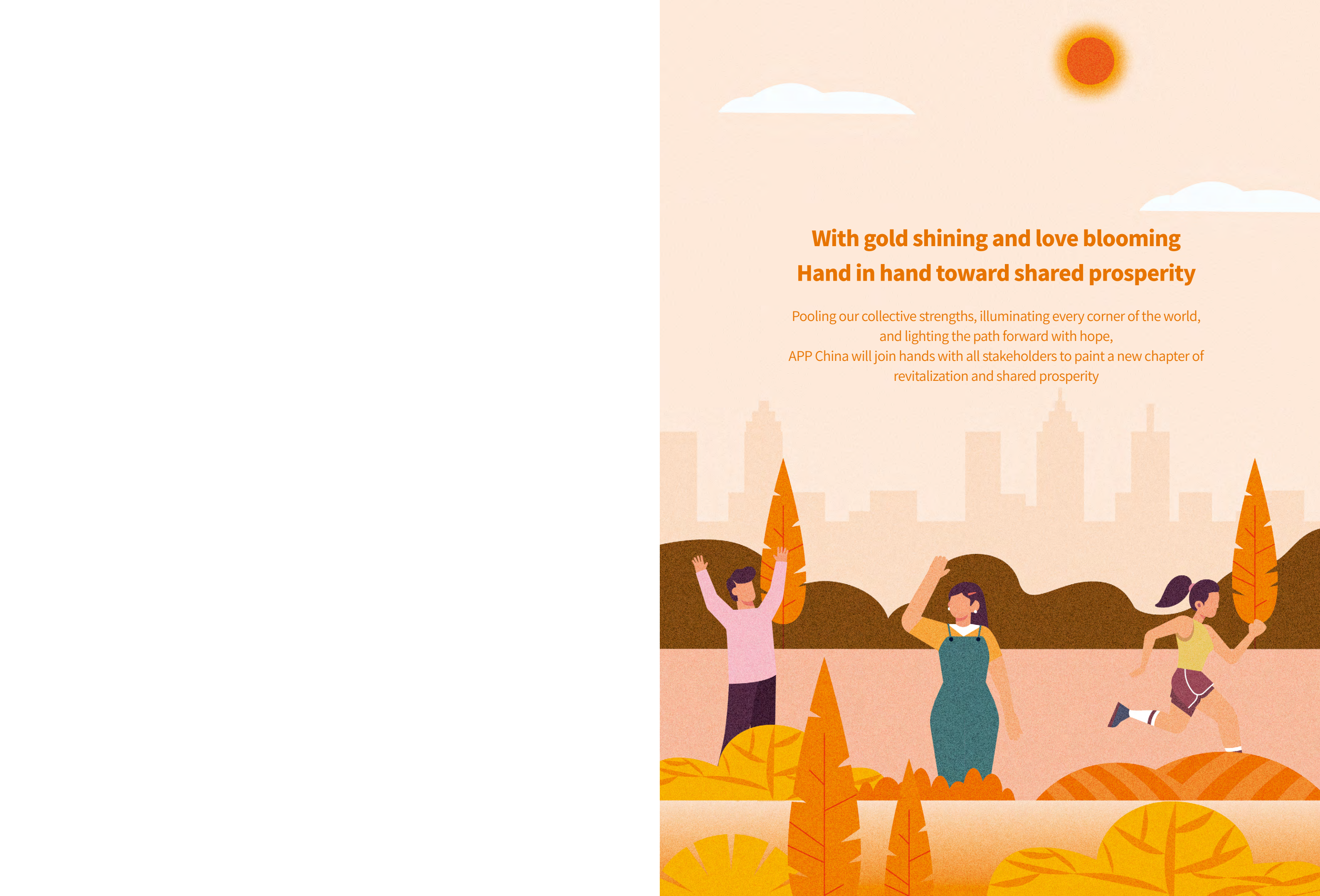




# 2023

## APP China Sustainability/ESG Report

Together for Rural Revitalization, Green  
Development, and Shared Prosperity

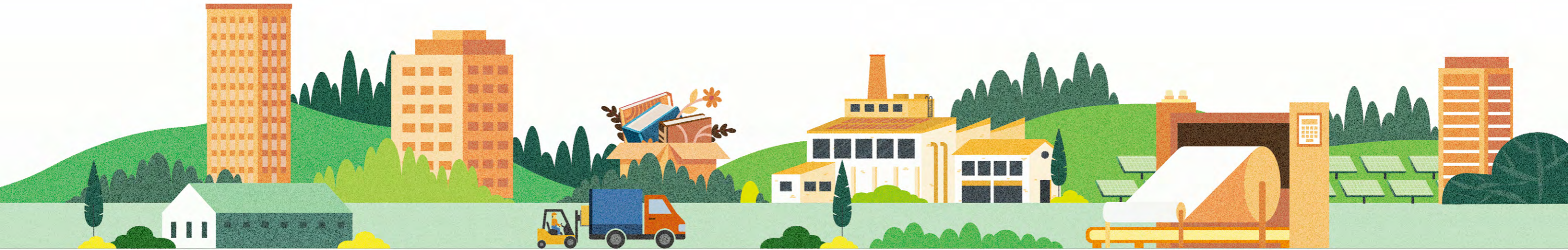


**With gold shining and love blooming  
Hand in hand toward shared prosperity**

Pooling our collective strengths, illuminating every corner of the world,  
and lighting the path forward with hope,  
APP China will join hands with all stakeholders to paint a new chapter of  
revitalization and shared prosperity



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APP China has been always resonating with the nation. Adhering to our vision of "contributing to the nation's development with industrial development", we actively embrace a "dual circulation" development paradigm, and resolutely advance the green transformation as well as the digital and intelligent transformation based on an integrated "Plantation-Pulp-Paper" industrial chain, aiming to participate in the sustainable and high-quality development of China's paper industry and Chinese modernization.

—— 黄志源

The 20th National Congress of the Communist Party of China charted a strategic blueprint of comprehensively promoting the great rejuvenation of the Chinese nation through Chinese modernization, and put forward the requirement of "improving the modern corporate system with distinctive Chinese features, and faster fostering world-class companies". APP China has been always resonating with the nation. Adhering to our vision of "contributing to the nation's development with industrial development", we actively embrace a "dual circulation" development paradigm, and resolutely advance the green transformation as well as the digital and intelligent transformation based on an integrated "Plantation-Pulp-Paper" industrial chain, aiming to participate in the sustainable and high-quality development of China's paper industry and Chinese modernization.

Over the last decade, China's paper industry has experienced a complete economic cycle. With industry growth slowing down and market demand falling back, paper industry is at a critical moment with both challenges and opportunities

ahead. Meanwhile, considering risks faced by our planet such as global climate change and sharp decline in biodiversity, companies need and are obligated to fully assess the actual and potential impacts of their operations on the environment and society. In this regard, we firmly believe that sustainable development is the key to addressing these issues. We should uphold long-termism and the "big picture thinking", continuously explore solutions that benefit environment, society, and economy, and truly create lasting value.

#### Implementing green and low-carbon transformation and exploring green and carbon reduction practices.

In 2023, we broke down the Group's strategic goals of "carbon peaking and carbon neutrality" into targets for the various business units under APP China. Our mills established their respective carbon peaking and carbon neutrality committees, which forms a robust carbon emission management system that allows us to steadily and orderly advance toward our goals of "peaking carbon emissions by 2030 and reach carbon neutrality by 2060". We have strengthened management

and innovation on the environmental front, such as cleaner production, forestry carbon sinks, biomass energy plantations, zero-carbon products, and forest biodiversity. We launched the "APPGreen" system of standards, which covers green production, green business ecosystem, green products and living. We intend to use the system to promote greater collaborative sustainable development efforts from our value chain partners. We continued to expand the area of our plantations, and accelerated the exploration and implementation of more efficient forest management models, which not only improves our sustainable supply capacity of raw materials, but also helps to effectively increase forest carbon sinks.

#### Adhering to the "people-oriented" thinking and contributing to the stability and harmony of the society.

The "people-oriented" thinking is deeply rooted in our corporate management. We care for the physical and mental health of employees, and fully protect their rights and interests. We continuously optimize our employee training system and resources, expand career development

path for employees, and encourage employees to unleash their potential and actively participate in the transformation of the Company, so as to achieve the harmonious alignment of their personal career goals and the Company's development visions. Under our public welfare vision of "building a harmonious society by helping the frail, the needy, the elderly, and the young", we continuously support community development. Cumulatively, we have donated over RMB1.5 billion in China to support balanced education development, youth talent cultivation, medical and research development, rural revitalization, and other charitable causes. We have successively launched rural revitalization projects in Ganzhou, Jiangxi Province, Lancang, Yunnan Province and other places, helping local communities diversely create values through exploiting local specialties, cultivating new-style agricultural entities, and improving the efficiency of the agricultural industry chain. Our rural revitalization projects have already achieved good results in terms of improved ecological environment and robust business growth of the village cooperatives.

**Deepening digital and intelligent transformation and optimizing corporate governance.** In 2023, we continued to advance toward "Digital and Intelligent Transformation 2.0", and have greatly improved our production efficiency and energy resource utilization efficiency through deep integration of intelligence technology and our industry, such as a series of successful intelligence upgrades in key areas such as product development, quality control, energy management, and risk prevention. We actively promoted the integration of "industry, university, and research institution", and established academician studios in Nanning, Guangxi Province and Ningbo, Zhejiang Province, building a reserve of high-end talent while promoting the commercialization of technological achievements. We intensified our R&D efforts, and developed and launched a variety of high-quality paper products, such as lightweight products with green and healthy attributes, zero-carbon products, and zero-plastic products, etc. We further optimized our corporate governance, strengthened risk management and internal control systems, and consistently emphasized

the importance of integrity and compliance among our employees and partners, ensuring stable development with a strong and comprehensive bottom line of compliance.

Great achievements require great ambitions, and great success requires great diligence. The world is at a stage filled with change, transformation, and adjustment. Faced with many uncertainties and risks, APP China will uphold the Company's vision and the strategic goal of "Two Transformations and One Surpassing", carry forward the spirit of self-improvement and perseverance, comprehensively enhance our technological innovation capabilities, strive to build a green ecosystem of green raw materials, green manufacturing, and green products, and make continuous efforts to create sustainable and shared value for the economy, society, and environment.

Chairman of Sinar Mas Group  
**Teguh Ganda Widjaja**

# About APP China

## Company Profile

Sinar Mas Group was founded by the prominent Indonesian Chinese Mr. Eka Tjipta Widjaja in 1938, with investments today spanning continents including Asia, North and South America, Europe, and Oceania. The Group operates in seven business sectors: pulp & paper, financial services, agri-business & food, real estate, energy & infrastructure, telecommunications, and healthcare.

Asia Pulp & Paper Co., Ltd. (APP), a pulp and paper subsidiary of Sinar Mas Group, was established in 1972 and has grown into a world leader in papermaking industry. APP has dozens of pulp and paper companies and over one million hectares of fast-growing plantations in Indonesia, China, etc. APP's products and business spread to more than 160 countries, with operations ranging from plantations and pulp to industrial paper, cultural paper, tissues, and various types of paper products.

APP's regional headquarters in China - Sinar Mas Paper (China) Investment Co., Ltd. - and its subsidiaries and affiliates are collectively referred to as "APP China", which is the leader of pulp and paper industry in China. As of the end of 2023, APP China had total assets amounting to RMB242.7 billion.

APP's investment in China dates back to 1992. For more than 30 years, the Company has been committed to a sustainable development strategy and a green and circular economy by practicing an integrated "Plantation-Pulp-Paper" approach, focusing on the Yangtze River Delta and South China. The Company has invested enormously in building world-class pulp and paper mills including Ningbo Asia, Gold East Paper, Hainan Jinhai Pulp & Paper, Guangxi Jingui Pulp & Paper and Bohui Paper, as well as 292,963 hectares of modern fast-growing plantations.

Currently, APP China boasts multiple business units such as Forestry Business Unit, Pulp Business Unit, Paper Business Unit, and Tissue Business Unit, and is actively present in industries such as chemical, real estate, paper equipment, etc. In 2023, APP China's domestic revenues were about RMB92.6 billion.

In terms of brands, APP China possesses a variety of well-known trademarks, such as tissue brands "Breeze" and "VIRJOY", cultural paper brands "Space Shuttle" and "Whale King", industrial paper brands "Jinli" and "Siji Gui", office paper brands "Gold Flagship" and "TOPGUN", etc.

APP China is actively engaged in developing sustainable urban real estate complexes and technology parks to diversify resource allocation. To date, the Company has built two large-scale urban complexes in Shanghai: the Sinar Mas Plaza and the Shanghai Arch.

As of the end of 2023, APP China had:



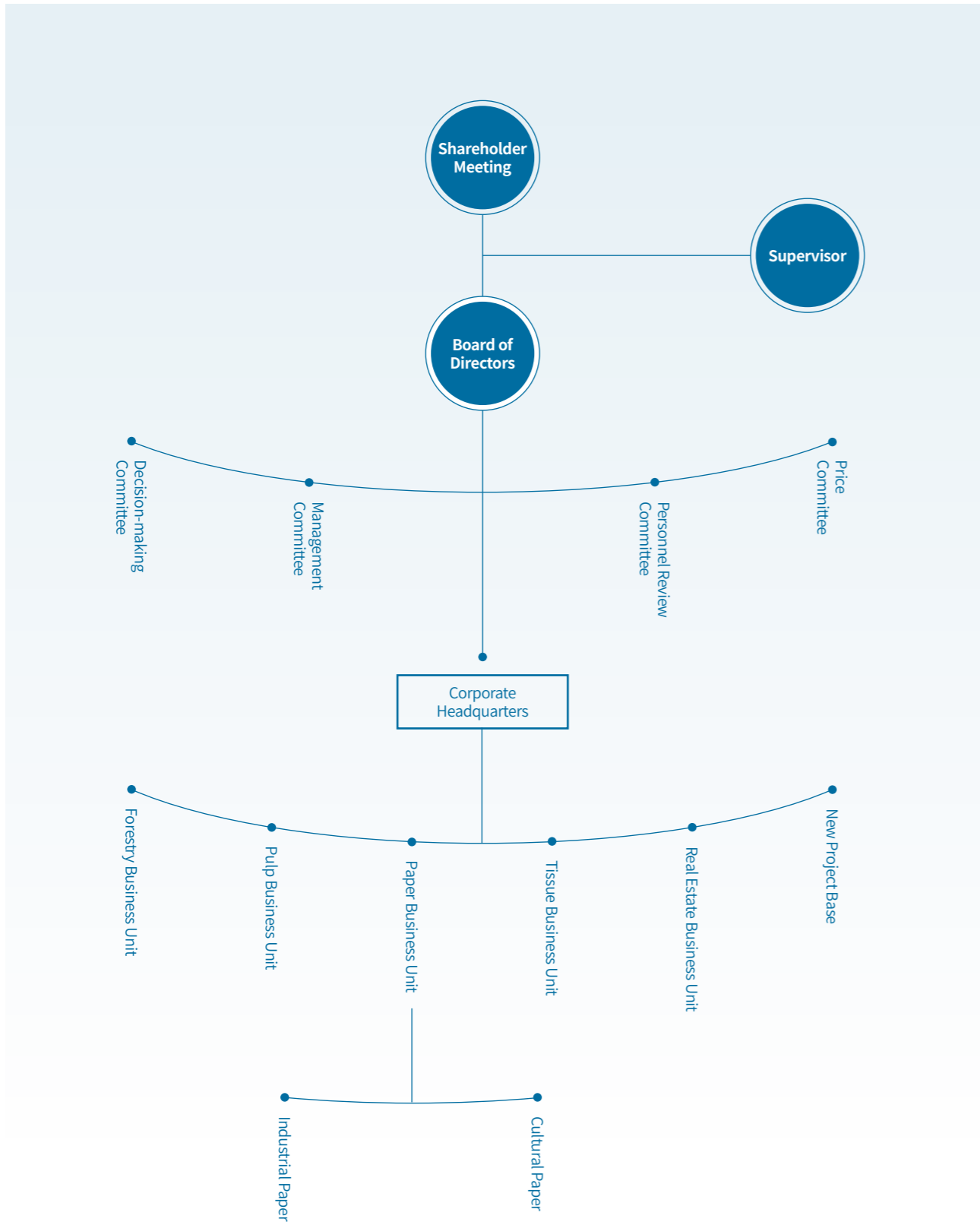
Products marketed in over  
**160** countries/regions  
across **6** continents



RMB**242.7** billion in total  
assets  
  
RMB**92.6** billion in annual  
revenue



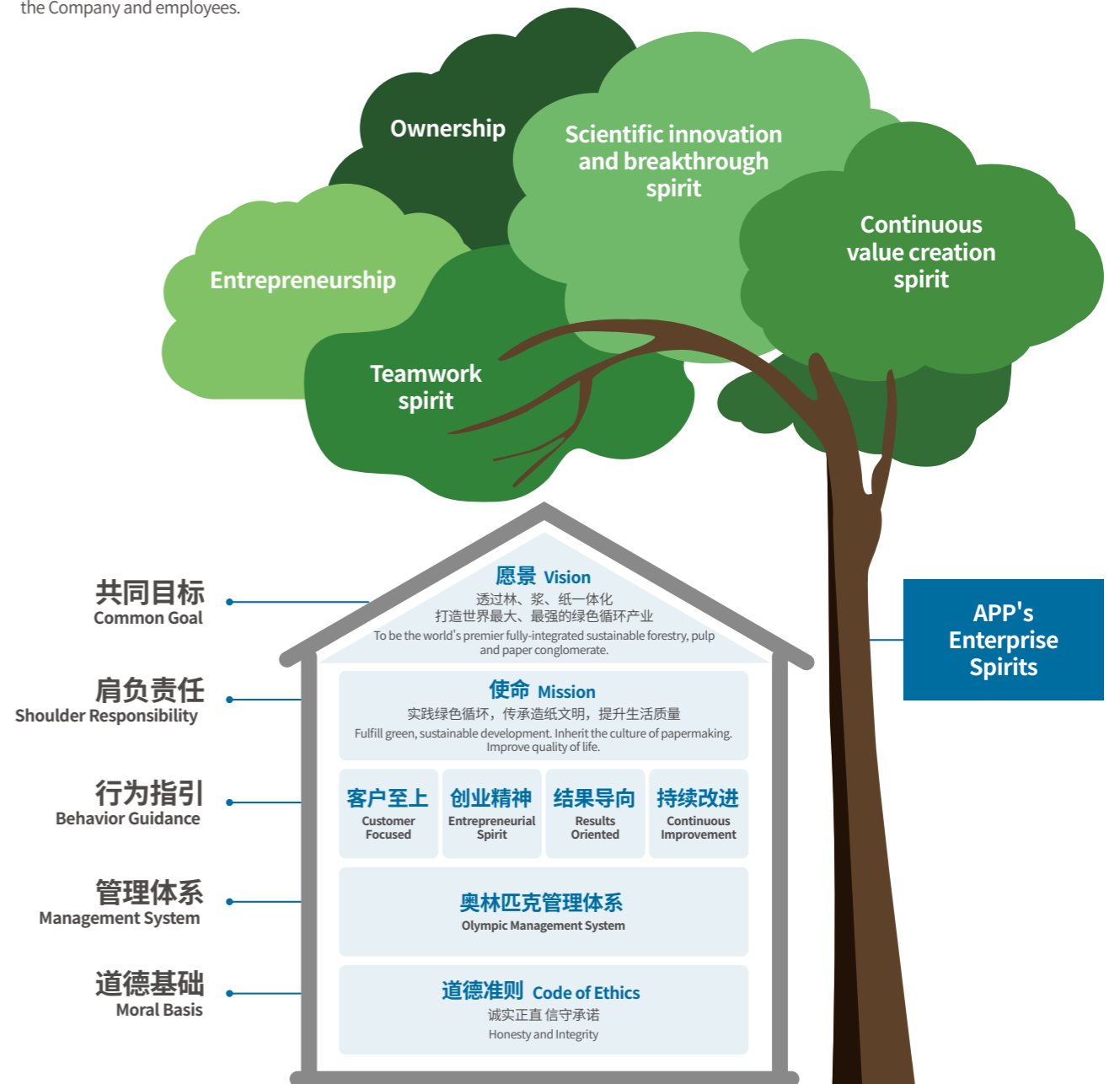
# Organizational Chart



# Corporate Culture

The core of the APP culture consists of corporate values and corporate spirits. Centering around the five spirits of "entrepreneurship, ownership, teamwork spirit, scientific innovation and breakthrough spirit, and continuous value creation spirit", APP China continues to deepen the construction of corporate culture, and promote the formation of a positive and dynamic corporate ecosystem, supporting the mutual progress and development of the Company and employees.

APP's Enterprise Spirits	Entrepreneurship	Have faith, dare to take risks, and take responsibility
	Ownership	Love the Company, willing to strive, and enjoy dedication
	Teamwork spirit	"Big picture thinking", emphasize cooperation, and good at teamwork
	Scientific innovation and breakthrough spirit	Strong technology, dare to innovate, and seek breakthroughs
	Continuous value creation spirit	Personal value, customer value, company value, and social value



## Milestones

1992

Ningbo Zhonghua was formed through joint investment by APP, 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.

1996

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

1995

APP started to establish plantations in China, embarking on a progressive journey to modernize papermaking in the country.

1997

Gold East Paper was officially established with a total investment of RMB20 billion; with an annual production capacity of 2 million tons of coated paper, it is one of the world's largest single-line coated paper enterprises.

Yalong Paper Products (Kunshan) Co., Ltd. started operations; with an annual paper product capacity of 200,000 tons, it was once one of the largest paper deep-processing enterprises in China.

1998

Gold Hongye Paper Group Co., Ltd. started operations, activating 23 fully automated assembly lines simultaneously; it currently has an annual capacity of over 1.2 million tons of tissue base paper and over 800,000 tons of finished products, and its brands such as "Breeze" and "VIRJOY" have become industry-leading tissue brands.

2004

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

2005

Hainan Jinhai Pulp & Paper Co., Ltd., APP China's first pulp mill as well as one of the first batch of integrated "Plantation-Pulp-Paper" Green Circular Industrial Bases in China, officially started operations.

2010

With an annual chemi-mechanical pulp (CMP) production of 300,000 tons, the first phase of Guangxi Jingui Pulp & Paper's Integrated "Plantation-Pulp-Paper" project started operations, and its 600,000-ton papermaking production also started operations.

2017

APP China actively responded to the "Belt and Road" Initiative and signed a strategic agreement with several cities to build large-scale production and R&D bases for tissues, industrial paper, and viscose fiber using "Industry 4.0 + artificial intelligence" technologies.

2020

Sinar Mas Paper acquired 100% of Shandong Bohui Group's equity, optimizing corporate scale and resource allocation, and promoting orderly competition and high-quality development in China's pulp and paper industry.

The foundation stone laying ceremony of the Sinar Mas Group Yancheng Cellulose Fiber Integration Industrial Base was held at the Binhai Port Industrial Park, Yancheng, Jiangsu Province.

2021

The Sinar Mas - APP Rudong Tissue Base started operations with a total investment of RMB45 billion, a planned site area of 567 hectares, and an annual high-grade tissue production capacity of 3.96 million tons. It was divided into three phases of construction, and the first phase of the project has been fully completed and put into production currently.

2022

On the occasion of its 30th anniversary of entering China, the Company integrated an ESG development concept into its sustainability strategy and released the first ESG report at the 5th China International Import Expo.

2023

The first academicians studio of Sinar Mas Group APP was inaugurated in Nanning, Guangxi Autonomous Region.

## Achievements and Honors

Entity	Honors and Awards	Issuers
APP China	2023 Responsible Enterprise	The 19th China Corporate Social Responsibility Forum
	Environmental Ecological Contribution Award	2023 Yicai China · Corporate Social Responsibility List
	2023 ESG Pioneer Enterprise Award	The 13th Philanthropy Festival and 2023 ESG Summit
	Based in Shanghai for 20 Years MNC's Regional Headquarters	Shanghai Municipal People's Government
Hainan Jinhai Pulp & Paper	2022 Water Efficiency Leader among Key Water-using Enterprises and Industrial Parks (valid for 2 years from the date of issuance)	Ministry of Industry and Information Technology, Ministry of Water Resources, National Development and Reform Commission, State Administration for Market Regulation
	2022 Green Factory	General Office of Ministry of Industry and Information Technology
	Worker Pioneer (Paper Research Team of the Technology Department)	All-China Federation of Trade Unions
	Top 10 Enterprises of Papermaking Industry in China's Light Industry (No.6)	China National Light Industry Council, China Paper Association
	2022 Top 200 Enterprises of China's Light Industry (No.45)	China National Light Industry Council
	2023 Outstanding Organization Award in the 2nd Hainan Free Trade Port Skills Competition - Danzhou Vocational Skills Competition	Danzhou Municipal Bureau of Human Resources and Social Security
	2022 Top 100 Enterprises in Hainan Province (No.11), 2022 Top 40 Enterprises of Manufacturing Industry in Hainan Province (No.4)	Hainan Enterprise Confederation, Hainan Entrepreneurs Association
	2023 Excellent Case of Industrial Internet Application in Hainan Province (Digital Mill for Pulp and Paper Built Based on Lean Management A+ System)	Hainan Provincial Department of Industry and Information Technology
	2022 Advanced Unit for Friendly Emission Reduction in Air Pollution Control in Zhenjiang City	Zhenjiang Atmospheric Pollution Prevention and Control Joint Conference Office
	2022 Advanced Unit in Transportation Work of Zhenjiang New District	Zhenjiang Municipal Transportation Bureau New District Branch
	2022 Water Efficiency Leader among Key Water-using Enterprises and Industrial Parks (valid for 2 years from the date of issuance)	Ministry of Industry and Information Technology, Ministry of Water Resources, National Development and Reform Commission, State Administration for Market Regulation
	China Environmental Labeling (Type II) Product Certification (coated paper, white kraft (card) paper, double adhesive paper, and thermal paper), China Environmental Labeling (Type I) Product Certification (copy paper)	China Environmental United Certification Center (CEC)
	Gold East Paper	Jiangsu Province Worker Pioneer
Jiangsu Province Employment and Internship Demonstration Base		Jiangsu Provincial Department of Human Resources and Social Security
Top 10 Enterprises of Papermaking Industry of China's Light Industry		China National Light Industry Council, China Paper Association
2022 Top 200 Enterprises of China's Light Industry (No.63)		China National Light Industry Council
Internationally Renowned Brands for Key Cultivation and Development in Jiangsu Province (2023-2025) ("Space Shuttle")		Jiangsu Provincial Department of Commerce
2023 Zhenjiang City Statistical Credit Red List Enterprise		Zhenjiang Municipal Bureau of Statistics
2023 Top 100 Innovative Enterprises, Top 500 Manufacturing Enterprises (No.374)		China Enterprise Confederation, China Enterprise Directors Association
High-Tech Enterprise		Jiangsu Provincial Department of Science and Technology, Jiangsu Provincial Department of Finance, Jiangsu Provincial Tax Service, State Taxation Administration

Entity	Honors and Awards	Issuers
Gold East Paper	2023 Top 100 Manufacturing Enterprises in Jiangsu (No.69)	Jiangsu Provincial Enterprise Confederation
	Intelligent Manufacturing Demonstration Workshop in Jiangsu Province	Jiangsu Provincial Department of Industry and Information Technology, Jiangsu Provincial Department of Finance
	National Digital Transformation Benchmarking Pilot Enterprise	China Light Industry Information Center
	2023 Advanced Unit in Digital Transformation in Zhenjiang City	Zhenjiang Enterprise Informatization Association
Guangxi Jingui Pulp & Paper	Qinzhou Port Area 2022 Employer Labor Security Law-abiding Integrity Rating A-level Unit	Qinzhou Port Economic and Technological Development Zone Labor Security Supervision Team
	2022 Qinzhou City Business Work "Outstanding Contribution Collective"	Qinzhou Municipal Bureau of Commerce
	2022 Water Efficiency Leader among Key Water-using Enterprises and Industrial Parks (valid for 2 years from the date of issuance)	Ministry of Industry and Information Technology, Ministry of Water Resources, National Development and Reform Commission, State Administration for Market Regulation
	2022 Outstanding Organizations for Women's Health Insurance Care	Qinzhou Women's Federation, China Life Insurance Co., Ltd. Qinzhou Branch
	Key Cultivated and Developed Foreign Trade Brands in Guangxi	Guangxi Zhuang Autonomous Region Department of Commerce
	Unit for Voluntary Blood Donation	Qinzhou City Central Blood Station
	2022 Top 30 Paper Producers (No.11)	China Paper Association
	2022 Top 200 Enterprises of China's Light Industry (No.57)	China National Light Industry Council
	Top 10 Enterprises of Papermaking Industry of China's Light Industry (No.8)	China National Light Industry Council, China Paper Association
	Top 20 Paper Enterprises in China (No.20)	China Pulp and Paper Industry Magazine
Ningbo Asia	2022 "Contract Abiding and Trustworthy" Enterprise of Guangxi	Market Supervision Bureau of Guangxi Zhuang Autonomous Region
	2023 Top 100 High-Tech Enterprises in Guangxi (No.14)	Guangxi Institute of Scientific and Technological Information, Guangxi High-Tech Enterprise Association
	2022-2024 Ningbo Export Famous Brand ("Jinli")	Ningbo Municipal Bureau of Commerce
	2023 Ningbo Excellent Products (Water-based Coated Paperboard for Food Packaging)	Ningbo Municipal Economic and Information Technology Bureau
	Ningbo Science Education Base	Ningbo Association for Science and Technology
	2022 Advanced Collective in Fire Safety Management	Ningbo Fire Protection Association
	2022 Outstanding Contribution Enterprises in the Industrial Manufacturing Industry	CPC Ningbo Beilun District Committee, Beilun District People's Government of Ningbo Municipality, Working Committee of CPC Ningbo Economic and Technological Development Zone, Ningbo Economic and Technological Development Zone Management Committee
	2022 Top 100 High-Tech Innovative Capabilities of Zhejiang Province	Zhejiang High-Tech Enterprise Association
	Top 10 Typical Cases of "Two Mountains" Practice Implementation in Beilun District, Ningbo City (Green Paper Culture Museum)	Office of the Leading Group for the Construction of Beautiful Beilun
	2022 Top 50 Taxpayers in Ningbo (No.23), 2022 Top 50 Taxpayers in the Manufacturing Industry in Ningbo (No.15), Top 10 Energy Saving & Carbon Reduction Enterprises in Ningbo, Top 50 R&D Investment Enterprises in Ningbo (No.11)	Ningbo Municipal People's Government
2022 Top 200 Enterprises of China's Light Industry (No.61)	China National Light Industry Council	



Entity	Honors and Awards	Issuers
Ningbo Asia	2023 Top 100 Competitive Enterprises in Ningbo (No.80), 2023 Top 100 Manufacturing Enterprises in Ningbo (No.31), 2023 Top 100 Comprehensive Enterprises in Ningbo (No.52)	Ningbo Enterprise Confederation, Ningbo Entrepreneurs Association, Ningbo Federation of Industrial Economics
	Top 10 Papermaking Enterprises of China's Light Industry	China National Light Industry Council, China Paper Association
	Top 500 High-Tech Enterprises with Innovative Capabilities in Zhejiang Province	Zhejiang High-Tech Enterprise Association
	Outstanding Member Enterprises of Ningbo Overseas Chinese Business Association	Ningbo Overseas Chinese Business Association
Bohui Paper	2023 Green Sustainable Development Contribution Award	2023 International Green Zero-Carbon Festival Organizing Committee
	2023 Top 500 Private Enterprises in R&D Investment	Office of the All-China Federation of Industry and Commerce
	2023 Annual (Industry) Innovative Enterprises	Organizing Committee of China Economic Conference
	2023 Advanced Demonstration Cases of Digital Transformation in the Consumer Goods Industry	China Light Industry Information Center
	2023 Outstanding ESG Corporate Governance Award	Organizing Committee of the Social Responsibility Conference
	2023 China Top 500 Private Manufacturing Enterprises	All-China Federation of Industry and Commerce, Shandong Provincial People's Government
	First Guoxin Cup ESG Top 100 Awards	<i>China Securities Journal</i>
	Top 200 Enterprises of China's Light Industry, Top 100 Technology Enterprises of China's Light Industry	China National Light Industry Council
	Shandong Provincial Green Factory, Shandong Provincial Green Supply Chain Management Enterprise	Ministry of Industry and Information Technology
	2022 Top 10 Enterprises	Shandong Paper Association
	2023 Top 100 Private Enterprises in Shandong, 2023 Top 100 Private Enterprises in Shandong in Employment Creation	Shandong Federation of Industry and Commerce
	2023 Provincial "Award for Supporting High-Quality Development Enterprises"	Shandong Provincial Department of Finance
	Shandong Province "Skills Shandong" Vocational Skills Competition—"Excellent Organization Award"	Shandong Province Light Industry and Textile Trade Union Committee, Shandong Light Industry Federation, Shandong Paper Industry Research and Design Institute
	Excellent Quality Management Team in Shandong Province	Shandong Quality Survey Management Association, Department of Industry and Information Technology of Shandong Province, General Labor Union of Shandong Province, Communist Youth League Shandong Provincial Committee, Shandong Women's Federation, Shandong Association for Science and Technology, Shandong Enterprise Federation
	2023 Shandong Province DCMM Pilot Enterprise, Digital Economy "Morning Star Factory"	Department of Industry and Information Technology of Shandong Province
	The 20th (2022) Shandong Listed Company Top 10 Governance Models	Shandong University of Finance and Economics, Shandong Macroeconomic Research Institute, Shandong Internet Media Group, <i>Economic Herald</i>
2023 Outstanding Enterprises for High-Quality Development	Zibo Economic Development Promotion Association	
Key Double-Increase Cultivation Enterprises in Zibo City	Zibo Municipal Bureau of Industry and Information Technology	
The fifth batch of Industry-University-Research Integration Pilot Cultivation Enterprises in Jiangsu Province	Jiangsu Development and Reform Commission	
High-Tech Enterprises in Jiangsu Province	Jiangsu Provincial Tax Service, State Taxation Administration, Jiangsu Provincial Department of Science and Technology, Jiangsu Provincial Department of Finance	
Jiangsu Province Intelligent Manufacturing Demonstration Factory, the first batch of provincial Three-Star Cloud-Based Enterprises in 2023	Industry and Information Technology Department of Jiangsu	
Intelligent Manufacturing Demonstration Workshop in Jiangsu Province	Industry and Information Technology Department of Jiangsu, Jiangsu Provincial Department of Finance	

Entity	Honors and Awards	Issuers
Bohui Paper	Jiangsu Province Science and Technology Innovation Achievement Commercialization Award	Jiangsu Association for Science and Technology Innovation
	The Fifth Top 30 Private Cultural Enterprises in Jiangsu Province	Propaganda Department of CPC Jiangsu Provincial Party Committee, Jiangsu Provincial Department of Culture and Tourism, Jiangsu Provincial Administration for Market Regulation, Jiangsu Provincial Radio and Television Administration, Jiangsu Provincial Bureau of Statistics, Jiangsu Federation of Industry and Commerce
	2022 Advanced Collective for Science and Technology Work	People's Government of Dafeng District, Yancheng City
	2023 Top 100 Private Enterprises in Yancheng, 2023 Top 50 Private Manufacturing Enterprises in Yancheng	Leading Group for the Evaluation of Top 100 Private Enterprises in Yancheng
Gold Hongye Paper	2022 Outstanding Contribution Award for Taxation, 2022 Five-Star Enterprise of Striving for Excellence	Office of the CPC Yancheng Municipal Committee, Office of Yancheng Municipal People's Government
	2023 Loving Enterprise Award	Yancheng Charity Federation
	National "Green Factory" (Gold Hongye Hubei Mill)	Ministry of Industry and Information Technology
	Excellent Unit of Social Responsibility	Working Committee of the CPC Suzhou Industrial Park High-end Manufacturing and International Trade Zone, Suzhou Industrial Park High-end Manufacturing and International Trade Zone Management Committee
	National Demonstration Enterprise of Product and Service Quality Integrity, National Leading Enterprise in Tissue Industry Quality, National Leading Brand in Tissue Industry Quality, National Quality Inspection Stable Qualified Product	China Association for Quality Inspection
	2023 Craftmanship Product in China Tissue Industry ("VIRJOY")	China Technical Association of the Paper Industry
	2023 Outstanding Green Quality Manufacturing Award ("VIRJOY" Zero-Carbon Tissue)	The Second International Green Zero-Carbon Festival
	2023 Shanghai Green Low-Carbon Technology Product ("VIRJOY" Zero-Carbon Tissue)	Shanghai Economic and Information Committee
	Annual Digital Marketing Innovation Pioneer Award	The 4th Asia Fast Moving Consumer Goods Industry Innovation Summit and 2023 Future FMCG Innovation Festival
	2023 Top 100 Brand Influence, 2023 Outstanding Contribution Enterprise in Green and Low-Carbon	Brand Influence Development Forum and Achievements Release Event Organizing Committee
Hainan Gold Hongye	Shanghai Green Low-Carbon Technology Product ("VIRJOY" Zero-Carbon Tissue)	Shanghai Energy-saving Product Review Committee
	Outstanding Unit for Energy Conservation and Emission Reduction	Hainan Energy Conservation and Emission Reduction Association
Rudong Base	2023 Top 100 Enterprises in Hainan Province (No.39), 2023 Top 40 Enterprises of Manufacturing Industry in Hainan Province (No.10)	Hainan Enterprise Confederation, Hainan Entrepreneurs Association
APP China Forestry	High-Tech Enterprise	Jiangsu Provincial Department of Science and Technology
	Jiangsu Provincial Green Factory	Industry and Information Technology Department of Jiangsu
APP China Forestry	2023 China Science and Technology Industry Annual Brand List "Technology Innovation Demonstration Enterprise"	Organizing Committee of China Global Forum on Technology Industry Development
	Loving Enterprise	CPC of Funing County, People's Government of Funing County

# Sustainability/ESG Strategy

## Strategy Implementation Progress

APP China established its 2030 Sustainability Development Strategic Framework in 2021. The framework is based on the "Sustainability Roadmap: Vision 2030" of APP tailored to the specific situation of APP China. In 2022, the Company established the dual carbon goals of to "peak carbon emissions by 2030 and reach carbon neutrality by 2060", and implemented innovative development models in various aspects. In 2023, at the 6th China International Import Expo, APP China launched its new green standard system, the

"APPGreen", further accelerating its pace of green transformation.

