are scattered and independent of each other, making it difficult for the managers to have an overall grasp of the equipment's running status. In line with the Group strategy, Guangxi Jingui Pulp & Paper started developing the PI (Plant Information) Real-Time Database System in 2019. The system extracts data from different production equipment and forms an infographic based on data processing and analysis before presenting it on the managers' computers, smart terminals, and other devices via wired, wireless, or 4G networks. This has notably improved the company's capabilities of comprehensive management and rapid response.

The system improves the company's ability to perform equipment maintenance and fault warning, which can reduce unplanned downtime by 10% every year, equal to RMB7.62 million in loss reduction. Meanwhile, based on

the data analysis by the system, the company will be able to know about the optimal raw material input ratio and the point of balance among steam, electricity, and water in a timely and accurate manner, thus realizing further savings in resources and energy.



Energy monitoring interface of the PI real-time database system ▲



The Radio Frequency Identification (RFID) technology stores product data in electronic tags and is a type of remote automatic identification technology. APP China applies the RFID technology in its entire production process (for example, base paper winding, rewinding, slitting, post-processing) and to its logistics and warehousing management (for example, delivery and inspection, warehousing, storage, inventory, transportation) to realize digitized quality control. The RFID technology has such advantages as fast information reading, contactless long-distance recognition, penetrable omnidirectional recognition, and high reliability. This makes it possible to comprehensively track and synchronize data of the production, warehousing, and logistics processes, thereby realizing full traceability of the digital information and more automated and efficient operations.

APP China integrates the intelligence strategy fully into its industrial development plan, making full use of cutting-edge technologies such as artificial intelligence, big data, and cloud computing to create an intelligent and green paper industry ecosystem and help boost the digital and intelligent transformation of China's paper industry.

APP China's first new intelligent manufacturing upgrading project, the Rudong High-Grade Tissue Industrial Base, was initiated in July 2019. With "Industry 4.0 + Artificial Intelligence" guiding its production, it takes advantage of new technologies such as big data and 5G to automate production and realize intelligent management and operations

and will be the most advanced of its kind in the world. Phase I of the project will begin operations in 2020. When put into full production in 2021, the project is expected to produce 3.96 million tons of high-grade tissues annually, and the per capita production will be tripled compared with the original factory.



Rudong High-Grade Tissue Industrial Base breaking ground ▲



At the new production base under construction, APP China has launched a logistics automation project, which will create an automated logistics model through the combined use of various technologies. From 2020 to 2021, we will focus on promoting the use of intelligent transport vehicles. Those vehicles are equipped with advanced technologies such as

unmanned driving and lidar and are connected with a variety of support systems, such as intelligent port system, automated warehousing system, automated transport system, and automated operations system, to facilitate intelligent operations at the new base.



Innovation is the soul that drives high-quality business development, and one important way of product innovation for the papermaking industry is to follow the global sustainability trend. In this era of challenges and rapid development, APP China aligns its actions with the needs of the market and social development and constantly injects innovation into developing industrial paper, cultural paper, and tissue products. At the same time, we seek extensive cooperation and engagement with the outside world and actively promote the implementation and wider application of best practices on issues such as "Paper for Plastic" and sustainable consumption.

Disposable plastic products are difficult to degrade and heavily used and have a low recycling rate. According to United Nations statistics, at least 8 million tons of plastic waste enter the ocean every year, and this number is still rising. In response to this increasingly severe pollution problem, the Chinese government has issued a number of policies and rules in recent years, clearly stating that bans and restrictions on the production, sales, and use of certain plastic products will come into force in a number of regions and fields first by the end of 2020. "Paper for Plastic" will become an inevitable trend in food

packaging, takeaway catering packaging, and other fields.

As an expert provider of paper packaging solutions, APP China strives to be a pioneer in the "Paper for Plastic" initiative and actively promotes the R&D and production of plastic product alternatives. We continue to deepen innovation in "zero plastic" food packaging products and step up the promotion of the degradable and recyclable Foopak food cardboard products for the Chinese market. Meanwhile, companies such as Gold Huasheng and Ningbo Asia have developed a series of

high-quality products such as "zero plastic" coated food cardboard, "zero plastic" oilproof food cardboard, and drinking straw base paper. In the future, we will foster more innovations in the field of medical packaging, plastic laminate alternatives, paper trash bags, etc., doing our part at the industry source to facilitate a broader transition to a green and low-carbon lifestyle.



The Sinar Mas Group's Foopak Bio Natura™ biodegradable food cardboard debuted at the first CIIE. The product can well replace traditional disposable food packaging thanks to features like thorough degradation rate, airtightness, and cold and heat resistance. Meanwhile, the water-based laminate inside of Foopak is plastic-free and fully biodegradable within 12 weeks. With technical optimization, Foopak products' performance has been further improved in 2019 to withstand high temperatures up to 220 degrees Celsius and be recycled and reused five to seven times.

At the second CIIE in 2019, the Group entered into an agreement with a number of Chinese companies to collaborate on the full range of APP products including Foopak. This was another solid step towards the scale-up and marketization of "Paper for Plastic" technologies as represented by Foopak and will also bring a new green consumption experience to Chinese consumers.



Sinar Mas Group and several Chinese companies reaching an agreement at the second CIIE ▲



APP China Paper Business Unit has developed and launched a range of "Paper for Plastic" packaging product series. Examples include the "zero plastic" coated food cardboard, "zero plastic" oilproof food cardboard, drinking straw base paper, white kraft paper for food packaging, etc., providing a variety of environmentally friendly packaging solutions for the domestic market.

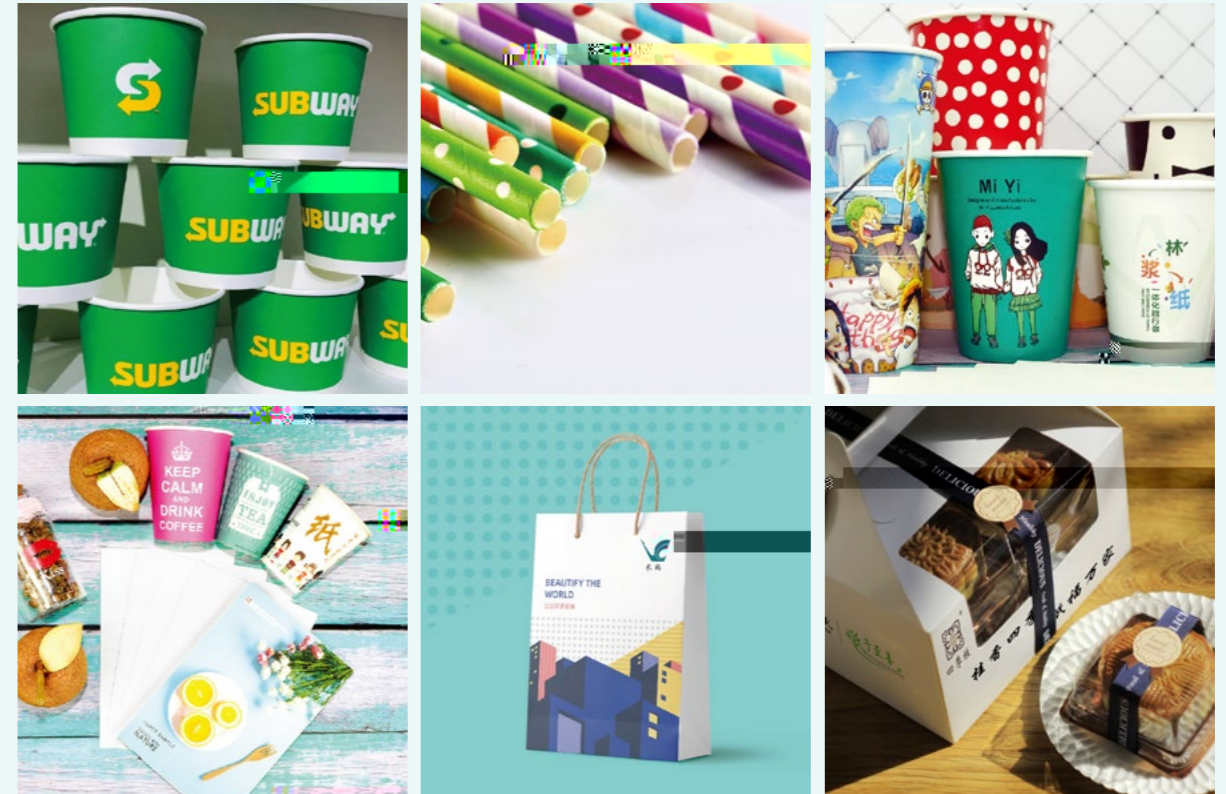
Gold Huasheng, a company engaged in special papers, has successfully developed a drinking straw paper product that complies with the restrictions set out in EU BfR (German Federal Institute for Risk Assessment) on food contact materials. To do so, the company conducted extensive research and testing, based on which it determined suitable eco-friendly chemicals and pulp processing conditions. In addition to straw paper, Gold Huasheng

is also developing dialysis paper that meets the requirements of medical packaging. The paper can withstand high-temperature steam sterilization while also effectively blocking bacterial penetration and is thus suitable for cases like mask packaging and dental consumables packaging. Moreover, the development of plastic lamination alternatives is also an important future direction for the product R&D at Gold Huasheng.



Drinking straw base paper

Made of virgin wood pulp, recyclable and degradable; QS certified, food-grade; suitable for making paper straws, airline cups, paper bag cups, and other products.



Forests are the largest and most expansive and biodiverse ecosystems on land and play an irreplaceable role in conserving water and soil, sequestering carbon and producing oxygen, and maintaining global ecological balance. Forests also provide ample resources for human production and living and are a true treasure house of resources.

APP China is fully aware that only by respecting and protecting forest ecology can we ensure the long-term and sustainable use of forest resources and truly turn "lucid waters and lush mountains" into "invaluable assets". For years, we have

actively conducted forest certification and continuously promoted sustainable forest management (FM) and chain of custody (CoC) management. On this basis, we continue to facilitate forest certification

labeling for products to draw wider attention to the environmental and social impact of sustainable paper products and advocate sustainable consumption.

