

2024

APP China
Sustainability/ESG Report

Thriving in Symbiosis with Nature,
Flourishing into the Future





"Thriving in Symbiosis with Nature" reflects our original intention of respecting the ecology and protecting the lucid waters and lush mountains with our sustainable actions;

"Flourishing into the Future" is our forward-looking commitment of leading our green journey with innovation and responsibility.

APP China strives to balance its corporate development with conservation of the ecology through pragmatic actions. Every step we take, will be a concrete step towards a more sustainable future.

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Message from Chairman



黃志源

Chairman of Sinar Mas Group
Teguh Ganda Wijaya

Consolidating the "dual carbon" management system and deepening the green and low-carbon transformation. In 2024, APP China further deepened its "dual carbon" strategy, integrating the goals of "peaking carbon emissions by 2030 and reaching carbon neutrality by 2060" into its daily operations and supply chain management. Each BU and mill deepened their practices around clean production, energy structure optimization, and risk control, established their respective "dual carbon" committees, optimized carbon emission management system, and strengthened their climate governance capabilities. Focusing on green manufacturing, energy-saving and carbon reduction, these practices allowed the Company to effectively reduce the carbon footprint of its products. We continued to expand the area of our plantations, strengthened disaster prevention and mitigation mechanisms, and enhanced the risk resistance capability of our forestry assets. In addition, we also actively supported the green and low-carbon transformation of the industrial chain through developing forestry carbon sinks, cultivating biomass energy plantations, and implementing green product innovations.

Practicing the "people-oriented" thinking and creating inclusive values for society. Talent is valued as our most valuable asset. We actively ensure a diverse, inclusive, fair, and just work environment

while fully safeguarding employee rights. Through a dual-track career development path of technology and management, we continuously optimize our career development system and incentive mechanisms, increase training investment, optimize employee benefits, and fully stimulate employees' innovative potential and work enthusiasm. We focus on listening to employees' voices, and ensure smooth communication channels with employees through fully leveraging the MBOS management system in enhancing efficiency and driving innovation. Regarding occupational health and safety, we have established dedicated safety management structure with a robust EHS accountability mechanism, and strengthened safety culture to comprehensively enhance the awareness of responsibility among all employees. In fulfilling our social responsibilities, we adhere to the concept of "building a harmonious society by helping the frail, the needy, the elderly, and the young", actively participating in public welfare initiatives such as community development, rural revitalization, education support, youth development, healthcare, and ecological protection, with cumulative donations in China exceeding RMB1.69 billion. Among them, the navel orange industrial park of the Golden Orchard Program had its first harvest in 2024, effectively contributing to the development of local collective economy and the employment and income of local farmers.

In the context of increasing global uncertainty, humanity is entering an era full of challenges and opportunities. The latest "Global Risks Report 2025" released by the World Economic Forum points out that environmental risks have shifted from long-term concerns to an urgent reality. Extreme weather, sharp declines in biodiversity, ecosystem degradation, and growing competition for natural resources will have a profound impact on global stability and human well-being in the next decade.

Meanwhile, global attention to sustainable development continues to rise. From addressing climate change to promoting green transformation, from ensuring ecological security to achieving inclusive growth, and to striking a balance among environmental, societal and economic considerations have drawn widespread concern globally. As a responsible major power, China actively promotes green and low-carbon development, contributing Chinese wisdom and strength. With the continuous improvement of its carbon peaking and carbon neutral target policy system, China is promoting a shift from the focus of its "dual control (control both the total consumption and the intensity)" efforts from energy consumption to that of carbon emissions, with green and low-carbon development gradually being implemented from strategic planning to industrial practice.

As a fundamental pillar of the national economy, the paper industry is undergoing profound transformation and upgrading. In the context of intensifying resource and environmental constraints, increasingly stringent environmental policies, and changes in consumption patterns, the paper industry bears the mission of meeting social needs while also facing the dual challenge of sustainable transformation and high-quality development. In the face of these challenges, APP China maintains a firm belief and forward-looking vision, adhering to its vision of "contributing to the nation's development with industrial development", continuously promoting the integrated "Plantation-Pulp-Paper" development model, and striving to achieve an inclusive growth of economic prosperity, social progress, and ecological harmony by building a green circular industrial chain and promoting digital and intelligent transformation. It is our strong belief that only through continuous innovation and self-transcendence can we firmly grasp the development opportunities ahead in the complex and ever-changing environment and create a more brilliant tomorrow.

Action leads to deeper understanding, and deeper understanding leads to greater achievement. In the future, APP China will steadfastly implement its Green Transformation Strategy and Digital and Intelligent Transformation Strategy, fully unleashing green productivity potentials, promoting the coordinated development of forest cultivation, manufacturing, product research and development, and community development, so as to build a more resilient and sustainable integrated "Plantation-Pulp-Paper" industrial system. Hand in hand with our stakeholders, APP China will deepen our sense of responsibility and humanistic care, and steadily drive impact and progress towards a better future of inclusive growth of industrial upgrading and environmental protection.

Annual Highlights

Environmental

In 2024, APP China's total environmental investment reached **RMB1,536.22** million, a year-on-year increase of **14.53%**. We continued to enhance sustainable forest management and further deepened our green transformation through measures such as optimizing energy structure and promoting the conservation and efficient utilization of resources.