During the reporting period, APP China continued to deepen its sustainable development and ESG governance. Company leadership further strengthened the deployment of key projects such as low-carbon development and rural revitalization from a strategic level. Our subsidiary Bohui Paper changed the Strategic Committee of the Board to the Strategic and ESG Committee, formally incorporating ESG into

its top-level design of corporate governance. Meanwhile, the Company attached great importance to capacity building and conducted training and experience sharing activities for employees at different levels and positions, covering a wide range of sustainability related topics, such as energy conservation, carbon reduction, biodiversity, ESG ratings, and carbon sinks, providing positive support for advancing the sustainability goals of APP China.



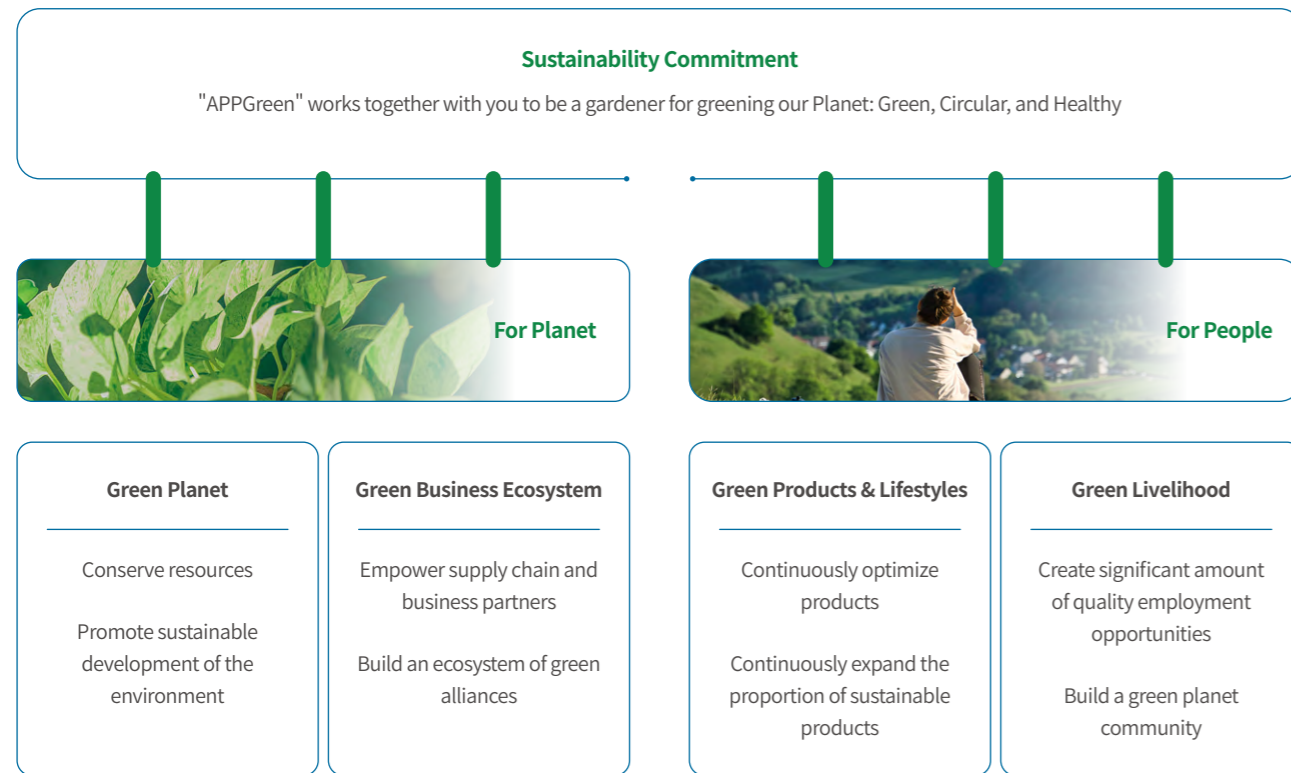
### Progress Toward Realizing APP China 2030 Sustainability Strategic Goals

Goals	Contribute to APP's goal of "over half a million hectares of natural forests conserved"	Undertake forest carbon sink projects	Adjust energy structure in mills	Continuously promote "carbon neutral" products	Contribute to APP's goal of "improving the lives of millions"	Fully advance ESG-related practices, deliver on the three-year ESG roadmap, and continuously improve ESG performance
Peak carbon emissions by 2030, 30% reduction in product carbon footprint	Further increased the area of our plantations to 292,963 hectares. About 230,000 mu of forest land in Hainan Business Area have been allocated to the Hainan Tropical Rainforest National Park. Since the implementation of the <i>Regulations on Hainan Tropical Rainforest National Park (Trial)</i> , APP China Forestry has ceased the logging-afforestation-nurturing operations in the park, and transferred this part of the forest land to conservation management. In December 2023, the Office of the Leading Group for the Construction of Hainan National Park issued a notice on the <i>Implementation Plan for the Disposal of Plantation Forests in Hainan Tropical Rainforest National Park (Phase I)</i> , and APP China Forestry, as the first batch of pilot units, has been actively cooperating with the withdrawal of plantation forests in the national park to protect the ecological environment.	By August 2023, the carbon storage capacity of our plantations reached 45.83 million tons of carbon dioxide, an increase of 990,000 tons compared to 2022.  The Hainan VCS carbon sink project completed its design and public notice for the first phase task of 69,000 mu of Acacia forest land.	We intensified the utilization of photovoltaic energy, biomass energy and purchased green power, with a solar power generation of 30,381.5 MWh, and a biomass energy utilization rate increased by 1.3% year-on-year.	A number of products have passed product carbon neutrality certification, including Gold East Paper's copy paper, and Bohui Paper's aseptic liquid packaging paperboard, food-grade coated kraft CBKB product, and offset printing paper.	Officially launched the rural revitalization pilot project—the Ganzhou Xinfeng Golden Orchard program, to promote shared prosperity by supporting the development of local specialty industries.	We carried out ESG capacity building activities, organizing a series of sustainability/ESG thematic training for employees at different levels and positions, and further enhancing employees' sustainability and ESG capabilities.

### Annual Key Progress

### Contribution to SDGs





**Sustainability Training of APP China Forestry**

In April 2023, APP China Forestry organized a thematic training for over 30 forestry companies under its various forestry business areas in order to create a learning organization. The training was conducted both online and in-person, covering a wide selection of topics, including forestry carbon sink development and case analysis, key points and case analysis of rural revitalization, CFCC standards and case analysis, ISO14001 case analysis, VCS project methodology, and monitoring and analysis of eucalyptus plantation ecology, etc.

The Sustainable Development Department of APP China Forestry organized the training and provided all five instructors. To prepare the training material, the lecturers conducted extensive study of national standards and policies and science literature, and combined them with their practical experience. During the training, the instructors provided the participants with well-rounded lectures that integrated professional knowledge, standards and policies, industry trends at home and abroad, market dynamics, and practical cases. The lectures were not only instructive, allowing the participants to quickly absorb various new knowledge points and work skill knowhows, but also fun and easy-to-understand. The training attracted many employees other than its targeted audience. A total of 104 employees participated in the training, instead of the original 60, with a passing rate of 99%.

Through this training, the participants gained a deeper understanding of our sustainable development goals and sustainable business practices, building professional knowledge reserve to lay a solid foundation for the continuous advancement of our sustainable business.

**Sustainability Certification**

**CFCC/PEFC-FM Certification\* of APP China Forestry**

No.	APP China Forestry Companies	Certificate No.
1	Simao Jin Lancang High-Yield Forestry Co., Ltd.	CFCC/PEFC-FM-ZTFC-000018
2	Wenshan Jin Wenshan High-Yield Forestry Co., Ltd.	CFCC/PEFC-FM-ZTFC-000017
3	Hainan Jinhua Forestry Co., Ltd.	CFCC/PEFC-FM-ZTFC-000003
4	Guangxi Jin Gui Forestry Co., Ltd.	CFCC/PEFC-FM-ZTFC-000005
5	Guangxi Jin Qinzhou High-Yield Forestry Co., Ltd.	CFCC/PEFC-FM-ZTFC-000006
6	Jin-Qingyuan Timberland (Paper mill) Ltd.	CFCC/PEFC-FM-ZTFC-000007
7	Shaoguan Jin-Shaoguan First Quality Timberland (Paper mill) Ltd.	CFCC/PEFC-FM-ZTFC-000008
8	Heyuan Jinmei Science & Technology Forestry Co., Ltd.	CFCC/PEFC-FM-ZTFC-000030
9	Leizhou Jin-taiyang Science and Tech Forestry Ltd.	CFCC/PEFC-FM-ZTFC-000030
10	Yangjiang Jin-taiyang Science and Tech Forestry Ltd.	CFCC/PEFC-FM-ZTFC-000030
11	Guangxi Xing Guilin Agriculture Technology Co., Ltd.	CFCC/PEFC-FM-ZTFC-000031
12	Guangxi Jin Taiyang Forestry Co., Ltd.	CFCC/PEFC-FM-ZTFC-000031
13	Xinjiu (Guangdong) Forestry Co., Ltd.	CFCC/PEFC-FM-ZTFC-000061
14	Zhaoqing Jiayao Forestry Economy Development Co., Ltd.	CFCC/PEFC-FM-ZTFC-000061
15	Huizhou Nanyou Forestry Economy Development Co., Ltd. Huizhou Nanyou Forestry Economy Development Co., Ltd., Heyuan Branch	CFCC/PEFC-FM-ZTFC-000061

\*CFCC/PEFC-FM certification refers to CFCC/PEFC Forest Management certification.

**2023 Main Sustainability Management System Certification Audit Status at Mills of APP China**

	ISO9001	ISO14001	ISO45001	ISO50001	CFCC/PEFC-CoC*
Gold East Paper	Periodic audit	Periodic audit	Periodic audit	Re-certificate audit	Label change audit
Ningbo Asia	Re-certificate audit	Re-certificate audit	Re-certificate audit	-	Re-certificate audit
Hainan Jinhai Pulp & Paper	Re-certificate audit	Re-certificate audit	Re-certificate audit	Re-certificate audit	Re-certificate audit
Guangxi Jingui Pulp & Paper	Periodic audit	Periodic audit	Periodic audit	-	Re-certificate audit
Shandong Base of Bohui Paper	Periodic audit	Periodic audit	Periodic audit	Periodic audit	Periodic audit
Jiangsu Base of Bohui Paper	Periodic audit	Periodic audit	Periodic audit	Periodic audit	Periodic audit
Rudong Base	Periodic audit	Periodic audit	Periodic audit	Periodic audit	Periodic audit

\*CFCC/PEFC-CoC certification refers to CFCC/PEFC Chain of Custody certification.

# Stakeholder Engagement

APP China has a regular communication mechanism with stakeholders through various channels to fully understand their expectations and demands, and incorporate their feedback into our corporate decision-making in a timely manner. As sustainable development has become a highly focused topic, we actively participate in industry and cross-sector communication and exchange activities, proactively absorb forward-looking ideas, and share our own practical experiences with others. In 2023, we co-hosted the 2023 China Paper Industry Sustainable Development Forum,

where experts from government, industry associations, research institutes, universities, and enterprises discussed the empowering role of green intelligent manufacturing in the paper industrial chain. In addition, we also engaged in cross-disciplinary dialogues with partners from various institutions through platforms such as the China International Import Expo and other conferences of the industry.

APP China and its subsidiaries have been guiding their development with standards, continuously deepening the application of


standards in production practices. During the years, we have also accumulated rich practical experience. During the reporting period, we participated in the formulation or revision of multiple national and group standards, contributing actively to the sustainable development of the industry, the high-quality development of China's society and economy, the construction of ecological civilization, and the realization of the carbon peaking and carbon neutrality goals.

### Industry-University-Research Cooperation in Low-Carbon Field

In October 2023, the Zhenjiang Municipal People's Government, the Development and Reform Commission of Jiangsu Province, and the Department of Ecology and Environment of Jiangsu Province jointly hosted the "Carbon Peaking and Carbon Neutrality 2023 Jinshan Summit", aiming to promote the exchange of carbon reduction experiences and explore low-carbon development strategies. At the summit, Gold East Paper signed an agreement with Nanjing Forestry University for a joint project in the low-carbon field, committing to jointly focus on the green and low-carbon practice and commercialization of the research outcome of "efficient utilization of papermaking plant fiber raw materials". The project will contribute to the sustainable development of the paper industry and contribute to the construction of a "Low-Carbon Zhenjiang".

### "Forest Certification in Action"

In September 2023, APP China co-hosted the "Forest Certification in Action" event in Harbin in cooperation with the Forest Certification National Innovation Alliance and Northeast Forestry University, under the guidance of the Science and Technology Development Center of National Forestry and Grassland Administration. The event activities included forest certification lectures at Northeast Forestry University, and awareness raising campaigns in popular urban areas as well as key communities, educating consumers about forest certification and APP China's paper products with forest certification. The aim of the event was to increase awareness and understanding of the China Forest Certification system among a broader audience, provide reliable information for consumers to choose sustainable paper products, and encourage stakeholders to join their efforts to promote sustainable consumption. The Forest Certification National Innovation Alliance and APP China also donated RMB50,000 to the student ecological society at Northeast Forestry University to support their activities in promoting ecological protection.



The "Forest Certification in Action" event hosted by APP China



### Standards APP China Participated in Formulation or Revision

- Forest certification in China—Forest carbon sink (National Standard)
- Forest certification in China—Chain of custody (National Standard)
- Forest certification in China—Operation guideline on forest management (National Standard)
- Forest certification in China—Flowers and plants management (National Standard)
- Water-saving enterprises—Pulp and paper making industry (National Standard)
- Guidelines for water footprint evaluation of tissue product products (Group Standard)
- General rules for evaluation of green and low carbon product (Group Standard)
- General principles for environmental footprint assessment of paper and paper products (Group Standard)
- Enterprise ESG rating system (Group Standard)
- Evaluation requirements for no-waste factory—paper industry (Group Standard)
- Guideline for carbon footprint accounting and reporting for pulp, paper, paperboard, and paper products (Group Standard)



The 2023 China Paper Industry Sustainable Development Forum co-hosted by APP China



Stakeholders visiting the workshop of Guangxi Jingui Pulp & Paper

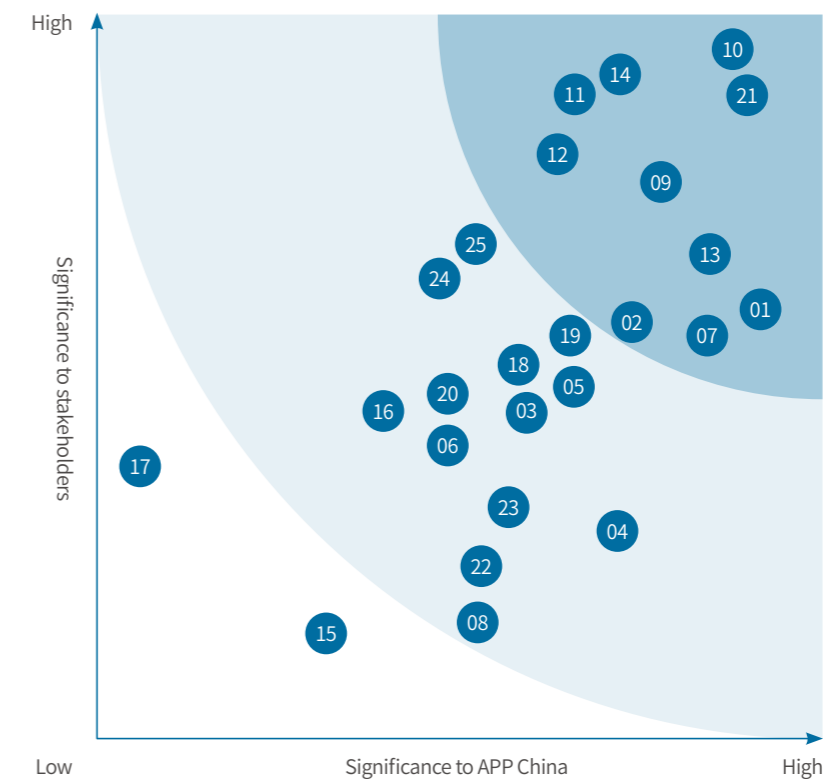
Top Concerns	Stakeholders	Engagement Channels
<ul style="list-style-type: none"> <li>• Employment relations</li> <li>• Occupational health and safety</li> <li>• Human rights</li> </ul>	<ul style="list-style-type: none"> <li>• Employee training and development</li> <li>• Product quality and safety</li> <li>• Business ethics</li> </ul>	<ul style="list-style-type: none"> <li>• Company internal magazine</li> <li>• APP Culture Voice platform</li> <li>• Employee representative meetings</li> <li>• Employee communication meetings</li> <li>• Executive mailbox</li> <li>• MBOS proposal competition</li> <li>• Sunshine Integrity Month</li> </ul>
<ul style="list-style-type: none"> <li>• Air pollutant control</li> <li>• Water resources management</li> <li>• Sustainable forest management</li> </ul>	<ul style="list-style-type: none"> <li>• Human rights</li> <li>• Customer relationship management</li> <li>• Product quality and safety</li> <li>• Win-win cooperation</li> </ul>	<ul style="list-style-type: none"> <li>• Training activities on different topics</li> <li>• Diversified employee activities</li> <li>• Sustainability reports</li> <li>• WeChat Official Account</li> <li>• Integrity and compliance whistleblowing channel</li> </ul>
<ul style="list-style-type: none"> <li>• Employment relations</li> <li>• Human rights</li> <li>• Supply chain management</li> </ul>	<ul style="list-style-type: none"> <li>• Product quality and safety</li> <li>• Win-win cooperation</li> <li>• Business ethics</li> </ul>	<ul style="list-style-type: none"> <li>• Customer service hotline/mail</li> <li>• Company website</li> <li>• Sustainability reports</li> <li>• WeChat Official Account</li> </ul>
<ul style="list-style-type: none"> <li>• Environmental management and compliance</li> <li>• Corporate governance</li> </ul>	<ul style="list-style-type: none"> <li>• Economic performance</li> <li>• Business ethics</li> <li>• Digital and intelligent transformation</li> </ul>	<ul style="list-style-type: none"> <li>• Customer visits</li> <li>• Engagement meetings</li> <li>• Little A Classroom</li> <li>• Industry conferences/events</li> <li>• Customer satisfaction surveys</li> </ul>
<ul style="list-style-type: none"> <li>• Environmental management and compliance</li> <li>• Product quality and safety</li> </ul>	<ul style="list-style-type: none"> <li>• Digital and intelligent transformation</li> <li>• Addressing climate change</li> <li>• Rural revitalization</li> </ul>	<ul style="list-style-type: none"> <li>• Supplier/Contractor meetings</li> <li>• Supplier/Contractor training</li> <li>• Cooperative R&amp;D mechanism</li> <li>• Regular supervision and inspection</li> </ul>
<ul style="list-style-type: none"> <li>• Employment relations</li> <li>• Occupational health and safety</li> <li>• Human rights</li> </ul>	<ul style="list-style-type: none"> <li>• Public welfare, charity, and community relations</li> <li>• Rural revitalization</li> <li>• Business ethics</li> </ul>	<ul style="list-style-type: none"> <li>• Sustainability reports</li> <li>• Supplier performance evaluation</li> <li>• Integrity and compliance whistleblowing channel</li> </ul>
<ul style="list-style-type: none"> <li>• Environmental management and compliance</li> <li>• Occupational health and safety</li> </ul>	<ul style="list-style-type: none"> <li>• Rural revitalization</li> <li>• Public welfare, charity, and community relations</li> </ul>	<ul style="list-style-type: none"> <li>• Daily communication meetings</li> <li>• Cooperation</li> </ul>
<ul style="list-style-type: none"> <li>• Information security management</li> <li>• Energy management</li> <li>• Air pollutant control</li> </ul>	<ul style="list-style-type: none"> <li>• Digital and intelligent transformation</li> <li>• Water resources management</li> <li>• Sustainable forest management</li> </ul>	<ul style="list-style-type: none"> <li>• Government communication meetings</li> <li>• Government inspections and onsite visits</li> <li>• Information disclosure and reporting</li> </ul>
<ul style="list-style-type: none"> <li>• Environmental management and compliance</li> <li>• Addressing climate change</li> </ul>	<ul style="list-style-type: none"> <li>• Air pollutant control</li> <li>• Sustainable forest management</li> <li>• Biodiversity</li> </ul>	<ul style="list-style-type: none"> <li>• Thematic training</li> <li>• Regular visits</li> <li>• Awards and recognition</li> <li>• Sustainability reports</li> </ul>
<ul style="list-style-type: none"> <li>• Addressing climate change</li> <li>• Air pollutant control</li> <li>• Product quality and safety</li> </ul>	<ul style="list-style-type: none"> <li>• Rural revitalization</li> <li>• Public welfare, charity, and community relations</li> <li>• Digital and intelligent transformation</li> </ul>	<ul style="list-style-type: none"> <li>• Community opinion processing and feedback</li> <li>• Community representatives' supervision and engagement</li> <li>• Mill visits</li> <li>• WeChat communication platform</li> <li>• Project cooperation</li> </ul>
		<ul style="list-style-type: none"> <li>• Industrial exhibitions, seminars, and thematic forums</li> <li>• Regular visits</li> <li>• Awards and recognition</li> <li>• Research cooperation</li> </ul>
		<ul style="list-style-type: none"> <li>• Collaboration to develop industry standards</li> <li>• Industry publications</li> <li>• Sustainability reports</li> </ul>
		<ul style="list-style-type: none"> <li>• Industry-University-Research cooperation</li> <li>• Joint talent cultivation</li> <li>• Professional exchange and onsite visits</li> </ul>
		<ul style="list-style-type: none"> <li>• Training</li> <li>• Company website</li> <li>• Sustainability reports</li> <li>• Biodiversity monitoring</li> </ul>
		<ul style="list-style-type: none"> <li>• Communication on specific topics</li> <li>• Charity projects donation and cooperation</li> <li>• Regular visits</li> </ul>
		<ul style="list-style-type: none"> <li>• Sustainability reports</li> <li>• Company website</li> <li>• WeChat Official Account</li> </ul>
		<ul style="list-style-type: none"> <li>• Onsite participation in events</li> <li>• Meetings, exhibitions, forums, etc.</li> <li>• Company website</li> <li>• WeChat Official Account</li> </ul>
		<ul style="list-style-type: none"> <li>• Executive interviews</li> <li>• Cooperation on publicity activities</li> <li>• Sustainability reports</li> </ul>

## Materiality Assessment

With reference to the latest national and industry policy trends, the GRI Standards, the SASB Standards for Pulp & Paper Products and Forest Management, and major global ESG ratings such as the S&P Corporate Sustainability Assessment (CSA), we comprehensively analyzed our business operations and identified 25 sustainability/

ESG issues closely related to APP China. The 2023 material issues are virtually identical with those identified in 2022, with the addition of "Rural Revitalization" and the removal of "Circular Economy", as well as a few minor adjustments and merging of issues to better align with our operational priorities.

A total of 1,063 valid responses to materiality issue surveys were collected through the issuance of online questionnaires this year. According to the survey results and opinions from internal and external experts, we sorted the issues based on their importance rankings and developed the following materiality matrix.



### High materiality issues

- 10 Occupational health and safety
- 21 Business ethics
- 14 Product quality and safety
- 11 Human rights
- 09 Employment relations
- 12 Employee training and development
- 13 Customer relationship management
- 01 Environmental management and compliance
- 07 Sustainable forest management
- 02 Energy management

### Medium materiality issues

- 25 Information security management
- 24 Digital and intelligent transformation
- 19 Risk and compliance management
- 18 Corporate governance
- 05 Water resources management
- 03 Addressing climate change
- 20 Economic performance
- 16 Rural revitalization
- 06 Waste management
- 23 Research and Innovation
- 04 Air pollutant control
- 22 Supply chain management
- 08 Biodiversity

### Low materiality issues

- 15 Win-win cooperation
- 17 Public welfare, charity, and community relations

# Annual Focus 1: Contributing to Rural Revitalization

The development of agriculture, rural areas, and rural residents is fundamental to the economic development of China and the improvement of people's wellbeing. Since the proposal to implement a rural revitalization strategy in 2017, the government has successively formulated and implemented a series of institutional framework and policy documents on rural revitalization, such as the *Rural Revitalization Strategy (2018-2022)*, the *Law of the People's Republic of China on Promoting Rural Revitalization*, and the *14th Five-Year Plan for Agricultural and Rural Modernization*. Centering around revitalizing industries, talents, culture, ecology and organizations, tremendous efforts have been made on promoting rural revitalization with significant achievements. Implementing

the rural revitalization strategy is a long-term task that requires the whole society to persistently explore and put into practice, so as to steadily achieve the medium- and long-term goals of rural revitalization: "By 2035, decisive progress will have been made, with the basic modernization of agriculture and rural areas achieved" and "By 2050, rural revitalization will be achieved. Rural areas should have robust agriculture, beautiful landscapes and prosperous farmers".

APP China has focused on rural development for decades. Whether it is through the Huang Yicong Foundation or our mills across the nation, we put assistance to less developed areas a top priority on the list of our public welfare undertakings. Since Chairman Teguh Ganda

Widjaja proposed "improving the lives of millions" as a sustainable development goal of the Sinar Mas Group, the Huang Yicong Foundation and APP China Forestry have conducted significant field research and experience sharing focusing on promoting rural revitalization with the development of agroforestry solutions. In 2023, we officially launched the Golden Orchard program, empowering rural residents to develop through the specialty agricultural business of growing navel oranges. Meanwhile, APP China has also been working on many other rural revitalization projects, rolling out projects in stages and focusing on key topics, continuously contributing our capabilities to the achievement of the strategic goals of rural revitalization.



## Piloting Rural Revitalization Projects

Adhering to the mission of "improving the lives of millions", the Huang Yicong Foundation successively carried out rural revitalization pilot projects in Ganzhou, Jiangxi Province and Lancang, Yunnan Province in 2023. These pilot projects cover multiple aspects of rural revitalization, such as industrial development, talent cultivation, and organizational development. By developing local industries, cultivating new agricultural operators, and improving the efficiency of the agricultural industry chain, these projects have generated benefits for rural residents and contributed to the rural revitalization strategy of China.

### Golden Orchard Program

The Foundation funded and jointly supported the local farmers cooperative to launch the Xinfeng Golden Orchard program with APP China Forestry in Ganzhou, Jiangxi Province. The program focuses on various activities related to the growing of a local specialty cash crop – navel orange, including fruit picking, deep processing, sightseeing, leisure, and cultural tourism. The 1,000-mu industrial park is located in Xingjin Village, Datangbu Town, Xinfeng County. Half of the park is orange groves, while the other half is planned as a comprehensive park integrating sightseeing, leisure, and study tours.

The program was officially launched in March 2023. The construction is progressing as scheduled, with basic infrastructure such as power supply, roads, and integrated water and fertilizer systems completed. As of the end of 2023, a total of about 20,600 navel orange seedlings have been planted, and a total of 2,959 local residents have engaged in various jobs generated by this program, a significant contribution to local employment market.



Launch Ceremony of Golden Orchard program



## • Huang Yicong Rural Talent Revitalization Scholarship

In collaboration with its rural revitalization programs, the Foundation has established the Huang Yicong Rural Talent Revitalization Scholarship at Jiangxi Environmental Engineering Vocational College to support rural revitalization, cultivate professional talent, and reward outstanding students with outstanding academic performance, outstanding skills, and comprehensive development of morality, intelligence, physical fitness, and exceptional characters in full-time public vocational schools. The scholarship also gives priorities to schools with higher educational standards, and students majoring in agriculture, forestry,

advanced manufacturing, modern services, strategic emerging industries, and other related fields.

In 2023, the first round of Huang Yicong Rural Talent Revitalization Scholarship was awarded to 11 students, each receiving a scholarship of RMB3,000. In the future, the Foundation will use the Golden Orchard program as a testing ground to carry out more rural development pilot projects in agricultural technology research, agricultural practice, volunteer services, and other aspects with Jiangxi Environmental Engineering Vocational College.

**11** students received the Huang Yicong Rural Talent Revitalization Scholarship in 2023

## • "Paper for the Countryside"

To support rural education development, in June 2023, the Foundation, in collaboration with Gold Hongye Paper as well as the live broadcast team of Hao Shaowen, launched the "Paper for the Countryside" public welfare project, donating RMB100,000 worth of tissue products to 11 rural schools in Xinfeng County, Jiangxi Province and Liangshan Prefecture, Sichuan Province. In addition to donating products to create more convenience and foster better hygiene habits among students, the project also has a Paper Knowledge Classroom component. APP China volunteers and community volunteers worked together to conduct popular science classes on paper culture and tissue hygiene, teaching knowledge to the students.