246,735 hectares of plantations are CFCC/PEFC-FM-certified

92.27% of plantations are CFCC/PEFC-FM-certified

16 affiliated entities have obtained CFCC/PEFC-CoC certification

Note: For more detailed information, please refer to the Sustainability Management section.

By normalizing the labeling of certified forest products, we hope to bring more sustainable products to consumers and make it easier for them to identify products made from raw materials sourced from sustainably managed forests. In this way, we can help increase the social awareness of sustainable consumption and the development of sustainable forestry.

Paper products carrying the CFCC/PEFC joint label are subject to audits by certification bodies for the source of their wood materials, which have to be 100% from scientifically planted, legally compliant, and environmentally protected plantations. For those products, material traceability has to be guaranteed throughout the whole process from material input, manufacturing, transportation, storage, and sales to consumer use. The forest label gives products the dual qualifications of "raw material reliability" and "product traceability".

Forest certification has been widely recognized by the international community and governments as an effective tool for promoting sustainable forest management and market access for forest products. China Forest Certification Council (CFCC) and the Programme for the Endorsement of Forest Certification (PEFC), a leading international forest certification system, reached mutual recognition in 2014. It gives China's sustainable forestry products an "international passport" while setting stricter requirements for the management of certified paper products in terms of

"traceable product information, reliable eco-friendly production, and sustainable raw materials".

Under the guidance of the Science and Technology Development Center of State Forestry and Grassland Administration, APP China has continued to promote the labeling of certified forest products in recent years and is the first in the industry to carry the CFCC/PEFC label on its products. In 2019, our Touchcare functional tissue under the well-known brand Breeze™ and some products under

the high-grade tissue brand EMPORIA also started to carry the joint label, further expanding APP China product series with forest certification labeling. The CFCC/PEFC joint certification and labeling will be normalized for an array of products under EMPORIA and VIRJOY in 2020.

While continuing the efforts to advance product labeling, APP China is also actively popularizing sustainability ideas represented by forest certification to the society by undertaking publicity and advocacy initiatives. With strong support of the Science and Technology Development Center of State Forestry and Grassland Administration, a series of CFCC/PEFC philanthropic campaigns jointly sponsored by Nanjing Forestry University and APP China was held on campuses and in communities and city areas of Nanjing in November 2019. We showcased the company's products with the CFCC/PEFC label and held a lecture at Nanjing Forestry University on forest certification. We mainly introduced relevant practices at APP China and called on the public to pay attention to the conservation and sustainable development of forests.



Lecture on forest certification at Nanjing Forestry University ▲

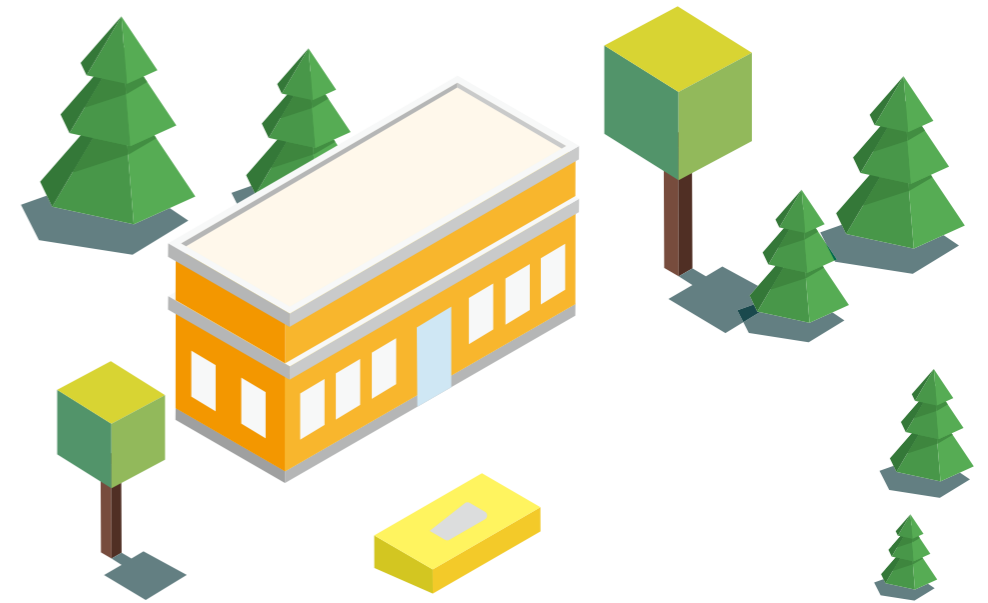
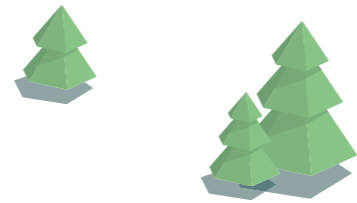


EMPORIA tissue products carrying the forest certification label ▲



APP China continues to step up R&D investment and technological innovation and manages to meet the increasingly diversified paper needs by constantly optimizing and enriching its product series. In terms of industrial paper and cultural paper, we have developed a wide range of high-bulk products in line with the lightweight trend of applied paper; we

constantly adjust product formulas and production technologies and processes and strive for excellence in product performance. In terms of tissues, we have launched a series of Healthy Family products, which can effectively meet people's requirements for a healthy and hygienic life.



The general trend of consumption upgrading and classification has created a higher demand for the functionality and personalization of paper in our daily life. Based on an in-depth analysis of the needs of contemporary consumers, Suzhou Gold Hongye has launched a series of functional wipes for different situations, including glass cleansing wipes, dish wipes, cooling wipes, and stain remover wipes. For people with sensitive skin, the company has developed a moisturizing facial tissue. Infused with moisturizing factors and vitamin E, the tissue effectively locks in moisture and offers a moisturizing and smooth soft touch. For baby skin, the company has developed a series of special products for mothers and babies using a number of patented technologies, such as moisturizing dry towels for babies, baby cotton tissues, and addictive-free hand and mouth wipes for babies.

In 2019, the company continued to deepen R&D and launched an array of antibacterial products, such as antibacterial cream paper products and 75% alcohol wipes (dish wipes), which adequately meet people's sanitizing and cleaning needs in



daily life. The outbreak of the epidemic has driven home the harm of bacteria and other microorganisms and led to increased recognition for sanitizing and antibacterial products.

With a relentless commitment to innovation, Suzhou Gold Hongye obtained 22 patents in 2019, of which 20 were invention patents, ushering it to China's top 500 enterprises in terms of patents.



Moisturizing dry towels for babies ▲



Dish wipes ▲



Dry & wet dual-use wipes ▲

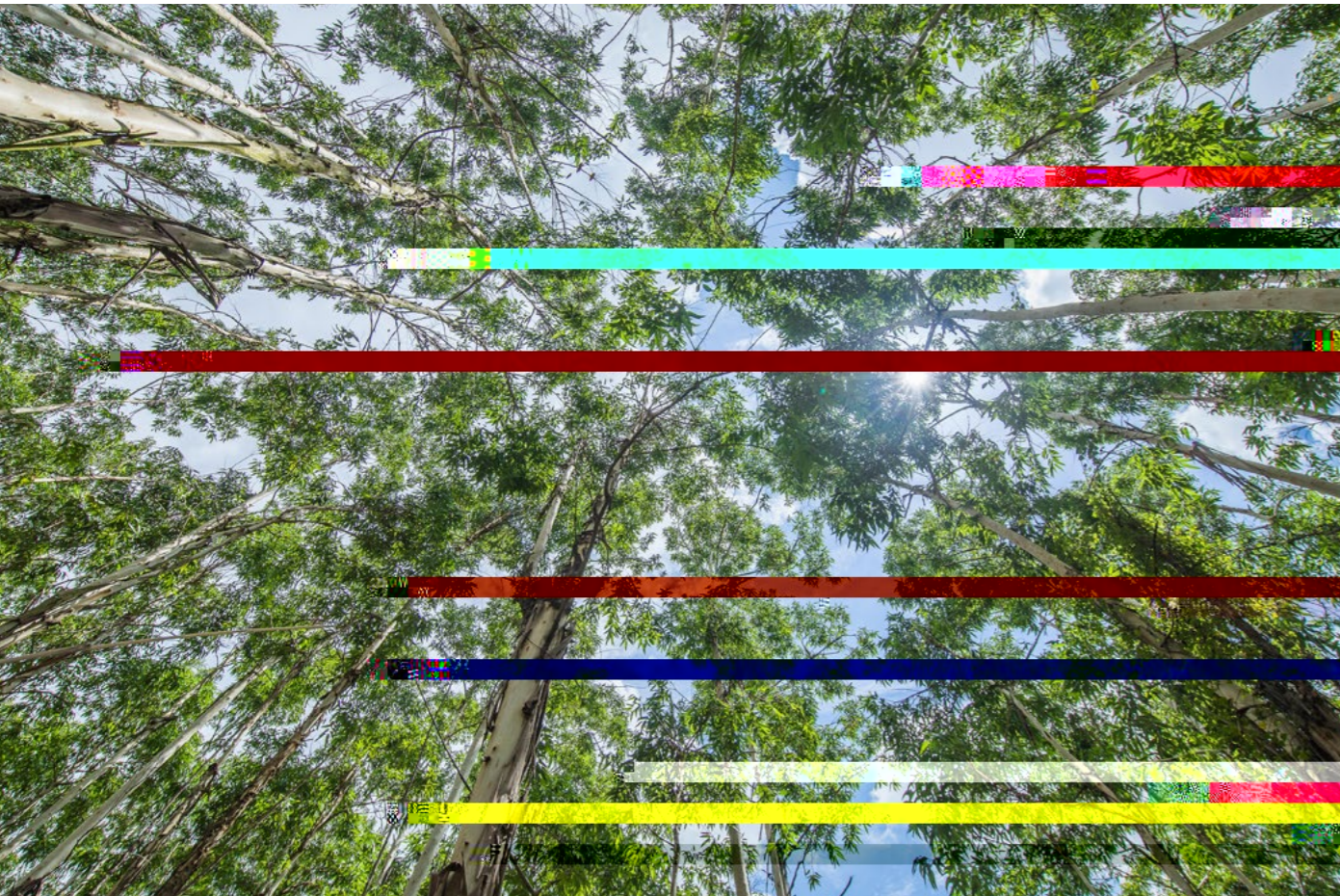
Coated paper is commonly used in printed products such as book covers and commercial advertisements. As people's taste improves, the traditional coated paper can no longer meet many customers' new requirements for paper products as they go after elegant paper color, embossed feel, high color reproduction quality, etc. Gold Huasheng has developed the "Art Paper" product series using optimized product formulas. This type of product offers a natural hue and excellent color reproduction and is suitable for a variety of printing processes. In addition to ordinary paper colors, the new product also provides special color options such as ivory white and high white, which satisfies customers' different needs in paper color and offers new possibilities for coated paper printing.