Sustainable Forest Management

The proportion of plantations certified by CFCC/PEFC-FM: **93.77%**

High Conservation Value (HCV) assessment covers **60%** of our plantation area

A total of **31** subcompartments of our plantations found protected plants and animals throughout the year, including **1** subcompartment discovered HCV

Ecological monitoring sample areas for eucalyptus plantations have been established in multiple locations to systematically assess indicators such as **vegetation diversity, water quality, and soil nutrients**, and to monitor the ecological impact of forestry

Energy Optimization and Carbon Emission

Proportion of renewable energy: **24.73%**

Solar power generation reached **60.1812** million kWh, a year-on-year increase of **98.09%**

Annual energy savings from energy conservation and emission reduction projects reached **142,300** tons of standard coal equivalent

Maintained a RMB **32.98** million balance on our carbon quota trading account

Multiple paper products across industrial, cultural, and tissue categories have completed carbon footprint verification and obtained **carbon neutrality certification**

Green Production

Gold East Paper was awarded the title of Zhenjiang's first batch of "**Waste-Free Factory**"

Guangxi Jingui Pulp & Paper, Hainan Jinhai Pulp & Paper, and Gold East Paper were awarded the national-level title of "**Water Efficiency Leader**"

Average industrial water reuse rate: **95.19%**

Social

In 2024, we remained committed to safeguarding employee rights, strengthened health and safety protection, and actively engaged in public welfare initiatives, demonstrating our dedication to corporate social responsibility through concrete actions.

Employee Rights Protection

Percentage of female employees: **20.89%**, percentage of female management: **17.67%**

117 positions for persons with disabilities provided

Tuition reimbursement ratio for in-service training fees has been increased to **80%**

Total employee professional development training hours reached **1,225,387.55**

Health and Safety Protection

Total investment in personal protective equipment: RMB **9.8917** million

Conducted **986** emergency drills

Average hazard rectification rate: **97%**

Total safety training hours reached **958,398.16**

Public Welfare

Cumulative donations in China have exceeded RMB **1.69** billion

Huang Yicong Foundation implemented 33 public welfare programs throughout the year, with a total donation of RMB **85.55** million

Total volunteer service hours reached **14,345**

Governance and Economic

In 2024, APP China recorded total assets of RMB **229.1** billion and operating revenue of RMB **89.4** billion. We actively carried out R&D innovation, steadily advanced digital and intelligent transformation, and firmly upheld integrity and compliance to ensure the Company's stable and sound operations.

R&D Innovation Process

R&D investment: RMB **2.649** billion

Gold Hongye Paper launched "Breeze" commercial biodegradable packaging products, which can reduce plastic usage by **10 to 20** tons annually

Gold East Paper has developed **5** major plastic-replacement paper product categories, including flour sack paper, paper file folders, white kraft food-grade paper, straw base paper, and plastic-free release base paper

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, and other regions. 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.

The holding company of APP in China is Sinar Mas Paper (China) Investment Co., Ltd. and its subsidiaries (collectively referred to as "APP China"). APP China's headquarters is located in Shanghai, China. As of the end of 2024, APP China had total assets amounting to RMB229.1 billion, with approximately 20,000 full-time employees.

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. The Company has invested enormously in building world-class pulp and paper mills including Ningbo Asia, Gold East Paper, Gold Hongye Paper, Hainan Jinhai Pulp & Paper, Guangxi Jingui Pulp & Paper and Bohui Paper, as well as 293,107.89 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, along with supporting operations in chemicals, papermaking equipment, real estate, etc. In 2024, APP China's sales revenues were about RMB89.4 billion in China.

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.

In addition, APP China is actively engaged in developing sustainable urban real estate complexes and technology parks. To date, the Company has built two large-scale urban complexes in Shanghai as operation and talent centers for businesses: the Sinar Mas Plaza and the Shanghai Arch.

As of the end of 2024, APP China had:

Products marketed in over
160 countries/regions

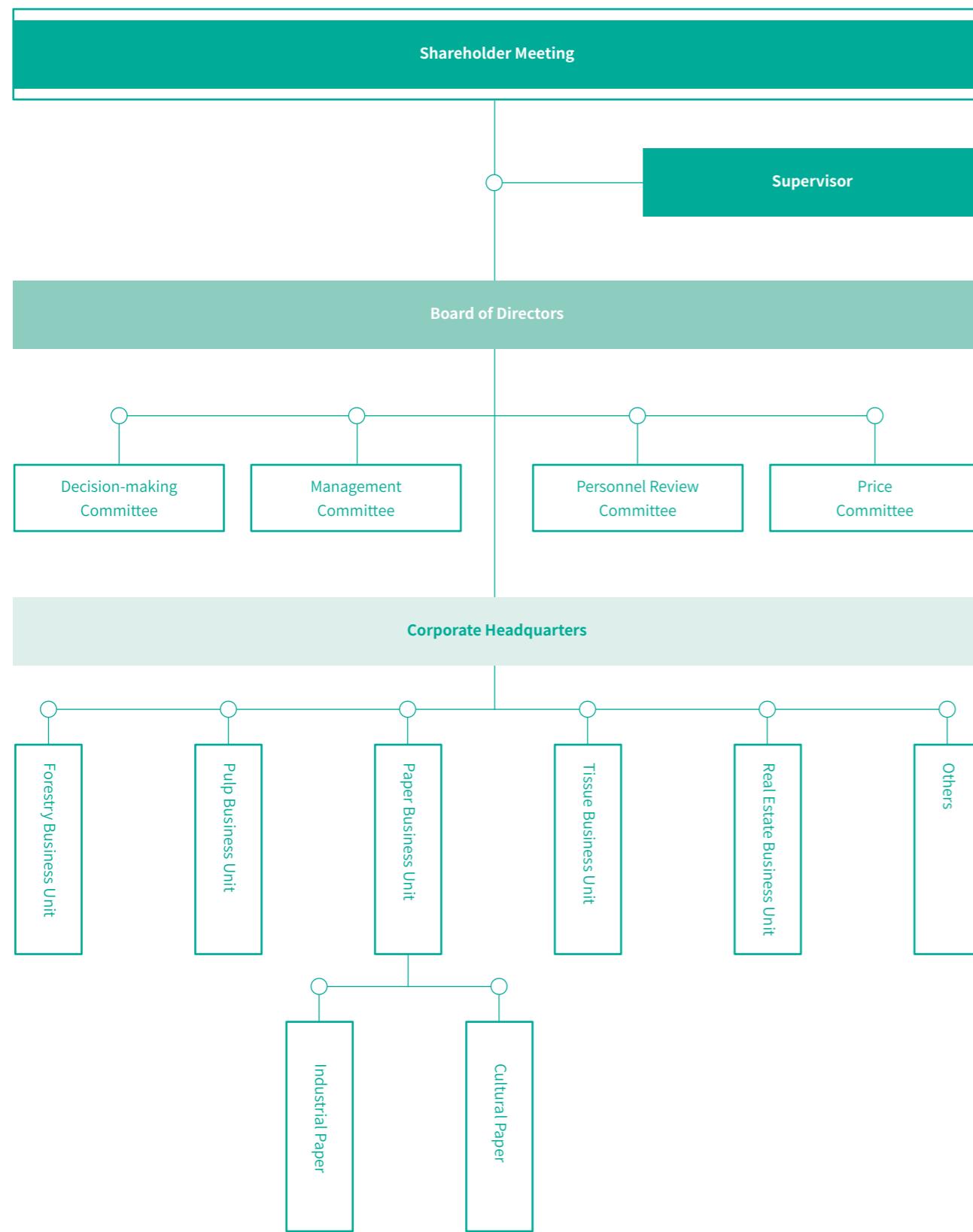
Total assets
RMB 229.1 billion

across
6 continents

Annual revenue
RMB 89.4 billion



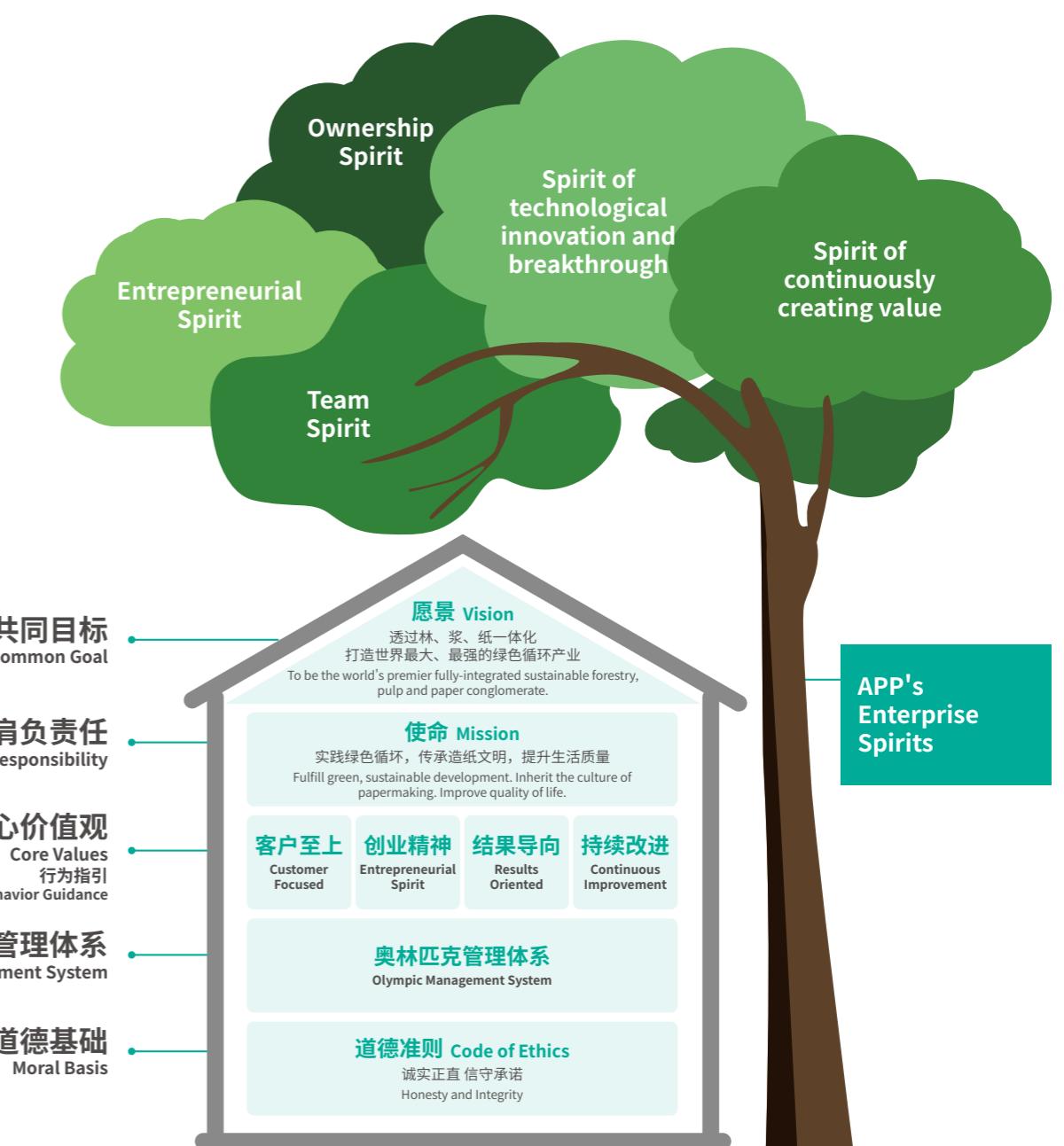
Organizational Chart



Corporate Culture

The core connotation of the APP culture consists of its corporate values and corporate spirits. Centering around the five spirits of "entrepreneurial spirit, ownership spirit, team spirit, spirit of technological innovation and breakthrough, and spirit of continuously creating value", APP China continues to deepen its corporate culture, striving to cultivate a positive, vibrant corporate cultural ecosystem that effectively promotes the coordinative development of both the Company and its employees.

APP's Enterprise Spirits	Entrepreneurial Spirit	Have faith, dare to take risks, and take responsibility
	Ownership Spirit	Love the Company, willing to strive, and enjoy dedication
	Team Spirit	"Big picture thinking", emphasize on cooperation, and good at teamwork
	Spirit of technological innovation and breakthrough	Strong technology, dare to innovate, and seek breakthroughs
	Spirit of continuously creating value	Personal value, customer value, Company value, and social value



Milestones



Achievements and Honors

Entity	Honors and Awards	Issuers
APP China	2024 Rural Revitalization Contribution Award	The 14th Philanthropy Festival and 2024 ESG Summit
	2024 Strategic Charity Model Award	2024 Yicai·China Corporate Social Responsibility Ranking
	2024 Water Efficiency Leader among Key Water-using Enterprises and Industrial Parks (valid for two years)	Ministry of Industry and Information Technology, Ministry of Water Resources, National Development and Reform Commission, State Administration for Market Regulation
	China's Top Runner for Industrial Carbon Peaking	China Federation of Industrial Economics
	Top 20 Chinese Papermaking Enterprises (Ranked 12th)	China Pulp and Paper Industry Magazine
	High-Tech Enterprise (starting from October 29, 2024, valid for three years)	Hainan Provincial Department of Science and Technology, Department of Finance of Hainan Province, Hainan Provincial Tax Service of State Taxation Administration, Department of Industry and Information Technology of Hainan Province