## • Projects in Preparation

In August 2023, APP China signed a strategic cooperation agreement with the Yunnan Forestry and Grassland Bureau. The cooperation aims to jointly build win-win cooperation projects to promote rural development, enterprise growth, and prosperity for farmers living in forestland. Both parties will adhere to the principles of compliance, complementary advantages, and focusing on ecological and social benefits, and strive to tapping vast forest resources in Yunan to develop a Yunnan model of "lucid waters and lush mountains are invaluable assets".

In October 2023, the Foundation signed a targeted assistance agreement with the government of Lancang County, Yunnan

Province. The cooperation focuses on carrying out rural revitalization pilot projects to tap local resources, so as to improve the wellbeing of local residents and support the economic and social development of Lancang. The project has entered the industrial feasibility study stage, with a detailed industrial research being conducted by the Foundation and APP China Forestry.

In the future, the Foundation plans to expand its assistance projects to more remote areas. The Foundation follows a rigid project procedure that requires on-site visits and careful study first, so as to ensure that the project planning can meet the actual needs of local communities with tangible benefits.



## Caring for Children in Rural Areas

APP China had years of experience in assisting development in rural areas before "improving the lives of millions" was made a sustainable development goal of the Company. Since its inception, the Foundation has always set "assisting in equilibrium of education" as a key focus of its public welfare projects, and has been carrying out a variety of projects targeting the growth needs of rural children in different age stages continuously, striving to grow together side-by-side with rural children.

## • The Sunshine Preschool Project

The Foundation collaborated with non-profit organizations specializing in early childhood education and launched the Sunshine Preschool Project in 2014. The project aims to support the growth of children aged 3 to 6 in remote rural areas of Yunnan, and assist the training of local early childhood educators, exploring better early childhood education models, and promoting long-term development of local communities. In 2021, participating preschools in Ximeng County and Funing County completed the 3

to 5 years project cultivation stage and were handed over to local education authorities and village committee for independent operations. The Lancang project was also completed in 2022. In August 2022, the Foundation initiated the project in Honghe County with 21 classes. As of the end of 2023, the Foundation had supported a total of 186 preschool classes in four counties in Yunnan, with 4,248 children enrolled and 1,797 graduated cumulatively, with a total funding of RMB7.29 million approximately.

As of the end of 2023, the Foundation's Sunshine Preschool Project had been implemented in four counties in Yunnan, with

**186** preschool classes supported

**4,248** children enrolled

**1,797** children graduated, and

RMB **7.29** million total funding support



Foundation staff interacting with children of a Sunshine Preschool class

## • One Plus One Matching Fund Project

The Foundation launched the One Plus One Matching Fund project in 2012. The Foundation partnered with employees from APP China Shanghai Office, pairing up with schools in Huining County, Gansu Province, Xunhua County, Qinghai Province, and Hongsibu Region, Ningxia Autonomous Region. APP China employee volunteers

make monthly donations to provide financial assistance to primary and middle school students from impoverished families. Meanwhile, the Foundation provides matching fund to support the paired schools, as well as other schools in remote areas, to improve their facilities, or pay for teaching supplies.

As of the end of 2023, over 1,000 employee volunteers had participated in the project, donating a total of RMB3.50 million, including RMB2.21 million from employee donations, and RMB1.30 million from the Foundation's matching fund, benefiting 3,692 students in total.



## • The High School Scholarship Program

The High School Scholarship program (also known as the Yicong Scholarship program) is a joint program of both APP China and the Foundation. Launched in 2011, the program has set up scholarships in a number of high schools in Guangxi, Gansu and Guizhou provinces.

The Yicong Scholarship rewards outstanding high school students with a three-year scholarship based on the assessment of both the participating schools and student

applicants. The Foundation also organizes activities for scholarship recipients to help them broaden their horizons and improve their capabilities more comprehensively, including the field visit of APP China Qinzhou Mill every summer since 2015, the Yicong Shanghai Study Camp every year since 2016, and the online workshop on career choices in cooperation with Tomoroe Education launched in 2019. As of the end of 2023, the program had funded 822 students with a total funding amount of

nearly RMB13.40 million, and conducted 175 Tomoroe vocational training classes with a total participation of 66,550 person-times.

In the future, the Yicong Scholarship will continuously provide support for outstanding high school students, encourage them to participate in social and public welfare activities, and carry out more capacity-building programs to provide students with a broader platform to grow and thrive.

## Rural Revitalization Support for Local Communities

Our mills have been focusing on supporting the development of local communities, and actively participating in supporting rural revitalization initiatives of local communities through charitable donations and targeted assistance. In 2023, Guangxi Jingui Pulp & Paper donated RMB95,000 to Ma'an Village, Lingshan County, Qinzhou City, to improve village infrastructure, such as roads, cultural squares, drainage systems, power grid upgrade, and greening, to improve the living conditions of local residents. Hainan Jinhai Pulp & Paper donated RMB150,000 each to two villages, Yidong Village and Pai'an Village, in Changjiang Li Autonomous County, Hainan Province for improving village infrastructure and improving the living conditions for village residents.

# Annual Focus 2: Exploring the Sustainable Roadmap for Low-Carbon Development

Addressing climate change is a common challenge facing all humanity and is a core issue for global sustainable development. In recent years, with the deepening of global climate governance, the international community has reached a consensus on addressing climate change and is implementing a series of climate actions. From the signing of the *Paris Agreement* to the hosting of the 28th United Nations Climate Change Conference (COP28), many nations have made emission reduction commitments and proactive action plans to address climate change. Since proposing its carbon peaking and carbon neutrality goals

for 2030 and 2060 respectively, China has been actively and steadily implementing relevant initiatives, achieving significant progress in terms of related policies, industrial development, and technological research.

As one of the earliest paper enterprises in China to adopt the integrated "Plantation-Pulp-Paper" modern development, APP China is committed to embedding the "green gene" deeply into our development philosophy and strategy. We closely follow global trends of climate actions, and actively respond to government's

requirements for green, low-carbon, and circular development. Focusing on energy conservation and carbon reduction, we strive to continuously reduce operational carbon footprint through the introduction of advanced environmental protection technologies, the development of forestry carbon sinks, and the research and promotion of green products. We are also in active search for carbon reduction solutions throughout our value chain, striving to make concrete contributions to make planet Earth a greener and better home for all.





## Governance

APP China has established a climate change governance system led directly by the Board of Directors, which is responsible for overall guidance and supervision of the overall implementation of the Company's green transformation initiatives. Under the Board of Directors, the Economic Committee of APP China is the highest-level management body responsible for guiding the direction and ensuring the orderly implementation of the green transformation of the Company, including formulating carbon emission reduction targets, planning carbon emission reduction projects, and setting and managing carbon emission reduction indicators and targets, ensuring that the Company systematically and efficiently implements its climate response initiatives.

### APP China's Governance System for Addressing Climate Change

<b>Board of Directors</b>	Set the strategic direction of the Company's green transformation. Responsible for leading and overseeing the overall implementation of the Company's green transformation.
<b>Economic Committee</b>	Responsible for executing the decisions of the Board of Directors, guiding the implementation of the green transformation plans, and ensuring the orderly implementation of green transformation activities.
<b>Carbon Neutrality Project Executive Committee</b>	Consisting of members from headquarters departments, such as the Strategy Department, the Digitalization Office, the Culture and Communication Department, and the Technology Center, as well as directors of various business units, the Committee is responsible for the implementation of the "dual carbon" goals at each unit.
<b>Strategy Department</b>	Responsible for formulating and tracking the progress of the "dual carbon" goals and road map, coordinating the implementation of key carbon emission reduction measures, and tracking and managing carbon emission reduction indicators.
<b>Headquarters departments and BUs</b>	Carry out carbon neutral capacity building, carbon accounting, carbon emission quota trading, product carbon footprint accounting, energy saving and carbon emission reduction, carbon asset development, green financial product development, etc.

Our mills actively respond to the Group's climate change response strategy. Each mill has established its own carbon peaking and carbon neutrality committee, and continuously optimizes its carbon emission management system and climate change governance. The Company has established an MBOS competition platform, where our mills and employees can set up project teams, collect proposals, set target pledges, conduct indicator competition assessment, and share experience. Winning projects are rewarded with bonuses to motivate employees more actively participate in energy conservation and carbon reduction activities, and the green transformation of the Company. During the reporting period, Guangxi Jingui Pulp & Paper formulated its *2023 Refined Management Assessment Plan for Energy Conservation and Consumption Reduction*. According to this plan, energy conservation performance of each department is included into the performance evaluation of department directors, so as to motivate the departments to achieve more substantial energy conservation and carbon reduction results.

The Company also actively conducts capacity building training for employees to promote employees' understanding, knowledge and skills related to carbon peaking and carbon neutrality. We have organized a variety of trainings on addressing climate change, including corporate carbon reduction strategy, greenhouse gas management training, carbon accounting system training, carbon peaking and carbon neutrality knowledge training, greenhouse gas emission management, carbon management system internal audit, carbon neutral products, etc.

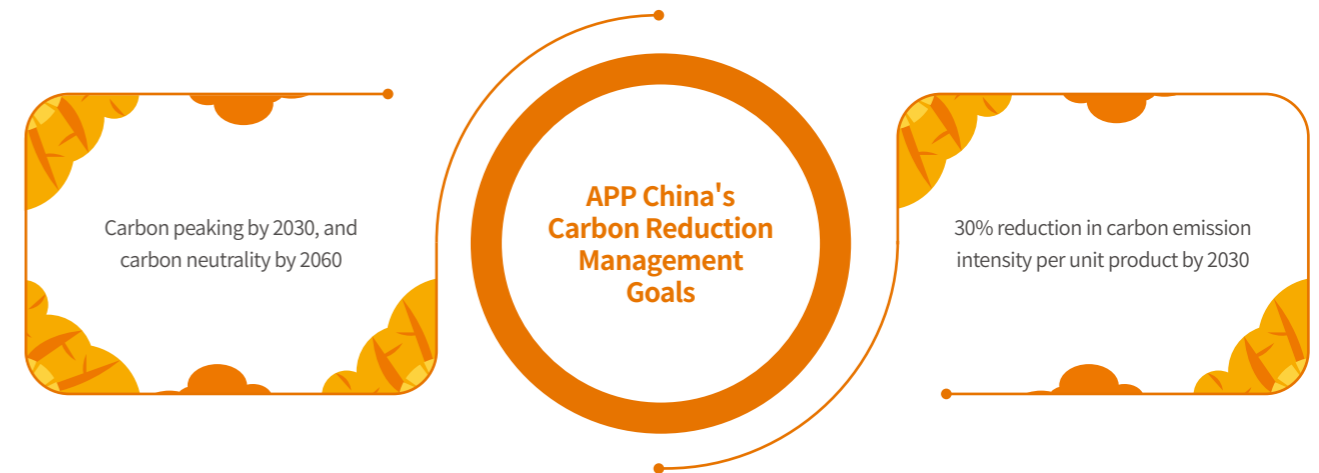
### Deepening Carbon Reduction Efforts with Organizational Framework

Both Shandong Base and Jiangsu Base of Bohui Paper have established a Carbon Peaking and Carbon Neutrality Management Committee. The committee is headed by the general manager of each base, who is responsible for the overall carbon reduction initiatives of the company. An executive director or executive deputy director is appointed to coordinate relevant carbon reduction operations and ensure the implementation of the company's carbon reduction strategy. Under the committee, each base has also set up a Carbon Peaking and Carbon Neutrality Management Office, which is responsible for the implementation of specific carbon reduction activities, such as carbon emission accounting and reporting, implementation of carbon reduction measures, organizing product carbon footprint verification and carbon neutrality certification, coordinating carbon trading and carbon asset management, and planning and providing carbon-related trainings for employees.

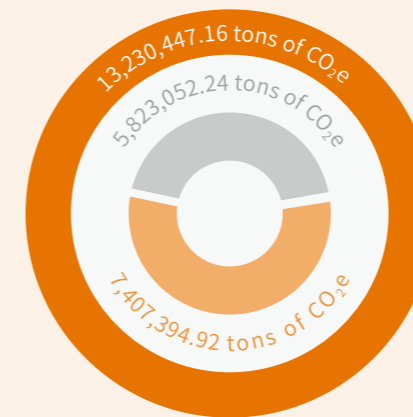
## Strategy and Goals

APP China started drafting its carbon peaking and carbon neutrality strategic plan in 2021, with the overall planning virtually completed in 2022. With 2021 set as the benchmark year for key carbon management targets, the strategic plan focuses on several key areas to ensure that the Company achieves its carbon neutrality goals, including reducing carbon emissions and intensity, improving energy efficiency, developing and adopting cutting-edge low-carbon technologies such as CCUS, and promoting carbon emission reduction throughout the value chain.

These carbon reduction goals have been broken down and assigned to our business units. Based on their production operations, production scale, carbon emission baseline, existing technologies, and process reserves, the business units set their specific targets, such as the reduction ratio of carbon intensity per unit product, renewable energy usage, biomass energy usage, and green electricity usage. Currently, our mills are in the process of actively formulating their carbon reduction action plans and implementing energy-saving and carbon reduction measures in order to achieve the assigned targets. In 2023, Bohui Paper set its three-year carbon management goals around carbon emissions and carbon intensity indicators, with specific carbon management targets set annually for each department to ensure continuous improvement in carbon management performance.



### 2022\* GHG Emissions of APP China Mills within the Reporting Scope



● Total emissions ● Scope 1 emissions ● Scope 2 emissions

\* As of the completion of this report, the GHG emission data of most mills for 2023 were still under the process of verification. The scope of data covers Gold East Paper, Ningbo Asia, Guangxi Jingui Pulp & Paper, Hainan Jinhai Pulp & Paper, Hainan Gold Hongye, Shandong Base of Bohui Paper, Jiangsu Base of Bohui Paper, and Rudong Base. The carbon accounting at Ningbo Asia, Bohui Paper, and Rudong Base was performed in accordance with the *ISO14064-1:2018*, while other mills used the *Greenhouse Gas Emissions Accounting Methodology and Reporting Guidelines for Paper and Paper Product Manufacturers (for Trial Implementation)* issued by the National Development and Reform Commission and the *Corporate Greenhouse Gas Emissions Accounting Methodology and Reporting Guidelines for Power Generation Facilities* issued by the Ministry of Ecology and Environment.

## Risk Management

Physical risks and transition risks are the main climate change risks that enterprises are currently facing. Identifying and analyzing risks can help enterprises better understand the risk stage they are in, laying a solid foundation for subsequent in-depth climate risk management.

Risks	Risk Factors	Response Measures
<p><b>Physical Risks-Acute Risks</b></p> <p><b>Timeframe: Short-, medium- to long-term</b></p> <p><b>Impact level: High</b></p>	<ul style="list-style-type: none"> <li>• APP China has plantations in multiple locations in China. Exacerbating climate change may bring higher frequency and intensity of extreme weather events such as typhoon, heavy storm, freeze, high temperature, and drought caused by climate change, which may pose significant risks to the Company's forestry operations, as well as the health and safety of employees and other workers.</li> <li>• Our production bases are mainly located in coastal areas, which are vulnerable to natural disaster risks such as typhoon and flood. Extreme weather events may disrupt our supply chain, which both increase our operating costs and affect our production stability.</li> </ul>	<ul style="list-style-type: none"> <li>• Formulate emergency plans and response procedures for fire, strong wind, disease and pest, and other disasters to ensure timely and effective relief efforts in plantation after disasters occur, and minimize forest asset losses.</li> <li>• Implement customized forest management approaches based on locations and environmental conditions. For example, in Hainan, forest lands are categorized into three types: wind-resistant and stable-yield, humid and high-yield, and drought-resistant and yield-increasing, each with differentiated cultivation methods in terms of variety and quality of saplings, planting density, land preparation methods, fertilization, planting season, and disaster prevention, etc.</li> <li>• Take extreme weather conditions into consideration when making decisions on wood chip procurement, and ensure the stability and continuity of raw material supply through source area diversification, and coordination of resources both internally and externally.</li> <li>• Maintain close communication with local meteorological services at each production base to obtain accurate real-time weather warnings; establish emergency response plans and strengthen the management of emergency facilities on a daily basis; and ensure timely rescue of disasters with a dedicated emergency firefighting and disaster response team, well-prepared emergency control supplies, and regular emergency drills for typhoon and flood control.</li> <li>• All plantations and mills purchase relevant insurance coverage every year to mitigate potential losses caused by disasters.</li> <li>• Improve employees' safety awareness and emergency response capabilities with health and safety activities such as emergency drills for heatstroke and first aid knowledge lectures.</li> </ul>
<p><b>Physical Risks-Chronic Risks</b></p> <p><b>Timeframe: Long-term</b></p> <p><b>Impact level: Medium-High</b></p>	<ul style="list-style-type: none"> <li>• The rise of average temperature globally caused by climate change may have a more significant negative impact on the ecological balance of forest systems, including higher risk of pests and diseases, thereby increasing the risk of forest management. The main raw materials for paper making, wood chips and wood pulp, come from forest resources. In a scenario of chronic risks, the supply capacity of our own plantations or forestland controlled by our supply chain may decrease, leading to risks such as increased raw material costs and challenges to production and operational continuity.</li> </ul>	<ul style="list-style-type: none"> <li>• Intensify R&amp;D on seedling varieties with characteristics such as wind resistance, waterlogging tolerance, cold resistance, disease and pest resistance, and high pulp yield, strengthening climate risk response in the seedling breeding stage. In addition, we optimize the yield stability of our own plantations by increasing the annual growth of forest through measures such as customized forest management, nurturing and fertilization management, and experimental site management, etc.</li> <li>• Sustainable forestry practices are of great significance for improving the climate adaptability of forest land. We conduct CFCC/PEFC forest management certification and ISO14001 environmental management system certification every year to improve sustainable forest management. We also actively promote the procurement of forest management certified raw materials and work together with our supply chain partners to promote sustainable forest management.</li> </ul>



Risks	Risk Factors	Response Measures
<p><b>Transition Risks-Policy Risks</b></p> <p><b>Timeframe: Short-, medium- to long-term</b></p> <p><b>Impact level: Medium-High</b></p>	<ul style="list-style-type: none"> <li>The government is accelerating the focus of control from energy consumption to carbon emissions and intensity. In the future, both state and local governments are expected to implement stricter policies and regulations on carbon reduction, leading to higher compliance costs of the Company.</li> <li>The power plants of our main production bases have been included in the national carbon emissions trading market. The paper industry is likely to be included in the market entirely in the short term. If our carbon emissions are at a high level, our fulfillment costs may increase. Meanwhile, changes in the carbon emissions accounting methods for the power generation industry, as well as the decreasing trend of carbon emission quota allocation, may also increase the fulfillment costs of the Company.</li> <li>The EU Carbon Border Adjustment Mechanism (CBAM) will gradually reduce the exemption quotas by 2026, and the paper industry may be covered in CBAM in the future, leading to increased costs for product exports of the Company.</li> </ul>	<ul style="list-style-type: none"> <li>Each business unit of APP China formulates a detailed policy list every year, against which they conduct compliance inspections regularly and implement relevant improvement measures in a timely manner, as well as organize targeted training.</li> <li>Increase the use of clean energy such as photovoltaics and purchased green electricity, ensure more efficient use of biomass energy sources such as bark and wood chips, and implement energy-saving upgrade projects to continuously reduce carbon emissions. Establish an online system for energy and carbon emission data and continuously strengthen digitalized management. Guangxi Jingui Pulp &amp; Paper, Gold East Paper, and Hainan Jinhai Pulp &amp; Paper made a profit of RMB25.363 million from fulfilling their carbon market transactions during the 2021-2022 period.</li> <li>We have set the goal of reducing product carbon footprint by 30% by 2030, launched multiple carbon neutral products, and plan to build "zero-carbon mills", to actively address potential emerging regulatory risks in the future.</li> <li>Continuously track the carbon footprint of exported products, and establish and gradually improve the product carbon emission accounting framework to meet the EU's requirements for product carbon emission data.</li> </ul>
<p><b>Transition Risks-Technology Risks</b></p> <p><b>Timeframe: Medium- to long-term</b></p> <p><b>Impact level: Medium</b></p>	<ul style="list-style-type: none"> <li>As government regulations on energy management and carbon emissions become increasingly stringent, our existing technologies and equipment may no longer meet the new environmental standards, leading to the risk of early phase-out. To comply with new regulatory requirements, we need to invest in new technologies and equipment, or upgrade existing technologies and equipment, which may increase the operating costs of the Company.</li> <li>The application of forward-looking technologies such as carbon capture, utilization, and storage (CCUS) is an important solution to achieve carbon neutrality goals. However, these technologies are still evolving and not yet widely commercialized, resulting in a number of risks related to their application, such as technical complexity, high costs, and the safety and reliability of long-term storage of carbon dioxide.</li> </ul>	<ul style="list-style-type: none"> <li>In addition to introducing advanced low-carbon technologies, we continuously strengthen our independent R&amp;D capabilities and actively promote the application of innovative R&amp;D results in various production bases, gradually reducing reliance on external technologies, achieving both significant carbon reductions and cost reductions for technological upgrades.</li> <li>Actively cooperate with external parties to explore the practical application of new technologies. Hainan Jinhai Pulp &amp; Paper leverages its location advantage to explore "blue carbon" possibilities, and collaborates with universities and research institutions to explore the application of CCUS technology.</li> </ul>
<p><b>Transition Risks-Market Risks</b></p> <p><b>Timeframe: Medium- to long-term</b></p> <p><b>Impact level: Low-Medium</b></p>	<ul style="list-style-type: none"> <li>With the increasing awareness of environmental protection, consumers are paying greater attention to the sustainability and environmental attributes of products when making purchasing choices. Meanwhile, due to the same trend, the market demand for products that are environmentally certified or have green attributes is continuously increasing. If we fail to timely launch high-quality green products that meet these needs, we may miss market opportunities and even face the risk of declining market competitiveness.</li> </ul>	<ul style="list-style-type: none"> <li>We have launched a series of "zero-plastic" and "carbon neutral" products, and a number of our industrial, cultural and tissue products have obtained green product-related certifications, such as the China Environmental Labeling Product Certificate. We will further intensify our R&amp;D in green and low-carbon products in the future.</li> <li>A number of our production bases have been recognized as national and local "Green Factory", showcasing our long-term efforts in energy conservation and emission reduction, and laying a solid foundation for further reducing product carbon footprint.</li> </ul>
<p><b>Transition Risks-Reputation Risks</b></p> <p><b>Timeframe: Short- to medium-term</b></p> <p><b>Impact level: Low</b></p>	<ul style="list-style-type: none"> <li>The climate actions of manufacturing enterprises are increasingly becoming a focus of attention for stakeholders such as investors, consumers, and regulatory authorities. Many companies at home and abroad have set specific reduction targets and implemented related management measures. If we fail to demonstrate adequate determination and action, we may face questioning from stakeholders, which could in turn affect our brand image and reputation.</li> </ul>	<ul style="list-style-type: none"> <li>We attach great importance to green development, and have integrated green transformation into our core development strategy. We take proactive actions to advance the implementation of our carbon peaking and carbon neutrality goals. Our mills are gradually establishing a carbon emission management system while carrying out in-depth climate governance regularly. A number of our mills have conducted carbon emission verification in accordance with the ISO14064 standard. Overall, APP China faces relatively limited climate-related reputation risks.</li> </ul>

## Climate Response Practices and Progress

For companies, climate change not only brings challenges, but also opens up the opportunities for transformation, upgrading, and innovation. In 2023, APP China continued our exploration and innovative practices in various areas, such as developing forestry carbon sinks, cultivating biomass energy forest, and developing green and low-carbon products, striving to achieve a win-win result for both environmental and economic benefits.

### Developing Forestry Carbon Sinks

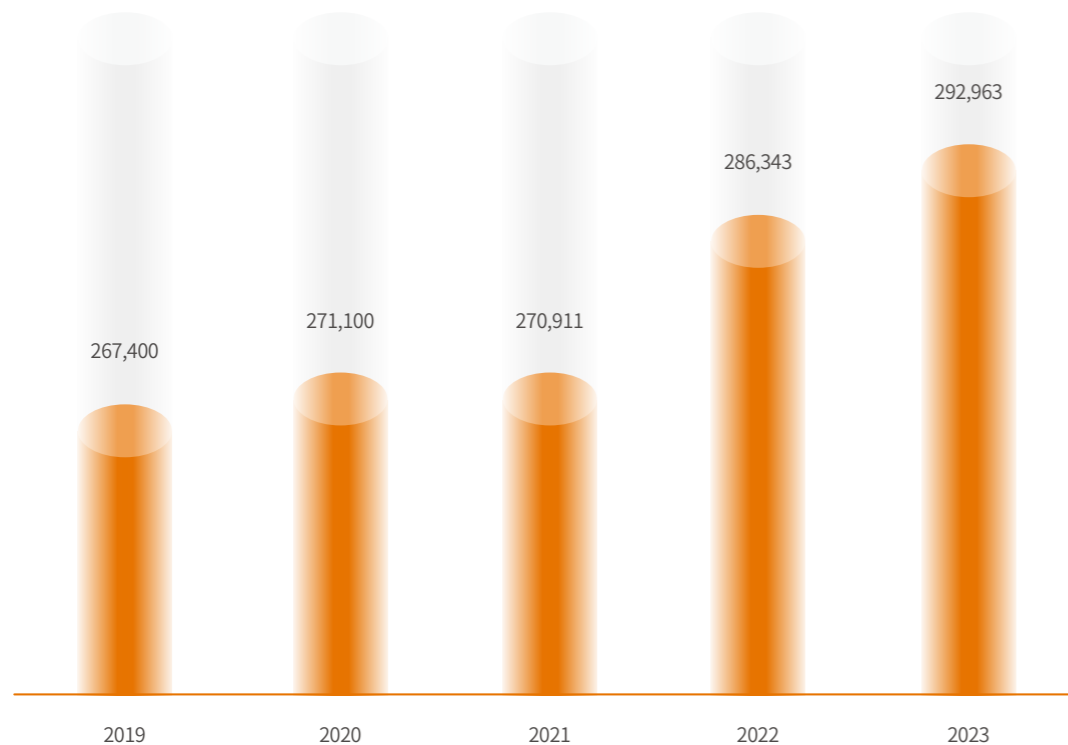
To realize the carbon peaking and carbon neutrality goals, forestry carbon sink is one of the most economically efficient methods for carbon sequestration. In recent years, APP China has been actively developing forestry carbon sinks. In 2019, we initiated the first carbon sink inventory of our plantations, laying the foundation for the development of forest carbon sinks. In September 2023, we initiated the third carbon stock assessment, which indicated that as of August 31, 2023, the carbon stock of APP China's plantations was 45.83 million tons of carbon dioxide, with a net increase of 990,000 tons of carbon dioxide compared to the amount at the end of 2022.

In 2023, our Hainan VCS Carbon Sink Project started the development of 69,000 mu of acacia forestland as carbon sinks, with a number of the project processes completed already, including preparing the project design documents (PDD), conducting satellite map verification, public disclosure at the VCS official website, and signing agreement with an approval agency.

After the Ministry of Ecology and Environment released the *Management Measures for Voluntary Greenhouse Gas Emission Reduction Trading (Trial)*, the Sustainability Department of APP China Forestry promptly studied the policy and

developed a number of interpretation and explanation documents for reference internally, such as the *Key Points on CCER Registration and Trading System Joint Account Opening*, the *Project Methodology*, and the *Differences between New and Old Management Measures*. The documents were also submitted to company executives as decision-making reference.

Total Area of APP China's Plantations (hectare)



### Developing Biomass Energy Plantations

APP China actively responds to the government's call to carry out green transformation and industrial upgrading, which includes actively using biomass fuels as replacements for coal. The biomass energy sources mainly include biomass energy plantation, supplemented by roots of trees. APP China Forestry has initiated a number of targeted pilot projects, including the biomass energy plantation pilot project, after conducting in-depth research on forest-related sciences and consulting industry experts for suggestions and guidance.

The Low-temperature Chilling Injury Area Eucalyptus Biomass Energy Timber Plantation Transformation and High-efficiency Cultivation Pilot Project, with a total area of 292.88 mu of forestland, was launched in Wenshan County, Yunnan Province. The project aims to explore ways to overcome the constraints on developing biomass energy plantations in high-altitude mountainous areas.

Dual-purpose plantation is the main direction of the Hainan biomass energy

plantation pilot project, which mainly includes high-density (3x1.33 meters, 167 trees per mu) eucalyptus plantation. APP China Forestry completed the planting of over 3,200 mu and 7,168 mu of biomass energy plantation in 2022 and 2023 respectively. As of the end of 2023, a total of over 10,000 mu of eucalyptus energy plantation had been planted cumulatively, with a mean annual increment (MAI) of approximately 1.5 tons per mu per year, and a total of about 85,000 tons of root biomass materials supplied to our mills.

### Expanding Supplies of Biomass Fuel Materials

APP China Forestry Hainan Business Area launched the Biomass Fuel Supply Project in 2022, aiming to produce a stable source of biomass fuel with economic scale in support of the biomass energy initiatives of APP China's production bases. In 2023, the pilot project focused on the dual-purpose plantation model with the plan of growing 10,000 mu of high-density eucalyptus as a biomass energy plantation. Other than this, the project also experimented with other varieties, such as Indian rosewood and Chinese tallow tree, as potential candidates for biomass energy plantation choices, with over 400 mu of pilot plantation planted. In 2023, APP China Forestry Hainan Business Area supplied 51,338 tons of biomass fuel material to Hainan Jinhai Pulp & Paper, while APP China Forestry Guangxi Business Area supplied 58,899 tons of biomass fuel material to Guangxi Jingui Pulp & Paper.



## Transformation of Low-quality and Low-efficiency Plantations

APP China Forestry Guangdong Business Area operates the Nankang Plantation, which has 74,000 mu of forest land spanning over seven counties and cities. Since 90% of the areas are located near the north limit for eucalyptus, the cold-tolerant eucalyptus variety growing here faces certain degree of chilling injury risk. Through in-depth research and planning, APP China Forestry plans to upgrade this low-quality plantation by building a long-fiber wood plantation, a short-fiber wood plantation, a carbon sink plantation at Ganzhou Operation Area, as well as exploring the possibility of building a biomass energy plantation. Taking long-fiber wood plantation as priority, we focused

on building a wood supply base with mixed long- and short-fiber woods. *Pinus elliottii* was selected as the long-fiber wood variety for the project. In 2022, Nankang Plantation planted 870 mu of *pinus elliottii* in Yudu County. With a survival rate of 99%, these trees can grow to 1.6 meters on average in 20 months. The project gained strong support from local government and forestry bureau due to its outstanding economic, ecological, and social returns. It was recognized as a state low-quality and low-efficiency plantation transformation project, and received a government afforestation subsidy of RMB150,000 in 2023.

In 2022, Nankang Plantation planted **870** mu of *pinus elliottii* in Yudu County.

## Developing Green Products

APP China has successfully developed a number of green products, with multiple products, including tissue products, cultural paper products, and industrial paper products, being certified as carbon neutral. In 2023, Gold East Paper's carbon paper, and Bohui Paper's aseptic liquid packaging paperboard, food-grade coated kraft CBKB product and offset printing paper obtained the certification for carbon

neutral products; Gold East Paper's coated paper, white cardboard (card) paper, double adhesive paper, and thermal paper, as well as Hainan Jinhai Pulp & Paper's pulp product and coated paper product obtained the China Environmental Labeling (Type II) Product Certification; and Hainan Jinhai Pulp & Paper's copy paper obtained China Environmental Labeling (Type I) Product Certification.

### Carbon Neutral Products of APP China

In November 2023, at the Sixth China International Import Expo, APP China launched a new carbon neutral series of products, including zero-carbon copy paper, zero-carbon aseptic liquid packaging paperboard, zero-carbon food-grade coated cardboard, and zero-carbon offset printing paper. These products not only meet the "zero-carbon" goal throughout product development, production, and use (from cradle to gate), but also meet the high-quality requirements of different consumption scenarios.

#### Zero-carbon copy paper:

The product uses the Trutone true color ink technology and anti-curling process design to ensure performance in terms of stability, smoothness, and printing clarity, making it suitable for office printing and copying, especially for important documents with high printing quality requirement such as bidding documents or documents for record.

#### Zero-carbon aseptic liquid packaging paperboard:

The product has good stiffness and flexibility, and stable post-processing performance against lactic acid and hydrogen peroxide edge penetration, which meet the high-quality requirements of aseptic liquid food packaging.

#### Zero-carbon food-grade coated cardboard:

The product uses 100% unbleached kraft pulp on its backside, which gives it good moisture resistance, burst resistance, and tear resistance performance, making it suitable for frozen and refrigerated food packaging.

#### Zero-carbon offset printing paper:

The product has good evenness, high thickness, and high stiffness, which make it suitable for meeting the high-speed printing requirements of educational publications, books, and magazines.