Thermal paper is notable for its ink-free way of using chemical reactions to create colors and is commonly found in places like cash registers, labels, and tickets. Generally speaking, the thickness of the paper is related to its base weight – the higher the base weight, the higher the thickness and the amount of pulp used. Gold Huasheng has developed the high-bulk thermal paper, which reduces the base weight of finished paper by more than 20% while maintaining its thickness. This has effectively reduced the use of pulp as a raw material and is another step in the direction of greener thermal paper.

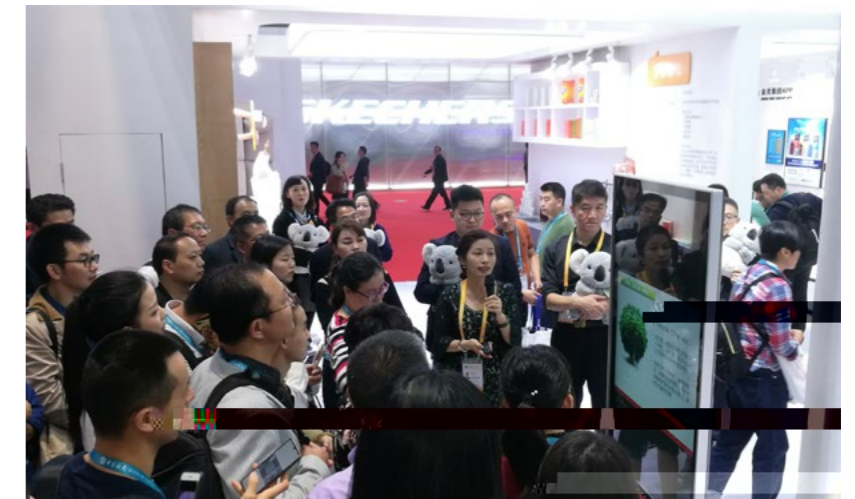


"Scientific, ecological, and legal forestry" is the fundamental forest management approach that APP China adopts. On the basis of the *APP Forest Conservation Policy*, APP China Forestry has drawn up a series of forestry policies to further optimize management in this regard and ensure that its forest management is both socially and environmentally friendly. They include the *Sustainable Management Policy*, the *Society and Labor Policy*, the *Environmental Policy*, etc. APP China Forestry fully implements its forestry policies based on the ISO 14001 Environmental Management Systems. It works with third-party professional organizations to perform environmental monitoring and evaluation on a regular basis and makes timely improvements based on the results; it takes measures to actively prevent safety risks like fires and illegal logging. APP China Forestry also conducts regular internal and external audits in line with forest certification requirements and organizes sustainability training for employees to continuously improve its sustainable forestry management.



APP China has built a modern seedling nursery and R&D center dedicated to the cultivation and planting of seedling strains. The company constantly improves its capabilities of innovative R&D in areas like the fostering of new seedling strains and industrial development and innovation. It also actively participates in industry dialogues on development to continuously contribute to the progress and development of the eucalyptus industry.

Based on samples from the Guangxi Gene Bank, the R&D team developed the RD-5, a new eucalyptus strain, which has been successfully bred after years of experimental planting. A hybrid between DH33-27 and the fine leaf eucalyptus T12, RD-5 has such fine properties as wind resistance, scorch resistance, fast growth, and high yield. It has been brought to forest areas in Hainan, Guangdong, and Guangxi, with 100,000 planted in 2019. We have also introduced new strains such as Lei-11 and Lei-40 from the Leizhou Forestry Bureau, which are wind-resistant, fast-growing, and high-yielding, with around 2,700 planted in Fangcheng in 2019. Additionally, we have introduced U7



A lecture on eucalyptus science and sustainable forestry development at the CIIE ▲

from the Leizhou Forestry Bureau, which is a high-yielding and upright strain, and had 95,300 of them planted in 2019.

In 2019, APP China Forestry hosted and participated in a number of industry exchanges and seminars. For instance, it initiated a conference and lecture on eucalyptus science and sustainable forestry development at the 2nd CIIE; it

attended industry conferences such as the National Eucalyptus Alliance Conference and the National Eucalyptus Industry Development and Academic Seminar, engaging in discussions with industry experts on the research directions of strains, among many other topics.



In 2019, Hainan Jinhua Forestry was included in the first batch of China Forestry and Grassland Industry Innovation Bases – "Raw Material Forest Base for Integration of Plantation-Pulp-Paper", the first such base in China. The selection was

organized by China Forestry Industry Association to highlight companies in the forestry and grassland industry with an outstanding performance in innovation, innovation bases, innovation personnel, and brand trustworthiness in 2019.

APP China Forestry carries out CFCC/PEFC-FM certification every year and continues to use the audits and evaluations to inform better management, thus laying a solid foundation for realizing sustainable forestry.

In 2019, a third-party forest certification agency undertook the annual CFCC/PEFC-FM audit on APP China Forestry's business units (BU) in Guangxi, Guangdong, and Hainan and a renewal audit on Lancang and Wenshan forest areas in Yunnan. In accordance with the *Forest Certification in China – Forest Management (GB/T28951-2012)*, Chinese laws and regulations, international conventions, and company rules and regulations, the audit team conducted a strict document audit and site audit from the environmental, social, and economic perspectives respectively. During the site audit, the audit team looked at a range of issues based on scientific sampling such as the forestry management procedures of different companies and forestry farms, as

well as the seedling cultivation at nurseries, material warehousing management, and chemical control. All of the 12 forestry companies passed the audit. Regarding the minor nonconformities found during the

audit or items under observation, relevant forestry farms have been required by the audit team to complete rectification within a particular time limit and continue to follow up.



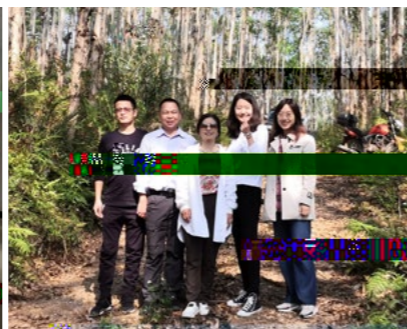
CFCC/PEFC-FM certification audit ▲

Forest carbon sequestration refers to the process by which forest plants absorb carbon dioxide from the atmosphere and fixate it in vegetation or soil, thereby effectively reducing the concentration of carbon dioxide in the atmosphere. It is pointed out in the *Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC)* that forestry is related to both climate change mitigation and adaptation and that increasing forestry carbon sequestration is an important and economically viable measure for reducing carbon emissions. It can be predicted that forestry carbon sink trading will become an important part of the future domestic carbon trading market.

As a pioneer of "Integration of Plantation-Pulp-Paper", APP manages more than 27 million mu of plantations in Indonesia

and China. These trees have played an important role in carbon sequestration. In 2019, we invited climate change experts to provide training on carbon trading, carbon accounting, and carbon sinks for all APP China Forestry business units. The training featured a systematic introduction

to climate change trends, national climate change policies, development of domestic and foreign carbon markets, methods of carbon sink calculation, etc. It has laid the foundation for the company's future work in forestry carbon sink calculation and implementation of carbon-neutral projects.



APP China Forestry sustainability seminar and carbon sink training and field inspection ▲

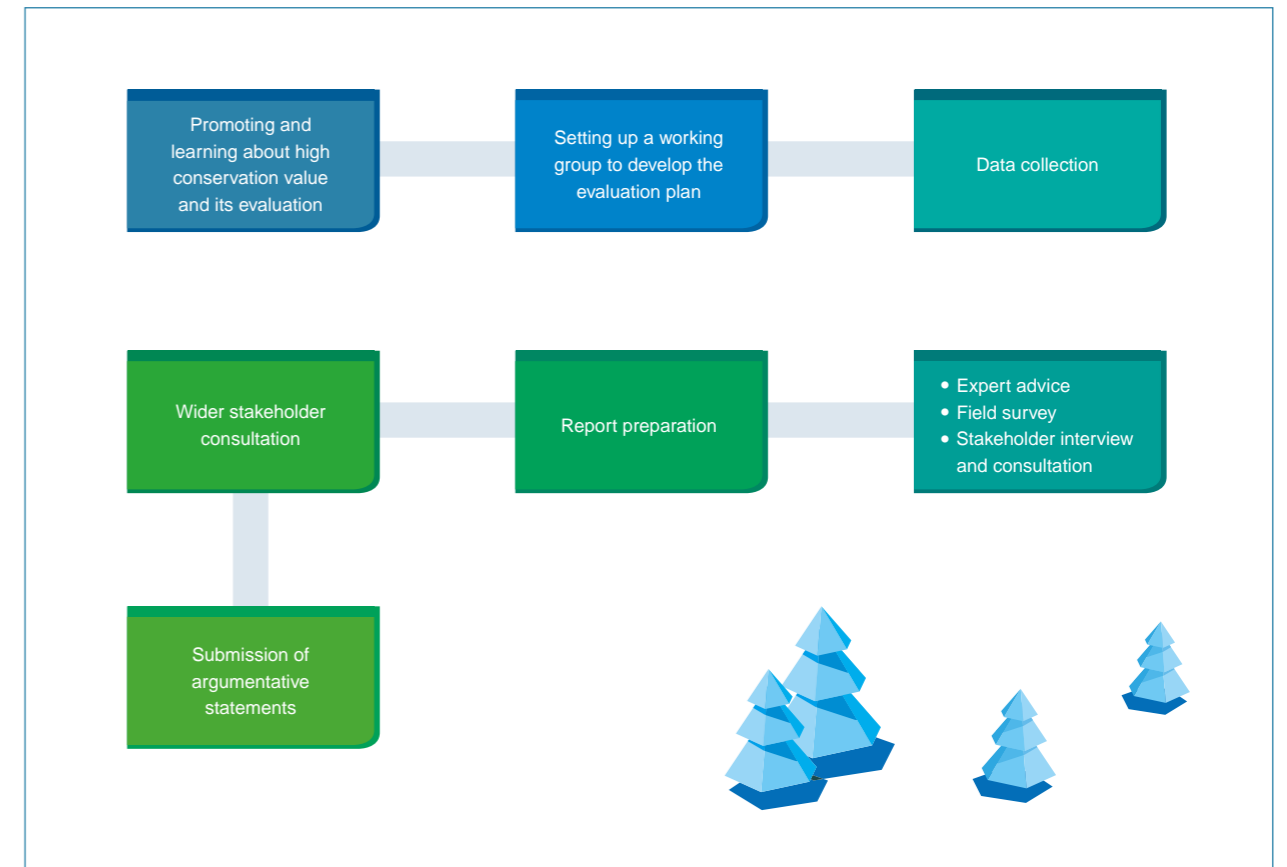
High Conservation Value (HCV) forests refer to forest areas with one or more particular attributes regarding the six areas of biodiversity, landscape-level ecosystems and ecosystem mosaics, ecosystems and habitats, basic ecosystem services, necessities of local communities, and cultural significance. Responsible forest managers need to determine the HCVs of the forests they manage, monitor the effectiveness of management, and make corresponding behavioral improvements so that those values are better conserved.