	2024 Top 50 Enterprises of Manufacturing Industry in Hainan Province (ranked 4th), and 2024 Top 100 Enterprises in Hainan Province (ranked 13th)	Hainan Province Enterprise Confederation, Hainan Province Enterprise Directors Association
	2023 Hainan Province High-tech Leading Enterprises (certification effective from February 2, 2024, valid for three years)	Hainan Provincial Department of Science and Technology
	2023 Hainan Province Energy Conservation and Carbon Reduction Demonstration Unit	Hainan Energy Conservation and Emission Reduction Association
	2024 Water Efficiency Leader among Key Water-using Enterprises and Industrial Parks (valid for two years)	Ministry of Industry and Information Technology, Ministry of Water Resources, National Development and Reform Commission, State Administration for Market Regulation
Hainan Jinhai Pulp & Paper	Top 500 Enterprises of China's Manufacturing Industry	China Enterprise Confederation, China Enterprise Directors Association
	Top 10 Enterprises of Paper Industry in China Light Industries	China National Light Industry Council, China Paper Association
	Jiangsu Province Carbon Peaking and Carbon Neutrality Pilot Enterprise	Jiangsu Development & Reform Commission
	2024 Top 100 Enterprises in Jiangsu, 2024 Top 100 Manufacturing Enterprises in Jiangsu	Jiangsu Provincial Enterprise Confederation
	Jiangsu Province Smart Manufacturing Factory	Jiangsu Provincial Department of Industry and Information Technology, Jiangsu Provincial Department of Finance
	Top 10 Green Low-Carbon Development Papermaking Enterprises in Jiangsu Province, Jiangsu Province Paper Industry Vocational Skills Competition Base	Jiangsu Province Paper Industry Association
	Green Raw & Auxiliary Material Product	Printing Technology Association of China
	First Batch of "Waste-Free Factories" in Zhenjiang City	Office of Zhenjiang Municipal People's Government
	2023 "Top 10 Industrial Investment Projects" of Zhenjiang Economic and Technological Development Zone	CPC Working Committee and Management Commission of Zhenjiang Economic and Technological Development Zone
	Case Study of Leader in Digital Transformation of Light Industry ("Smart Energy-saving and Emission-reduction Production Management System Construction")	China Light Industry Information Center