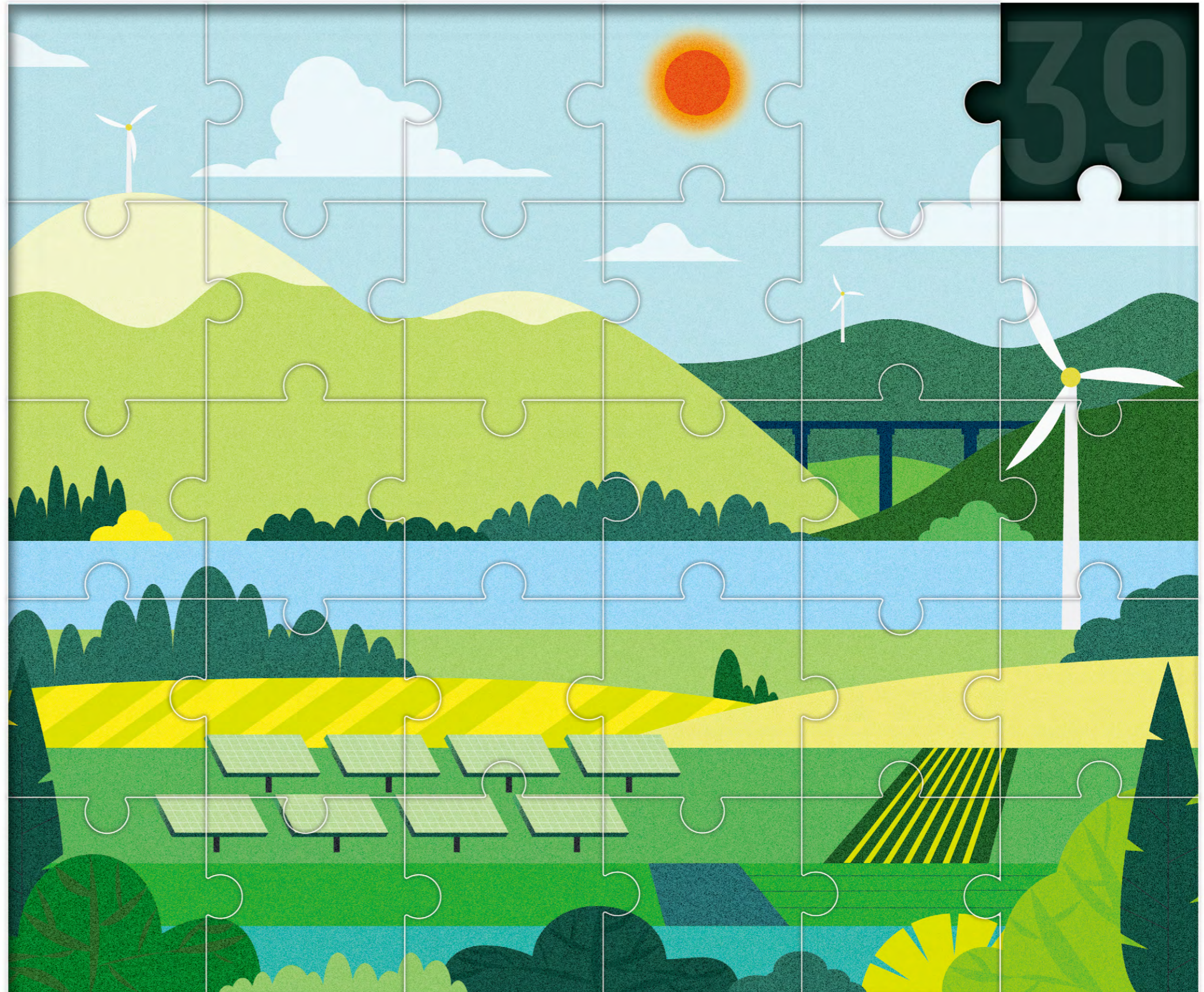


APP China's exhibits of green products at CIIE

# Environmental

## Marching Toward a Green Future

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## Sustainable Forest Management

Adhering to our forestry management concepts focusing on "compliance, technology, ecology, harmony, and sustainability", APP China follows a growth path focusing on sustainable forest management, and continuously explores more standardized and scientific ways to manage our plantations, striving to achieve win-win economic, social, and ecological benefits.

- **292,963** hectares of plantations, up **2.31%** year-on-year
- **31.328** million seedlings cultivated in 2023, up **62.95%** year-on-year
- **45.83** million tons of CO<sub>2</sub> fixed in plantations, with a net increase of **990,000** tons of CO<sub>2</sub> in forest carbon sinks
- **272,494.87** hectares of plantations are CFCC/PEFC-FM-certified, accounting for **93.01%** of the total area of our plantations
- **100%** of raw wood materials supplied by our plantations to our pulp mills are CFCC/PEFC-FM-certified
- **59.67%** of our plantations are ISO14001-certified
- **51.13%** of our plantations are High Conservation Value-assessed

### Vision of APP China Forestry

APP China Forestry is committed to managing modern timber plantations with scientific management and sustainability concepts, striving to become a world-leading forestry business and harmoniously create win-win economic, social, and ecological benefits.

## Sustainable Forest Audit and Standards

APP China started large-scale plantation operations in 1995. As of the end of 2023, the Company owned 292,963 hectares of plantations and three seedling nurseries focusing on the integrated "research, production, demonstration, and promotion" of clone tissue cultured high-quality eucalyptus varieties.

APP China Forestry started implementing the ISO14001 Environmental Management System in 2001. In 2011, we also started implementing the CFCC/PEFC-FM Forestry Certification system. We have integrated

the requirements of relevant certification standards into the daily operations of our plantations. Each year, we rigorously complete relevant internal and external audits, timely summarize audit findings and share key achievements and experience, actively communicate with our stakeholders, and rectify and improve problems found in our forestry operations, ensuring the continuous improvement of our forestry management capabilities.

In 2023, APP China Forestry conducted a series of trainings for all plantations

to help our forestry management staff systematically understand relevant national standards and required operational procedures. We rigorously carried out internal audits and made thorough preparations for external audits. All 15 forestry companies under APP China Forestry completed the annual CFCC/PEFC-FM certification audits. Among which, 12 companies completed their periodic audits, 3 new companies completed their initial certification audits, and 6 companies also passed the periodic audits for ISO14001 certification.



APP China Forestry conducted forest certification

## • Forestry Risk Management

Forestry operations are mainly exposed to risks such as fire, wind, frost, disease and pest, and flooding. Climate change has induced frequent occurrence of extreme weather events globally, causing both disruptions to the balance of ecosystems and a growing trend in forest-related risks. APP China forestry has formulated and continuously optimizes a series of emergency response procedures for disasters, such as the *Disaster Emergency Response Procedures*, the *Lightning Disaster Response Plan*, the *Typhoon Disaster*

*Emergency Response Plan*, the *Eucalyptus Frost Disaster Emergency Response Plan*, and the *Forest Disaster Insurance Management Measures*. These policies stipulate the specific response measures and procedures for various types of disasters, aiming to ensure effective prevention and post-disaster relief to minimize the possible damage to our forest assets.

In 2023, APP China Forestry classified disaster-prone areas into different risk

categories according to historical occurrence of disasters. Targeted forest management measures were implemented in high-risk areas, mitigating the overall disaster risks more effectively. During the reporting period, there was 130,815 mu of our plantations affected by natural disasters, up 14% year-on-year. Among the plantations affected, 3,964 mu suffered from frost damage, and 116,070 mu suffered damages caused by typhoons.

### Forest Disaster Risks Prevention Measures of APP China Forestry



#### Forest fire prevention

- ※ Formulate the *Forest Fire Prevention Operation Manual* to standardize forest fire control activities and ensure the effective prevention and extinguishing of forest fires in accordance with the fire control principle of "prevention first, and active control".
- ※ Collaborate with local governments to raise fire safety awareness in local villages and establish a joint fire hazard prevention mechanism at each village, under which we carry out fire prevention activities regularly under government supervision, and with active participation of local community residents; actively engage in relevant information exchange and experience sharing such as participating in fire prevention trainings organized by the government.
- ※ Establish a forest fire control command center at each operation area, which is responsible for coordinating the emergency response operations regarding the prevention and extinguishing of forest fires, and formulating a forest fire emergency plan for each management level. Fire control command center has also been established at the plantation level, conducting relevant training and emergency drills regularly to raise both the fire prevention and control

awareness as well as the capabilities to handle fire emergencies.

- ※ Establish fire breaks properly, ensuring there is a 2- to 3-meter-wide fire break in areas with high fire hazard risks, such as large stretch of land, or areas near farmland, dry land, villages, and temples.
- ※ Require contractors to abide by the Company's *Safety Production and Environmental Protection Regulations*, which prohibits the use of fire for production purposes in forest areas, such as burning vegetated land or performing controlled burns.
- ※ Use drones to assist in monitoring forest fire hazards.
- ※ Purchase forest insurance.



#### Wind damage prevention

- ※ Research and experiment on wind-resistant varieties, and avoid planting during typhoon seasons to ensure the survival rate of seedlings.
- ※ Strengthen the wind resistance of forests in high wind risk areas with higher planting density and depth.

- ※ Prune in advance of incoming typhoons to mitigate wind damage, and activate post-disaster response plans promptly (within 72 hours of the disaster).
- ※ Purchase forest insurance.



#### Frost damage prevention

- ※ Research and experiment on frost-resistant varieties.
- ※ Establish a frost monitoring and early warning system, and closely follow weather forecasts and maintain close communication with local meteorological bureaus to ensure timely response.

- ※ Take active measures to enhance the frost-resistance of forests after receiving weather alerts, such as checking and strengthening root stabilization, pruning, increasing soil covering, wrapping trees with insulation materials, and fertilizing, etc.
- ※ Purchase forest insurance.



#### Disease and pest control

- ※ Cultivate high-quality seedling strains with greater resistance to diseases and pests.
- ※ Implement rigorous planting and protection measures and forest monitoring, ensuring scientific, effective, and targeted control.
- ※ Create better ecological environment conditions for plants and the predators of pests as an effective way for prevention.
- ※ Maintain a proper diversity of hybrid strains and tree species.

- ※ Develop a monthly disease and pest control calendar to ensure early prevention and control.
- ※ Use drones to spray pesticides.
- ※ Conduct training on the identification and control of diseases and pests.
- ※ Purchase forest insurance.

### Fighting Eucalyptus Wilt Disease

Eucalyptus wilt is a disease that causes the most serious damage to the entire plant. In APP China's plantations in Guangdong, the peak season of eucalyptus wilt occurs from July to September each year, which can seriously affect our operations.

For effective prevention and control of the spread and outbreak of eucalyptus wilt, APP China has introduced highly resistant eucalyptus varieties such as LH1 and L11, and continues to tackle the technical challenges of combating eucalyptus wilt. In September 2023, APP China Forestry collaborated with Research Institute of Tropical Forestry, Chinese Academy of Forestry to conduct experiment with seedlings we cultivated in Yingde Plantation, aiming to identify high-yield tree species as potential replacements for eucalyptus. In November 2023, experts from APP China Forestry and South China Agricultural University cooperated and pooled their expertise to cultivate more potential varieties resistant to eucalyptus wilt, expanding our reserve of advantageous varieties.

In the future, APP China Forestry's nursery technicians will also conduct independent experiments. Our technicians will select trees that demonstrate good disease resistance after the peak season of the disease, and carry out relevant cloning, breeding, and disease resistance testing activities to cultivate premium fast-growing varieties with high disease resistance.



APP China's seeding nursery in Guangdong



## • Boosting Annual Growth of Plantations

Accelerating the growth of plantations can effectively enhance our wood supply capacity, as well as increase the amount of forest carbon sinks. APP China Forestry has made the increase of mean

annual increment (MAI) of plantations one of its core tasks, and actively carries out pilot projects for this purpose. In 2023, APP China Forestry formulated the *Brief Technical Protocols of the MAI*

*3.0 Plantation Management Model*. We promote the MAI 3.0 efficient plantation management model among our forestry companies to further improve our plantation management capabilities.



APP China Forestry has been dedicated to the research and cultivation of seedling varieties. In order to effectively realize the MAI targets, we have developed customized forest management plans for each plantation based on factors such as disaster risks, climate patterns, and yield, and implement targeted management measures. Meanwhile, we implement a tree variety diversity plan, collecting and experimenting on various tree species and strains to build a rich reserve of them, which contributes to the continuous enhancement of the productivity of our plantations.

### Developing the *Eucalyptus dunnii* Seed Plantation

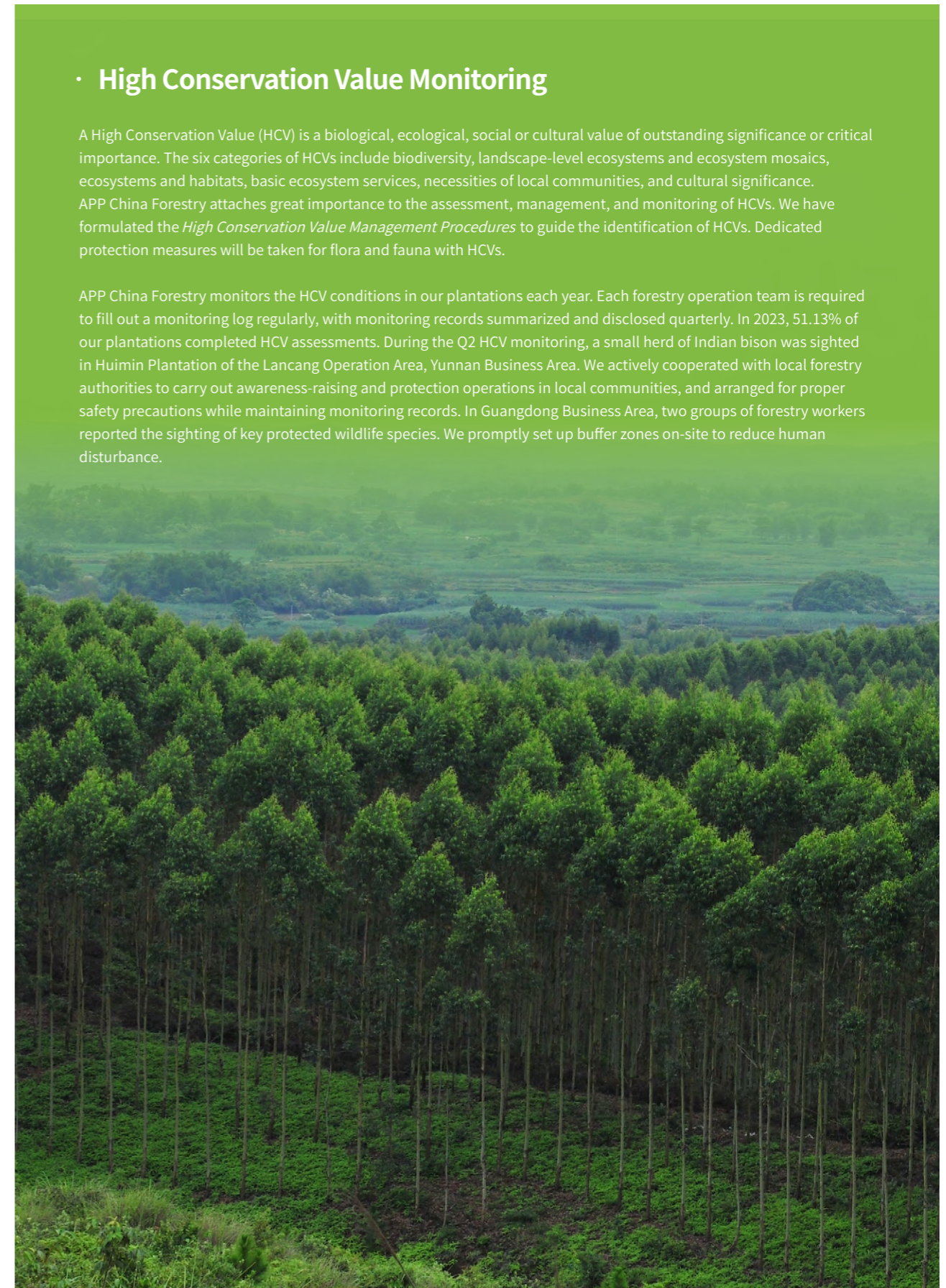
In recent years, APP China Forestry's plantations in the high-altitude mountainous areas such as Ganzhou in Jiangxi Province, Wenshan in Yunnan Province, and northern Guangxi Autonomous Region have suffered severe damages from frequent chilling injuries. Changing the selection of tree varieties is an effective solution. APP China Forestry Technical Center cooperated with experts from Research Institute of Fast-growing Trees, Chinese Academy of Forestry. The joint research concluded that *eucalyptus dunnii* will be a good choice for commercial plantation in high-altitude areas due to its cold resistance and high growth rate.

Because *eucalyptus dunnii* can only be grown from seed, APP China Forestry made the plan for building a seed plantation for seed production. In 2023, APP China Forestry Yunnan Business Area completed the seedling planting in two experimental plots. The experiment will last for three years. Once completed, the seed plantation is expected to be able to start seed production in 5-6 years, and reach peak production in about 11 years. The seed plantation is expected to not only meet the needs of APP China Forestry for our plantations in cold areas, but also allow us to effectively revitalize more forest land suffering from chronic frost damage.

## • High Conservation Value Monitoring

A High Conservation Value (HCV) is a biological, ecological, social or cultural value of outstanding significance or critical importance. The six categories of HCVs include biodiversity, landscape-level ecosystems and ecosystem mosaics, ecosystems and habitats, basic ecosystem services, necessities of local communities, and cultural significance. APP China Forestry attaches great importance to the assessment, management, and monitoring of HCVs. We have formulated the *High Conservation Value Management Procedures* to guide the identification of HCVs. Dedicated protection measures will be taken for flora and fauna with HCVs.

APP China Forestry monitors the HCV conditions in our plantations each year. Each forestry operation team is required to fill out a monitoring log regularly, with monitoring records summarized and disclosed quarterly. In 2023, 51.13% of our plantations completed HCV assessments. During the Q2 HCV monitoring, a small herd of Indian bison was sighted in Huimin Plantation of the Lancang Operation Area, Yunnan Business Area. We actively cooperated with local forestry authorities to carry out awareness-raising and protection operations in local communities, and arranged for proper safety precautions while maintaining monitoring records. In Guangdong Business Area, two groups of forestry workers reported the sighting of key protected wildlife species. We promptly set up buffer zones on-site to reduce human disturbance.



## Managing Environmental Footprint with Cleaner Production

APP China is committed to the exploration and implementation of green development practices. The Company has established a robust environmental management system. We actively manage the operations of our mills to build "Green Factory", promote the transformation toward green energy, ensure efficient use of water, and adopt sustainable logistics measures, striving to fully integrate the concept of green development into our operations.

- 5 mills recognized as National "Green Factory"
- RMB1.3413 billion in environmental investment, up 32.58% year-on-year
- 30.3815 million kWh generated with photovoltaics
- 25.51% of energy used comes from renewable energy
- Average industrial water reuse rate: 94.71%
- Comprehensive utilization rate of non-hazardous solid waste: 99.34%

### • Environmental Management Mechanism

APP China mills have all established and continue to optimize their environmental management systems based on the ISO14001 environmental management system. Environmental management policies and objectives are formulated by integrating the requirements of relevant laws and regulations, such as the *Environmental Protection Law of the People's Republic of China*, as well as various international certification standards, which include specific policies on energy management, wastewater management, air pollution control, solid waste management, environmental monitoring management, environmental impact management, environmental assessment management, and environmental assessment incentive management. To ensure compliance with the requirements of the environmental management system, each mill has established a dedicated EHS department and an environmental management manual, which clearly defines the responsibilities and authorities of relevant departments and regulates the implementation of various management policies. In 2023, there was no incident of major environmental accidents at APP China, and the Company invested a total of RMB1.3413 billion on environmental protection initiatives.

National "Green Factory" is the designation given by the Ministry of Industry and

Information Technology to model enterprises of various industries for promoting the implementation of China's "14th Five-Year Plan" for green industrial development and green manufacturing, and achieving the carbon peaking and carbon neutrality goals of the industrial sector. APP China is committed to optimizing its production and operation processes in accordance with the Green Factory standards. In 2023, the General Office of the Ministry of Industry and Information Technology released the list of green manufacturing for 2022. With outstanding performance in safety, quality, environmental protection, and energy conservation, Hainan Jinhai Pulp & Paper and Gold Hongye Hubei Mill were awarded the title of "National Green Factory", joining the ranks of Gold East Paper, Ningbo Asia, and Guangxi Jingui Pulp & Paper, which obtained the title in previous years. In addition, Bohui Paper was selected as a Shandong Province Green Factory in July 2023.

In order to effectively control environmental risks and ensure the adequacy and applicability of our environmental management system, our mills attach great importance to the identification and assessment of environmental risks, and take prompt rectification measures regarding the problems found to timely control

the harmful impact on the environment. We have also formulated relevant emergency plans for various environmental emergencies, establishing a scientific and standardized emergency response mechanism, including the prevention, early warning, emergency response procedures, and response measures regarding various environmental emergencies. In 2023, Guangxi Jingui Pulp & Paper and Gold East Paper each carried out a comprehensive identification and assessment of environmental risk factors, and Hainan Jinhai Pulp & Paper conducted a risk hazard inspection regarding risk substances, production process risks, risk prevention measures, and preparedness of emergency supplies.

#### National Green Factory:

Gold East Paper, Ningbo Asia, Guangxi Jingui Pulp & Paper, Hainan Jinhai Pulp & Paper, and Gold Hongye Hubei Mill

### Continuous Strengthening of Environmental Risk Management

From June to July 2023, Guangxi Jingui Pulp & Paper conducted a comprehensive identification and assessment of environmental risk factors. A total of 39 general environmental factors and 34 significant environmental factors were identified during the process, with relevant prevention or emergency plans formulated accordingly by related departments. Guangxi Jingui Pulp & Paper actively strengthened the inspection of environmental risk hazards, conducting regular inspections over the conditions of odor, noise, rainwater ditches, wastewater discharge outlets, discharge pipeline under seawater of the mill, and hiring third parties to conduct regular environmental monitoring. The company also visited surrounding villages regularly to better understand the demands of local residents and take prompt prevention measures regarding possible environmental risks.



The plant of Hainan Jinhai Pulp & Paper

## Energy Management

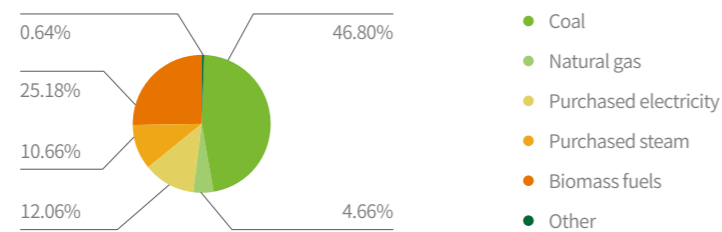
Our mills have established their own energy management systems strictly in compliance of requirements of the *Energy Conservation Law of the People's Republic of China*, the *Administrative Measures for Energy Conservation in Key Energy Consumers*, and other relevant laws and regulations. During the process, we also drew reference from a number of industry standards, including the *Energy Management Systems (GB/T 23331-2012)*, the *Energy Management Systems—Requirements with Guidance for Use (GB/T 23331-2020)*, the *Energy Management System—Requirements Certification for Pulp and Paper Plants (RB/T 118-2014)*, and the *Guideline for Energy Management in Industry Enterprise (GB/T 15587-2009)*. Each mill has established a dedicated Energy Management Committee. The committee is responsible for developing and implementing energy performance improvement plans, coordinating energy conservation and carbon reduction efforts

across departments, and conducting regular reviews of energy management effectiveness.

To ensure the successful achievement of APP China's carbon reduction goals of "peaking carbon emissions by 2030 and reaching carbon neutrality by 2060", our mills continuously strengthen the management of their reduction targets, breaking down the

targets into annual targets around indicators such as comprehensive energy consumption per ton of paper produced, comprehensive energy consumption per ton of pulp produced, and the proportion of renewable energy in energy mix. Indicators related to comprehensive energy consumption are included in the KPIs for performance evaluation.

Energy Mix of APP Mills within Reporting Scope in 2023



Note: Biomass fuels include black liquor (accounting for approximately 91%), wood chips, etc.; other energy sources include gasoline, diesel, fuel oil, liquefied petroleum gas (LPG), solar energy, and purchased green electricity.

### Vigorously Pursuing Energy Conservation

Energy conservation through technological upgrade is an important means for APP China to achieve carbon peaking and carbon neutrality goals. In recent years, the Global Technology Research and Development Department of APP China has been focusing its efforts on the research of cutting-edge energy-saving and carbon-reduction technologies. A series of energy-saving upgrade projects have already been implemented in our

mills accordingly. In 2023, a number of these energy-saving upgrade projects were successively applied in our mills with significant results. For example, replacing Venturi heat pumps with steam compressors can reduce the natural gas cost by RMB100 per ton of paper produced; and upgrading water ring vacuum pumps on paper machines to more efficient turbo machines can reduce electricity cost by over RMB14 million per year.

Each mill also conducts a significant number of energy-saving potential assessments each year, and establishes targeted improvement project teams to follow the identified opportunities, achieving significant energy-saving and carbon-reduction results. In 2023, our mills achieved a total annual energy-saving of the equivalent of 119,824 tons of standard coal.

#### Results of Energy Saving Projects in 2023

Gold East Paper:  
**4,767.00 tons of standard coal/year**

Hainan Gold Hongye:  
**1,194.00 tons of standard coal/year**

Guangxi Jingui Pulp & Paper:  
**11,630.92 tons of standard coal/year**

Bohui Paper:  
**14,128.58 tons of standard coal/year**

Hainan Jinhai Pulp & Paper:  
**88,103.44 tons of standard coal/year**



### Gold East Paper

Gold East Paper vigorously implemented a number of energy-saving technological upgrade projects, such as the efficiency improvement of generators, efficiency improvement of paper machines, and installation of hybrid frequency conversion shore power systems at docks. In addition, the company also contracted a third-party energy source inventory, and cooperated with mature energy-saving integration vendors to further ensure effective and continuous energy-saving results.



Gold East Paper actively implemented energy-saving technological upgrades

### Guangxi Jingui Pulp & Paper

Guangxi Jingui Pulp & Paper established an energy-saving committee in 2021. The company thoroughly manages its consumption of coal, steam, electricity, natural gas and water, and carries out energy-saving projects regularly. In 2023, the company conducted a comprehensive analysis of all production processes, and identified 40 conservation opportunities at its power plant, pulp line, and paper machines, generating a total of RMB42 million in cumulative cost savings, 117% of its annual target.

### Pushing Forward Green and Low-Carbon Transformation

In recent years, our mills have been accelerating the pace of green and low-carbon transformation of their energy structure by vigorously implementing new energy projects, such as building photovoltaic projects, purchasing green electricity, and exploring the efficient utilization of biomass energy.

In March 2023, Gold East Paper started the Phase III construction of its 20-MW rooftop photovoltaic project. Upon its completion, Gold East Paper will be able to generate over 50 million kWh of power per year on average with a total installed capacity of 50 MW, making the project one of the largest rooftop distributed photovoltaic projects under a single entity in China or even globally. The project generated over 31 million kWh of power during the reporting period. Compared with a traditional thermal power plant with the same capacity, based on the average coal consumption of 350 grams/kWh for the mainstream 600 MW thermal power generation unit, this project can realize an energy saving equals to approximately 16,707.5 tons of standard coal per year. The project can also help reduce the emissions of air pollutants, reducing the emissions of sulfur oxides and nitrogen

oxides by about 142.02 tons and 123.64 tons per year respectively.

In 2023, our mills utilized a total of 544,914.38 tons of biomass fuels, up 1.3% year-on-year. During the reporting period, Guangxi Jingui Pulp & Paper purchased 129 million kWh of green electricity to replace self-generated electricity, reducing the consumption of 40,600 tons of standard coal. The company also continued to carry out biomass pellet co-firing experiment projects, completing the co-firing of 47,800 tons of wood chips, 56,100 tons of pulp residues, 31,100 tons of sludge, and 16,600 tons of bark during the reporting year, up 7% year-on-year in total compared to 2022, with an energy saving of 21,400 tons of standard coal.

Solar power generation:

**30.3815 million kWh**

Proportion of renewable energy:

**25.51%**

Proportion of biomass fuel:

**25.18%**



Phase III of Gold East Paper's 20-MW rooftop photovoltaic project

## Water Management

APP China strictly complies with relevant laws and regulations, such as the *Water Law of the People's Republic of China*, the *Law of the People's Republic of China on the Prevention and Control of Water Pollution*, and the *Law of the People's Republic of China on Water and Soil Conservation*, in the production process. Our mills have established a robust water conservation management system, setting specific annual water consumption targets and tracking their progress with a strict assessment mechanism. Our mills have also established multiple water conservation improvement project teams to fully tap into their water conservation potentials and continuously strengthen the intensive use of water resources. We also focus on technological innovation and technological upgrades to adopt advanced water-saving equipment and technologies, continuously increasing the reuse of rainwater, reclaimed water, and workshop wastewater to reduce the intake of fresh water. Each mill also regularly carries out environmental protection awareness raising campaigns to promote employees' awareness about water conservation.

In February 2023, Ministry of Industry and Information Technology, Ministry of Water

Resources, National Development and Reform Commission, and other ministries jointly announced the 2022 list of Water Efficiency Leader among Key Water-using Enterprises and Industrial Park. Guangxi Jingui Pulp & Paper, Hainan Jinhai Pulp & Paper, and Gold East Paper were awarded the title of national-level "Water Efficiency Leader". In 2023, the average industrial water reuse rate of our mills reached 94.71%.

Gold East Paper continuously explores the water-saving potential of paper machines through management optimization, equipment upgrade, regular inspections and improvement activities, and a series of water-saving technological upgrade projects. In 2023, Gold East Paper's water withdrawal per ton of paper produced was reduced to 8.59 tons, meeting the standard for advanced enterprises. Hainan Jinhai Pulp & Paper has implemented a number of water-saving renovation projects, such as the reuse of white water in cultural paper production process, reuse of condensate in the evaporation section, rain and sewage separation, and sealing water recovery. Guangxi Jingui Pulp & Paper has adopted multiple industrial water recycling technologies, such as designing

a complete condensate recovery system in the white cardboard paper production workshop, sending the clean condensate water discharged from the paper machine drying section back to the power workshop for reuse, which reduces the use of softened water. Guangxi Jingui Pulp & Paper also installed white water recovery device and reuse system and sedimentation water reuse system in the pulp preparation workshop, and focused on management optimization, equipment and technological upgrade, and continuous improvement to reduce fresh water consumption. Bohui Paper implemented 12 water-saving projects during the year, achieving an annual water saving of 5.41 million cubic meters.

Our mills manage their production wastewater treatment and discharge in strict compliance with requirements of the *Discharge Standard of Water Pollutants for Pulp and Paper Industry* (GB 3544-2008). Our mills continuously optimize their wastewater treatment systems, setting up online monitoring facilities and implementing refined management measures, ensuring that the concentrations of all pollutants 100% meet or even higher than the relevant discharge standards.

Indicator	Unit	2023	2022	2021
Wastewater discharge per ton of paper produced (National standard* limit: 20 tons)	ton	6.18	5.79	5.88
Wastewater discharge per ton of pulp produced (National standard limit for pulp enterprises: 50 tons; national standard limit for pulp & paper enterprises: 40 tons)	ton	10.05	9.60	12.46
COD emissions per ton of paper produced (National standard limit: 1.6 kg)	kg	0.21	0.24	0.24
COD emissions per ton of pulp produced (National standard limit for pulp enterprises: 5 kg; national standard limit for pulp & paper enterprises: 3.6 kg)	kg	0.52	0.60	0.86

\*Discharge Standard of Water Pollutants for Pulp and Paper Industry (GB 3544-2008)

## Air Pollutant Management

Our mills continuously optimize their exhaust gases management policies and procedures in compliance with the *Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution*, the *Integrated Emission Standard of Air Pollutants* (GB 16297-1996), the *Ambient Air Quality Standard* (GB 3095-2012), as well as

other related laws, regulations and standards. We continuously strengthen the emission reduction management of atmospheric pollutants, ensuring that the concentration of atmospheric pollutant emissions is lower than the corresponding emission standard limit, and our total emissions are less than the emission permit limit.

During the reporting period, Bohui Paper formulated the *Management Measures for Materials and Solid Waste Storage and Transportation*, comprehensively regulating the relevant management measures for storage, loading and unloading, transportation, production, and other processes. For example, effective covering

measures must be taken for powdery, lumpy, and granular materials in the storage and transportation processes to prevent road spillage and atmospheric dust. Gold East Paper, which had already lowered the flue gas emissions of its power plant at the ultra-low emission level, further reduced its flue gas emissions, and was recognized as "Zhenjiang City 2023 Air Pollution Prevention and Control Friendly Emission Reduction Advanced Unit". Hainan Jinhai Pulp & Paper actively responded to local government's regulatory requirements and formulated the *Graded Response Plan for Pollution Weather*, which has passed expert review and been filed with the local bureau of ecology and environment.

### Continuously Strengthening Odor Control

Odor control has been a focus of Hainan Jinhai Pulp & Paper since its establishment. The company continuously invests in equipment upgrades and process optimization to continuously improve the air quality in and around the mill. In 2023, Hainan Jinhai Pulp & Paper collaborated with a professional odor treatment company to develop odor control agents. Seven sets of odor suppression spray device were installed in areas that generate strong odors, such as the wastewater treatment workshop and alkali recovery workshop. The device works by automatically spraying control agents, which has improved the air quality within the mill. Meanwhile, the company also commissioned a qualified third-party monitoring agency to monitor the air quality at the boundary of the mill throughout the year. The monitoring results show that the air quality indicators fully meeting the criteria of relevant standards.

## Solid Waste Management

APP China mills strictly comply with the requirements of national laws, regulations and standards such as the *Law of the People's Republic of China on the Prevention and Control of Environment Pollution Caused by Solid Waste*, the *National Catalogue of Hazardous Wastes*, the *Standard for Pollution Control on the Non-hazardous Industrial Solid Waste Storage and Landfill* (GB 18599-2020), and the *Standard for Pollution Control on Hazardous Waste Storage* (GB 18597-2001), and have formulated and revised relevant management procedures for non-hazardous

solid waste and hazardous waste, specifying the classification, collection, storage, and treatment methods for different types of waste. In 2023, Guangxi Jingui Pulp & Paper formulated the *Management Measures for Disposal of Solid Waste with No Value*, further clarifying and standardizing the disposal approaches for solid waste with no value and allowing the environment within the mill to become better managed.