We pledge to protect and properly manage the HCVs within our business scope and also help our employees understand those values in depth by means of brochures,

training sessions, etc. so that we can fully operationalize our protection efforts. APP China forest areas have devised the *High Conservation Value Management Measures* and the *High Conservation Value Forests and Determination and Protection of Traditional Rights* and set up the HCV working group. We determine, evaluate, and protect the HCVs of forestlands through data collection and analysis, forest field surveys, stakeholder engagement, and other approaches.

As of the end of 2019, 54% of our plantations had completed HCV assessment. APP China Forestry will continue to pay attention to the environmental changes of forestlands and

surrounding areas. Once potential HCV attributes are detected, we will conduct evaluation and confirmation in accordance with the HCV determination criteria and follow up with appropriate conservation measures.



General process for determining high conservation value ▲

Attention to and protection of biodiversity remains the focus of APP China during forestland management. APP China Forestry has drawn up a series of management measures, including the *Buffer Zone Management Measures*, the *Guidelines for Eco-Friendly Operations*, the *Provisions on Wildlife Protection*, etc., to guide the recording, monitoring, and protection of wild animals and plants during forestry activities. Consistent with relevant national lists and protection requirements of rare, threatened, and endangered species, the forest areas have compiled albums and wallcharts of wild animals and plants that need to be protected so that foresters can learn about and recognize them. Each small class at the forestry farms undertakes a biodiversity survey at least once a year, where they locate animals and plants by using GPS, take photos to keep records, and summarize and analyze the survey and monitoring data. All of those contribute to the establishment of a biodiversity database that enables a closer tracking of those animals and plants. During the 2019 biodiversity survey, the protected plant *Alsophila spinulosa* was discovered in both our Hainan BU and Lancang Sub-BU. The survey team has marked and recorded the protected plants and will continue to monitor them in the future.



The protected plant *Alsophila spinulosa* in Wusha Forestry Farm of Hainan BU ▲

APP China Forestry has long been working with Guangxi University and the Research Institute of Tropical Forestry, Chinese Academy of Forestry to carry out scientific research such as ecological monitoring and has continuously undertaken environmental monitoring of the eucalyptus plantations it manages. In 2019, APP China Forestry conducted self-audit and evaluation and developed an environmental impact assessment report, summarizing its past work in environmental

management while offering suggestions for future improvements. The assessment mainly looked at impacts in areas like soil erosion, soil quality, and biodiversity and showed that the eucalyptus plantations had certain positive ecological effects. While lower than that of philanthropic forests, their ecological benefits are still greater than that of rubber forests and mango forests. The plantations have also created ample employment opportunities, bringing significant social benefits.

Forest fires not only severely damage the ecosystem but also cause great loss of life and property for human society. Preventing forest fires is a top priority of APP China Forestry's work in forest resources management and protection. The company has established a forest fire prevention command, delineated forest fire risk zones, and formed a fire prevention squad. It has also built an artificial patrol monitoring network, information monitoring network, and prediction and forecasting system. Those systems, in conjunction with local forest fire prevention command and meteorological department, has enabled forest fire monitoring and forecasting in key fire prevention areas using satellite monitoring and other high-tech means. During high-risk fire seasons, the company implements a 24-hour duty system and a daily reporting system to keep abreast of changes in forest fire risks and take prompt control.

Employees in the forest areas assume the important responsibility of guarding the safety of the forests. In order to enhance the employees' awareness of fire safety and equip them with better fire-fighting skills and emergency response abilities, APP China Forestry organizes multiple fire drills and competitions every year to ensure timely and effective response in the event of a fire. It has also hired a large

number of local residents as forest rangers, helping reduce unemployment among local farmers. The rangers and APP employees would go to villages near the forestry farms and educate local people on fire prevention in ways like home visits, radio broadcasts, and banners, to make them better informed and effectively prevent and control fires.



Another major risk area in forest management is illegal logging. APP China has set up a security team in each forest area and works to prevent illegal logging, illegal settlement, and deforestation through continuously strengthened daily patrols. In addition, each forest area actively works with local police to combat illegal activities together and build a strong "protective wall" for the forests.

Putting up publicity banners ▲

Distribution of publicity bags on forest protection and fire prevention ▲

In 2019, we created the APP-SHE Case Study Repository based on the APP Corporate University Online Learning Management Platform. SHE accidents that had happened over the years were collected by the respective mills and uploaded to the online platform, available to all users. The mills would organize case study sessions regularly to draw lessons from past accidents and keep them from happening again.

We provide safety and health training for all employees and contractors, which covers contents like work safety knowledge, firefighting knowledge, and first-aid knowledge and skills; we invite health professionals to give lectures on the prevention of occupational diseases; we organize various safety drills and knowledge competitions to improve our employees' safety skills and awareness. In 2019, APP China mills conducted 267

safety drills in total. Guangxi Jingui Pulp & Paper held more than 200 training sessions on topics such as safety hazard removal, safe use of machinery, and general knowledge of workshop environment safety, involving 13,519 person-times of participants.



APP China incorporates sustainability throughout the procurement decision-making and management processes. It gives full consideration to the social and environmental criteria when evaluating and selecting suppliers and continuously pushes for improvements in the suppliers' performance in fulfilling their responsibilities.

In January 2019, we officially launched our Supplier Management Platform. It has brought online processes like supplier registration, certification, and due diligence and risk assessment and is another step forward in the construction of an integrated procurement control system that is efficient, transparent, compliant, and consistent.

In terms of supplier risk assessment and approval, we audit the suppliers' business qualifications and assess their financial risks while also requiring related information in areas like technology and quality management as well as health, safety, and environmental protection. Based on the suppliers' overall performance in those aspects, we form a risk assessment. We have added social responsibility related clauses to the contract and sign a *CSR Statement and Commitment Form* with our suppliers. This requires them to make commitments in respect of compliance with business ethics, respect for human rights, environment protection, positive impact on the community, etc. Meanwhile, we have created a supplier blacklist system to urge our suppliers to continuously improve their management and practices in fulfilling their responsibilities.

We have established a due diligence mechanism for timber source legitimacy, implementing a series of procedures and measures such as information collection, risk assessment, and risk mitigation to ensure the compliance and traceability of the sources of our raw materials. In addition, when entering into contracts with our suppliers, we require an undertaking from them that the raw materials they provide are free from disputed sources. In 2019, we increased the proportion of internationally certified wood pulp procured to 19.8%.

As regards raw material acceptance, we have laid out strict criteria in accordance with national and industry standards and the company's product quality requirements. For nonconforming products, we would promptly report back to suppliers and urge revisions. Hainan Gold Hongye has developed criteria for the acceptance and fining of raw materials. It also holds meetings with the suppliers from time to time, working together to continuously improve the quality of the raw materials. Gold East Paper regularly updates its raw material acceptance criteria and has created a blind sample system, a duty separation system, and a job rotation system to ensure the fairness and prudence of raw material inspection.



In 2019, Ningbo Asia and Ningbo Zhonghua organized five successive training sessions to include all of their employees. The training offered a systematic introduction to safety management knowledge and safety concepts and explained the company's reward and punishment system for production safety; the company's own safety accidents were cited for case study, which involved an in-depth analysis of their causes to help improve the employees' safety awareness and ability to avoid accidents. The training also included an examination, which could assess its effectiveness while further deepening the employees' awareness of safe production.

Safety training examination ▲



Guangxi Jingui Pulp & Paper requires newly recruited contractors to take the safety training organized by the Industrial Safety Division and pass the examination before they can start working. The training covers many aspects such as national laws and regulations, company safety regulations, traffic safety, safe operations, and accident case study. The Industrial Safety Division carries out safety training for contractors every month in batches and covers all of them within the year. The company also requires the contractors to give internal all-staff safety training at least once a month to ensure timely information and communication on issues like safety regulations, accidents, and safety inspection results.

Monthly contractor safety meeting ▲







APP China goes all out to build a service system centered on customer needs. We have established diversified channels for customer communication and carried out a variety of customer engagement activities to fully understand customer needs and continuously improve the quality of our products and services based on such interactions.