Entity	Honors and Awards	Issuers
Gold East Paper	Top 20 Chinese Papermaking Enterprises (Ranked 15th)	China Pulp and Paper Industry Magazine
	2024 Top 30 Key Paper Producers (Ranked 14th)	China Paper Association
	2024 Water Efficiency Leader among Key Water-using Enterprises and Industrial Parks (valid for two years)	Ministry of Industry and Information Technology, Ministry of Water Resources, National Development and Reform Commission, State Administration for Market Regulation
	2024 Clean Production Enterprises of Autonomous Region	Industry and Information Technology Department of Guangxi Zhuang Autonomous Region, Ecological Environmental Department of Guangxi Zhuang Autonomous Region, Guangxi Development and Reform Commission
	2024 Guangxi Zhuang Autonomous Region Manufacturing Industry Single Champion Enterprises, 2024 Autonomous Region Industrial Water Conservation Benchmark Enterprise	Industry and Information Technology Department of Guangxi Zhuang Autonomous Region
	2018-2022 Contract Abiding and Trustworthy Enterprise of Guangxi	Market Supervision Bureau of Guangxi Zhuang Autonomous Region
	2024 Top 30 Key Paper Producers (Ranked 11th)	China Paper Association
	2024 Top 100 Enterprises in Guangxi (Ranked 40th), 2024 Top 100 Manufacturing Enterprises in Guangxi (Ranked 21st)	Confederation of Guangxi's Enterprises and Employers
	Accreditation Certificate for the Pulp & Paper Testing Laboratory of Guangxi Jingui Pulp & Paper Co., Ltd.	China National Accreditation Service for Conformity Assessment
	Top 100 High-Tech Enterprises in Guangxi (2024)	Guangxi Institute of Scientific and Technological Information, Guangxi High-Tech Enterprise Association
Guangxi Jingui Pulp & Paper	2024 Outstanding Contribution Import and Export Enterprise in Qinzhou City	Qinzhou Municipal Bureau of Commerce
	Outstanding Unit for Participating in Work Injury Insurance for 20 Years	Qinzhou Municipal Bureau of Human Resources and Social Security
	Top 20 Chinese Papermaking Enterprises (Ranked 16th)	China Pulp and Paper Industry Magazine
	Top 20 Chinese Papermaking Enterprises (Ranked 17th)	China Pulp and Paper Industry Magazine
	Technology-Leading Demonstration Enterprise	CPC Ningbo Beilun District Committee, Beilun District Government, CPC Working Committee and Management Commission of Ningbo Economic and Technological Development Zone
	2023 Top 10 Cultural and Tourism Enterprises in Ningbo	People's Government of Ningbo Municipality
	2024 Top 100 Competitive Enterprises in Ningbo (Ranked 78th), 2024 Top 100 Manufacturing Enterprises in Ningbo (Ranked 32nd), 2024 Top 100 Comprehensive Enterprises in Ningbo (Ranked 52nd)	Ningbo Enterprise Confederation, Ningbo Entrepreneurs Association, Ningbo Federation of Industrial Economics
	2023 Top 50 Enterprises in R&D Investment in Ningbo	Ningbo Science & Technology Bureau
	Most Socially Responsible Enterprise in Qijiashan Industrial Community	Qijiashan Industrial Community
Ningbo Asia		

Entity	Honors and Awards	Issuers	Entity	Honors and Awards	Issuers
Bohui Paper	2024 ESG Golden Dawn Award, Social Responsibility Award, Top Ten Leading Enterprises - Best Green Innovation	Securities Market Weekly	Gold Hongye Paper	2023 Outstanding Economic Contribution Award - Top 30 in Output (Revenue) Growth, 2023 Outstanding Economic Contribution Award - Top 30 in Resource Intensive Utilization	CPC Working Committee and Management Commission of Suzhou Industrial Park
	China Light Industry Patent Achievement Award, AAAA-rated Corporate Social Responsibility Evaluation, Modern Management Innovation Achievements, Excellent Corporate Social Responsibility Achievements	China Light Industry Enterprise Management Association		Pioneering Cases of Sustainable Development for Chinese and Foreign Brands	Brand Work Office of Xinhua News Agency, Xinhua News Agency News Information Center
	2024 China Innovation Brand Top 500	China-Asia Economic Development Association		Green Low-Carbon Partner	Shanghai Energy Conservation Promotion Week Organizing Committee Office
	Sustainability Yearbook 2024 (China Edition) Selected Enterprises	S&P Global		2022-2023 Advanced Collective in Energy Conservation and Emission Reduction	Shanghai Energy Conservation Association
	2024 (Industry) Influential Brands	The 13th China Finance Summit		2024 Pudong New Area Sino-Foreign Enterprises Sustainable Development (ESG) Industry Ecological Innovation Competition - Excellent Case Award	Shanghai Pudong Headquarters Economy Shared Service Center, Shanghai Pudong Foreign Investment Enterprise Association, Shanghai Pudong Local Investment Enterprise Associations
	Outstanding Green Innovation Award	3rd International Green Zero Carbon Festival		2023 Excellent Green Low-Carbon Demonstration Case (VIRJOY)	Shanghai Green Low-Carbon Technology Innovation Competition Organizing Committee
	AAA Credit Enterprise in Corporate Credit Evaluation	China Enterprise Confederation, China Enterprise Directors Association		Universal ESG Standards Brands of the Year (Breeze)	UESG (China)
	2024 China Top 500 Private Manufacturing Enterprises	All-China Federation of Industry and Commerce		For Good Enterprise, 2024 For Good Awards - Top 15 ESG Sustainable Development Enterprises	For Good, China Social Enterprise and Impact Investment Forum, Caixin Global, CBJ Think Tank, CYZONE.cn
	2024 Top 20 Paper Enterprises in China (Ranked 9th)	China Pulp and Paper Industry Magazine		2024 Top 50 Enterprises of Manufacturing Industry in Hainan Province (Ranked 12th)	Hainan Enterprise Confederation, Hainan Entrepreneurs Association
	Top 200 Private Enterprises in Shandong, Top 100 Private Enterprises in Shandong for Employment Absorption	Shandong Federation of Industry and Commerce		2024 Top 100 Enterprises in Hainan Province (Ranked 53rd)	Hainan Enterprise Confederation, Hainan Entrepreneurs Association
	Shandong Province Manufacturing Industry Single Champion	Department of Industry and Information Technology of Shandong Province		2024 Top 20 Industrial Development Enterprises in Rudong County	CPC Rudong County Committee, Rudong County Government
	Shandong Enterprises Database of Outstanding ESG Management	Shandong Council for Brand Development, IFENG.com Shandong		2024 World Forest Products and Wood Products Exhibition - Best Design Award	National Forestry and Grassland Administration
	Jiangsu Province Paper Industry Top 10 Green Low-Carbon Development Enterprises	Jiangsu Province Paper Industry Association		2020-2023 Tax Credit "Four Consecutive A's" Enterprise	Nanning High-Tech Industrial Development Zone Tax Bureau
	Advanced Collectives for Green, Low-Carbon, High-Quality Development in Zibo City	Office of the Zibo Municipal Committee of the Communist Party of China		Leading Forestry Enterprises in Guangdong Province	Forestry Administration of Guangdong Province
	Innovation Alliance for Model Workers and Skilled Talents	Zibo Municipal Federation of Trade Unions	APP China Forestry		
	Loving Enterprise Award	Yancheng Charity Federation			
	2024 China Enterprise ESG 100 Index	Haiwainet.cn, All-China Environment Federation			
Gold Hongye Paper	National Consumer Quality Credit Guarantee Products, National Quality Inspection Stable Qualified Products, National Quality Integrity Advanced Enterprises, National Product and Service Quality Integrity Demonstration Enterprises, 2024 National "Quality Month" Quality Integrity Initiative Enterprises	China Association for Quality Inspection			
	2023 User Satisfaction Service Star Team (CRM Customer Experience Operation and Maintenance Center)	Shanghai Association for Quality			
	2024 Craftsmanship Products in China Tissue Industry (Breeze, VIRJOY, Elis, Zhenzhen, EMPORIA), 2023 China's Top 10 Technological Innovation Enterprises in Tissue Industry	China Technical Association of the Paper Industry			
	Top 20 Chinese Papermaking Enterprises (Ranked 11th)	China Pulp and Paper Industry Magazine			