Adhering to the principle of "reduce, reuse, and resource utilization", our mills continuously explore more efficient ways

for the comprehensive utilization of non-hazardous solid waste, such as fly ash, pulp residues, sludge, lime sludge, gypsum, wood chips, and slurry. In 2023, the comprehensive utilization rate of non-hazardous solid waste at APP China mills within the reporting scope reached 99.34%. Meanwhile, our mills entrust qualified third-party companies for the legitimate and compliant disposal of hazardous waste generated in production process, such as heavy metals, waste chemicals, radioactive materials, waste mineral oils, waste paints, organic resin waste, and waste fluorescent tubes, etc.

### Increasingly Prominent Comprehensive Utilization of Sludge

Ningbo Asia uses two bubbling fluidized bed furnaces to burn the sludge and chemical sludge generated in the waste water treatment and pulp production processes, with the co-burning of a certain proportion of coal and biomass fuels for stable combustion. The steam generated is used as heat energy for the papermaking workshop. The company actively accepts wastewater and sludge from other enterprises in the area for treatment, creating positive social benefits.

In 2023, the total of 370,941 tons of sludge was incinerated, among which there was 16,515 tons from external sources. After the company's new 300,000 tons per year chemi-mechanical pulp production line started operation, a significantly higher amount of biogas was used in the co-burning process. During the reporting period, 12,761,973 cubic meters of biogas was used in the incineration furnace, an increase of 11,956,655 cubic meters compared to 2021, which is equivalent to the annual saving of 7,540 tons of standard coal per year. The sludge treatment cost was also reduced by RMB10.3 million per year.

Methods of Non-hazardous Solid Waste Disposal at Guangxi Jingui Pulp & Paper

Wood chips generated in the wood preparation workshop and pulp residue generated in the chemi-mechanical pulp workshop are sent to the power workshop for incineration.

Part of the lime sludge generated in the alkali recovery workshop is used as a desulfurizer for flue gas in the power workshop, and another part is sold to the surrounding power plant as the desulfurization agent for the boiler exhaust gas.

Green mud generated in the alkali recovery workshop is sent to the power workshop for incineration.

Sludge generated in the wastewater treatment workshop is partially sent to the power workshop for incineration, with the remaining part sold as material for the production of corrugated paper, yarn tube paper, and organic fertilizer, etc.

Fly ash, bottom ash, and gypsum generated in the power workshop are sold as materials for the production of cement and concrete.

Waste alumina generated in the hydrogen peroxide workshop is sold as material for making ceramics.

Sustainable Logistics

APP China attaches great importance to sustainable logistics. In recent years, the Company actively explores the "new models, new management, new processes, and new layouts" for logistics. We have formulated logistics risk contingency plans and optimized logistics routes with the combination of various logistic models, such as ocean-rail, ocean-road, road-rail, trunk-feeder lines, and "bulk-to-container", achieving both cost savings and reduction of logistic carbon footprint.

During the reporting period, our mills implemented a variety of resource recycle and reuse projects in the logistics process, such as the recycling and reuse of starch bags, corrugated cardboard pallets, paper core plastic sleeves, and waste pulp sheet, etc. Hainan Jinhai Pulp & Paper, Gold East Paper, and Rudong Base continued to optimize their loading operations, improving logistics efficiency by increasing the percentage of container shipment.

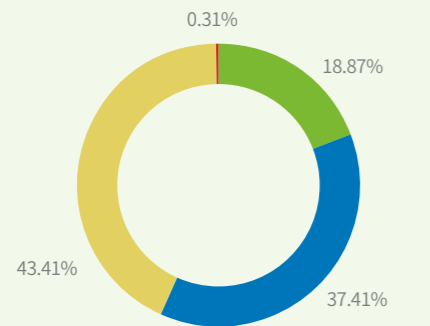
Meanwhile, our mills actively implemented the upgrading and green transformation of logistic equipment. In 2023, Hainan Jinhai Pulp & Paper contributed to the green development of the port area with the increased use of power supplied ashore for ships, with a total of 259 services provided for ships during the year. Bohui Paper and Hainan Jinhai Pulp & Paper continued to replace fuel-powered forklifts with electricity-powered ones, effectively reducing the carbon emissions and pollutants generated in forklift operations.

Green Logistics Measures of Bohui Paper

**Loading materials:** Bohui Paper replaced plastic pallets with reusable wooden pallets to reduce the use of plastics, and obtained customers' consent to reduce the use of pallets without compromising the quality of the products shipped.

**Long-haul transportation:** Bohui Paper actively adopts the sea-rail intermodal logistics model as a prioritized low-carbon transportation method. For example, Jiangsu Base successfully reduced the shipping mileage from Dafeng to Shanghai by switching from road transportation to water shipping, effectively reducing vehicle exhaust emissions and carbon emissions. Jiangsu Base also actively encouraged carriers to use natural gas powered and electric trucks in their fleet.

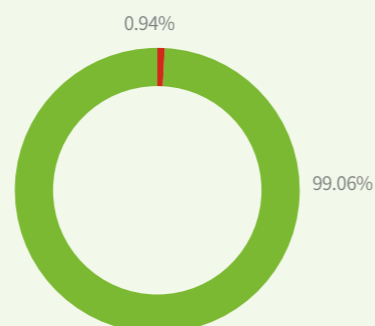
Methods of Non-hazardous Solid Waste Disposal at Mills within Reporting Scope in 2023



● Recycling and reuse ● Incineration  
● Selling to external parties for reuse ● Other

Note: "Recycling and reuse" refers to the recycling and reuse of waste through direct processing by APP China mills or through special cooperation with third-party agencies, such as making by-products from waste. Other disposal methods are mainly comprised of centralized treatment by local sanitation departments.

Energy Recovery from Solid Waste Incineration

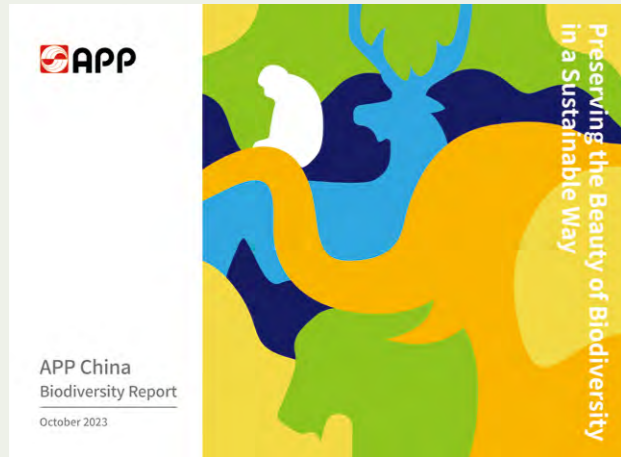


● With energy recovery ● Without energy recovery



# Preserving Biodiversity and Protecting Ecological Security

APP China attaches great importance to biodiversity conservation in production and operation. Upholding "insisting on integrating sustainable development of forest resources and biodiversity conservation, high conservation value areas protection, and ecological protection into social and economic development" as one of the key principles for our forestry management operations, we are committed to making positive contributions to maintaining ecological stability where we operate.



Please scan the QR code to view the APP China Biodiversity Report

## Biodiversity Conservation Measures

In recent years, rare plants and wild animals were often monitored in and around our plantations. In addition, Jiangsu Base of Bohui Paper is located within 25 kilometers of the Dafeng Milu (*Elaphurus davidianus*) National Nature Reserve, with wild Milu are often sighted close to the mill. The presence of wildlife close to our operating area is not only an indication of well-protected biodiversity and the harmonious coexistence of our business activities with the ecological environment, but also a reminder for us to

pay greater attention to biodiversity and take proactive measures to preserve biodiversity.

To this end, we have intensified the efforts for monitoring and protecting wild animals and plants in our daily production operations and daily patrols. We also actively carry out training and awareness-raising activities on the protection of wildlife. Regarding our forestry management practice, the Company strictly complies with national laws and regulations such

as the *Forest Law*, the *Environmental Protection Law*, and the *Wildlife Protection Law*. We have formulated relevant policies and regulations, such as the *Wildlife (RTE Species<sup>1</sup> Included) Protection Regulations*, and the *Measures for the Administration of Biodiversity Conservation and Monitoring*, to comprehensively regulate our biodiversity conservation initiatives.

<sup>1</sup> RTE Species: A collective term for rare, threatened, and endangered species.

## APP China Forestry's Key Biodiversity Conservation Measures

- 
**Forestland selection stage**  
 Only operate on commercial forestland defined by the government.
- 
**Afforestation planning stage**  
 Conduct biodiversity monitoring and the afforestation planning surveys. Onsite administrators must communicate with local forestry bureaus, forestry stations, and village committees to learn whether any protected wildlife has been sighted in the forestland; any wildlife sighting shall be clearly marked on the planning map and documented.
- 
**Pre-operation training**  
 Provide training for contractors and workers on biodiversity conservation, water and soil conservation, and operational safety. Prohibit contractors and workers from using fire for production in the forestland, such as burning vegetated land or performing controlled burns.
- 
**During forestry activities**  
 Use contract articles to formally prohibit contractors and workers from hunting or trading wild animals, indiscreetly gathering or digging protected wild plants, or destroying the habitats of wild animals.
- 
**During daily patrols**  
 Promote awareness of wildlife protection in local communities. Take immediate action to protect injured wildlife or HCV forest found.
- 
**Ecological monitoring**  
 Engage in long-term cooperation with external partners in carrying out ecological monitoring of plantations, and strengthen protective measures or modify forest management practices in accordance with the monitoring results.

### Rescuing a Trapped Milu

Milu (*Elaphurus davidianus*) is a national first-class protected animal. It was distinguished in China in last century. In 1985, the animal was reintroduced back to China, with herds placed in Nanhaizi in Beijing and Dafeng in Jiangsu for breeding, free-range, and wild release. Dafeng, where our Jiangsu Base of Bohui Paper is located, is chosen for this program because that it used to be a natural habitat for the animal in history.

In May 2023, one of Jiangsu Base's employee sighted a wild Milu entangled in wires in the reed marshes south of the mill. The company immediately activated the relevant emergency plan and dispatched a rescue team with drones. It took them 10 minutes to locate the stranded animal in the marshes. Eventually, the animal was successfully rescued and released with the cooperation of local police and wildlife reserve personnel.



A stranded Milu was successfully rescued

## • Biodiversity Identification

APP China Forestry regularly collects and compiles the latest requirements of national and local laws and regulations and relevant international conventions into a *List of Laws, Regulations, and Other Requirements*. Both the list and the specific requirements are distributed to each plantation as training materials for our forestry workers. We strive to enhance the awareness of biodiversity protection compliance among our forestry workers, so that they can integrate relevant requirements into daily forestry operations. Prior to each operation, we conduct a comprehensive survey of protected wildlife in and around our plantations. Besides national

and provincial protected animals and plants, we also record the local tree species found for protection. Forestry workers are required to conduct a comprehensive field survey over the scheduled plot before operation to confirm that there is no presence of protected animals and plants, and fill out the *Biodiversity Survey Record Form*. If any key protected wild plant or the nesting area of any key protected wild animal is found, the forestry worker is also required to fill out the *Wildlife (including RTE) Species Record Form*, mark the location on map, take photos for records, and record the finding on file.

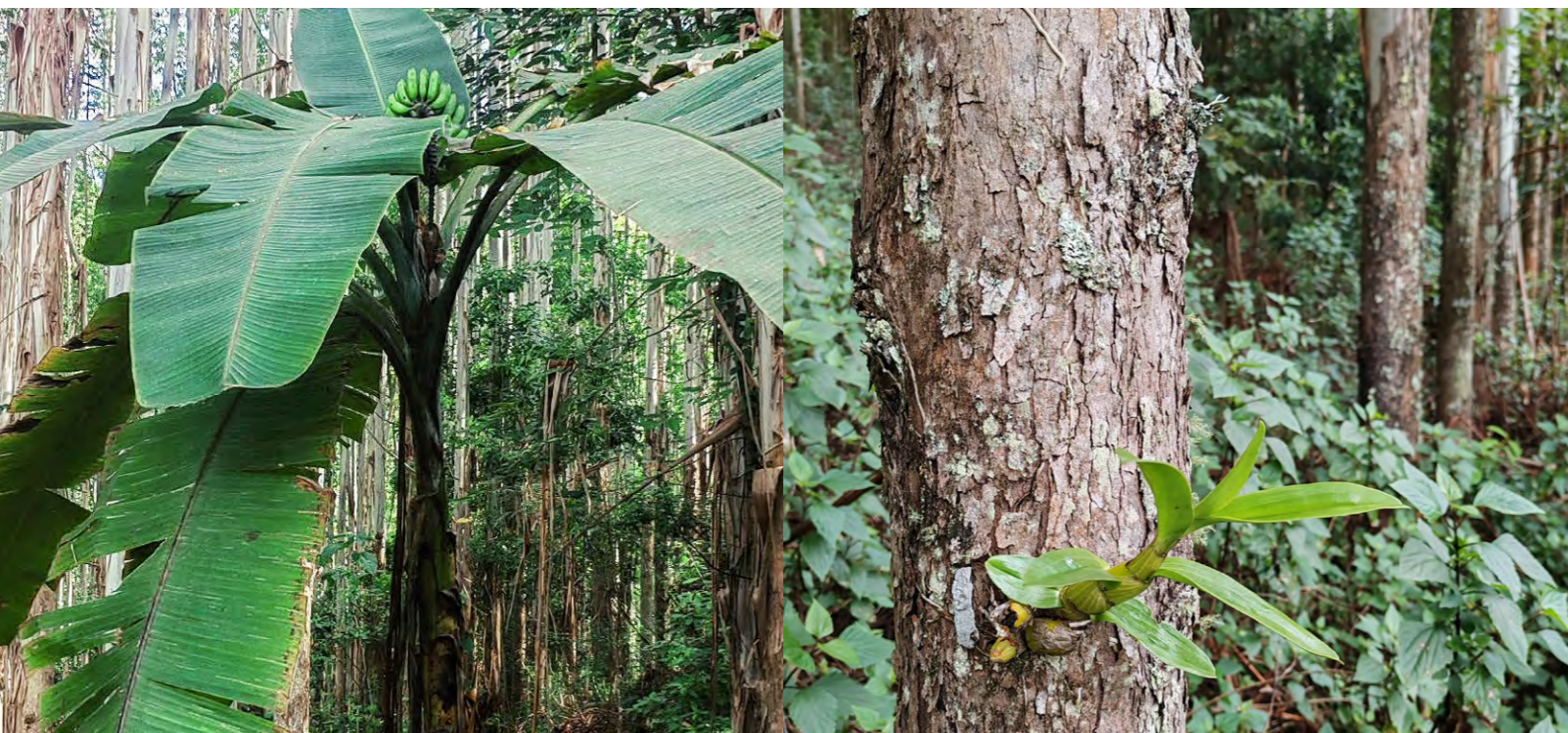
APP China Forestry has been conducting HCV assessment of our plantations and their surrounding areas for years. In recent years, a number of rare plants and animals were found during the process, such as *Alsophila spinulosa*, a national second-class protected plant, Indian bison, and Asian elephant. During the reporting period, Indian bison were sighted in the Huimin Plantation of Lancang Operation Area, for which we promptly adopted relevant protection and awareness-raising measures.

## • Biodiversity Impact Monitoring

Each year, APP China Forestry has been cooperating with various universities and research institutions on ecological impact monitoring, including biodiversity monitoring. Our partners include the Guangxi Academy of Sciences Ecological

Industry Research Institute, Guangdong Eco-Engineering Polytechnic, the School of Earth Sciences of Yunnan University, and Hainan University. These projects are intended to objectively and accurately assess the impact of forestry activities on

ecosystems. In the future, we will continue to strengthen our capabilities, striving to establish a scientific, quantitative, and objective evaluation system for the ecological service functions of eucalyptus plantations.



Monitoring and recording biodiversity impact

## Scientific Forest Management Practice Contributing to Biodiversity Conservation

APP China Forestry has been conducting ecological monitoring projects with Guangdong Eco-Engineering Polytechnic for years. The project has set up a standard experiment plot in each of the four plantations in the Guangdong Business Area. Monitoring results over the years show that the soil fertility in the four plots is suitable for tree growth, the soil quality meets the requirements of sustainable cultivation, and the water quality is above Class II (drinking water standard) of the national surface water quality standard. In addition, the diversity of understory plants in eucalyptus forests is higher than those in 5 broad-leaved forests in state-owned plantations. Well-managed eucalyptus plantation has ecological, economic, and social benefits.

Benefits to biodiversity conservation	Benefits to soil fertility, air quality and water body
<p>We intentionally plant mixed varieties during the afforestation process to avoid large stretch of single variety of trees, which can effectively increase the variety of understory plants and improve the stability and resilience of the forest ecosystem. Currently, our plantations have lush understory shrub and grass vegetation with rich biodiversity.</p>	<p>We forbid the practice of controlled burning when clearing grounds, which helps maintain the organic matter in topsoil and preserve balanced soil fertility, resulting in better accumulation of nutrient and biological cycling. When applying base fertilizer, fertilizer is thoroughly mixed with the subsoil and applied with the trenching method for topdressing, which not only improves fertilizer efficiency but also prevents pollution of the water bodies downstream caused by nutrient runoffs in rainwater.</p>



Lush understory vegetation in our plantations

## • Biodiversity Conservation Capacity Building

APP China continues to strengthen its biodiversity conservation initiatives. The Company also pays great attention to conducting biodiversity protection-related training for employees and contractors. We conduct periodic training on the identification and protection of wildlife for various functional departments and frontline forestry workers. We have developed an illustrated list of protected

animals and plants both at national and provincial levels. Prior to the forestry operations, their images will be displayed to field workers for on-site training and education.

In October 2023, an expert team from the Guangdong Eco-Engineering Polytechnic conducted a biodiversity monitoring survey in the Yuantan forest area in Guangdong.

APP China Forestry Guangdong Business Area organized employees to learn side-by-side with the expert team. Our staff carefully observed the whole process of setting up monitoring plots and collecting soil and water samples, accumulating experience for developing the capabilities to conduct monitoring independently next year.

# Social

## Creating and Sharing a Better Life Together

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## Empowering Employee Career Development

APP China attaches great importance to protecting employees' rights and interests, and provides rich resources and offers supporting platforms for employees to realize their career aspirations and demonstrate their talents. The Company has established a sound incentive mechanism to encourage employees to actively innovate and participate in contributing ideas and suggestions to the growth of the Company.

- Percentage of female employees: **21.83%**
- Percentage of female employees in management: **18.72%**
- Proportion of positions filled through internal recruitment and internal transfers: **84.7%**
- Total employee training hours: **918,971.8** hours
- 123** positions provided for people with disabilities

## Protecting Employee Rights

APP China takes the *Labor Law of the People's Republic of China*, the *Labor Contract Law of the People's Republic of China*, the *Civil Code of the People's Republic of China*, and other relevant national and local laws and regulations as the basis for labor relationship management. Adhering to the principles of equality, voluntariness, and consensus through negotiation, APP China signs labor contracts with all employees. We strictly prohibit child labor, as well as forced labor and workplace discrimination in any forms, and ensure equal pay for equal work, striving to provide a just, fair, and harmonious workplace for all employees.

The Company provides employees with the five social insurances and housing provident fund. During the reporting period, we provided new employees employed for less than one year with several new benefits, such as paid sick leave and annual leave. Our mills also offer a number of additional benefits such as meal allowances, high temperature allowances, complementary insurance, and employee dormitories based on actual conditions. We have a dedicated Employee Care Fund for providing additional financial support to employees with serious illness. We also provide female employees with financial support for accident insurance and medical insurance coverage for their underage children. We are increasingly implementing flexible working mechanisms. For example, our Shanghai

office implements a staggered working hours mechanism, and the employees can apply for telecommuting under special circumstances.

To fully listen to the voices of employees, we have established various communication channels, such as employee representative meetings, employee satisfaction surveys, and regular employee townhall meetings. APP China Forestry updates their own *Employee Handbook* based on suggestions collected from employees from time to time, and the revised version shall get confirmed by employees first with their signatures before the official release. During the reporting period, our business units, such as Guangxi Jingui Pulp & Paper, Rudong Base, and Hainan Gold Hongye, organized a number of employee townhall meetings and communication sessions, where employees

freely shared their thoughts and opinions, allowing us to better understand their needs and thoughts regarding both work and life.

The Company attaches great importance to the physical and mental health of employees, and takes active measures to ensure work-life balance. Our mills provide various leisure and entertainment facilities in their living quarters, such as library, basketball court, table tennis room, badminton court, gym, etc., and regularly organize activities, such as basketball game, team competition, flower arrangement lectures, festival celebrations, etc. Some subsidiaries such as Guangxi Jingui Pulp & Paper and Bohui Paper have established cultural and sports clubs to encourage employees to explore their hobbies and enrich their after-work lives.



Handcraft work of employees

### Employee Satisfaction Survey of Guangxi Jingui Pulp & Paper

Guangxi Jingui Pulp & Paper conducted an online satisfaction survey for all employees in 2023, with a total of 1,820 questionnaires collected and an effective response rate of 97.69%. The survey questionnaire was mainly designed with reference to the Locke, Arnold and Feldman scales, including 5 dimensions, 10 aspects, and 43 indicators. The survey results indicated a relatively high satisfaction among employees, with an average score of 82.88 (out of 100). The results of the survey will be used by the company to better identify possible issues in enterprise operations and formulate targeted improvement measures, so as to ensure continuous improvement in employee satisfaction.

### Employee Townhall Meeting at Rudong Base

In December 2023, Rudong Base organized an employee townhall meeting with the theme of "open your hearts and listen to individuals' voices for a shared future", aiming to listen to employees' voices and better understand their thoughts, so as to provide help targeting challenges in employees' work and life accordingly.

A total of 44 employee representatives from various age groups and departments participated in this townhall meeting, sharing their ideas and suggestions on work and life, and expressing their desires and confidence in growing together with the company. Department heads shared their experiences and insights with employees, provided reasonable suggestions, and responded to issues of concern to employees. Issues raised by employees were assigned to relevant departments to follow up to ensure their effective resolution.

### Family Open Day Event at Gold East Paper

On May 20, 2023, the 26th anniversary of Gold East Paper, the company organized a Family Open Day event. Nearly 150 employees and their families were invited to a tour of the paper exhibition hall, paper machine workshop, intelligent production line, the production process of coated paper, and the environmental protection garden of the company. The event allowed family members to not only experience firsthand the work environment of their loved ones, but also gain a deeper understanding of Gold East Paper and APP China's green development concept.

## • Building Smooth Career Development Channels

Against the backdrop of continuous industrial upgrading, we are in increasingly greater need for technical talent. To effectively attract talent and facilitate their comprehensive growth, we have established a professional technical career development channel with relevant grade evaluation mechanism, forming a "dual-channel" career growth path in combination of the management channel, and providing employees with greater growth space and more diverse career development choices. In 2023, as a great encouragement for the enthusiasm of the employees, a total of 237

employees were promoted through the "dual-channel" mechanism at our six major mills in China.

In addition, the Company will also help employees achieve better development and achievements in the workplace by providing job rotation opportunities, implementing hierarchical performance appraisal, and supporting employees' on-the-job education. In 2023, a total of 1,544 positions were opened within the Company, with 84.7% of which filled through internal recruitment and internal transfers.

Proportion of positions filled through internal recruitment and internal transfers

**84.7%**

## • Enriching Employee Training Resources

With a strong emphasis on talent development, APP China continuously optimizes its employee training system, providing a rich variety of training opportunities for employees at all levels and in different business units. Our subsidiaries have also formulated a series of training management policies. For example, Bohui Paper has established the *Employee*

*Training Management Measures*, the *Management Measures for Management Trainees*, and the *Mentorship Agreement*, while Gold East Paper has formulated the *Occupational Training Measures* and the *On-the-Job Continuing Education Management Measures*, aiming to continuously standardize vocational training to help employees enhance their professional

development capabilities. In 2023, in line with the Company's development needs, we continued to carry out customized training and targeted training programs, such as training for digital talent, training for the Paper Business Unit sales team, and the advanced leadership development program.



### Training for the Paper Business Unit Sales Team

From March to August 2023, the Company organized a series of trainings for over 260 frontline sales staff in the Paper Business Unit. Focusing on direct sales skills, the training topics included sales strategy, sales logic, customer pain points exploration, and product value communication. The training helped the participants effectively improve their practical sales skills and was well received by the participants, with a satisfaction score of 4.85 (out of 5).

### Advanced Leadership Development Program

In September 2023, APP China launched an Advanced Leadership Development Program. The one-year program aimed at cultivating leaders with a macroeconomic perspective, strategic financial analysis capabilities, leadership, and change management skills. A total of 38 high-potential leaders and 37 senior executives participated in the program.

For high-potential leaders, the development program included classroom learning at the School of Management at Fudan University, online learning courses, and collaborative strategic projects. For senior executives, the development program covered topics such as macroeconomics and systematic thinking, strategic finance and business insights, leadership, and self-improvement. The program adopted a variety of approaches to help the participants learn more efficiently, such as interactive Q&A, coaching and peer study, interactive group learning, and book reading club activities.

### Training Programs for Digital Talent

As APP China's digital transformation enters the 2.0 phase, there is an urgent need for trainings for digital professionals and digital management talent. In 2023, we launched the Data Analyst Training Program and the Digital Capability Training Program for Management Staff.

- ◆ The Data Analyst Training Program aims to make "everyone a data analyst", providing live broadcast and on-site training on modules such as self-service analysis promotion, experience sharing, data talent cultivation, and sharing of business value closed-loop cases. The training enabled the trainees to better understand, process, analyze data, and master the use of self-service analysis platforms to enhance data analysis capabilities and work efficiency. Within the reporting period, nearly 1,000 data analysts had participated in this program.
- ◆ The Digital Capability Training Program for Management Staff aims to enhance the basic digital skills of management personnel, offering 32 courses such as intelligent manufacturing, smart supply chain, intelligent management, digital finance, and data governance. In 2023, the program carried out 29 online live training sessions, with a total participation of over 3,200 person-times. About 97.6% of management staff at division-level or above participated in this program, with an average pass rate of 97%.

**New Employee Orientation Training**

Guangxi Jingui Pulp & Paper provides new employees with a phased comprehensive training program. The basic orientation training stage includes topics such as corporate culture, MBOS culture, papermaking basics, and safety knowledge. The job skills training stage includes training tests, one-on-one tutoring, mentorship, and mill visits, aiming to allow new employees to quickly master job skills. During the training assessment stage, new employees are assessed and participate in peer experience sharing sessions to consolidate their learning outcomes. In 2023, the company held a total of 5 rounds of new employee orientation training.

**"New Flight" Training of High-potential Employees**

To strengthen the pipeline of promising young talent, Gold East Paper launched the "New Flight" training program in 2023. A total of 30 outstanding new employees with potential were selected to participate in themed activities, group sharing, and individual presentations on a monthly basis. The company also organized internal lecturers to offer courses such as papermaking basics, PowerPoint skills, time management, advanced papermaking knowledge, and stress and mood management.

**"Qingmu Plan" Forestry Managerial Leadership Training Camp**

In order to provide rapid growth and career development opportunities for forestry employees, APP China Forestry launched the "Qingmu Plan" Forestry Managerial Leadership Training Camp in 2023. The program has three stages, including theory learning, on-site study, and follow-up guidance. A total of 120 participants participated in the training in two classes for potential plantation managers and potential station managers respectively.



## • Employee Motivation and Engagement

APP China has established a performance evaluation mechanism centered around setting annual goals at the beginning of the year, revising goals at mid-year, and conducting year-end performance evaluation as well as comprehensive assessment. This mechanism serves as a key reference for decisions on employee bonus, promotion and raise, providing positive incentives for employee development. The Company implements a position-based salary system. Salary levels of employees are set fairly and unbiased, taking into account factors such as the job position, qualifications, experience, work performance, and capabilities of each employee.

In 2023, the Company expanded the eligibility of the long-term retention bonus from senior management to include middle and lower management staff and professional technical talent. The Company also plans to introduce a new long-term incentive plan for senior management. Based on an analysis of local job market and industry employment conditions, Guangxi Jingui Pulp & Paper conducted a human resources risk assessment, formulated retention measures from the aspects of career planning and promotion mechanism adjustment, ensuring a stable pipeline of talent for key positions.

### APP China "Striver" Selection

In 2023, the Company held the third APP China "Striver" Selection with the theme of "The Power of Role Models in 'Two Transformations and One Surpassing'". All employees were eligible for this year's selection. A total of 176 Strivers at all levels were selected from 26 selection activities. The Company integrated this campaign into regular talent development activities with a mentorship program, facilitating cross-mill, cross-regional, and cross-BU mentoring to encourage greater employee participation in our strategic transformation. The "Night of Strivers" live streaming event concluded the campaign, with over 5,000 employees watching the stories and experience sharing of the selected Strivers online.



The Third APP China "Striver" Selection Campaign

"Everyone can be creative, and everything can be innovated" signifies the innovation spirit advocated by APP China. We organize MBOS proposal competition every year to encourage employees to fully participate in

the Company's development and provide a stage for them to showcase their talent and creativity. With activities such as the MBOS competition and the relevant outcome sharing meetings, we strive to encourage

the dissemination and replication of outstanding proposals internally, effectively promoting the innovation progress at various business units.

### Guangxi Jingui Pulp & Paper Organized an MBOS Exchange & Sharing Competition

In November 2023, Guangxi Jingui Pulp & Paper held the Digital and Intelligent Transformation MBOS Exchange & Sharing Competition with the theme of "Winning the Future Empowered with Intelligence" to consolidate the foundation of digital and intelligent transformation and accelerate the digital and intelligent innovation of the industry. During the competition, participating teams shared their presentations in groups. A total of 20 reports covering the achievements of digital and intelligent transformation's MBOS implementation, detailed illustration of 2023 digital transformation results, as well as the 2024 digital transformation work plan. With these shared reports, we not only thoroughly reviewed the 2023 digital transformation results of various business units, both identifying gaps and highlighting innovation achievements from production lines to administrative logistics departments, but also proposed the new directions for digital transformation initiatives for 2024.



Guangxi Jingui Pulp & Paper's Digital and Intelligent Transformation MBOS Exchange & Sharing Competition

## Prioritizing Safety and Health

APP China has established a sound safety management mechanism, and continuously strengthens the implementation of safety management measures to ensure workplace safety. The Company comprehensively strengthens the prevention and management of occupational disease risks, actively undertakes the main responsibility for the prevention and control of occupational diseases, and is committed to providing a healthy and safe working environment for all workers.

- 2 production base EHS surveys, and 6 cross-mill inspections of "project under construction" of the production bases conducted
- Number of emergency drills: **814**
- Average hazard rectification rate: **98.96%**
- 799,932.12 hours of safety training carried out in total, up **26.73%** year-on-year
- RMB **11.1574** million spent on protective gears, up **5.67%** year-on-year

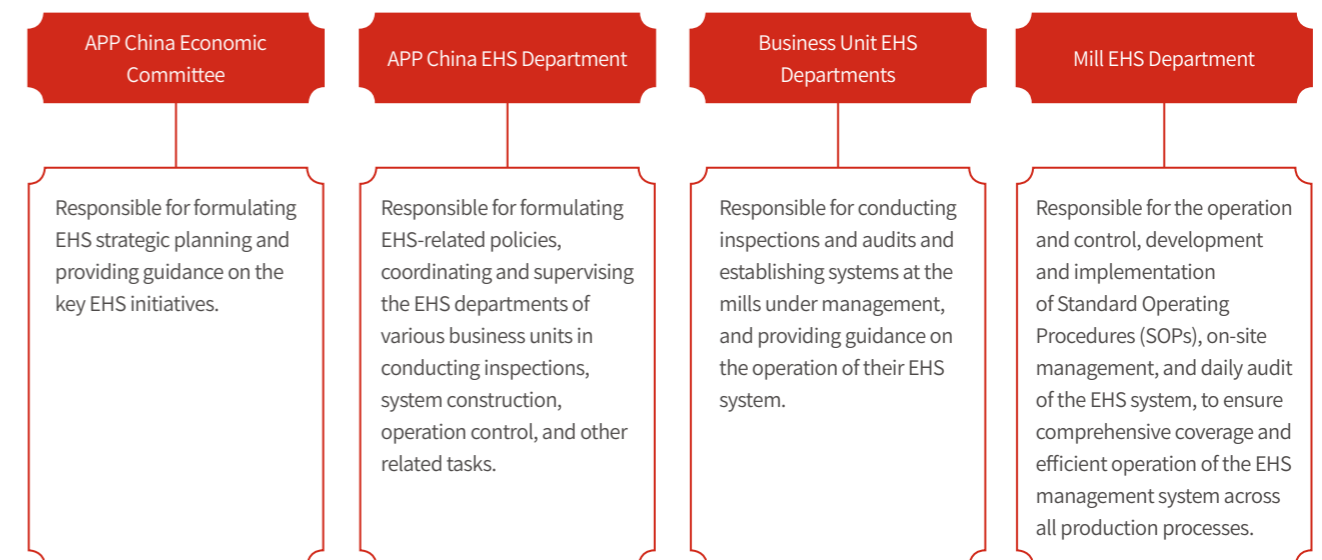
### Establishing a Sound Safety Management Mechanism

Adhering to the principle of "safety first, prevention-oriented, and comprehensive governance", APP China has established a robust environment, health and safety (EHS) management system in line with relevant laws and regulations such as the *Law of the People's Republic of China on Work Safety*, the *Law of the People's Republic of China on*

*the Prevention and Control of Occupational Disease*, and the *Environmental Protection Law of the People's Republic of China*. Our EHS management system covers both our own employees and the employees of our contractors. Our mills have also formulated their own occupational health and safety management system in accordance with the

ISO45001 standard, and actively implement the dual prevention mechanism for risk classification control and safety hazard identification and rectification, as well as the certification of safety management standardization.