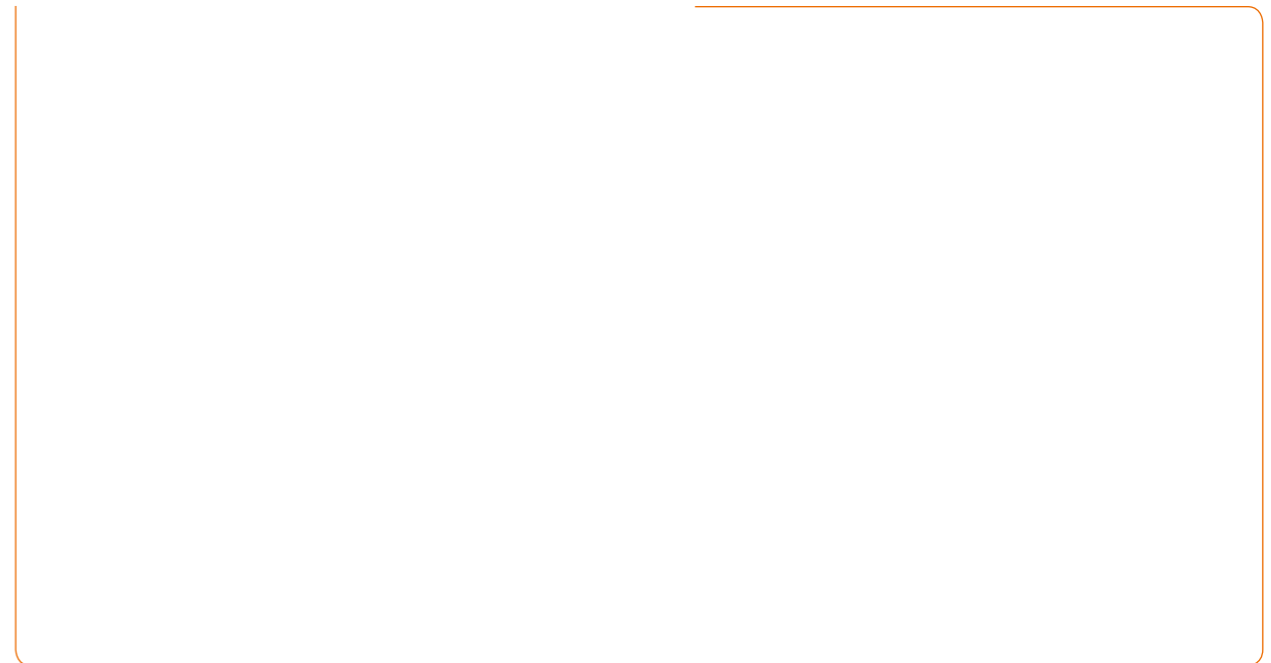
2019 saw our "All-Hands Marketing" strategy in full swing. Under this model, R&D, production, finance, administration, logistics, and other departments all adopt customer-centricity into their work, thereby forming a complete chain of value creation for the customers. "All-Hands Marketing" has given our non-sales employees more opportunities to get into contact with the market, which has made them more perceptive of customer needs.



All-Hands Marketing is not just marketing by all employees. More importantly, it is for all employees to be committed to their own duties with an ownership spirit and be guided by the purpose of "creating a community of shared life with customers" so as to create more value for our customers.

We launched the "Little A Classroom" in 2018, which is a customer interaction program. The program includes features like information sharing, product introduction, technical communication, strategic thinking, and more. Over a year into its launch, the classroom has become a platform for the company to communicate with the customers at zero distance regarding cultural paper and industrial paper. In 2019, we brought the "Little A Classroom" to provinces like Guangxi, Jiangsu, Guangdong, and Hunan, where we engaged our customers in discussions on topics such as trends in the paper and packaging industries, product development, customer complaint risk and management, and printing technologies. As of the end of

"Little A Classroom" lecturing ▲





The collective efforts of all the employees are central to a company's growth. APP China strictly abides by the Labor Law of the People's Republic of China, the Labor Contract Law of the People's Republic of China, the Provisions on Collective Contracts, and other national laws and regulations to ensure employees' lawful rights are well protected. We ensure equal pay for equal work and respect our employees' right to freedom of association and collective bargaining. We prohibit the use of child and forced labor and create a diverse, equal, safe, and healthy working environment for our employees.

We regard talents as the cornerstone of company development and help our employees realize their full value by building a well-structured career development system and providing a wealth of training resources. We make our employees feel delighted at work by fostering open and frank communication, listening to their concerns and caring for their physical and mental wellbeing.

APP China has built a systematic and scientific staff training system and designed training courses that suit the growth needs of employees of different posts. Those courses are designed to train employees in a variety of areas like corporate culture, professional knowledge, management skills, and comprehensive competencies. We continue to enrich our courses to equip our employees with well-rounded capabilities needed to grow and advance their careers.

APP's first global learning resource sharing platform – APP Online Learning Management System (LMS) – was officially launched in March 2019. Incorporating the four features of online learning, training

management, global exchange, and cultural inheritance, the platform hosts over 500 courses under eight major learning sections on subjects such as management, professional skills, corporate culture, and the Management by Olympic System (MBOS) feature. This allows the employees to study quality training courses anytime and anywhere.

Meanwhile, we continue to deepen offline training to give employees of different positions and levels access to quality training resources. In 2019, the president of APP Corporate University and a number of experts from the field of organization and management provided the company's

executives and some top-performing employees with leadership training under such themes as "High-Performance Work" and "Coaching Leadership". For frontline technicians, we provided a series of training on professional knowledge and skills to help them better adapt to their positions. We also invited senior trainers from outside the company to give in-depth training on teaching skills to employee candidates for internal trainers. While supporting the construction of the company's internal knowledge transfer system, we also give employees more room for independent development.



The 7 Habits of Highly Effective People training ▲



Coaching Leadership Workshop ▲

In 2019, Suzhou Gold Hongye carried out diversified training for different departments. The company entered middle and senior executives in general management courses on the LMS online platform, which covered contents in team management, efficient negotiation, time management, stress management, emotional intelligence management, and so on. For HR supervisors of the production and marketing departments, the company offered a training session on Change Management and guided the participants to have discussions about challenging work problems and work out the solutions. The company also held a leadership training camp for production supervisors to further enhance their leadership and teamwork skills.



Group discussion at the leadership training camp for production supervisors ▲

From October to November 2019, Hainan Gold Hongye held the second Instrument and Electrical Class Training Camp and the third Mechanical Class Training Camp. Designed to improve the comprehensive competencies of frontline employees, the training camp courses covered not only professional theoretical knowledge but also modules such as paper machine process flow, work-related injury case study, and basic management and leadership. There was also a written test on theoretical knowledge and a hands-on competition. Such an arrangement prompted the participants to combine theory with practice and apply what they had learned to real work scenarios, thereby stimulating their enthusiasm at work.



Skill competition of Mechanical Class Training Camp ▲

APP China has been implementing the technical competency model for production positions for five consecutive years, covering various professional positions such as pulp production, paper production, energy, environment, safety, quality assurance, and maintenance. The mills have effectively enhanced the employees' professional skills through systematic training and assessment of position-specific technical competencies. In 2019, a total of 608 supervisors participated in the technical competency certification for production management positions, showing notable progress in the assessment results compared with previous years.



2019 Technical Competency Certification for Production Management Positions ▲

APP China respects and safeguards the legitimate rights and interests of its employees, listens to their opinions and voices through multiple channels, and responds to their needs in a timely manner. The company treats employees with consideration and works to foster a stronger work-life balance among its employees.

In 2019, following the example set by the Economic Commission in China, the APP China Headquarters communication team launched the "C-time" communication initiative under the leadership of the Group Culture Development division. Taking such leisurely forms as afternoon tea, tea party, and coffee time, the initiative was designed to be a bridge between company management and frontline employees, where they spent time together and the employees voiced their needs, problems, and concerns. As of the end of 2019, the Economic Commission in China and the APP China Headquarters communication team had organized "C-time" on a number of occasions for the three major sales teams of industrial paper, cultural paper, and tissues. A total of 93 sales problems were solved during those sessions, and they made the frontline employees truly feel supported and valued by the Group.



C-time special communication meeting for industrial paper sales team ▲

C-time = Culture time
C-time = Communication time
C-time = Coffee time



In April 2019, the first C-time communication meeting was held in Ningbo Asia. The APP China Economic Commission led the headquarters communication team to have a face-to-face exchange with the employee representatives. Their conversation was heated and all-encompassing, covering everything from the many details, operating procedures, and systems concerning finance, credit, and logistics to human resources issues like team building, talent development, and incentive systems, and to more micro problems like transparency of the Group's various rules and regulations and the company's future strategic planning. This not only provided support for frontline work but also drove the headquarters to think more about the future direction of its overall management improvements.



Living the Group's MBOS spirit of "emulating, learning from, catching up with, helping, and surpassing each other", APP China mills organize a variety of activities like indicator competitions, improvement activities, and exchange and sharing sessions to stimulate in-depth employee participation in the company's development. In 2019, Hainan Gold Hongye and Hainan Gold Shengpu received 2,984 improvement proposals from employees, with 11 outstanding proposals finally selected to enter the proposal competition. The company management selected the excellent proposals based on a comprehensive consideration of the content, overall benefits, and presentation and offered rewards to departments for active contribution of proposals, which gave a strong boost to the employees' enthusiasm for making suggestions.

We care about our employees' physical and mental wellbeing and the happiness of their families. We organize a series of activities such as team building, mass birthday parties, sports competitions, and employee family days to make our employees and their families feel the care from the company.



In 2019, Guangxi Jingui Pulp & Paper carried out a wealth of activities to show care to its employees and their families. On the Women's Day, the company planned 12 programs, such as giving exquisite gifts and group outings, to provide diverse welfare options for the female employees to thank them for their contributions to the company. On the Employee Family Open Day, the company invited the employees' families to the mill to experience the environment firsthand and learn about the history of papermaking. Children could operate a DIY paper machine and experience for themselves the papermaking process. At the Mid-Autumn Festival garden party, the employees tasted specialties such as noodles, snacks, and mooncakes and played a number of entertainment games like "darts", "rings", and "karaoke".



Employees and children experiencing the papermaking process together ▲



In 2019, Hainan Jinhai Pulp & Paper, Hainan Gold Hongye, and Hainan Gold Shengpu invited employees to visit the mills with their families. They were enlightened on the establishment and development of APP China and its mills in Hainan, the pulp and paper production processes, and the outstanding achievements in environmental protection. The tour at the Hainan Jinhai Pulp & Paper Cultural Paper Production Workshop gave them a more intuitive experience of the papermaking equipment and processes. This event was very well received and made our employees even prouder of their jobs.



Family members of employees listening to the introduction to pulp and paper products ▲



Caring for the growth of young people and helping children see and enter a wider world is one of the founding purposes of the Foundation. Since 2016, the Foundation has been organizing the Yicong Capacity Building Summer Camp every year for high school students in remote areas to undertake course training and capacity building. It aims to encourage high school students in remote areas to pursue their future dreams by building their capacity outside of the school curriculum.