Sustainability/ESG Strategy

Strategy Implementation Progress

APP China established its 2030 Sustainability Strategic Framework in 2021. The framework is drafted by tailoring the Sustainability Roadmap: Vision 2030 (SRV2030) of APP to the localized development needs of APP China. In 2022, the Company further specified its "dual carbon" strategic goals of "peaking carbon emissions by 2030 and reaching carbon neutrality by 2060", promoting the transformation and upgrading of its sustainable development model through multidimensional and systematic innovative measures.

Progress Toward Realizing APP China's 2030 Sustainability Strategic Goals

<p>Peak carbon emissions by 2030</p> 	<p>We have been making steady progress in accordance with the roadmap of "peaking carbon emissions by 2030 and reaching carbon neutrality by 2060". Our production bases have set specific phased goals and implementation plans, systematically planning and implementing energy-saving and carbon-reduction projects.</p>	<p>Reduce product carbon footprint by 30%</p> 	<p>Our production bases carried out product carbon footprint accounting, and strove to effectively reduce carbon emission intensity through life cycle management. At the group level, APP China is building an energy and carbon management platform, supporting our mills to better monitor, analyze and reduce their carbon emissions through digital means.</p>
<p>Contribute to APP's goal of "over half a million hectares of natural forests conserved"</p> 	<p>Own a total of 293,107.89 hectares of plantations. Approximately 230,000 mu of forest land in Hainan Business Area has been designated as part of Hainan Tropical Rainforest National Park. In accordance with the "Regulations on Hainan Tropical Rainforest National Park (Trial)", APP China Forestry carried out relevant conservation on these forest land. In December 2023, APP China Forestry, as one of the first pilot units of the "Implementation Plan for the Disposal of Plantation Forests in Hainan Tropical Rainforest National Park (Phase I)", initiated the withdrawal of plantation forests in the national park to help protect the ecological environment.</p>	<p>Continuously promote "carbon neutral" products</p> 	<p>Multiple products under APP China, including industrial paper, cultural paper, and tissue products, obtained carbon neutrality certification during the reporting period.</p>
<p>Undertake forest carbon sink projects</p> 	<p>By the end of 2023, the carbon storage capacity of our plantations reached 43.70 million tons of carbon dioxide. APP China will closely follow the trends in domestic and international forest carbon sink policies and methodologies, and explore innovative practices in developing forestry carbon sinks projects.</p>	<p>Contribute to APP's goal of "improving the lives of millions"</p> 	<p>Continuously deepen the Ganzhou Xinfeng Golden Orchard program, providing assistance to over 6,000 people-times cumulatively. In addition, continue to explore rural revitalization pilot projects in Lancang County, Yunnan and other places.</p>
<p>Adjust energy structure in mills</p> 	<p>Strengthen the utilization of renewable energy such as photovoltaic energy and biomass energy, generating 60.1812 million kWh of solar power annually, a year-on-year increase of 98.09%.</p>	<p>Fully advance ESG-related practices</p> 	<p>By conducting a variety of ESG-themed training, we continuously improve the employee sustainability capability building system, significantly enhancing the ESG capabilities of employees in all positions.</p>