### APP China EHS Organizational Structure





In 2023, the group headquarters revised the *Management Measures for Reporting and Handling EHS Incidents*. The updated content includes more detailed classification of EHS incidents, stricter requirements for the reporting deadline of incidents, and more specific penalties for concealing or falsifying reports, such as termination of contracts of those accountable, harsher disciplinary actions for mill managers, and a one-year suspension of eligibility for any internal award for the mill. The subsidiaries

of the Group consistently implement the EHS meeting system, promoting internal communication and collaboration on EHS management with regular meetings, themed meetings, and year-end meetings. Our mills strictly implement the collective production safety responsibility system, signing safety responsibility agreements with employees at each level, holding monthly safety meetings, setting annual safety targets, and conducting monthly assessments. These measures closely link

the safety performance of the mill with employees' individual performance, which helps enhance the safety awareness of employees at all levels. During the reporting period, the Company had made continuous achievements in digitizing EHS management processes, establishing an online platform with incident reporting, monthly data reporting, and hazard identification and rectification functions, making further steps toward achieving the real-time management of safety performance data.



## Deepening Safety Risk Management

### Safety Education and Training

In 2023, APP China intensified its safety training for all employees. The Company officially launched the Safety Management Community, which includes six sections: safety information, accident cases, laws and regulations, safety knowledge lectures, employee experience sharing platform, and best practices. The online community aims to allow every employee to participate in the co-creation of a corporate culture on safety in a more flexible way. During the reporting period, our EHS Department conducted a

series of surveys of our mills, and organized the Safety Management Training for Managers for senior managers of the mills surveyed. Key topics of the training include current safety risk management practices, safety culture, safety management standardization, and the dual prevention mechanism.

Our subsidiaries also carried out a variety of safety education activities, such as safety awareness and skills training,

safety accident warning education, safety knowledge competition, and special safety meeting. These activities continuously expand the depth and breadth of employee safety education, ensuring that employees at all levels establish strong safety awareness and practice the "prevention-oriented" safety principle in daily work. In 2023, a total of 799,932.12 hours of safety training were carried within the Company.

### Bohui Paper Launched Its First Safety Month Event

In September 2023, Bohui Paper launched its first Safety Month event with the theme of "Eliminate Hazards to Prevent Accidents". The event featured a variety of activities, including "writing a safety reminder letter to family members", accident case sharing by supervisors, comprehensive safety inspections, and accident experience study, effectively enhancing employees' safety awareness. In addition, the company also organized safety officer skills competitions and safety knowledge tests to improve employees' ability to identify, predict, and respond to safety accidents through skills competitions and peer learning, striving to reduce the possibility of accidents from the source.

### Hazard Identification and Rectification

APP China has established and implements a dual prevention mechanism for safety risk classification and control, and safety hazard identification and rectification in strict accordance with relevant national and local laws and regulations such as the *Work Safety Law of the People's Republic of China*, aiming to eliminate safety hazards in a timely manner. In 2023, the Chairman's Office of the Group and the APP China Expansion Center jointly established the Safety Inspection and Supervision Team and carried out a series of focused activities. From September to October, the inspection team conducted a large-scale cross-mill safety inspection of projects

under construction to identify and rectify major safety hazards, comprehensively enhancing our safety governance and safety management capabilities. This inspection team visited 6 production bases, and issued inspection summaries and improvement suggestions for each production base, urging the mills to take timely improvement measures.

Our mills conduct various regular safety inspections and hazard identification in daily operations, and continuously strengthen the closed-loop management of safety hazards. In 2023, our average hazard rectification rate was 98.96%. Mills such as Hainan Gold

Hongye and Guangxi Jingui Pulp & Paper continued to improve the dual prevention mechanism, and established and optimized a long-term mechanism for identification and rectification of safety hazards. Gold East Paper conducted compliance assessment on 640 major environmental and hazard factors and compiled them into a key hazard list. Bohui Paper formulated the *Employee Hazard Inspection Reward Policy* to better motivate employees to actively participate in safety hazard inspection, to prevent safety accidents through happening with everyday preventive measures. In 2023, we carried out a total of 814 emergency drills internally.



### Contractor Safety Management

Contractor safety management is of great importance to the operations of an enterprise. Contractor safety management at construction sites face a number of challenges due to the factors such as the high mobility of contractor employees, lack of safety awareness among contractor EHS management personnel, lax on-site supervision, and weak safety management capabilities of contractors. APP China has incorporated

contractors into the Company's EHS management system, gradually standardizing and strengthening contractor safety management with a series of measures, such as strengthening qualification review, clarifying safety management responsibilities, regularly conducting safety training and contractor meetings, enhancing operational process supervision, and inspecting the implementation of contractor

safety measures at least once a month. In 2023, we have launched a series of targeted training and awareness raising activities focusing on the key factors and best practices in contractor safety management, as well as relevant experience sharing sessions, effectively urging our subsidiaries to continuously deepen their contractor safety management activities.

### Strengthening Occupational Health Management

In compliance with the *Law of the People's Republic of China on Prevention and Control of Occupational Diseases* and the *Employer's Occupational Health Surveillance Measures on the Supervision*, APP China has formulated its *Code of Occupational Health Supervision and Management* and other management policies, forming a robust management system with the EHS Department of APP China in charge of the overall management, EHS departments of business units provide guidance and conduct regular audits, and the EHS department of each mill manages their specific occupational health-related issues.

In 2023, the Chairman's Office of the Group updated the *Code of Occupational Health Supervision and Management* and other relevant EHS policies. We further refined the requirements for the identification and control of occupational disease hazards. Our mills are required to conduct annual monitoring and inspection of occupational disease hazard factors, and provide occupational health examinations and establish health monitoring records for individuals with exposure to those

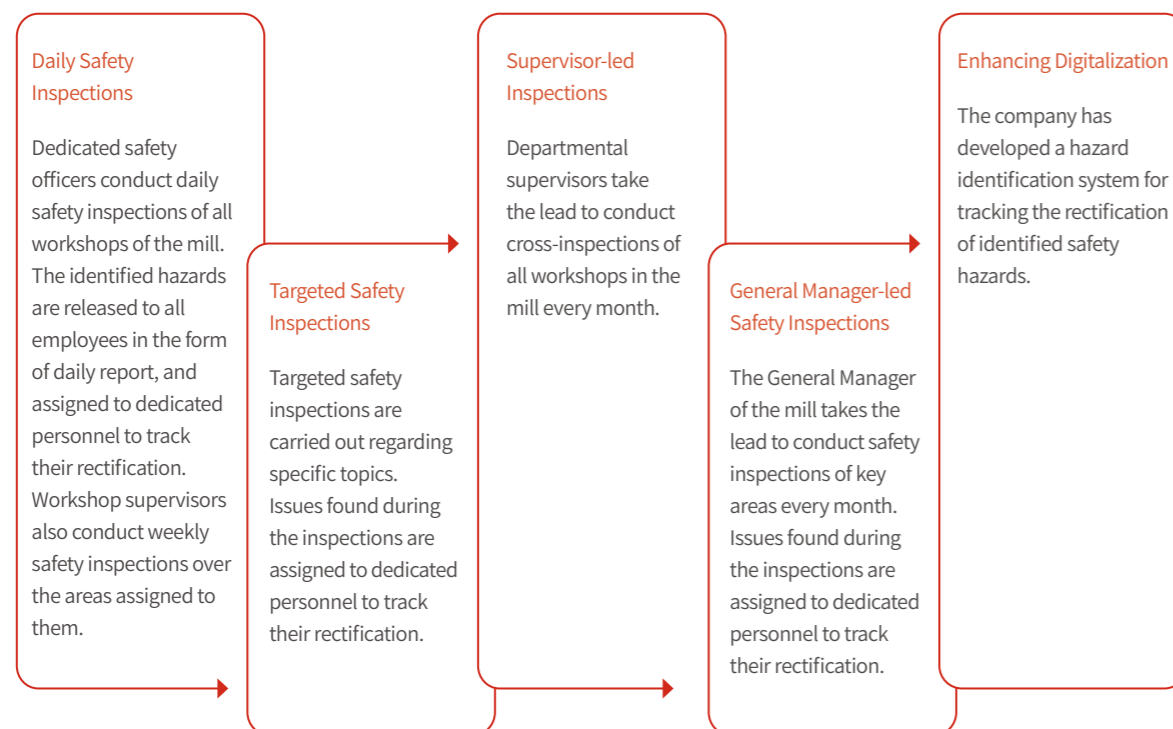
factors. In response to accidents caused by improper use of personal protective equipment, the Chairman's Office of the Group also formulated the *Notice on Strengthening the Management of Personal Protective Equipment*, requiring all units to strengthen relevant management measures. Other than providing workers with the proper personal protective equipment, we also provide regular training on the proper use of personal protective equipment, and conduct regular inspections and supervision of the use of protective equipment, to ensure that the relevant regulations are effectively implemented.

Employees with exposure to occupational disease hazard must receive pre-job training on occupational health and occupational disease prevention and control regulations, job-related personal protection knowledge, and the proper use of personal protective equipment. One shall not start working before passing the post-training exam. Our subsidiaries strictly implement the requirements for occupational disease prevention and control, including optimizing occupational

disease management policies, organizing occupational health examinations, conducting occupational disease hazard assessments, providing occupational disease prevention and control training, implementing the "three simultaneities" rule for new projects (i.e., occupational disease prevention and control measures must be designed, constructed, and put into operation simultaneously with the project), and timely reporting occupational disease hazards. With these measures, we strive to effectively fulfill our responsibility of occupational disease prevention and control and effectively reduce the potential impact of occupational hazards.

During the reporting period, Hainan Jinhai Pulp & Paper urged contractors to conduct occupational health examinations for employees with exposures, actively fulfilling its responsibility for the prevention and control of occupational diseases. In 2023, a total of 596 employees from 37 contractor units of Hainan Jinhai Pulp & Paper were arranged to receive physical examinations.

#### Safety Inspection Measures of Hainan Jinhai Pulp & Paper



## Quality Control, Striving for Excellence

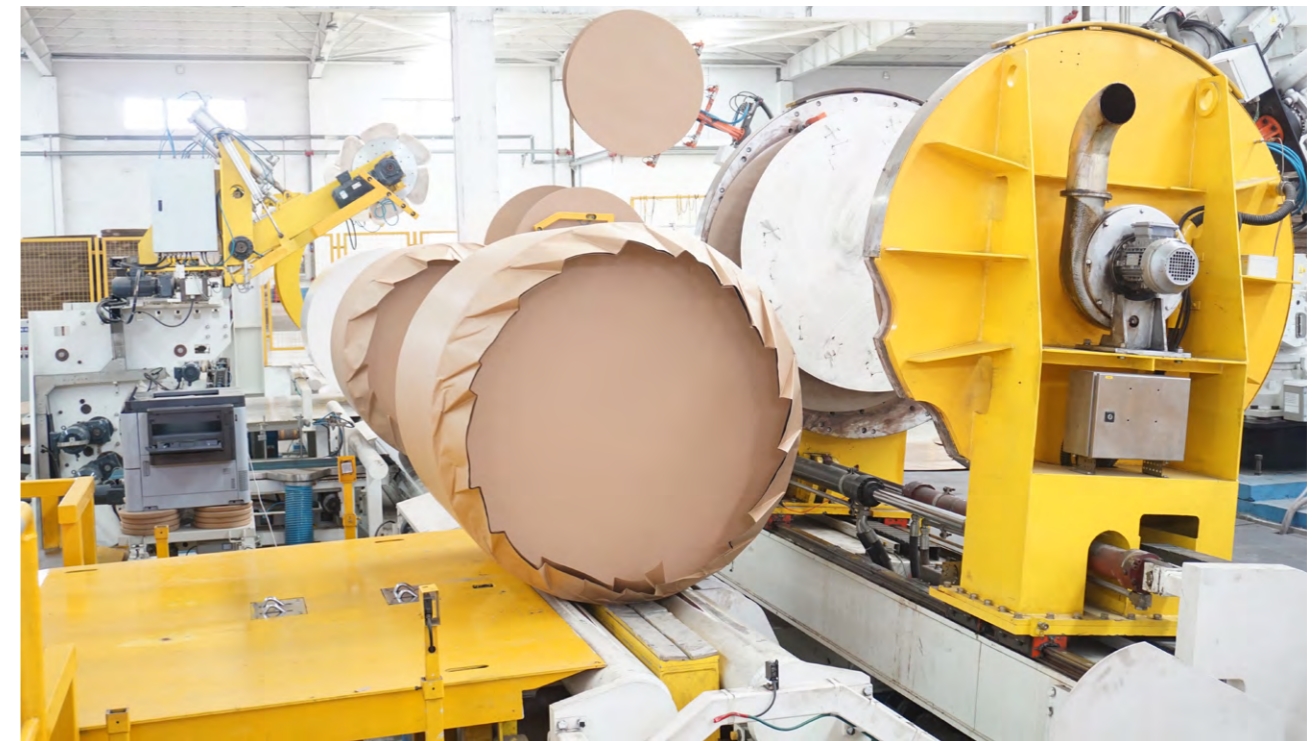
APP China strives to continuously improve its product quality through strictly controlling the incoming inspection of raw materials, continuously optimizing the quality management of the production process, and fully implementing the quality management plan. We are committed to providing customers and consumers with satisfactory products with high-quality.

APP China mills strictly comply with the laws and regulations such as the *Product Quality Law of the People's Republic of China*. In accordance with the ISO9001 Quality Management System Standards, we have established comprehensive quality control procedures, covering material procurement, product quality inspection, chemical quality

assessment, non-conforming product management, and the management of potentially unsafe products, and implement strict quality control standards throughout the product lifecycle.

Incoming inspection of raw materials is a key step for ensuring product quality.

Our mills attach great importance to the health, safety, and environmental attributes of raw materials, and have established strict incoming inspection standards and procedures to fully ensure the quality and safety of raw materials.



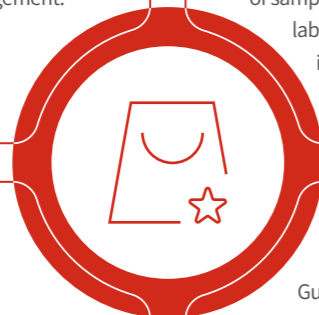
APP China mills have effectively improved the efficiency of quality control measures by promoting the application of lean management system in product quality management. Gold East Paper launched a quality traceability platform. With modules such as in-transit data dashboard, inventory data dashboard, and material requisition data, the platform can help quality management personnel accurately trace the quality of raw materials at different stages in the production cycle. Hainan

Jinhai Pulp & Paper has established a non-conforming alarm system for materials with non-conforming physical properties, which automatically sends warning messages and information about non-conforming incident through WeChat. Persistent non-conforming incidents will also trigger a quality abnormality rectification notice, requiring the relevant parties to take timely actions to analyze reasons and formulate relevant rectification plans. Hainan Jinhai Pulp & Paper has also achieved real-time

monitoring of the paper making process with intelligent data capturing capabilities, which allows the company to quickly identify the reasons for problems that occur during the production process. The company has also established a monitoring and early warning system for its paper machines and related systems, which can promptly detect equipment abnormalities and ensure product quality.

Hainan Gold Hongye will impose penalties according to standards, or return the raw materials found non-conforming during the incoming inspection. If such return caused impact on production, the penalty will be further increased to urge suppliers to pay greater attention to quality management.

Gold East Paper continues to improve the anti-fraud management regarding incoming materials from suppliers, strictly preventing fraud risks of non-conforming raw materials with variety of measures, including full-process video recording of sampling processes from tank trucks, warehouses, and laboratories, random on-site inspections, and regular inspection of video records.



Bohui Paper has introduced a number of new inspection methods, such as odor detection and cationic starch substitution degree detection, to ensure the comprehensive control of the quality of incoming materials. For example, the company has developed odor inspection methods for surface sizing agents and latex, added new chemical detection items for food cardboard products, so as to better manage the odor performance of food cardboard products from the source.

Guangxi Jingui Pulp & Paper has formulated the *Management Measures for Quality Assessment of Chemical Raw Material*. The company also evaluates the quality of chemical products supplied in batches every quarter. Suppliers with low evaluation scores will be asked to improve, with the improvement process monitored in a closed-loop manner. In 2023, 13 suppliers of chemical materials were asked to improve the quality of their products.

### Quality Improvement of Production Waste Paper Material

In October 2023, Ningbo Asia started using waste paper from the production process in the pulping process to use resources more efficiently. Ensuring the quality of raw materials is a crucial first step to guarantee the quality of the finished paper products. To ensure strict quality inspection, Ningbo Asia formulated the *Production Waste Paper Inspection Quality Control Reward and Punishment Scheme* and refined the standards, inspection standards, and inspection procedures for production waste paper. The company also regularly conducts quality training and issue communication sessions with suppliers, and organizes targeted communication meetings to ask waste paper suppliers with quality issues to improve quality. All these efforts have resulted in significantly improved quality of production waste paper materials.

## Customer-Oriented Services

Adhering to a customer-oriented service philosophy, APP China is committed to maintaining smooth communication with customers, continuously improving product and service quality based on customer feedback, and providing customers with comprehensive and high-quality pre-sales, in-sales, and after-sales service experiences.

APP China has established efficient customer service processes and diversified communication channels. The Company is dedicated to providing customers with comprehensive pre-sales consultation, in-sales support, and after-sales services. In addition, the Company actively uses both online and in-person technical support to help customers solve problems related to using paper products, striving to provide customers with products and services beyond market value. In 2023, APP China's Paper Business Unit organized customer service exchange meetings among its various units, aiming to pushing for further improvement in customer service quality with cross-mill sharing of customer service skills and complaint handling experiences.

The Company attaches great importance to customer feedback. While actively responding to consumer complaints, we also conduct in-depth analysis of the reasons for complaint in order to ensure improvement from the source. During the reporting period, the Paper Business Unit simplified

the processing procedures for certain types of complaints, which has effectively sped up the time for processing complaints. The Quality Assurance Department, Production Department, and Sales Department of Hainan Gold Hongye visit distributors and customers together every month, and regularly hold production-sales meetings to conduct in-depth analysis of customer needs. The Company also establishes targeted improvement work teams to tackle key challenging issues.

Every year, our business units conduct customer satisfaction surveys to comprehensively understand customer needs and feedback in various aspects, such as product quality, sales service, sales personnel after-sales service, logistics service, technical service, and information service. In 2023, the customer satisfaction score of Gold East Paper, Gold Hongye Paper, and Bohui Paper have improved compared to 2022. In addition, we also invite customers to visit our mills, and listen to their feedback during the visit.

As of the end of 2023, the Paper Business Unit has been carrying out the "Little A Classroom" customer communication program for six consecutive years. The program has received wide attention and praise from customers. A total of 67 "Little A Classroom" sessions were organized in 2023, with a participation of over 800 person-times, covering topics such as market trends, product features, basic knowledge of papermaking and paper, printing and post-processing technology exchanges, scientific methods of paper use, and sustainability related topics. At a session in March 2023, two senior environmental protection experts from Ningbo Asia conducted online live lectures on the topics of the "Road to Pollution Control and Emission Reduction for Sustainable Development" and "Building a Standardized System to Coordinate Sustainable Development", promoting the awareness about sustainable development among a greater number of customers and consumers.



"Little A Classroom" and technical exchange meeting

## Cultivating Talent with Industry-Academia Collaboration

APP China actively leverages its industry expertise and resources, and continuously explores ways to deepen the collaboration between enterprises and universities in vocational training to cultivate more talent for the paper making industry.

172 participants recruited by the "Dream Plan" program

### The "Dream Plan" Program

Since its inception in 2018, the "Dream Plan" program has established joint classes with Guangxi Vocational & Technical Institute of Industry, Nantong Vocational University, and Zibo Vocational Institute on mechatronics and electrical automation. The program also cooperated with the College of Light Industry and Food Engineering of Guangxi University, Zhejiang University of Science and Technology, and Qilu University of Technology to offer courses on pulp-making and papermaking, aiming to cultivating talent with practical skills needed by the industry. Students participating in this program are awarded a scholarship to cover their tuition and accommodation expenses, and an allowance to cover part of their living and transportation expenses. APP China will provide them with employment opportunities upon their graduation. In 2023, the "Dream Plan" program admitted a total of 172 students.

### Deepening the Industry-Academia Collaboration

To deepen the collaboration of the paper making industry and academic institutions for innovatively cultivating industry talent, Hainan Gold Hongye collaborated with Yangpu Advanced Technical School and jointly launched a modern apprenticeship training program. This program features a training mode of "studying while working", fully integrating the role of enterprise and school. Upon completion of the training program, students who pass the examinations will obtain a vocational skills level certificate. In 2023, the closing ceremony of the training program had been successfully held. The first class of this program recruited a total of 39 students. All these students had obtained the national intermediate vocational skills certificate after passing both the exam on theoretical knowledge and the demonstration test on manual operation.

Gold East Paper was designated as a "Zhenjiang Youth Employment Internship Base" in 2021. Since then, the company has been continuously supporting employment internship for students. Company executives and department heads act as mentors to support the learning and practical training at the company, aiming to fully enhance the students' comprehensive theoretical and practical capabilities. The company actively communicates with students to better understand the feedback regarding their practice training. In May 2023, the company was awarded the title of Jiangsu Province Employment Internship Demonstration Base. In mid-September 2023, more than 100 students majoring in pulping and papermaking from Nanjing Forestry University visited Gold East Paper on a learning trip. The program helped the students significantly enhance their professional skills with a pedagogy focusing on a mixture of on-site observation, on-site teaching, and cognitive enhancement.

In 2023, Ningbo Asia was awarded the title of an Industry-Academia Collaboration Enterprise in Ningbo.

#### Bohui Paper Launched the Third "Dream Plan" Class

In 2023, Bohui Paper collaborated with Qilu University of Technology and Zibo Vocational Institute to launch the third "Dream Plan" modern apprenticeship class. A total of 27 high school graduates joined the "Dream Plan" APP Class with full scholarship from the company. The program will help the students to better integrate textbook knowledge with practical skills, as well as practical training in paper mill workshops, which helps the students to lay a solid foundation for fulfilling the job competency requirements upon their graduation.



The Third "Dream Plan" Modern Apprenticeship Class



## Community Development and Social Harmony

Upholding our original aspiration of charity and philanthropy, which is to "help the frail, the needy, the elderly, and the young, and build a harmonious society", APP China is committed to making continuous contributions to supporting education equity, national development, poverty alleviation, and community development, growing together with our stakeholders toward a harmonious society.

- RMB**1.5** billion donated cumulatively in China
- 21,508** hours of volunteer services from our employee volunteers
- 41** charity projects implemented during the year by the Huang Yicong Foundation, with a donation totaling around RMB**138** million

### Expanding Support for Philanthropic Undertakings

Huang Yicong Foundation has been focusing on providing long-term support for promoting equity in education, supporting youth development, and assisting medical and research advancement. The Foundation actively engages in the charitable programs and activities in education support, poverty alleviation, and disaster relief, funds charity programs that contribute to national and social development in the fields of scientific research, culture and sports, medical care, and environmental protection, organizes volunteer services, to support national development strategies and related research and promote the development of philanthropy in China. In recent years, the

Foundation has intensified its exploration in the field of rural revitalization. Please refer to the section of Contributing to Rural Revitalization of this report for detailed information.

The Foundation both provides funding support for charitable programs in line with its mission and focused areas, and implements its own charitable programs. The Foundation has established sound project management and follow-up mechanisms. Every year, we conduct follow-up visits to the beneficiaries of our programs, talking to the students to understand their learning and living conditions and

needs, and continuously caring for their development and growth needs. APP China employee volunteers also actively participate in our charitable activities such as supporting impoverished students to better grow.

In 2023, the Foundation was recognized for its contributions at several occasions, including being awarded the "China Red Cross Dedication Medal" by the Red Cross Society of China, and being included in the "2023 China Charity Ranking: Annual Exemplary Foundation".

#### Earthquake Disaster Relief in Gansu

In December 2023, a 6.2-magnitude earthquake struck Jishishan County, Linxia Hui Autonomous Prefecture, Gansu Province. Upon learning about the severe disaster caused by the earthquake, Sinar Mas Group and the Huang Yicong Foundation promptly donated RMB20 million to a local philanthropic organization, the Gansu Jishishan Bao'an, Dongxiang, Salar Minorities Charity Association, to support the emergency rescue, disaster relief supplies procurement, resettlement of affected people, and post-disaster reconstruction in the earthquake-stricken area.

### Progress of Key Programs of the Huang Yicong Foundation



Congcong Baby

Caring for or abandonment of special-needs children due to congenital diseases is a social challenge. The Foundation donated RMB1 million to Shanghai Cimeng Foundation in support of the launch of the Congcong Baby project. The project aims to improve the medical, rehabilitation, and social integration of special-needs children. The project provides children with congenital diseases with assistance in medical treatment, education, adoption support, and other aspects to help them get better treatment and more support. Cimeng Foundation also established a support center in the Nanyang Children's Welfare Institution with the funding under this project.



Huang Yicong Scholarship

Since 2002, APP China has established scholarships at multiple universities across China, such as Beijing Forestry University and Huazhong Agricultural University, for students with outstanding academic performance and remarkable achievements. In 2011, the Foundation started including "charity and philanthropy" as a dimension of the scholarship to encourage college students to actively pay attention to and participate in charitable activities. In 2019, the Foundation established Huang Yicong Scholarship in Huaqiao University and Chinese Academy of Forestry for young talent with both outstanding achievement in science research and significant charitable contributions. The Foundation holds annual meetings with scholarship recipients to listen to their thoughts on study, employment, and personal development. As of the end of 2023, the Foundation had already granted RMB8 million in scholarships to over 2,700 recipients.



Supporting research in the field of artificial intelligence

In order to support the cultivation of top talent in the field of artificial intelligence, the Foundation made the plan to donate RMB10 million each to the education foundations of Tsinghua University and Peking University from 2022 to 2024. The funding will be used for supporting academic activities and student scholarships in artificial intelligence related education programs. As of the end of 2023, each university had received RMB8 million cumulatively.



Mathematics Leading Talent Program

In order to cultivate leading talent with solid foundation in mathematics and theoretical physics, the Foundation made the plan to donate RMB20 million to the Beijing Shing-Tung Yau Science Foundation from 2021 to 2024. The interest of the fund will be used to support the Shing-Tung Yau Mathematics Leading Talent Program, mainly as student scholarships for students of the leading program and talent class, as well as expenses for inviting renowned scholars. As of the end of 2023, RMB15 million had been donated cumulatively, and 112 students had received scholarships under this program.



Green Finance and Carbon Neutrality

The Foundation has committed to donate RMB15 million to the Tsinghua University Education Foundation from 2021 to 2025. The funding will be used to fund research projects related to green finance. As of the end of 2023, RMB9 million had been donated cumulatively.

The Foundation has committed to donate another RMB20 million to the Tsinghua University Education Foundation from 2022 to 2026. The funding will be given to the Institute for Carbon Neutrality of Tsinghua University to support research projects on key carbon neutrality technologies, publishing key reports, and cultivating talent. As of the end of 2023, RMB8 million had been donated cumulatively.

## Supporting Community Development

APP China and its subsidiaries have long been engaged in various public welfare activities such as community assistance, charitable donations, culture promotion, tree planting, and voluntary blood donation, making positive contributions to the harmonious development of the community. APP China Forestry actively implements the recruitment principle of prioritizing local hiring in the recruitment for plantation management personnel, not only creating employment opportunities for local communities, but also cultivating a large group of managerial and technical talents.



### Caring for Teenager Girls

In 2020, APP China cooperated with the Shanghai Overseas Chinese Development Foundation and launched the "Love Never Stops on Paper" Care from Overseas Chinese - Caring for Left-behind Teenager Girls. The program focuses on caring for left-behind teenager girls with difficulties with menstrual hygiene products due to economic conditions or living conditions, as well as providing them with relevant knowledge and education. The program has been carried out in a number of high schools in Yunnan, Guangxi, Chongqing, and Gansu.

In 2023, we brought this program to Houliu Junior High School in Shiquan County, Shaanxi Province. Other than donating 385 boxes of female sanitary products worth RMB24,000 to 275 teenager girl students, the program also provided professional social services such as mental health lectures, group counseling, and individual consultations for students, helping these teenager girls properly understand the physical changes during puberty, clear their confusion, learn to love themselves, and cultivate a positive attitude in life.



#### Culture Promotion

Since its opening in April 2021, Ningbo Asia's Green Paper Culture Center has been actively carrying out papermaking culture promotion activities, featuring both China's papermaking cultural heritage and the environmental protection efforts of modern papermaking industry. In 2023, Ningbo Asia carried out a variety of popular science education activities with the themes of "green", "environmental protection", "heritage", and "popular science", receiving a total of more than 900 visitors in 72 batches, and hosting over 20 popular science events for local community members and students of all ages.



#### Community Care

Hainan Jinhai Pulp & Paper regularly visits the elderly and families in need in neighboring communities with support. The company also funds the improvement of cultural and sports facilities in local communities, donates cultural and sports supplies, and sponsors community basketball, volleyball, chess games during holidays. In January 2023, the company donated over RMB120,000 to fund its community care activities.



#### Environmental Protection

In 2023, Hainan Jinhai Pulp & Paper, APP China Forestry, Bohui Paper, and several other subsidiaries organized tree planting activities. Over 30 volunteers from Hainan Jinhai Pulp & Paper and APP China Forestry planted over 300 eucalyptus seedlings. Cumulatively, Hainan Jinhai Pulp & Paper volunteers have planted a total of over 20,000 trees over the 14 consecutive years.



#### Disaster Relief

In 2023, Gold Hongye Paper donated tissue products worth about RMB1.45 million to a number of regions affected by flood disasters, providing much-needed assistance to people affected by the disasters.



# Governance

## Laying a Solid Foundation for Sustainable Development

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## Empowering Transformation with Digital and Intelligent Transformation

APP China is committed to building a more intelligent, efficient, and sustainable business model with advanced digital technology and intelligent systems to compete in a fast-changing market and seize the development opportunities in the digital age.

Adhering to its "Digital and Intelligent Transformation" strategy, APP China has been accelerating the application of digital technologies in various fields such as enterprise operations, mill production, logistics, and forestry management in recent years. We use big data technology to analyze and optimize resource allocation, implement real-time monitoring through the Internet of Things (IoT) technology, and realize intelligent production with the application of artificial intelligence (AI), significantly improving the overall operational efficiency of the Company as a result.

### The Digital and Intelligent Transformation Strategy of APP China

#### Digital and Intelligent Transformation 1.0:

Efficiency Tools

Use digitalization to connect upstream and downstream business processes, and improve efficiency by designing a comprehensive platform where data can be digitized and visualized, and the computation results can be promptly transmitted.



#### Digital and Intelligent Transformation 2.0:

Business Decision-making

Automatic uploading and acquisition of information

Data-driven machine intelligent decision-making

Implementation of intelligent decisions with guidance from managers

### • Digitalized Production

With a variety of digitalization measures, our mills have achieved the intelligent management of key processes, such as product development, quality control, energy management, and risk prevention. These measures have significantly improved our production efficiency and product quality, reduced energy consumption, optimized resource allocation, and mitigated production operation risks, playing a crucial role in the stable operation of the Company.

Regarding intelligent logistics, APP China actively explores the application of cloud computing, IoT, AI, digital twins, as well as other technologies to promote the digital and intelligent transformation of its value chain, aiming at building a whole-process and end-to-end intelligent supply chain. With these advanced technologies, significant results have already been achieved at a number of our mills, such as optimized production processes, intelligent inventory management, and more efficient logistics operations.

#### Guangxi Jingui Pulp & Paper Optimizing Energy Management with EMS

Guangxi Jingui Pulp & Paper has deployed its Energy Management System (EMS) to achieve more efficient and accurate energy management. The system not only monitors major energy-consuming equipment in real-time, but also is capable of conducting real-time analysis on the consumption of water, electricity, gas, steam, coal, oil, and materials with corresponding production and consumption forecasting models, achieving optimized scheduling, balanced forecasting, and effective management of energy and resources.

We developed coal, steam, and electricity production and consumption forecasting models based on the Total Cost Ownership (TCO) system, and integrated the system with the SAP system to obtain inventory information. As a result, the system is able to provide procurement alert and procurement guidance for various scenarios, such as coal supply planning based on production and inventory status, and automatic energy demand forecasting based on the electricity and steam balancing model.

#### Realizing Cost Reduction and Efficiency Improvement Through Digitalization

Hainan Jinhai Pulp & Paper has achieved great results with its digitalization efforts, realizing not only significant cost reduction and efficiency improvement in business management, production control, engineering maintenance and other fields, but also better product quality and higher customer satisfaction.

The company has created a chemical circulation balance diagram and an alkali consumption balance diagram using digital tools, which allow real-time monitoring of the inventory status of circulating chemicals in each pulp line, and timely adjustments of material usage. The company also adopted an Advanced Process Control (APC) intelligent control system, which can automatically adjust the chemical usage based on the process parameters of the bleaching section. In comparison with manual operations with human randomness, the new system has not only achieved fine management of product quality, but also effectively reduced chemical consumption, resulting in an annual cost saving up to RMB12 million.