Students participating in the summer camp are all recipients of various high school scholarships and grants from the Foundation and mainly come from Guangxi, Gansu and Fujian provinces. For many of them, the camp is the opportunity to leave their hometowns for the first time and get a brand-new learning experience. In two to three weeks' time, the students can study through a rich selection of subjects, participate in visits and

exchanges, communicate with each other, and share their experiences and findings.

In 2019, 22 students participated in the fourth summer camp themed "Technology and Innovation". In the course, the students tried programming for the first time and experienced firsthand the creation of mini-games and mini-programs; they completed the town renovation challenge under the guidance of instructors from the Makers' Workshop, honing their own ability to identify and solve problems; they appreciated the beauty of traditional art during cultural exchanges; and they practiced their oral communication skills in English classes.

For the originality of its operational mode and impacts it creates, the Yicong Summer Camp was listed in the 2019 "China CSR Best Case Collection" initiated by the China Philanthropy Times. In the future, the summer camp will continue to optimize

its courses and activities and provide more outstanding high school students in remote areas with opportunities to participate and prepare them for a broader and more exciting life.

"After returning from the Yicong Summer Camp, I feel more natural and confident when expressing my opinions or suggestions in front of my peers. When I stand on the podium facing my teachers and classmates, I feel less frightened and worried than before. I am now more courageous and optimistic. This is all thanks to the great learning experience at the camp."

Student from Guangxi

APP China mills have long been actively involved in philanthropic undertakings in education and poverty alleviation through monetary and in-kind donations, event support, and volunteer services. In 2019, Hainan Jinhai Pulp & Paper, Ningbo Asia,

Guangxi Jingui Pulp & Paper, Gold East Paper, among others, carried out a number of educational philanthropic activities, such as scholarships and grants, funds for preschool education, donations of school supplies and teaching equipment, and

sponsorship of schools' cultural and sports activities, cooperation with universities to support students' social practice, and customized practical courses for children in the community.



Guangxi Jingui Pulp & Paper donating computers to primary schools in impoverished areas



Ningbo Asia and Ningbo Zhonghua Summer Practice class for community children



Students visiting the Shanghai Sinar Mas Plaza

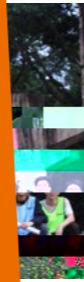


Summer Camp Makers' Workshop

Suzhou Gold Hongye and the Suzhou Charity Federation signed an agreement in September 2019 to donate RMB500,000 worth of tissues to the "Swap Campus Waste Paper for Toilet Paper" project. The goal was to improve the public health on campus and combine philanthropic and environmental protection with education. Suzhou Gold Hongye has been carrying out the "Forever Love with Papers" charitable activity for many years, donating tissues to many primary and middle schools and undertaking educational campaigns under the theme of "Using Paper Scientifically".



Donation ceremony of "Swap Campus Waste Paper for Toilet Paper" project



Class ▲

In 2019, Guangxi Jingui Pulp & Paper took an active part in the Qinzhou Environmental Protection and Energy Conservation Publicity Week & Opening of Environmental Protection Facilities to the Public event. It organized Qinzhou citizens and primary school teachers and students to visit the mill. The employee volunteers recounted in detail the company's pulping and papermaking processes, environmental protection measures, and sustainability ideas to the visitors.

At the cultural event co-hosted by the Publicity Department of Qinzhou Municipal Committee, the Qinzhou Municipal Bureau of Ecological Environment, and other units, Guangxi Jingui Pulp & Paper gave a performance in the language category named "Environmental Protection in Three and a Half Sentences". Through

Students visiting Guangxi Jingui Pulp & Paper Mill ▲

APP China seeks actively to build harmonious and friendly community relations. Our mills are regularly open to community residents so that people have more opportunities to learn about them firsthand. We carry out activities on important occasions to build a closer rapport with the community. For example,



Volunteers teaching firefighters how to make rice dumplings ▲

Drawing on an array of internal information collection, communication, and interviews, we have identified ten key stakeholder groups. Each of our functional departments engages directly and maintains close contact with a range of stakeholder groups






through multiple channels. They manage to respond promptly to stakeholder expectations and concerns and continuously improve their management and practices in this process.

In 2019, we participated in a number of exchange activities, such as the Second CIIE, China Paper Industry Sustainability Forum, China Printing Industry Innovation Conference, and International Paper Technical Conference. We engaged in in-

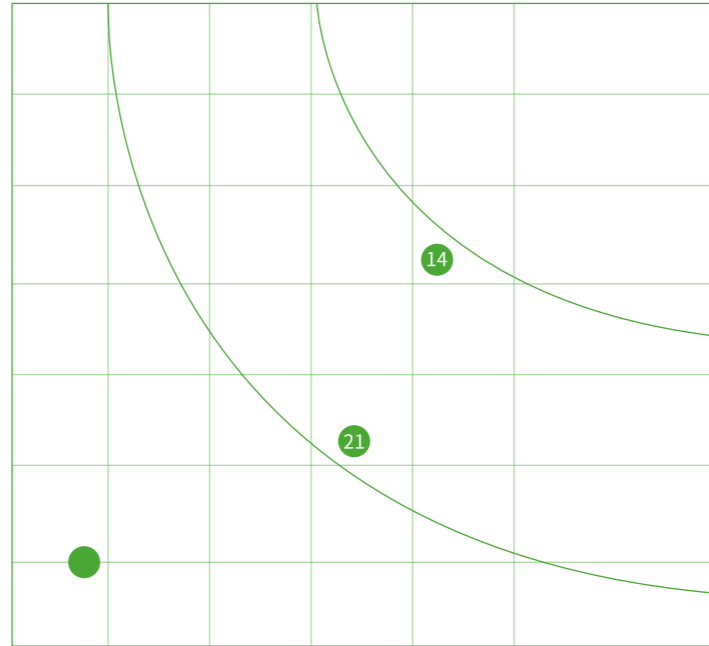
depth discussions with governments and regulatory agencies, industry experts and scholars, customers, and partners on a range of topics including the R&D and innovation of environmentally friendly products, the integrated development

of papermaking and printing, and the sustainable development of the industry.

	<ul style="list-style-type: none"> - Occupational health and safety - Employment - Economic performance - Business ethics - Human rights 	<ul style="list-style-type: none"> - Company intranet, internal magazine - Employee representative meetings - Employee communication meetings - Executive mailbox - MBOS Conference/Contest - APP Online Learning Management System - Family opening day, book club, etc. - Sustainability reports - WeChat Official Account
	<ul style="list-style-type: none"> - Business ethics - Product quality and safety - Sustainable forest management - Human rights - Occupational health and safety 	<ul style="list-style-type: none"> - Customer visits, store visits - Engagement meetings/activities - Industry conferences/events - Customer satisfaction surveys - Customer service hotline/mail - Company website - Sustainability reports - WeChat Official Account
	<ul style="list-style-type: none"> - Business ethics - Human rights - Customer service quality - Responsible supply chain - Environmental compliance - Air pollutant emissions 	<ul style="list-style-type: none"> - Supplier/Contractor meetings - Cooperative R&D mechanism - Supplier/Contractor training - Regular supervision and inspection - Email, phone, and other daily communication channels - Sustainability reports
	<ul style="list-style-type: none"> - Business ethics - Air pollutant emissions - Economic performance - Occupational health and safety - Employment - Sustainable forest management 	<ul style="list-style-type: none"> - Daily communication meetings - Cooperative agreement - Sustainability reports - Company website
	<ul style="list-style-type: none"> - Sustainable forest management - Biodiversity - Air pollutant emissions - Waste management - Water management - Energy conservation and emission reduction 	<ul style="list-style-type: none"> - Government communication meetings - Governmental inspection and supervision - Information disclosure and reporting - Regular visits - Awards and recognition - Sustainability reports - Company website

	<ul style="list-style-type: none"> - Water management - Environmental compliance - Win-win cooperation - Business ethics - Community relations and cultural popularization - Waste management - Sustainable forest management 	<ul style="list-style-type: none"> - Daily visits - Community opinion processing and feedback - Community representatives' supervision and engagement - Mill visits - Community charitable activities
	<ul style="list-style-type: none"> - Product quality and safety - Win-win cooperation - Energy conservation and emission reduction - Economic performance - Resource effectiveness 	<ul style="list-style-type: none"> - Industry communication meetings - Regular visits - Industry exhibitions and forums - Awards and recognition - Research and cooperation - Industry publications - Sustainability reports
	<ul style="list-style-type: none"> - Product quality and safety - R&D and innovation - Responsible supply chain - Environmental compliance - Water management 	<ul style="list-style-type: none"> - Cooperative R&D mechanism - Talent cultivation - Company website - Sustainability reports
	<ul style="list-style-type: none"> - Occupational health and safety - Employee training and development - Waste management - Energy conservation and emission reduction - Supporting philanthropy 	<ul style="list-style-type: none"> - Communication on specific topics - Charity projects donation and cooperation - Sustainability reports - Company website - WeChat Official Account
	<ul style="list-style-type: none"> - Resource effectiveness - Product quality and safety - Air pollutant emissions - R&D and innovation - Sustainable forest management - Energy conservation and emission reduction 	<ul style="list-style-type: none"> - Media coverage - Participation in meetings and forums - Press conferences - Company website - WeChat Official Account - Executive interviews

Drawing reference from the GRI Standards, the Global Compact Ten Principles, the latest national and industry policies, and key industry sustainability issues, we identified 22 issues closely related to the company's development. Compared to 2018, "resource effectiveness" is added to the material issues list, in response to the policy and industry trends of circular economy and "Paper for Plastic"; other than the merging of certain issues and refining the description, such as the inclusion of "responsible raw material sourcing" and "supplier social assessment" in "responsible supply chain" and the adjustment of "anti-corruption" to "business ethics", etc. No significant changes have taken place in issue boundaries. In 2019, we conducted online and offline surveys regarding the significance of the issues to stakeholders. A total of 1,554 valid questionnaires were collected. The issues have been arranged in order of materiality based on discussions with internal and external experts.



China is seeing an accelerating fusion between the real economy and digital economy and a prevailing trend for the manufacturing industry to be digitized, networked, and intelligent.