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.	AAC-CFCC-FM-106148
2	Wenshan Jin Wenshan High-Yield Forestry Co., Ltd.	AAC-CFCC-FM-106153
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.	CFCC/PEFC-FM-ZTFC-000061

» 2024 Main Sustainability Management System Certification Audit Status at Mills of APP China

	ISO 9001	ISO 14001	ISO 45001	ISO 50001	CFCC/PEFC-CoC*
Gold East Paper	Re-certificate audit	Surveillance audit	Surveillance audit	Surveillance audit	Surveillance audit
Ningbo Asia	Re-certificate audit	Re-certificate audit	Re-certificate audit	-	Re-certificate audit
Hainan Jinhai Pulp & Paper	Surveillance audit	Surveillance audit	Surveillance audit	Surveillance audit	Re-certificate audit
Guangxi Jingui Pulp & Paper	Surveillance audit	Surveillance audit	Surveillance audit	-	Surveillance audit
Shandong Base of Bohui Paper	Surveillance audit	Surveillance audit	Surveillance audit	Re-certificate audit	Surveillance audit
Jiangsu Base of Bohui Paper	Surveillance audit	Surveillance audit	Surveillance audit	Surveillance audit	-
Rudong Base	Surveillance audit				

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

Stakeholder Engagement

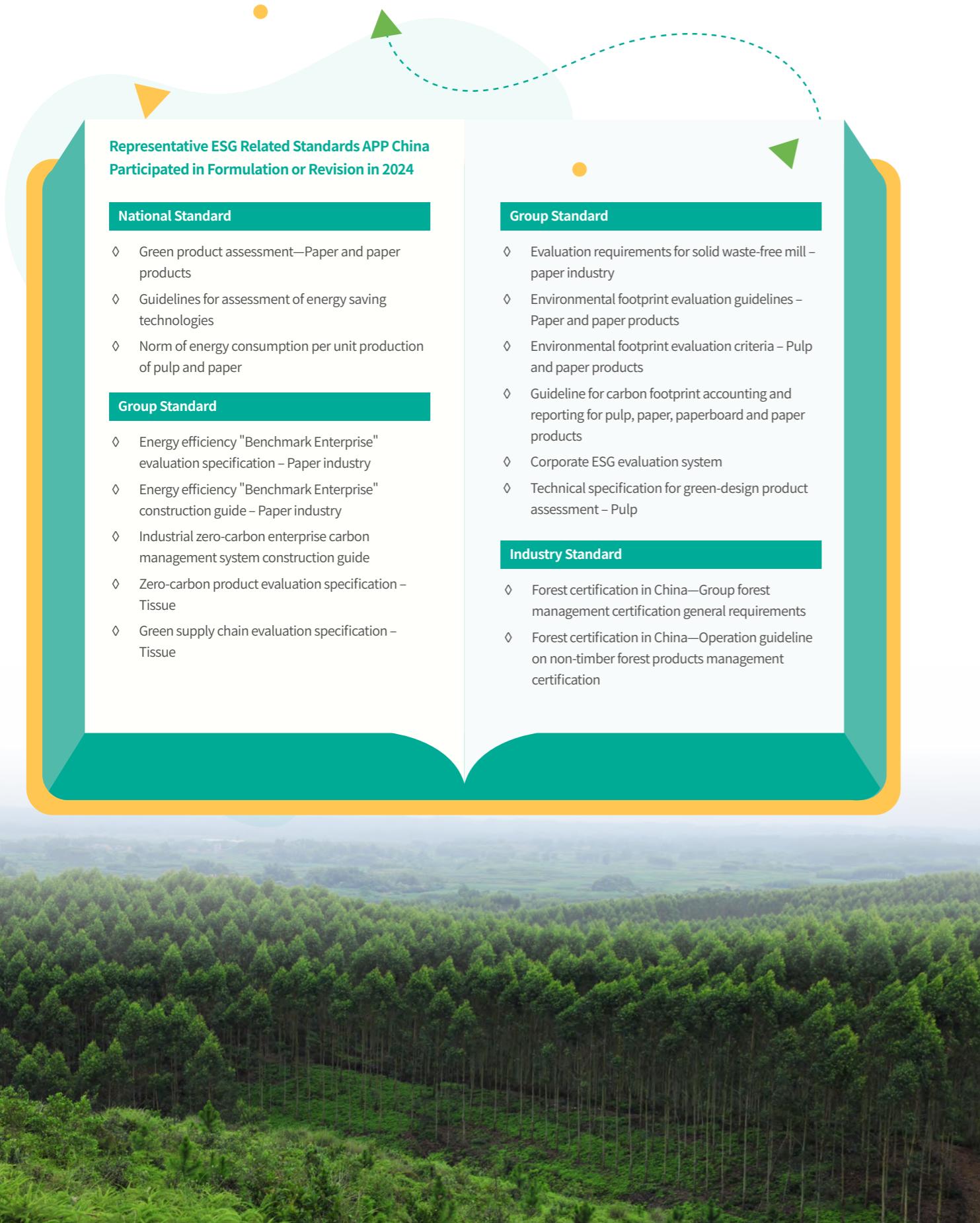
APP China has a regular communication mechanism with stakeholders through various channels to fully understand their expectations and demands, and incorporate their feedback into our corporate decision-making. As the importance of sustainability continues to increase, we have deepened the communication and cooperation both within and outside the industry by

participating in industry forums, summits, and other activities, actively absorbing new concepts as well as corporate best practices. We also actively engage in in-depth dialogue with partners from various fields to jointly explore new paths for sustainable development through international platforms such as the China International Import Expo.