In terms of engineering maintenance, the company has also strengthened the monitoring and health management of key equipment with the predictive maintenance function of its intelligent maintenance system, resulting in higher stability and lower failure rate of equipment. In 2023, its failure rate of Class A equipment decreased by 42.8%, providing strong support for the stable production of pulp.

#### Promoting the Management of Abnormal Risk Events Through Digital-intelligence

In 2023, Bohui Paper expanded the functions of the intelligent park and implemented the smart visual park project, which further improved the level of safety risk management of the base by using digital-intelligent technology and optimizing control processes, thereby enhancing business and management efficiency. The company has developed an online platform with the alarm function around scenarios such as safety violations in hazardous areas, safety helmets, theft prevention, personnel idleness, etc. In the future, the company plans to expand the smart vision park project to more scenarios and send alarm information through platforms such as WeChat and WeCom to achieve timely handling of abnormal risk events.



Gold Hongye Paper's fully automated sealing and stacking production line



## Powering Development with Technological Innovation

APP China strengthens independent R&D and establishes a virtuous cycle of cooperation among "industry, academia, and research". With these measures, our innovation capabilities have been continuously enhanced, and we strive to provide customers and consumers with products that are more environmentally friendly, healthier, and safer.

R&D investment: RMB **2.962** billion

**1,239** patents granted cumulatively

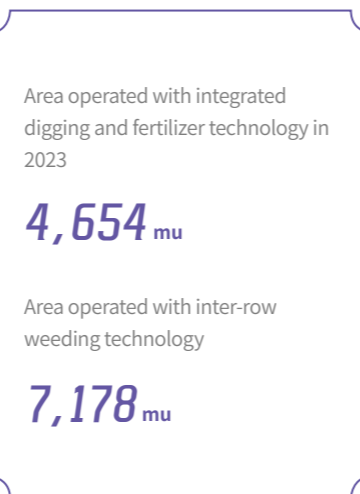
### Developing Intelligent Forestry

APP China Forestry has made positive progress in its promotion of the application of mechanized forestry operations, with technologies such as integrated digging and fertilizing, inter-row weeding, integrated plowing and fertilizing, and integrated fertilizing applied in forest operations. Compared to manual operations, the efficiency of mechanized operations is significantly higher, with significantly lower operational cost. In 2023, the integrated digging and fertilizing technology and the inter-row weeding technology was applied to 4,654 mu and 7,178 mu of forest land respectively. We have also adopted quantitative container fertilization regarding closed-loop fertilizer control, achieving precise fertilization with intelligent controls through a WeChat applet.

In addition, APP China Forestry continuously expanded the boundaries of mechanization with the implementation of nine mechanized technologies, such as drone spraying and hillside digging and

fertilization. The company plans to introduce and develop more forestry machinery for mountain areas in the future, and gradually achieves the transformation from manual labor to mechanization and then to unmanned intelligence, further promoting the modernization and digitalization of forestry operations.

APP China Forestry has a geographic information aerial photography team. In recent years, the company has been continuously expanding the application of drones in various forestry operations, such as land acquisition, planning, afforestation, nurturing, management, and logging. By 2023, our drones have flown over a total area of 4.27 million mu of forest land, producing 19,772 maps. In the future, we will continue to promote the iterative updating of aerial survey equipment and promote the application of LiDAR drones in measuring reforestation growth indicators, further enhancing the visualized management of forest land.



### Continuously Strengthening R&D Capabilities

With innovation as the driving force and industry demand as the orientation, APP China continuously intensifies its R&D efforts and actively strengthens the integrated mechanism for industry, academia, and research collaboration to realize the synergy among enterprises, universities, and society. In recent years, a number of our subsidiaries have successively obtained the recognition of national high-tech enterprises. In 2023, Hainan Jinhai Pulp & Paper was recognized as one of the "2023 Leading High-Tech Enterprises in Hainan Province".

APP China abides by applicable laws, regulations and provisions, such as the *Patent*

*Law of the People's Republic of China*, the *Trademark Law of the People's Republic of China*, the *Copyright Law of the People's Republic of China*, the *Registration Measures for Computer Software Copyright*, and has formulated and continuously optimizes relevant policies such as the *Intellectual Property Rights Management Measures* and the *Patent Management Operation Procedures*, establishing normalized regulation over patent rights, copyrights, trademark rights, and trade secrets, aiming to protect the legitimate rights and interests of all subsidiaries of APP China, encourage employees' innovation initiatives, and enhance the innovation capabilities of the

Company. During the reporting period, our mills, such as Guangxi Jingui Pulp & Paper, conducted training sessions on patent knowledge to continuously enhance the capability of technological personnel to identify innovation opportunities in their daily work and promptly convert technological results into patents.

In 2023, our R&D investment totaled RMB2.962 billion. As of the end of 2023, we held 1,239 authorized patents cumulatively, including 559 invention patents, 103 assigned invention patents, 422 utility model patents, and 155 design patents. In addition, we also had 209 patent applications pending.



Promoting the Establishment of Academician Expert Studios

In May 2023, the inauguration ceremony of the Sinar Mas Group APP Academician Expert Studio was held in Nanning. Adhering to the concept of "shared resource, complementary advantages, mutual promotion, and mutual advance", we hope to promote deeper "industry, academia, and research" collaboration with the academician studio, contributing to the common development of our production bases and local industries in Guangxi.

In July 2023, Ningbo Asia also unveiled the Ningbo City Academician Studio, marking an important step of APP China's "government, industry, academia, and research" collaboration model. With the support of the Ningbo Municipal Government and the Ningbo Science and Technology Association, the Academician Studio strives to build on the experience of university-enterprise cooperation and previous research results to make breakthroughs in applied science, technological research, and achievement commercialization. The Academician Studio is also an important platform for Ningbo to attract high-end talent to support its innovation-driven development, and build Beilun District into a model for modernized harbor city as well as high-quality development and shared prosperity.

These studios allow the academician teams and APP China to further leverage their resource and technological advantages to achieve key technological breakthroughs in the field of green and low-carbon papermaking with more in-depth cooperation in the fields of papermaking, ecological environmental protection, green chemical industry, major research breakthroughs, commercialization of research results, jointly research on basic green and low-carbon papermaking technology applications, and research on industrialization of technological achievements.



Inauguration Ceremony of the Sinar Mas Group APP Academician Expert Studio



Inauguration Ceremony of the Ningbo City Academician Studio

Technological and Product Innovation

Wood and pulp are important raw materials in the pulp and paper industry. While ensuring product quality, reducing the consumption of wood and pulp not only helps the Company conserve forest resources but also reduce operating costs. Innovations in production processes can also result in significant reduction in resource consumption. In 2023, Hainan Jinhai Pulp & Paper reduced the whiteness of pipelined wet pulp, the largest material input in its production process, from 88% to 87%, effectively reducing the amount of chemicals used in the production process.

APP China has a large amount of low-cost empty palm fruit bunches in Indonesia. In 2023, the Company conducted research on using empty palm fruit bunches for pulping, such as chemical pulp preparation, and semi-chemical pulp preparation. The research concluded that empty palm fruit bunches have good pulping potential. For example, compared to conventional broadleaf wood, palm pulp is easier to boil and requires fewer chemicals due to its lower density, and has better strength. Based on the research, we believe that pulp made from empty palm fruit bunches

has potential as a raw material for making black paper and gray paper, and will continue to carry out follow-up research accordingly.

Increasing the ash content of paper helps improve paper strength and printing intensity while reducing wood consumption. The Company has conducted extensive research on increasing the ash content of paper, and obtained the patent for the pre-treatment technology with ground calcium carbonate (GCC) filler.

Researching on Corn Starch Coating Application

Corn is widely grown in China. Gold East Paper has successfully conducted a research on replacing imported cassava starch with corn starch in the coating process, with some of its paper machines adjusted to use solely corn starch in 2023. Hainan Jinhai Pulp & Paper also conducted similar research, reducing production costs by nearly RMB12 million annually by optimizing the cooking process and production flow to increase the use of corn starch.

During the reporting period, Gold East Paper also innovated on corn starch coating process, successfully addressing issues with traditional corn starch coating process, such as high screening residue, clumping, and excessive foaming, with a proprietary modified formula and process.



APP China is committed to developing high-quality products with green, healthy, and environmentally friendly attributes for paper products to meet the increasing requirements of product quality from customers and consumers. In recent years, we have launched a series of innovative products focusing on product attributes

such as lightweighting, convenience, zero-carbon, and zero-plastic. At the 6th China International Import Expo in 2023, we showcased our efforts and progress in exploring more sustainable paper solutions with the exhibition of a variety of zero-plastic and zero-carbon products, such as the zero-carbon copy paper series, the carbon-neutral

aseptic liquid packaging paperboard, the "Zero-Plastic" uncoated food-grade white cardboard (EPP), the "Zero-Plastic" water-based coating paper (REPP), and the "Zero-Plastic" oil-proof coated food paperboard (OPB) products.

### Green Products from Gold Hongye Paper

#### "Zero-Plastic" Tissue Series

The first "Zero-Plastic" Breeze tissue product uses 100% paper-based packaging with existing automatic production lines. The new packaging effectively replaced traditional plastic film packaging, making the tissue products 100% biodegradable and more environmentally friendly.



The first "Zero-Plastic" Breeze tissue product

#### Bottom-Pull Tissue Products

The Breeze bottom-pull products feature a large capacity design. Traditional tissues are pulled from the top, which limits the capacity to around 100 tissues due to height limitation. In comparison, bottom-pull products can hold 300-400 tissues, effectively reducing the amount of packaging materials used on average. In addition, the wall-mounted design of the bottom-pull products saves desktop space and is more hygienic when used in greasy or humid environments such as kitchen and bathroom.

### High Processing Adaptability Single-Sided Coated White Card

The high processing adaptability single-sided coated white card IVP is a new product developed by Guangxi Jingui Pulp & Paper in 2023. This product can meet our customer's requirements for reverse ultraviolet (UV) curing printing processing. As a green and low carbon printing technology, the UV curing printing technology not only consumes lower energy, but also is more suitable for three-dimensional printing and high-end printing. In order to meet the high requirements for post-processing from the customers, the company conducted multiple rounds of technical optimizations during the development process based on customer needs, and successfully developed a product with both high quality and cost-efficient. Sales of the product reached nearly 3,500 tons every month. The development of this product is also a successful example of our efforts to empower customers to reduce raw material consumption with our product innovations.

### Commercial Production of Plastic-Free Paper Cups

In October 2023, BASF, APP China, DBC Group, and Hunan Lido Environmental Science & Technology Co., Ltd. reached a strategic partnership to jointly promote the global development of plastic-free paper cup technology.

Plastic-free paper cups are recyclable, degradable, compostable, and microwavable, can be used for hot and cold drinks, as well as other food containers. This technology was jointly developed by APP China, BASF, and the DBC Group. Replacing traditional PE-coated paper cups and plastic cups with REP (Recyclable Energy Product) coated products can effectively reduce the plastic use in paper cup production, actively promote industry upgrading. In December 2023, Ningbo Asia successfully completed the commercial production of plastic-free paper sheets and delivered them to customers after passing relevant inspections, marking a more mature development stage for the application of plastic-free paper cups.

### Development of the High-Quality Double Coated Paper

Hainan Jinhai Pulp & Paper optimized the production process for making high-whiteness double-coated paper by reducing the use of long fibers, resulting in greater uniformity of the product. The optimization also includes reduction in the uses of chemi-mechanical pulp, whitening agents, and dyes, which results in significantly higher product strength as well as finer texture. The optimized process not only reduces costs, but also makes the product more environmentally friendly and safer. In addition, through optimizing the coloring process, the paper has a softer and more eye-friendly color tone, further enhancing the reading comfort and protecting the sight of readers.

### Development of Food-Grade Coated Kraft Cardboard

The food-grade coated kraft cardboard developed by Bohui Paper has a white front side, similar to high-grade white cardboard, suitable for high-precision offset printing; the back side uses a more environmentally friendly natural fiber, effectively reducing the addition of bleaching agents and processing steps in production, thereby significantly reducing the consumption of environmental resources. Food-grade coated kraft cardboard has high moisture resistance, burst resistance, tear resistance, and excellent postprocessing performance, and can be widely used in the packaging of frozen and refrigerated food packaging paper. The product has obtained product carbon neutral certification.



## Strictly Managing Risks and Ensuring Stable Growth

APP China continuously enhances risk management and the development of internal control system to optimize its corporate governance effectiveness. The Company has also established a robust information security management system based on the ISO27001 standard to provide the necessary security guarantee for digital transformation and business growth with comprehensive prevention against network security threats and data leakage risks.

- Piloted the establishment of the **"Three Lines Model"** framework based on the "Three Lines of Defense" for internal control, which will be replicated at various business units subsequently
- 41** audit projects conducted
- Zero incidents** of data leaks or cybersecurity issues

### Risk Management System

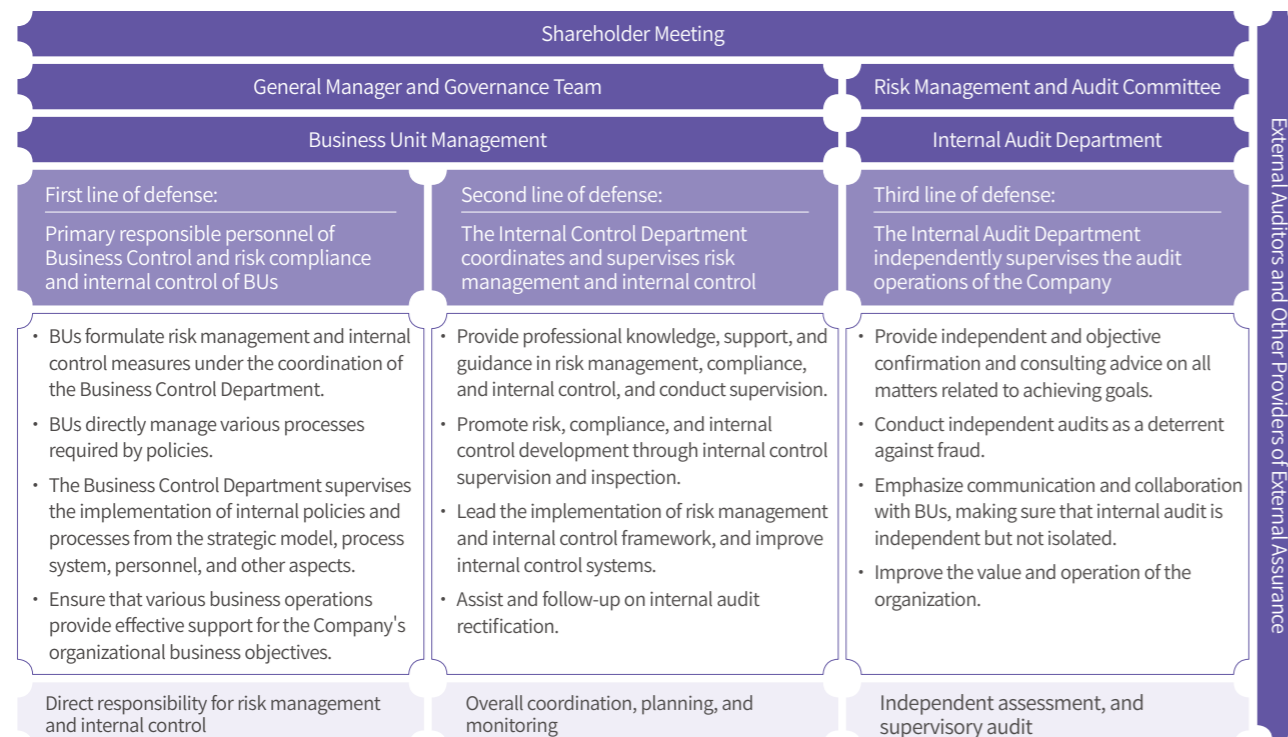
In 2023, APP China further improved the risk management and internal control system. Under the guidance of the Audit Committee, a pilot "Three Lines Model" framework, covering business control, internal control, and internal audit, was established at the Tissue BU based on the "Three Lines of Defense" for internal control. The framework will be replicated at various business units subsequently to

comprehensively enhance the effectiveness of the Company's risk management, internal control, and corporate governance. In 2023, the Company conducted a total of 41 audit projects.

During the reporting year, the Company further deepened its business audit operations. With various benchmarking as well as MBOS peer learning and

competition, we encouraged various units to identify and tap potential opportunities, and avoid related risks in fields such as production control, raw material management, warehousing logistics, and finished product sales. A total of 42 improvement project teams were established during the reporting year to follow-up the identified issues, generating a total return of RMB120 million.

### The "Three Lines Model" Internal Control and Internal Audit Framework of APP China Tissue BU



### Information Security Risk Management

APP China has built a Company-wide IT infrastructure and information security management system consistent with the ISO27001 Information Security Management System, and formulated a series of regulations and policies on information security and cybersecurity, which are posted on our OA system and can be accessed by our employees at any time. The Information Security Committee is the Company's top information security decision-making entity, with members including the General Managers of Chairman's Offices of both Sinar Mas Group and APP China, the Digital CIO of APP China, Audit Committee members of Sinar Mas Group, and Director of Sinar Mas Group's Information Security Department.

The Company has formulated the *Guidelines for the Management of Major IT & OT Information Security Incidents*, specifying standardized response procedures

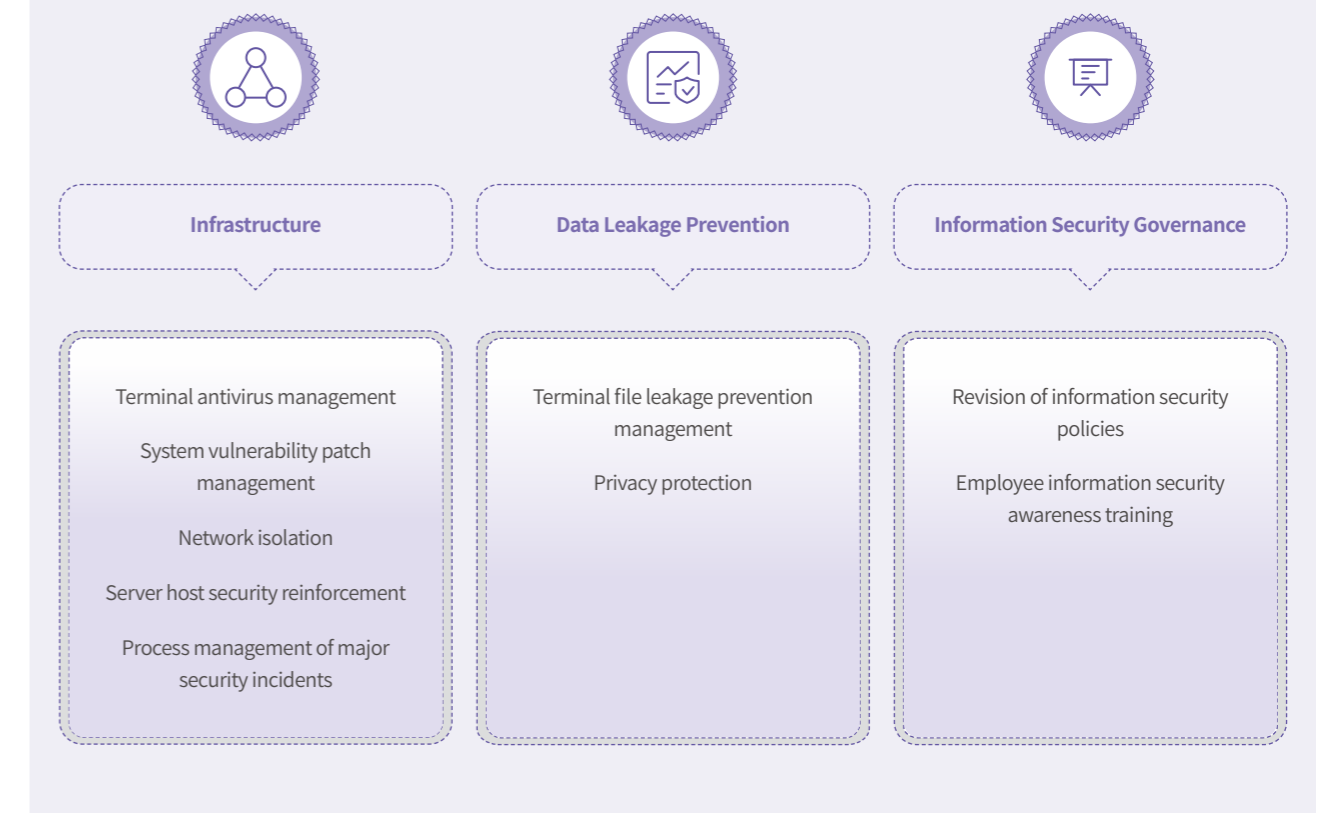
regarding information security-related incidents. During the reporting period, we tested the event response procedures in our business continuity plan. Employees can report suspected information security or cyber security issues to a specific email or the relevant Information Technology Department of their business unit or the SSC Service Sharing Center. Violations of the Company's information security policies shall be disciplinary accordingly based on the extent of the loss in accordance with the provisions in the *Employee Handbook*, serving as reminders to enhance the overall awareness of information security among all employees. In 2023, the Company had no incident of privacy data leaks or cyber security incidents.

In 2023, the e-commerce applet of our Tissue Business Unit (TBU) passed the National Information Security Protection

Level III Certification. In November 2023, the Company purchased cyber security insurance, which covers emergency response expenses, business interruption losses, data recovery costs, cyber ransom losses, etc. In addition to providing cyber security insurance coverage, we also improved our cyber security rating as assessed by the insurance provider by patching vulnerabilities and requiring two-factor authentication for remote access, web email, and privileged account systems.

We also organized monthly information security training sessions for all employees, raising employee awareness on information security through using corporate WeChat account postings, workplace bulletin boards, online mini-games, new employee orientation training, as well as phishing email simulations.

### Information Security Management Focuses of APP China





## Adhering to Business Ethics and Integrity

Adhering to its core ethical guidelines of "Honesty and Integrity", APP China proactively promotes the awareness of integrity and compliance, and is committed to building a culture of honesty and responsibility, building a solid ethical foundation for achieving sustainable development goals.

- 21 integrity and compliance training sessions carried out during the year
- 100% employee training coverage on business ethics and integrity culture
- 6 consecutive years we have been launching the "Sunshine Integrity Month" event
- 100% suppliers are subjected to our anti-corruption policies

## Integrity and Compliance Management

APP China has formulated the APP China Integrity Management Framework in accordance with the ISO37001 anti-bribery management system. With the Framework as guidelines, we apply the concept of compliance to all levels of employees, and actively involve everyone to participate in integrity and compliance management and practices.

The Company has established an Ethics Discipline Committee, responsible for approving the *APP China Employee Code of Ethics* as well as its complementary policies. The Committee regularly reports to senior management of the Company on employee performance in terms of professional ethics, handles whistleblowing reports with the support of relevant functional departments. The Committee is composed of at least five senior executives of the Company, and convenes regular meetings annually. In case of emergency, the chairperson of the Committee is authorized to convene ad hoc meetings. The Corporate Risk and Integrity Department is the responsible department for integrity and compliance management, which plans, supervises, and implements specific integrity and compliance initiatives with the support of other departments.

The Company has incorporated the *APP China Employee Code of Ethics* into the *Employee Handbook*, which regulates employees' daily behaviors in various aspects such as responsibilities to each

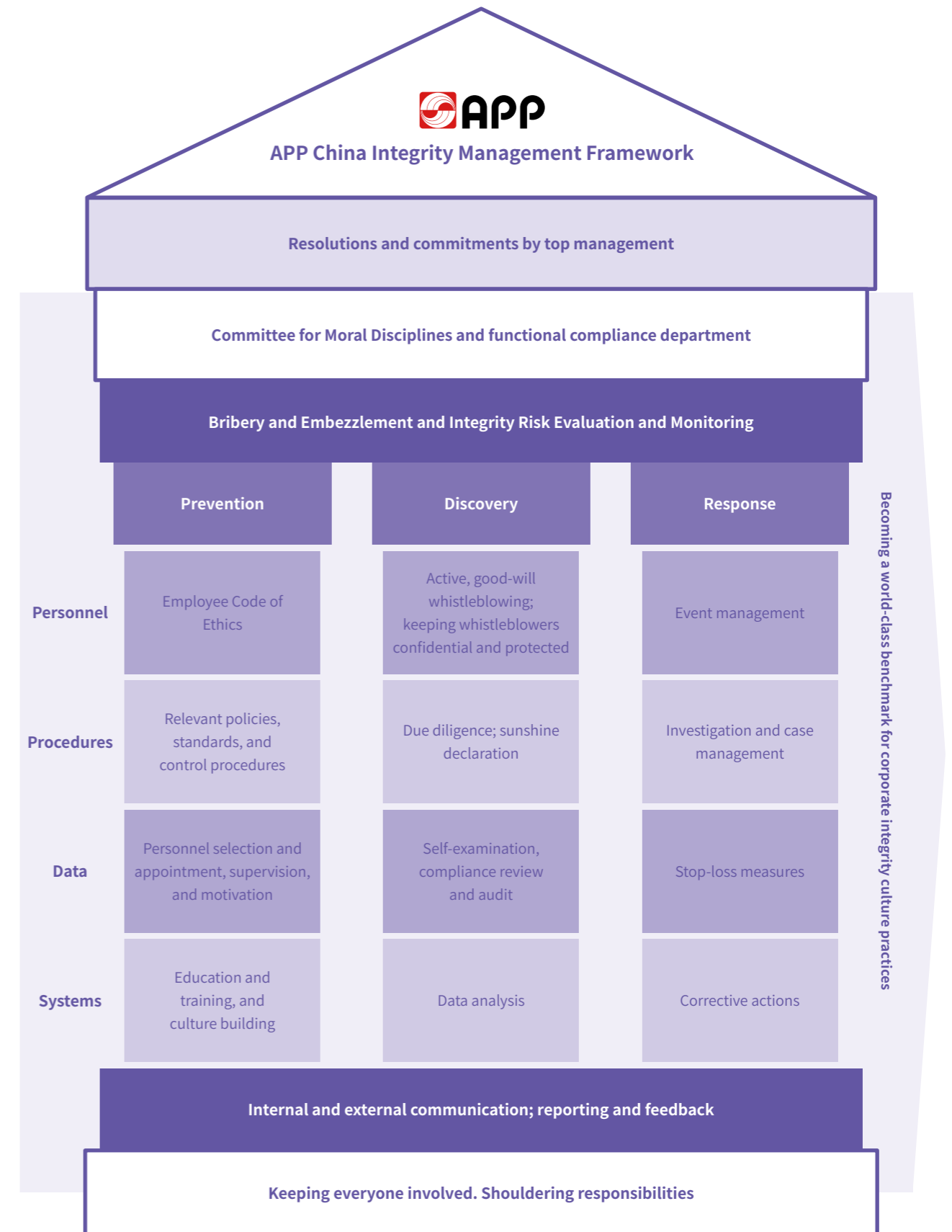
other, to customers, to the Company, to business partners, and to society. Employees are required to be "incorruptible and self-disciplined, honest and upright, compliant and dedicated, self-managed, and team-oriented". The Company's *Provisions for Prohibition of Gifts and Hospitality* stipulates that employees shall not accept any gifts or hospitality from business partners (suppliers, customers, and potential third parties). Employees are required to report any gifts received, whether declined or not, through the OA system within three working days, accompanied by a photo of the gift.

The *Whistleblowing Operation Management Measures* specifies the reporting channels, scope, principles, rewards and penalties, and relevant investigation procedures for handling reported violations and non-compliance incidents. The Company encourages whistleblowers to report under real names, while also accepting anonymous reports. The confidentiality of the identify of whistleblowers is strictly protected. Any retaliation against whistleblowers will be strictly disciplined to protect the right of employees to report violations of integrity and compliance requirements.

Upon receiving a whistleblowing report, we will first assess its validity, then assign it to relevant department for handling and issue an investigation report based on the

assessment results. The Corporate Risk and Integrity Department is responsible for handling incidents involving fraud, corruption, theft, forgery, commercial bribery, encroachment, conflicts of interest, and major dereliction of duty; the Internal Audit Department is responsible for handling incidents involving deficiencies of our internal control system such as payment disputes, false reimbursement, poor management, and process loopholes; the Human Resources Department is responsible for handling incidents involving personnel disputes, and employee misconduct listed in the *Employee Handbook*. In July 2023, under the guidance of the Audit Committee, the Company formulated the procedures for fraud audit, identification, investigation and disciplining. In response to suspected fraud incidents identified during audits, the Internal Audit Department and the Corporate Risk and Integrity Department will collaborate closely to ensure more effective handling of corruption and conflicts of interest issues.

Regarding the integrity and compliance management for suppliers, APP China has formulated the *Sinar Mas Supplier/ Partner Pledge on Business Compliance and Integrity*, which provides detailed requirements on business ethics and integrity for suppliers. All suppliers are required to sign this pledge, which is downloadable at the Company's supplier management platform.



APP China Integrity and Compliance Whistleblowing Mechanism

Whistleblowing Channels

- ◆ Email: GRW@app.com.cn
- ◆ Phone: 021-22839763

Principles of Whistleblowing

- ◆ APP China adopts a "zero tolerance" attitude toward any behavior that violates professional ethics and integrity principles. Any violations by internal personnel shall be handled impartially and shall never be tolerated or condoned.

Scope of Whistleblowing

- ◆ Violation of laws and regulations, including criminal acts
- ◆ Corruption/bribery (accepting/giving bribery)
- ◆ Theft/encroachment/misappropriation of Company assets
- ◆ Misconduct that puts the Company at risk
- ◆ Violation of Company policies or integrity principles
- ◆ Severe violation of the *Employee Handbook* of the Company
- ◆ Intentionally damage the reputation of the Company
- ◆ Violent behaviors at workplace
- ◆ Major crisis event
- ◆ Leakage of major business secrets or information security breaches
- ◆ Abuse of power
- ◆ Conflict of interest

Reward for Whistleblowers

- ◆ Internal whistleblowers: Bonuses, rewards and credits
- ◆ External whistleblowers: Bonuses, Channel rewards

Integrity Culture Building

APP China attaches great importance to cultivating a culture of integrity, and regularly conducts various training and cultural activities to promote integrity and compliance among all employees. Through training, lectures, thematic learning, online quizzes, brochures, posters, Company-wide emails, corporate WeChat promotion, etc., we continued to focus on improving the awareness of integrity and compliance among employees. We also conducted targeted integrity awareness programs for senior and middle management personnel, such as the Integrity Month and thematic training.

"Winning Through Change, Integrity as Foundation" Sunshine Integrity Month Event

From August to September 2023, APP China launched the sixth annual "Sunshine Integrity Month" event activity with the theme "Winning Through Change, Integrity as Foundation". During the four-week event, the Company organized various activities for each department and mill to engage with employees and further enhance the awareness about compliance and business ethics of all employees. The Company also promoted the awareness of its whistleblowing channels during training sessions, and organized all employees to fill out an online "Conflict of Interest Declaration Form" to identify and prevent potential conflicts of interest. In addition, the Company also conducted integrity awareness exams to instill the integrity thinking of "dare not, cannot, will not" into the moral bottom line and daily guidelines of employee.

2023 Sunshine Integrity Month Activities

Launch ceremony and pledge ceremony	<ul style="list-style-type: none"> <li>• All-staff pledge making ceremony with signing of the integrity commitment.</li> <li>• Invited an external lecturer to conduct a special lecture on "ESG and Corporate Integrity Compliance Management Trends", interpreting the significance of compliance and anti-corruption to deepen employees' awareness.</li> </ul>	Case studies and Sunshine Declaration	<ul style="list-style-type: none"> <li>• Carried out business ethics and integrity culture promotion activities through case study bulletin boards and online/offline lectures.</li> <li>• All units conducted sunshine declaration to avoid conflicts of interest.</li> <li>• Introduction to whistleblowing channels and reward policies.</li> <li>• Provided integrity training to suppliers, promoting the whistleblowing channels and reward policies of the Company.</li> </ul>
Conducted interactive visits and collected suggestions	<ul style="list-style-type: none"> <li>• Provided training for management personnel at all levels to promote their compliance with integrity norms and guidelines.</li> <li>• Encouraged employees to stop, avoid, and timely report violations or non-compliant behaviors.</li> <li>• Emphasized the importance of compliance with integrity policies, as well as transparency of daily management behaviors.</li> </ul>	Online exams, review and summary	<ul style="list-style-type: none"> <li>• Organized all employees to participate in online quizzes with winners awarded.</li> <li>• The Corporate Risk and Integrity Department concluded the Integrity Month event, continuously consolidating the learning and practical results in exploration of the establishment of relevant long-term mechanism.</li> </ul>



Senior management of APP China participating in integrity training during the "Sunshine Integrity Month"



Employees taking the *Integrity Pledge*

## Refining Supply Chain Management, and Adhering to Responsible Procurement

APP China continuously optimizes its supplier management system, and implements strict supplier approval and assessment mechanisms; it focuses on deepening responsible procurement strategies to promote green and sustainable development of our supply chain.

- Proportion of wood chips with forest certification in total wood chips procurement: **23.38%**
- Proportion of wood pulp with forest certification in total wood pulp procurement: **40.96%**

The main supplier categories of APP China include raw materials, energy, technical services, equipment manufacturing, logistics, and engineering and construction. In 2023, we revised the *APP Procurement Manual*, continuously optimized supplier

approval and assessment mechanisms, and continuously improved the online supplier management system to strengthen supplier risk assessment and control. In 2023, We procured a total of 3,343,385.16 tons of certified wood pulp

and 2,623,009.32 tons of certified wood chips, accounting for 40.96% and 23.38% of total wood pulp and wood chips procurements respectively.