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Water resources and waste water*

		2019	2018	2017
Total water withdrawal**	Tons	125,397,098	130,935,175	118,173,907
Total waste water discharge***	Tons	88,160,320	90,097,689	84,968,795
Waste water discharge per ton of paper produced	Tons	6.37	6.79	6.35
Waste water discharge per ton of pulp produced	Tons	11.62	12.68	13.90
COD emission per ton of paper produced	Kg	0.29	0.23	0.26
COD emission per ton of pulp produced	Kg	0.63	0.94	1.99

*Not including data from APP China Headquarters and APP China Forestry.
 **98.31% came from surface water, 1.69% from third-party facilities.
 ***In 2019, there were zero incidents of major water body pollution at APP China.

Water reuse

	2019	2018	2017
Gold East Paper	573,048,504	567,192,412	581,093,529
Hainan Jinhai Pulp & Paper	981,208,947	1,290,127,756	1,046,378,081
Ningbo Zhonghua	135,490,647	134,936,133	135,358,599
Ningbo Asia	269,558,416	269,995,863	219,904,179
Gold Huasheng*	377,985,044	372,484,717	368,663,480
Guangxi Jingui Pulp & Paper	596,060,424	322,287,500	445,290,787
Hainan Gold Hongye	67,569,742	82,413,167	65,982,500
Hainan Gold Shengpu	61,526,999	59,984,587	56,721,070

*The data of Gold Huasheng include those of Suzhou Gold Hongye.

Air pollutant emissions*

		2019	2018	2017
Total SO ₂ emissions	Tons	697.80	1,254.11	2,622.63
Total NO _x emissions	Tons	5,362.75	5,715.42	6,883.50
Total soot emissions	Tons	429.06	502.62	

	2019	2018	2017
Gold East Paper	142.75	377.76	49.61
Hainan Jinhai Pulp & Paper**	330.84	3,093.24	194.83
Ningbo Zhonghua	21.09	237.24	35.63
Ningbo Asia	48.17	635.84	28.10
Gold Huasheng***	55.57	344.30	56.82
Guangxi Jingui Pulp & Paper	99.38	674.37	64.07

*Not including the data of APP China Headquarters and APP China Forestry.
 **The data of Hainan Jinhai Pulp & Paper include those of Hainan Gold Hongye and Hainan Gold Shengpu.
 ***The data of Gold Huasheng include those of Suzhou Gold Hongye.

Waste

		2019	2018
General waste generated	Tons	1,592,579.39	1,743,836.25
General waste disposed of	Tons	1,592,473.46	1,738,064.25
Recycling and reuse	Tons	513,583.54	179,793.10
Incineration	Tons	446,418.20	539,570.50
Selling to external parties for reuse	Tons	564,674.86	1,011,777.75
Centralized treatment by local sanitation departments	Tons	5,653.00	6,747.70
Hazardous waste generated	Tons	883.84	989.81
Hazardous waste disposed of	Tons	1,003.65	939.54

Environmental investment

Environmental investment	RMB10,000	2019	2018	2017
		87,457.18	64,083.68	82,593.16

Employment*

		2019	2018	2017
Employees directly and indirectly employed	Number	20,460	21,381	23,633
Employees directly employed	Number	18,909	19,976	21,746
Male employees directly employed	Number	14,003	14,507	15,779
Female employees directly employed	Number	4,906	5,469	5,967
Employees indirectly employed	Number	1,551	1,405	1,887
Male employees indirectly employed	Number	1,107	870	1,156
Female employees indirectly employed	Number	444	535	731
New employees	Number	1,773	1,514	2,259
New male employees	Number	1,256	1,064	1,473
New female employees	Number	517	450	822
Employee turnover	Number	2,796	3,862	3,786
Male employees who voluntarily resigned	Number	1,274	1,282	1,274
Female employees who voluntarily resigned	Number	645	626	698
Male employees who involuntarily resigned	Number	544	1,341	1,301
Female employees who involuntarily resigned	Number	265	557	460
Male employees who retired	Number	9	13	23
Female employees who retired	Number	59	43	30

*The employment data are within the reporting scope.

Environmental compliance

Environmental fines	RMB	2019	2018	2017
		90,000	1,620,000	977,400

Employee turnover rate

		2019	2018	2017
Employee turnover rate	%	12.88	16.20	15.77
Male employee turnover rate	%	11.54	15.38	15.09
Female employee turnover rate	%	16.48	18.31	17.50

Employee retention after maternity/paternity leave

		2019	2018	2017
Female employees who took maternity leave	Number	373	530	634
Female employees who returned to work after maternity leave	Number	340	479	568
Female employees who resigned after maternity leave	Number	31	44	50
Male employees who took paternity leave	Number	447	808	991
Male employees who returned to work after paternity leave	Number	425	756	943
Male employees who resigned after paternity leave	Number	20	41	31

Employee composition by level

Percentage of senior-level managers	%	1	1	1
Percentage of middle-level manager	%	10	10	9
Percentage of line-level employees	%	89	89	90

Employee composition by gender

Percentage of female employees	%	25.97	27.38	27.44
Number of female employees in management	Number	573	560	528
Percentage of female employees in management	%	26.69	25.85	24.28

Employee composition by age

Percentage of employees aged 30 and below	%	16.33	20.66
Percentage of employees aged between 31 and 50	%	79.27	75.79
Percentage of employees aged 51 and above	%	4.40	3.55

Employee training

Total training investment	RMB10,000	475.42	523.14	396.50
Total employee training time	Hours	762,701	717,135	762,557
Number of employees who participated in company-paid diploma programs	Number	35	78	96
Total investment in company-paid diploma programs for employees	RMB10,000	11.20	12.77	29.51
Average training time for senior-level managers	Hours	29.53	21.08	28.77
Average training time for middle-level managers	Hours	46.03	41.82	32.71
Average training time for line-level employees	Hours	39.79	35.43	34.39

Occupational health and safety*

Employee safety training time	Hours	333,033	294,354.45	206,759.50
Total investment in protective gears	RMB10,000	578.74	630.35	615.55
Lost hours per million working hours	Hours	854.70	830.61	1,090.55
Work-related injuries of employees**	Person-times	51	50	79
Number of work-related fatalities of employees	Number	0	1	1
Work-related injuries of contractors**	Person-times	3	—	—

*The 2019 data do not include those of APP China Forestry.
 **According to APP China's *Group Management Measures*, work-related injuries are determined based on assessments by the Labor Department.

Anti-corruption*

Number of governance agency members reached by anti-corruption policies and procedures	Number	13
Percentage of governance agency members reached by anti-corruption policies and procedures	%	100
Number of governance agency members receiving anti-corruption training	Number	13
Percentage of governance agency members receiving anti-corruption training	%	100
Number of senior-level managers receiving anti-corruption training	Number	188
Percentage of senior-level managers receiving anti-corruption training	%	100
Number of middle-level managers receiving anti-corruption training	Number	1,548
Percentage of middle-level managers receiving anti-corruption training	%	79.02
Number of line-level employees receiving anti-corruption training	Number	15,804
Percentage of line-level employees receiving anti-corruption training	%	94.28

*During supplier registration, APP China requests suppliers to sign an anti-corruption statement. The percentage of suppliers that APP China's anti-corruption policies have been communicated to is 100%.



Independent Verification Statement

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch (hereinafter referred to as "TÜV SÜD") has been engaged by Sinar Mas Paper (China) Investment Co., Ltd. (hereinafter referred to as "APP China" or "the Company") to perform an independent third-party verification on APP China Sustainability Report 2019 (hereinafter referred to as "the Report"). During this verification, TÜV SÜD's verification team strictly abided by the contract signed with APP China and provided verification regarding the Report in accordance with the provisions agreed by both parties and within the authorized scope stipulated in the contract.

This Independent Verification Statement is based on the data and information collected by APP China and provided to TÜV SÜD. The scope of verification is limited to the said information. APP China shall be held accountable for authenticity and completeness of the provided data and information.

Scope of Verification

Time frame of this verification:

- The Report contains the data disclosed by APP China during the reporting period from January 1st, 2019 to December 31st, 2019, including economic, environmental and social information and data, methods for management of substantial issues, actions/measures and the Company's sustainable development performance during the reporting period.

Physical boundary of this verification:

- Except for Zhonghua Pulp & Paper Co., Ltd., the subject and address of the on-site verification are the same with those specified in the report.

The following information and data are beyond the scope of this verification:

- Any information and contents beyond the reporting period of this Report; and
- The financial data and information disclosed in this Report that have been audited by an independent third party are not verified again herein.

Limitations

- This verification was performed at aforementioned sites, and no other branch or subsidiary was visited during the aforesaid verification; and
- The Company's standpoint, opinions, forward-looking statements and predictive information as well as the historical data and information before January 1st, 2019 are beyond the scope of this verification.

Basis for the Verification

This verification process was conducted by TÜV SÜD's expert team who are highly experienced in the corporate social responsibility, economic, social, environmental and other relevant issues and this team drew the conclusions thereof. The verification referred to the following standards:

- Global Reporting Initiative: *Sustainability Reporting Standards (GRI Standards) (2018)*
- TÜV SÜD *Procedure of Verification on Sustainability Report*

In order to perform adequate verification in accordance with the contract and provide reasonable verification for the conclusions, the verification team conducted the following activities:

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- Preliminary investigation of the relevant information before the verification;
- Confirmation of the presence of the highly substantial issues and performance in the Report;
- On-the-spot review of all supporting documents, data and other information provided APP China; tracing and verification of key performance information;
- Interviews were carried out with the management of APP China, and with the employees who are engaged in collecting, organizing and reporting the disclosed information; and
- Other procedures deemed necessary by the verification team.

Verification Conclusions

Based on the verification, we believe that the reports prepared by APP China are reliable, consistent and substantive; the information disclosure is made in an objective, truthful, complete and clear manner, without systematic or material issues. this Report can be used by the stakeholders of APP China.

General Disclosures			
Organizational Profile			
102-1 Name of the organization	4; 82		√
102-2 Activities, brands, products, and services	4		√
102-3 Location of the headquarter	5; back cover		√
102-4 Location of operations	4-5		√
102-5 Ownership and legal form	4		√
102-6 Markets served	4		√
102-7 Scale of the organization	4-5; 19		√
102-8 Information on employees and other workers	73-74		√
102-9 Supply chain	49; 71		√
102-10 Significant changes to the organization and its supply chain	4-5; 82; no significant changes		√
102-11 Precautionary principle or approach	11; 64		√
102-12 External initiatives	11; 65		√
102-13 Membership of associations	6-7		√
Strategy			
102-14 Statement from senior decision-maker	2-3		√
102-15 Key impacts, risks, and opportunities	2-3; 10-11; 68; 70		√
Ethics and Integrity			
102-16 Values, principles, standards, and norms of behavior	64		√
102-17 Mechanisms for advice and concerns about ethics	64		√
Governance			
102-18 Governance structure	5		√
Stakeholder Engagement			
102-40 List of stakeholder groups	66-67		√
102-41 Collective bargaining agreements	54		√
102-42 Identifying and selecting stakeholders	66-67		√
102-43 Approach to stakeholder engagement	66-67; 68		√
102-44 Key topics and concerns raised	66-67; 68-69		√
Reporting Practice			
102-45 Entities included in the consolidated financial statements	82		√
102-46 Defining report content and topic boundaries	69; 82		√
102-47 List of material topics	68		√
102-48 Restatements of information	71		√
102-49 Changes in reporting	No significant changes		√
102-50 Reporting period	82		√
102-51 Date of most recent report	82		√
102-52 Reporting cycle	82		√
102-53 Contact point for questions regarding the report	82		√
102-54 Claims of reporting in accordance with the GRI Standards	82		√
102-55 GRI content index	78-80		√
102-56 External assurance	75-77		√
Materiality Issues			
Economic Performance			
GRI 103: Management approach 2016	4-5; 16		√
GRI 201: Economic performance 2016	201-1 Direct economic value generated and distributed	4; 71	√
Indirect Economic Impacts			
GRI 103: Management approach 2016	10-11; 12-15; 16; 18; 58-61; 71		√
GRI 203: Indirect economic impacts 2016	203-2 Significant indirect economic impacts	19-20; 28-30; 68; 70-71	√
Procurement Practices			
GRI 103: Management approach 2016	49		√
GRI 204: Procurement practices 2016	204-1 Proportion of spending on local suppliers	71	√

Materiality Issues			
Anti-Corruption			
GRI 103: Management approach 2016		64	√
GRI 205: Anti-corruption 2016	205-2 Communication and training about anti-corruption policies and procedures	64; 74	√
Materials			
GRI 103: Management approach 2016		21-27; 49	√
GRI 301: Materials 2016	301-1 Materials used by weight or volume	71	√
	301-2 Recycled input materials used	71	√
Energy			
GRI 103: Management approach 2016		23-24; 26-27	√
GRI 302: Energy 2016	302-1 Energy consumption within the organization	71	√
	302-2 Energy consumption outside of the organization	71	√
	302-4 Reduction of energy consumption	26; 71	√
Water and Effluents			
GRI 103: Management approach 2016		23-25	√
GRI 303: Water and Effluents 2016	303-1 Interactions with water as a shared resource	24-25	√
	303-2 Management of water discharge-related impacts	24-25	√
	303-3 Water withdrawal	72	√
	303-4 Water discharge	24; 72	√
	303-5 Water consumption	24; 72	√
Biodiversity			
GRI 103: Management approach 2016		40; 43-44	√
GRI 304: Biodiversity 2016	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	43-44	√
	304-2 Significant impacts of activities, products, and services on biodiversity	43-44	√
Emissions			
GRI 103: Management approach 2016		23-24; 27	√
GRI 305: Emissions 2016	305-7 Nitrogen oxides (NO _x), sulfur oxides (SO _x), and other significant air emissions	27; 72	√
Effluents and Waste			
GRI 103: Management approach 2016		22-24	√
GRI 306: Effluents and waste 2016	306-1 Water discharge by quality and destination	24; 72	√
	306-2 Waste by type and disposal method	22; 73	√
	306-3 Significant spills	None	√

Materiality Issues		
Occupational Health and Safety		
GRI 103: Management approach 2016		46-48 ✓
GRI 403: Occupational health and safety 2018	403-1 Occupational health and safety management system	46 ✓
	403-2 Hazard identification, risk assessment, and incident investigation	47 ✓
	403-3 Occupational health services	13; 47 ✓
	403-4 Worker participation, consultation, and communication on occupational health and safety	47 ✓
	403-5 Worker training on occupational health and safety	48; 74 ✓
	403-6 Promotion of worker health	47 ✓
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	48 ✓
	403-8 Workers covered by an occupational health and safety management system	65 ✓
	403-9 Work-related injuries	74 ✓
Training and Education		
GRI 103: Management approach 2016		54-55 ✓
GRI 404: Training and education 2016	404-1 Average hours of training per year per employee	74 ✓
	404-2 Programs for upgrading employee skills and transition assistance programs	54-55; 74 ✓
Diversity and Equal Opportunity		
GRI 103: Management approach 2016		54 ✓
GRI 405: Diversity and equal opportunity 2016	405-1 Diversity of governance bodies and employees	74 ✓
Non-Discrimination		
GRI 103: Management approach 2016		54 ✓
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	49; no such incidents occurred ✓
Child Labor		
GRI 103: Management approach 2016		54 ✓
GRI 408: Child labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	49 ✓
Forced or Compulsory Labor		
GRI 103: Management approach 2016		54 ✓
GRI 409: Forced or compulsory labor 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	49 ✓
Local Communities		
GRI 103: Management approach 2016		12; 35; 58-61 ✓
GRI 413: Local communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	12; 35; 58-61 ✓
	413-2 Operations with significant actual and potential negative impacts on local communities	44-45; 73 ✓
Supplier Social Assessment		
GRI 103: Management approach 2016		46; 49; 64 ✓
GRI 414: Supplier social assessment 2016	414-1 New suppliers that were screened using social criteria	49; 64 ✓
	414-2 Negative social impacts in the supply chain and actions taken	46; 49 ✓
Customer Health and Safety		
GRI 103: Management approach 2016		34-37; 52-53 ✓
GRI 416: Customer health and safety 2016	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	None ✓
Marketing and Labeling		
GRI 103: Management approach 2016		34-35 ✓
GRI 417: Marketing and labeling 2016	417-1 Requirements for product and service information and labeling	34-35; 65 ✓

Human Rights		
Principle 1	Businesses should support and respect the protection of internationally proclaimed human rights	46-49; 54; 58-61; 73-74
Principle 2	Make sure that they are not complicit in human rights abuses	46-49; 54
Labor		
Principle 3	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining	54
Principle 4	The elimination of all forms of forced and compulsory labor	49; 54
Principle 5	The effective abolition of child labor	54
Principle 6	The elimination of discrimination in respect of employment and occupation	49; 54
Environment		
Principle 7	Businesses should support a precautionary approach to environmental challenges	31-37; 42-44; 49; 71-73
Principle 8	Undertake initiatives to promote greater environmental responsibility	31-37; 42-44; 49
Principle 9	Encourage the development and diffusion of environmentally friendly technologies	31-37
Anti-Corruption		
Principle 10	Businesses should work against corruption in all its forms, including extortion and bribery	64

This is the 13th Sustainability Report issued by Sinar Mas Paper (China) Investment Co., Ltd. and the group of companies under its direct investment in China (herein referred to as APP China). The report is released in both Chinese and English. The English report is translated from the Chinese report. If there is any discrepancy between the two reports, the Chinese version shall prevail.

Reporting Boundary and Scope

The time span of this report is from January 1, 2019 to December 31, 2019. The chapter "Bravely Fighting the Battle against the Epidemic" contains events and actions that took place in 2020. Our last Sustainability Report was published in November 2019. Data in "Company Profile", "Economic Performance", "APP China sources of pulp procurement", and "Materials" relate to Sinar Mas Paper (China) Investment Co., Ltd. and the group of companies under its direct investment in China; cases and other data in the report are collected from APP China Headquarters, nine pulp & paper mills, and APP China Forestry Business Unit, unless otherwise stated.

- ◎ APP China Headquarters
- ◎ Gold East Paper (Jiangsu) Co., Ltd. (Gold East Paper)
- ◎ Hainan Jinhai Pulp & Paper Co., Ltd. (Hainan Jinhai Pulp & Paper)
- ◎ Guangxi Jingui Pulp & Paper Co., Ltd. (Guangxi Jingui Pulp & Paper)
- ◎ Ningbo Zhonghua Pulp & Paper Co., Ltd. (Ningbo Zhonghua)
- ◎ Ningbo Asia Pulp & Paper Co., Ltd. (Ningbo Asia)
- ◎ Gold Huasheng Paper (Suzhou Industrial Park) Co., Ltd. (Gold Huasheng)
- ◎ Gold Hongye Paper Group Co., Ltd. (Suzhou Gold Hongye, including Suzhou Mill and Sales & Marketing)
- ◎ Hainan Gold Hongye Paper Co., Ltd. (Hainan Gold Hongye)
- ◎ Hainan Gold Shengpu Paper Co., Ltd. (Hainan Gold Shengpu)
- ◎ APP China Forestry Business Unit (APP China Forestry, including Forestry Business Headquarters, Hainan, Guangxi, and Guangdong BUs, and Lancang, Wenshan, Ganzhou and Henan Sub-BUs)

Reporting Frameworks

The report has been prepared in accordance with the core option of the GRI Standards (2018) issued by the Global Sustainability Standards Board (GSSB). Additionally, the report refers to the Global Compact Ten Principles and papermaking industry clean production and emissions standards.

Content and Indicator Selection

This report was prepared in accordance with the GRI principles of materiality, stakeholder inclusiveness, sustainability context, completeness, etc. At the preliminary stage, our work group conducted policy analysis, industry issues analysis, stakeholder surveys, and field visits to our headquarters and pulp & paper mills to collect the management approaches, specific practices and performance indicators on sustainability issues most relevant to APP China.

Report Assurance

APP China commissioned Technischer Überwachungs-Verein (TÜV) to assess the reliability, objectivity, and transparency of this report. Please refer to the Assurance Statement for further details.

Contact Us

We sincerely welcome readers' comments and suggestions regarding this report and our work. Readers can contact us by email: csr@app.com.cn.