### Supplier approval

- Supplier risk assessment comprehensively considers the financial status, credit profile, fraud record, legal risk, information security, and customer complaint system, etc. of suppliers. Specific vendors such as wood chips and energy suppliers are required to provide proof of third-party certification regarding their health, safety, and environmental protection performance. Suppliers are categorized as low-, medium-, and high-risk suppliers.
- Suppliers are required to sign the *Sinar Mas Supplier/ Partner Pledge on Business Compliance and Integrity* and the *Corporate Social Responsibility Statement and Pledge*, as well as abide by the integrity and compliance management standards of APP China.

### Supplier communication and assessment

- Suppliers are subject to ongoing risk monitoring, and due diligence assessments are reviewed at random intervals.
- An effective supplier communication mechanism has been established to quickly resolve various issues during cooperation to ensure consistent supply of quality products and services.
- Suppliers are classified based on their respective category and assessment results, and those who persistently fail to meet our requirements will be delisted.

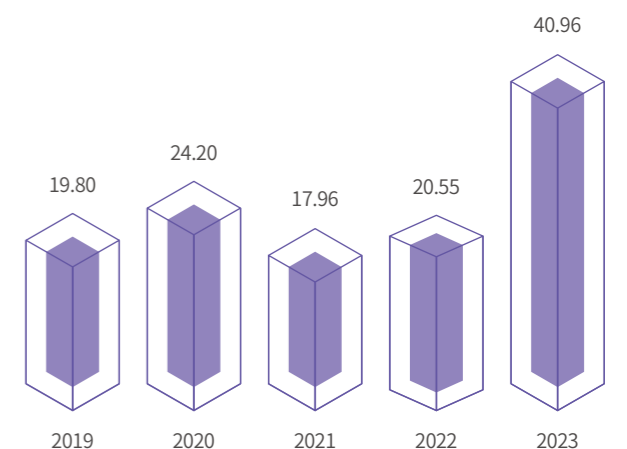
### APP China's Requirements for Pulp and Wood Fiber Suppliers

- Suppliers are required to maintain valid records to demonstrate the origin of the source of raw materials (e.g., plantation), and to be able to demonstrate in general how the suppliers of wood fiber obtained their raw materials.
- Suppliers and their upstream suppliers must comply with the laws and regulations of the countries in which they operate, including laws and regulations on environmental protection.
- Suppliers shall guarantee that all wood chips come from plantation forests.
- Suppliers shall take proactive actions to improve their own sustainability management mechanisms, including strengthening the procurement of raw materials from plantation forests.
- Suppliers shall comply with the Responsible Fiber Procurement & Processing Policy (RFPPP) of APP China's pulp and paper businesses, guaranteeing to provide:
  - only timber that has been properly inspected and certified as legally sourced and traced through the chain of custody;
  - no timber harvested in violation of tradition and civil rights;
  - protection of HCV through appropriate forest management activities in source forests of timber where HCV forests are identified;
  - only waste and wood residues that comply with national regulations and are not on the list of regulated species of the International Union for Conservation of Nature (IUCN) and the *Convention on International Trade in Endangered Species of Wild Fauna and Flora* (CITES) Appendix I;
  - no genetically modified trees for reforestation unless it is assessed as in compliance with best-practice standards; and
  - timber harvested in compliance with the Fundamental Conventions of the International Labour Organization (ILO).

Proportion of Wood Chips Sourced from Certified Forests (%)



Proportion of Wood Pulp Sourced from Certified Forests (%)



# Performance in Numbers

## Environmental Performance

### Energy

Indicator	Unit	2023	2022	2021
Coal	ton	4,018,244.02	3,533,945.33	3,622,348.26
Gasoline	ton	442.08	529.62	408.27
Diesel	ton	4,978.92	3,732.87	3,522.56
Fuel oil	ton	1,962.17	1,651.06	1,146.27
Natural gas	10,000 cubic meters	23,316.87	23,070.74	22,797.08
LPG	ton	4,290.33	8,976.29	7,179.45
Kerosene	ton	0.00	0.66	0.65
Purchased electricity	10,000 kWh	698,973.70	427,144.95	376,627.71
Purchased steam	GJ	15,654,807.44	15,460,124.74	12,106,028.74
Black liquor from pulp	ton	2,957,873.05	2,978,895.18	2,796,688.29
Other biomass fuels	ton	604,557.38	537,774.95	387,104.53
Solar power generation	10,000 kWh	3,038.15	3,102.42	2,440.66
Purchased green electricity	10,000 kWh	12,899.95	21,122.00	0

### Water resources and wastewater\*

Indicator	Unit	2023	2022	2021
Total water withdrawal**	ton	158,457,617.63	140,426,381.96	125,567,722.20
Total wastewater discharge***	ton	127,005,726.42	109,903,311.37	101,907,671.22
Wastewater discharge per ton of paper produced	ton	6.18	5.79	5.88
Wastewater discharge per ton of pulp produced	ton	10.05	9.60	12.46
COD emissions per ton of paper produced	kg	0.21	0.24	0.24
COD emissions per ton of pulp produced	kg	0.52	0.60	0.86

\*Not including data from APP China Headquarters. Not including data from APP China Forestry except for the indicator of total water withdrawal.

\*\*97.05% came from surface water, 2.94% from third-party facilities, and 0.01% from ground water.

\*\*\*In 2023, there were zero incidents of major water body pollution at APP China.

Mill*	Annual average discharge concentration (mg/L)				
	COD	NH <sub>3</sub> -N	Total Phosphorous (TS)	Total Nitrogen (TN)	Suspended Solids
Gold East Paper	37.14	0.47	0.09	5.55	6.25
Hainan Jinhai Pulp & Paper	49.71	1.19	0.025	3.88	15.31
Ningbo Asia	44.99	1.30	0.11	2.27	15.00
Guangxi Jingui Pulp & Paper	42.68	0.65	0.02	3.65	8.00
Shandong Base of Bohui Paper	27.20	0.60	0.02	3.91	-
Jiangsu Base of Bohui Paper	33.28	2.13	0.13	5.29	-

\*Wastewater discharged from Hainan Gold Hongye was treated by Hainan Jinhai Pulp & Paper. The annual average pollutant discharge concentration data for each mill were below the requirements of the *Discharge Standard of Water Pollutants for Pulp and Paper Industry* (GB 3544-2008).

### Water reuse

Mill	Amount of reused water (ton)		
	2023	2022	2021
Gold East Paper	664,730,400	650,109,600	658,752,000
Hainan Jinhai Pulp & Paper*	984,158,242	974,001,791	985,949,728
Ningbo Asia	250,158,336	245,318,915	230,884,979
Guangxi Jingui Pulp & Paper	642,083,786	430,151,971	340,441,483

\*The data of Hainan Jinhai Pulp & Paper include those of Hainan Gold Hongye.

### Air pollutant emissions\*

Indicator	Unit	2023	2022	2021
Total SO <sub>2</sub> emissions	ton	511.70	688.82	550.15
Total NO <sub>x</sub> emissions	ton	4,137.85	4,243.02	3,995.42
Total soot emissions	ton	292.46	342.10	292.95
Total VOCs emissions**	ton	3.32	0.04	0.14

\*Not including the data of APP China Forestry.

\*\*In 2023, Rudong Base was included into the scope of total VOCs emissions. In addition, there was an increase in Shandong Base of Bohui Paper's production, thus total VOCs emissions have been increased.

Mill	Exhaust gas emissions (ton)			
	SO <sub>2</sub>	NO <sub>x</sub>	Soot	Volatile Organic Compounds (VOCs)
Gold East Paper	73.28	260.36	10.67	-
Hainan Jinhai Pulp & Paper*	119.30	2,660.30	150.90	-
Ningbo Asia	158.51	540.25	16.87	-
Guangxi Jingui Pulp & Paper	160.08	662.36	89.23	-
Bohui Paper	0.53	9.66	2.08	2.01
Rudong Base	-	4.92	22.71	1.31

\*The data of Hainan Jinhai Pulp & Paper include data of Hainan Gold Hongye.

## • Waste\*

Indicator	Unit	2023	2022	2021
Non-hazardous waste generated	ton	2,178,331.21	2,199,475.04	1,933,954.95
Non-hazardous waste disposed of	ton	2,187,511.42	2,202,827.72	2,017,693.61
Recycling and reuse	ton	412,657.41	353,504.67	378,796.61
Onsite	ton	91,206.43	106,417.74	109,014.00
Offsite	ton	321,450.98	247,086.94	269,782.61
Incineration	ton	818,418.66	856,288.15	779,631.70
With energy recovery	ton	810,744.76	848,707.19	772,455.80
Without energy recovery	ton	7,673.90	7,580.96	7,175.90
Selling to external parties for reuse	ton	949,674.17	986,722.60	851,379.42
Centralized treatment by local sanitation departments	ton	6,561.22	5,986.41	6,570.00
Hazardous waste generated	ton	1,362.17	1,203.76	2,096.41
Hazardous waste disposed of	ton	1,234.00	1,242.56	2,098.16

\*Not including the data of APP China Forestry.

## • Environmental investment

Indicator	Unit	2023	2022	2021
Environmental investment	RMB10,000	134,131.72	101,174.12	103,069.13

## • Environmental compliance

Indicator	Unit	2023	2022	2021
Environmental fines	RMB10,000	0	0	0

## • Social Performance

### • Employment\*

Indicator	Unit	2023	2022	2021
Employees directly and indirectly employed	person	19,914	21,361	19,428
Employees directly employed	person	19,224	20,568	18,486
Male employees directly employed	person	15,027	15,900	14,184
Female employees directly employed	person	4,197	4,668	4,302
Employees with ethnic minority background	person	1,017	1,039	927
Employees from Mainland China	person	19,113	20,440	18,352
Employees from Hong Kong, Macao and Taiwan	person	78	92	94
Employees from abroad	person	33	36	40
Employees with disabilities	person	123	73	69
Employees indirectly employed	person	690	793	942
Male employees indirectly employed	person	617	651	770
Female employees indirectly employed	person	73	142	172
New employees	person	2,874	5,763	4,848
New male employees	person	2,433	4,621	3,742
New female employees	person	441	1,142	1,106
Employee turnover	person	4,028	3,577	2,514
Male employees who voluntarily resigned	person	2,208	2,246	1,545
Female employees who voluntarily resigned	person	484	564	320
Male employees who were involuntarily terminated**	person	859	492	433
Female employees who were involuntarily terminated**	person	195	99	92
Male employees who retired	person	106	65	30
Female employees who retired	person	176	111	94

\*Employee-related data is calculated from statistical data within the scope of the report.

\*\*The reasons for involuntary termination mainly include firing, non-renewal, negotiated termination, transfer to a sister mill, and death.

## • Employee turnover rate

Indicator	Unit	2023	2022	2021
Employee turnover rate	%	17.32	14.81	11.97
Male employee turnover rate	%	17.43	14.99	12.40
Female employee turnover rate	%	16.92	14.22	10.52
Turnover rate of employees aged 30 and below	%	30.73	29.23	21.07
Turnover rate of employees aged between 31 and 50	%	11.73	9.32	8.34
Turnover rate of employees aged 51 and above	%	19.12	11.28	16.56

## • Employee retention after maternity/paternity leave

Indicator	Unit	2023	2022	2021
Female employees who took maternity leave	person	169	155	124
Female employees who returned to work after maternity leave	person	152	141	114
Female employees who resigned after maternity leave	person	16	12	6
Male employees who took paternity leave	person	402	400	338
Male employees who returned to work after paternity leave	person	382	383	323
Male employees who resigned after paternity leave	person	16	14	5

## • Employee composition by level

Indicator	Unit	2023	2022	2021
Percentage of senior-level managers	%	0.93	0.95	0.99
Percentage of middle-level managers	%	9.38	9.70	8.80
Percentage of line-level employees	%	89.69	89.35	90.21

## • Employee composition by gender

Indicator	Unit	2023	2022	2021
Percentage of female employees	%	21.83	22.70	23.27
Number of female employees in management	person	371	412	337
Percentage of female employees in management	%	18.72	18.80	18.62

## • Employee composition by age

Indicator	Unit	2023	2022	2021
Percentage of employees aged 30 and below	%	21.56	22.21	20.12
Percentage of employees aged between 31 and 50	%	69.12	68.65	70.93
Percentage of employees aged 51 and above	%	9.33	9.14	8.94

## • Employee training

Indicator	Unit	2023	2022	2021
Total training investment	RMB10,000	601.38	387.76	562.16
Total employee training time	hour	918,971.80	1,052,512.80	753,012
Number of employees who participated in company-paid diploma programs	person	104	79	35
Total investment in company-paid diploma programs for employees	RMB10,000	20.68	2.92	2.55
Average training time for senior management	hour	40.21	32.71	37.99
Average training time for mid-level management	hour	37.22	40.44	31.62
Average training time for line-level employees	hour	48.99	41.40	41.65

## • Occupational health and safety

Indicator	Unit	2023	2022	2021
Employee safety training time	hour	799,932.12	631,233.50	450,918.00
Total investment in protective gears	RMB10,000	1,115.74	1,055.92	922.51
Work-related injuries of employees	person-time	70	51	44
Work-related fatalities of employees*	person	1	1	0
Total lost worktime rate of employees**	/	1,892.97	1,307.74	2,234.87
Lost time injury frequency rate of employees***	/	1.57	1.25	-
Work-related injuries of contractors	person-time	4	4	5
Work-related fatalities of contractors	person	1	1	-
Total lost worktime rate of contractors**	/	17.91	159.33	-
Lost time injury frequency rate of contractors***	/	0.12	0.14	-

\*In May 2023, a female employee of Guangxi Jingui Pulp & Paper had her hair and clothes caught in a lathe while operating the lathe. The employee died despite medical efforts. After the incident, the Company carried out investigation over all aspects of risk control, including risk identification, already-formulated control measures, the advocacy of control measures, and the implementation and the supervision of the implementation of the control measures. Corrective measures had been formulated from the aspects of technology, behavior and management. APP China Headquarters and the Paper BU conducted a comprehensive review of the incident, and carried out advocational education throughout the Company to push all units to improve management measures and prevent such incident from happening again.

\*\*Total lost worktime rate = (Total lost hours/Total hours worked in the reporting period) × 1,000,000

\*\*\*Lost time injury frequency rate = (Number of lost time injuries/Total hours worked in the reporting period) × 1,000,000

## • Indirect economic impact

Indicator	Unit	2023	2022	2021
Employee volunteer hours	hour	21,508	30,348	16,532
Donations	RMB10,000	13,863	13,712	4,692

## Economic and Governance Performance

### • Economic performance

Indicator	Unit	2023	2022	2021
Total assets	RMB100 million	2,427	2,445	2,465
Total taxes paid	RMB100 million	39	51	47
Sales revenue	RMB100 million	926	943	973
Total profit	RMB100 million	50	81	84
Net profit	RMB100 million	43	61	64

### • Places of origin for APP China's pulp procurement\*

Region	2023	2022	2021
China	45.68%	45.03%	39.89%
Other Asian regions	31.02%	31.27%	33.49%
North America	8.82%	8.14%	12.88%
South America	8.48%	9.55%	5.64%
Europe	6.00%	6.01%	7.96%
Oceania	0%	0%	0.14%

\*The changes in the proportion of each origin of procurement are mainly determined by product quality and relevant market price.

## • Materials

Indicator	Unit	2023	2022	2021
Total amount of wood chips purchased	10,000 tons	1,121.99	1,390.55	1,129.64
Amount of certified wood chips*	10,000 tons	262.30	262.54	238.69
Proportion of certified wood chips	%	23.38	18.88	21.13
Total amount of wood pulp purchased	10,000 tons	816.26	752.82	692.10
Amount of certified wood pulp*	10,000 tons	334.34	154.72	124.30
Proportion of certified wood pulp	%	40.96	20.55	17.96
Total amount of waste paper purchased	10,000 tons	52.18	52.97	52.82

\*Including CFCC/PEFC Certification and FSC Certification.

### • Anti-corruption

Indicator	Unit	2023	2022	2021
Number of governance agency members reached by anti-corruption policies and procedures	person	23	20	14
Percentage of governance agency members reached by anti-corruption policies and procedures	%	100	100	100
Number of governance agency members receiving anti-corruption training	person	23	20	14
Percentage of governance agency members receiving anti-corruption training	%	100	100	100
Number of senior-level managers receiving anti-corruption training	person	178	196	183
Percentage of senior-level managers receiving anti-corruption training	%	100	100	100
Number of middle-level managers receiving anti-corruption training	person	1,804	1,995	1,627
Percentage of middle-level managers receiving anti-corruption training	%	100	100	100
Number of line-level employees receiving anti-corruption training	person	17,242	18,377	16,676
Percentage of line-level employees receiving anti-corruption training	%	100	100	100
Number of incidents of termination or non-renewal of contracts with suppliers due to corruption*	case	7	19	12

\*In advocacy for a culture of integrity and compliance, APP China requests all suppliers to sign the *Sinar Mas Supplier/Partner Pledge on Business Compliance and Integrity* and the *Corporate Social Responsibility Statement and Pledge*. The percentage of suppliers to whom anti-corruption policies have been communicated to is 100%.

# Assurance Statement

## Independent Verification Statement



### To the management and stakeholders of APP China,

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. and the group of companies under its direct investment in China (herein referred to as "APP China" or "the Company") to perform an independent third-party verification on APP China 2023 Sustainability/ESG Report (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 given 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 1<sup>st</sup>, 2023 to December 31<sup>st</sup>, 2023, including governance, environmental and social information and data, methods for management of material issues, actions/measures and the Company's sustainability performance during the reporting period.

Physical boundary of this verification:

- The verification took sampling way to carry out the on-site work, the on-site verification sampling took place at below listed location:

Scope of the Report	Verification Location
APP China Headquarters	66F, Sinar Mas Plaza, No.501 East Daming Road, Hongkou District, Shanghai, China
Gold East Paper (Jiangsu) Co., Ltd.	No. 8 Xinggang East Road, Dagang, Zhenjiang City, Jiangsu Province, China
Hainan Jinhai Pulp & Paper Co., Ltd.	D12 District, Yangpu Free Trade Port Zone, Haikou City, Hainan Province, China
APP China Forestry Business - Hainan Headquarters	
Guangxi Jingui Pulp & Paper Co., Ltd.	Not in the scope of this verification sample
Ningbo Asia Pulp & Paper Co., Ltd.	Not in the scope of this verification sample
Shandong Bohui Paper Co., Ltd.	Not in the scope of this verification sample
Gold Hongye Paper Group Co., Ltd.	Not in the scope of this verification sample
Gold Hongye Paper (Nantong) Co., Ltd.	Not in the scope of this verification sample
Hainan Gold Hongye Paper Co., Ltd.	Not in the scope of this verification sample
APP China Forestry Business - other Sub-BU	Not in the scope of this verification sample

Scope of data and information for the verification:

- The scope of verification is limited to the data and information of APP China and Plants/Production sites under its operational control covered by 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 data and information of APP China's suppliers, partners and other third parties; and
- The financial data and information disclosed in this Report that have been audited by an independent third party are not verified again herein.

## Independent Verification Statement



### Limitations

- The verification process is conducted in the above scope and places. Sampling and verification are adopted for the data and information in the Report by TÜV SÜD, and only the stakeholders within the Company are interviewed; and
- The Company's standpoint, opinions, forward-looking statements and predictive information as well as the historical data and information before January 1<sup>st</sup>, 2023 are beyond the scope of this verification.

### Basis for the Verification

This verification process was conducted by TÜV SÜD's expert team with extensive experience in the economic, environmental, social and other relevant areas and drew the conclusions thereof. The verification conforms to the following standards:

- AA1000AS v3, Type 1 Engagement and Moderate Level of Assurance
- 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:

- Preliminary investigation of the relevant information before the verification;
- Confirmation of the presence of the topics with high level of materiality and performance in the Report;
- On-site review of all supporting documents, data and other information provided by APP China; tracing and verification of key performance information and data;
- Special interview with the representative of APP China's management; interviews with the employees related to collection, compilation and reporting of the disclosed information; and
- Other procedures deemed necessary by the verification team.

### Verification Conclusions

According to the verification, we believe that the data and information presented in APP China's report are objective, factual and reliable, without systematic problems, and can be used by stakeholders.

The verification team has drawn the following conclusions on this Report:

<b>Inclusivity</b>	APP China has fully identified the internal and external stakeholders of the organization, such as employees, customers and consumers, suppliers/contractors, banks, government agencies, community representatives, industry associations, professional bodies, NGOs, media, etc., and has established a stakeholder communication mechanism to regularly collect the real demands of stakeholders.
<b>Materiality</b>	APP China has established a prioritization process for material topics, identified sustainability topics that are highly relevant to the industry and prioritized the topics, disclosed strategies, management actions and performance data in the company's sustainability management and operations process, and the report content is substantive overall.
<b>Responsiveness</b>	APP China has clearly disclosed the management methods and performance of major issues in the areas of occupational health and safety, product quality and safety, water management and air pollutant emissions, and has established various stakeholder communication mechanisms



# Independent Verification Statement



	to fully respond to stakeholders' demands and expectations, with room for improvement in the material topics of individual topics.
<b>Impact</b>	APP China has built a sustainable development strategy. At the same time, it clarifies the breakdown of key targets for the goal pillars under the framework and continuously tracks the progress of strategy implementation. In addition, APP China has constructed a sustainability management structure, continuously improved the construction of the company's sustainability system, and monitored, measured and accounted for the ecosystem that affects the wider community.

### Recommendations on Continuous Improvement

- It is recommended that companies disclose Scope 3 GHG emissions data in the future to enhance the responsiveness of disclosure.

### Statement on Independence and Verification Capability

TÜV SÜD is a trusted partner of choice for safety, security and sustainability solutions. It specializes in testing, certification, auditing and advisory services. Since 1866, the company has remained committed to its purpose of enabling progress by protecting people, the environment and assets from technology-related risks. Today, TÜV SÜD is present in over 1,000 locations worldwide with its headquarters in Munich, Germany. Through expert teams represented by more than 26,000 employees, it adds value to customers and partners by enabling market access and managing risks. By anticipating technological developments and facilitating change, TÜV SÜD inspires trust in a physical and digital world to create a safer and more sustainable future.

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch is one of TÜV SÜD's global branches and has an expert team whose members have professional background and rich industrial experiences.

TÜV SÜD and APP China are two entities independent of each other and both TÜV SÜD and APP China and their branches or stakeholders have no conflict of interest. No member of the verification team has business relationship with the Company. The verification is completely neutral. All the data and information in the Report are provided by APP China. TÜV SÜD has not been involved in preparation and drafting of the Report, except for the verification itself and issuance of the verification statement.

**Signature:**

**On Behalf of TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch**

Zhu Wenjun

TÜV SÜD Sustainability Authorized Signatory Officer

July 19<sup>th</sup>, 2024

Shanghai, China

Note: In case of any inconsistency or discrepancy, the simplified Chinese version "Independent Verification Statement CN" of this verification statement shall prevail, while the English translation is used for reference only



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# GRI Standards (2021) Content Index

<b>Statement of use</b>	APP China has reported in accordance with the GRI Standards for the period from January 1, 2023 to December 31, 2023.
GRI 1 used	GRI 1: Foundation 2021

GRI Standard	Disclosure	Page Numbers	
GRI 1: Foundation 2021	2-1	Organizational details	4; 114
	2-2	Entities included in the organization's sustainability reporting	114
	2-3	Reporting period, frequency and contact point	114
	2-4	Restatements of information	114
	2-5	External assurance	106-108
	2-6	Activities, value chain and other business relationships	4; 18-20; 96-97; 104
	2-7	Employees	101
	2-8	Workers who are not employees	71; 101
	2-9	Governance structure and composition	6
	2-12	Role of the highest governance body in overseeing the management of impacts	2-3; 28; 67; 90-91
	2-13	Delegation of responsibility for managing impacts	28; 67
	2-14	Role of the highest governance body in sustainability reporting	114
	2-16	Communication of critical concerns	2-3; 92-94
	2-17	Collective knowledge of the highest governance body	14-16; 18-20; 28; 67; 90-91
GRI 2: General Disclosures 2021	2-22	Statement on sustainable development strategy	2-3; 14-16
	2-23	Policy commitments	17-20; 60-61; 92-95
	2-24	Embedding policy commitments	28; 62-66; 90-97; 105
	2-25	Processes to remediate negative impacts	60-61; 67-71; 92-94
	2-26	Mechanisms for seeking advice and raising concerns	60-61; 65-66; 92-94
	2-27	Compliance with laws and regulations	101
	2-28	Membership associations	10-13
	2-29	Approach to stakeholder engagement	18-21
	2-30	Collective bargaining agreements	60-61

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GRI Standard	Disclosure	Page Numbers
GRI 3: Material Topics 2021	3-1	Process to determine material topics 21
	3-2	List of material topics 21
	3-3	Management of material topics 14-16; 18-97
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed 4; 104
	201-2	Financial implications and other risks and opportunities due to climate change 27-37; 48-49
GRI 203: Indirect Economic Impacts 2016	203-1	Infrastructure investments and services supported 22-26; 75-79
	203-2	Significant indirect economic impacts 22-26; 34-37; 72-73; 75-79; 87-89
GRI 204: Procurement Practices 2016	204-1	Proportion of spending on local suppliers 96-97; 104
GRI 205: Anti-corruption 2016	205-2	Communication and training about anti-corruption policies and procedures 92-97; 105
	205-3	Confirmed incidents of corruption and actions taken 105
GRI 301: Materials 2016	301-1	Materials used by weight or volume 105
	301-2	Recycled input materials used 105
GRI 302: Energy 2016	302-1	Energy consumption within the organization 48-49; 98
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GRI 303: Water and Effluents 2018	303-1	Interactions with water as a shared resource 46-47; 50
	303-2	Management of water discharge-related impacts 46-47; 50
	303-3	Water withdrawal 98-99
	303-4	Water discharge 98-99
	303-5	Water consumption 98-99
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 45; 54-57
	304-2	Significant impacts of activities, products and services on biodiversity 45; 54-57
	304-3	Habitats protected or restored 54-57
	304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations 54-57
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions 29; 48-49
	305-2	Energy indirect (Scope 2) GHG emissions 29; 48-49
	305-3	Other indirect (Scope 3) GHG emissions 29; 48-49

GRI Standard	Disclosure	Page Numbers
GRI 305: Emissions 2016	305-5	Reduction of GHG emissions 27-37; 48-49
	305-7	Nitrogen oxides (NO <sub>x</sub> ), sulfur oxides (SO <sub>x</sub> ), and other significant air emissions 50-51; 99-100
GRI 306: Waste 2020	306-1	Water generation and significant waste-related impacts 51-52
	306-2	Management of significant waste-related impacts 46-47; 51-52; 87-89
	306-3	Waste generated 51-52; 100
	306-4	Waste diverted from disposal 51-52; 100
	306-5	Waste directed to disposal 51-52; 100
GRI 308: Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria 96-97
	308-2	Negative environmental impacts in the supply chain and actions taken 96-97
GRI 401: Employment 2016	401-1	New employee hires and employee turnover 101-102
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees 60-61
	401-3	Parental leave 102
GRI 403: Occupational Health and Safety 2018	403-1	Occupational health and safety management system 67-68; 71
	403-2	Hazard identification, risk assessment, and incident investigation 67-70
	403-3	Occupational health services 71
	403-4	Worker participation, consultation, and communication on occupational health and safety 67-71
	403-5	Worker training on occupational health and safety 69-71; 103
	403-6	Promotion of worker health 71
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships 67-71
	403-8	Workers covered by an occupational health and safety management system 67-71
	403-9	Work-related injuries 103
	403-10	Work-related ill health 67-68; 71; 103
GRI 404: Training and Education 2016	404-1	Average hours of training per year per employee 103
	404-2	Programs for upgrading employee skills and transition assistance programs 62-66; 75
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees 101-103

GRI Standard	Disclosure	Page Numbers
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	Did not occur
GRI 408: Child Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	Did not occur
GRI 409: Forced or Compulsory Labor 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	Did not occur
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	22-26; 34-36; 40-47; 54-57; 75-79
	413-2 Operations with significant actual and potential negative impacts on local communities	22-26; 42-47; 78-79
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	96-97
	414-2 Negative social impacts in the supply chain and actions taken	96-97; 105
GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories	72-74; 87-89
	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	Did not occur
GRI 417: Marketing and Labeling 2016	417-1 Requirements for product and service information and labeling	17; 36-37; 87-89
GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	Did not occur

## TCFD Index

TCFD Recommended Disclosures	Page Numbers
<b>Governance: Disclose the company's governance around climate-related risks and opportunities.</b>	
a. Describe the board's oversight of climate-related risks and opportunities.	28
b. Describe management's role in assessing and managing climate-related risks and opportunities.	28
<b>Strategy: Disclose the actual and potential impacts of climate-related risks and opportunities on the company's businesses, strategy, and financial planning where such information is material.</b>	
a. Describe the climate-related risks and opportunities the company has identified over the short, medium, and long term.	29-37; 87-89
b. Describe the impact of climate-related risks and opportunities on the company's businesses, strategy, and financial planning.	14-16; 29-37; 87-89
c. Describe the resilience of the company's strategy, taking into consideration different climate-related scenarios, including a 2° C or lower scenario.	29
<b>Risk Management: Disclose how the company identifies, assesses, and manages climate-related risks.</b>	
a. Describe the company's processes for identifying and assessing climate-related risks.	28-33
b. Describe the company's processes for managing climate-related risks.	28-33
c. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the company's overall risk management.	30-33
<b>Metrics and Targets: Disclose the metrics and targets used to access and manage relevant climate-related risks and opportunities where such information is material.</b>	
a. Disclose the metrics used by the company to assess climate-related risks and opportunities in line with its strategy and risk management process.	14-16; 29; 34-37; 48-49
b. Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	29-33
c. Describe the targets used by the company to manage climate-related risks and opportunities and performance against targets.	14-16; 29-37; 48-49

## UN Global Compact Ten Principles Index

Theme	Principle	Page Numbers
Human Rights	Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and	22-26; 60-61; 67-71; 74-79; 92-94; 96-97
	Principle 2: make sure that they are not complicit in human rights abuses.	60-61; 67-71; 92-94; 96-97
Labor	Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	60-66
	Principle 4: the elimination of all forms of forced and compulsory labor;	60-61; 96-97
	Principle 5: the effective abolition of child labor; and	60-61; 96-97
Environment	Principle 6: the elimination of discrimination in respect of employment and occupation.	60-61
	Principle 7: Businesses should support a precautionary approach to environmental challenges;	27-57; 84; 87-89
	Principle 8: undertake initiatives to promote greater environmental responsibility; and	27-57; 84; 87-89
Anti-corruption	Principle 9: encourage the development and diffusion of environmentally friendly technologies.	34-37; 46-53; 84; 87-89
	Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.	7; 90-97; 105

## About this Report

This is the 17th Sustainability Report issued by Sinar Mas Paper (China) Investment Co., Ltd. and its subsidiaries and affiliates (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. The Board of Directors, as the top governance body of APP China, is ultimately responsible for reviewing and approving the information disclosed in this report.

### Reporting Boundary and Scope

The time span of this report is from January 1, 2023 to December 31, 2023. Our last Sustainability Report was released in October 2023. Data in "Company Profile", "Economic Performance", "Places of origin for APP China's pulp procurement" and "Materials" relate to Sinar Mas Paper (China) Investment Co., Ltd. and its subsidiaries and affiliates. Cases and other data in the report are collected from APP China Headquarters, 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 Asia Pulp & Paper Co., Ltd. (Ningbo Asia)
- Shandong Bohui Paper Co., Ltd. (Bohui Paper)
- Gold Hongye Paper Group Co., Ltd. (Gold Hongye Paper)
- Gold Hongye Paper (Nantong) Co., Ltd. (Rudong Base)
- Hainan Gold Hongye Paper Co., Ltd. (Hainan Gold Hongye)
- APP China Forestry Business Unit (APP China Forestry, including Forestry Business Headquarters, Hainan, Guangxi, and Guangdong Business Areas, and Lancang, Wenshan, and Ganzhou Operation Areas)

As APP China completed the acquisition of Bohui Paper in July 2020, we started including relevant data from Bohui Paper in our report from our 2021 Report. Gold Hongye Paper Co., Ltd. absorbed and merged Hainan Gold Shengpu Paper Co., Ltd. in 2023, and the data of Hainan Gold Shengpu Paper Co., Ltd. are no longer disclosed separately.

### Reporting Framework

The report has been prepared in accordance with the core option of GRI Standards (2021) issued by the Global Sustainability Standards Board (GSSB), the Global Compact Ten Principles, the TCFD recommendations issued by the Task Force on Climate-Related Financial Disclosures (TCFD), the Pulp & Paper Products standard and the Forest Management standard issued by the Sustainability Accounting Standards Board (SASB), the S&P Global Corporate Sustainability Assessment (CSA), and papermaking industry cleaner production and emissions standards.

### Content and Indicator Selection

This report was prepared in accordance with the GRI principles of materiality, stakeholder inclusiveness, sustainability context, and completeness, etc. At the preliminary stage, our work group conducted policy analysis, industry issues analysis, the core issues and indicators benchmark of ESG mainstream information disclosure frameworks and rating systems, stakeholder surveys, and field visits to our headquarters and pulp & paper mills to collect the management approaches, specific practices and performance indicators on sustainability/ESG 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](mailto:csr@app.com.cn).



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