As an actively supporter of the development of the paper industry, APP China and its subsidiaries participate in the formulation and revision of multiple national and group standards. Some subsidiaries, such as Guangxi Jingui Pulp & Paper, Bohui Paper, and APP China Forestry, play important roles in industry associations and other related organizations.

Hainan Jinhua Forestry Conducted Social Impact Assessment Survey

Hainan Jinhua Forestry conducted a biennial social impact assessment survey from August 2023 to March 2024, evaluating the social, economic and ecological impact of its integrated "Plantation-Pulp-Paper" project at local level. The survey collected feedback via an online questionnaire, with 307 responses received from various stakeholder groups such as employees, contractors, government agencies, community residents, and village committee members. The survey results show that the project has achieved significant outcomes in providing employment opportunities, enhancing forestry benefits, and strengthening sustainable forestry management. In response to the potential risks identified in the survey, such as natural disasters and safety operations, the company has formulated risk response plans to continuously optimize its management practices in conjunction with the implementation of its smart forestry initiative.



Stakeholders	Top Concerns	Engagement Channels
Employees	<ul style="list-style-type: none"> ◊ Occupational health and safety ◊ Product quality and safety ◊ Environmental management and compliance ◊ Water resources management ◊ Air pollutant control ◊ Employment relations 	<ul style="list-style-type: none"> ◊ Company internal magazine ◊ Employee representative meetings ◊ Employee communication meetings ◊ Executive mailbox ◊ MBOS proposal competition ◊ Sunshine Integrity Month ◊ Employee training and activities ◊ Sustainability reports ◊ WeChat corporate account ◊ Integrity and compliance whistleblowing channel
Customers and consumers	<ul style="list-style-type: none"> ◊ Product quality and safety ◊ Water resources management ◊ Air pollutant control ◊ Human rights ◊ Waste management ◊ Business ethics 	<ul style="list-style-type: none"> ◊ Customer visits ◊ Engagement meetings ◊ Remote and on-site technical support ◊ Little A Classroom ◊ Industry conferences/events ◊ Customer satisfaction surveys ◊ Customer service hotline/mail ◊ Company website ◊ Sustainability reports ◊ WeChat corporate account
Suppliers/Contractors	<ul style="list-style-type: none"> ◊ Business ethics ◊ Product quality and safety ◊ Environmental management and compliance ◊ Corporate governance ◊ Air pollutant control ◊ Occupational health and safety 	<ul style="list-style-type: none"> ◊ Supplier/contractor meetings ◊ Supplier/contractor training ◊ Supplier/contractor due diligence ◊ Cooperative R&D mechanism ◊ Regular supervision and inspection ◊ Sustainability reports ◊ Supplier performance evaluation ◊ Integrity and compliance whistleblowing channel
Banks	<ul style="list-style-type: none"> ◊ Win-win cooperation ◊ Product quality and safety ◊ Environmental management and compliance ◊ Air pollutant control ◊ Occupational health and safety ◊ Energy management 	<ul style="list-style-type: none"> ◊ Daily communication meetings ◊ Cooperation ◊ Sustainability reports ◊ Company website
Government authorities	<ul style="list-style-type: none"> ◊ Environmental management and compliance ◊ Sustainable forest management ◊ Water resources management ◊ Human rights ◊ Ecosystem and biodiversity Conservation ◊ Product quality and safety 	<ul style="list-style-type: none"> ◊ Government communication meetings ◊ Government inspections and onsite visits ◊ Information disclosure and reporting ◊ Thematic training ◊ Awards and recognition ◊ Sustainability reports

Stakeholders	Top Concerns	Engagement Channels
Community representatives	<ul style="list-style-type: none"> ◊ Human rights ◊ Ecosystem and biodiversity Conservation ◊ Waste management ◊ Circular economy ◊ Water resources management ◊ Energy management 	<ul style="list-style-type: none"> ◊ Community opinion handling and feedback ◊ Community representatives' supervision and engagement ◊ Mill visits ◊ WeChat communication platform ◊ Project cooperation ◊ Charitable activities and volunteer activities ◊ Papermaking cultural activities ◊ Community surveys
Industry associations	<ul style="list-style-type: none"> ◊ Environmental management and compliance ◊ Human rights ◊ Product quality and safety ◊ Win-win cooperation ◊ Rural revitalization ◊ Business ethics 	<ul style="list-style-type: none"> ◊ Industrial exhibitions, seminars, and thematic forums ◊ Awards and recognition ◊ Research cooperation ◊ Collaboration to develop industry standards ◊ Industry publications ◊ Sustainability reports
Professional institutions	<ul style="list-style-type: none"> ◊ Water resources management ◊ Sustainable forest management ◊ Air pollutant control ◊ Waste management ◊ Employment relations ◊ Occupational health and safety 	<ul style="list-style-type: none"> ◊ Industry-University-Research cooperation ◊ Joint talent cultivation ◊ Professional exchange and onsite visits ◊ Training activities ◊ Company website ◊ Sustainability reports
NGOs	<ul style="list-style-type: none"> ◊ Environmental management and compliance ◊ Air pollutant control ◊ Water resources management ◊ Waste management ◊ Sustainable forest management ◊ Ecosystem and biodiversity conservation 	<ul style="list-style-type: none"> ◊ Communication on specific topics ◊ Charity projects donation and cooperation ◊ Sustainability reports ◊ Company website ◊ WeChat corporate account
Media	<ul style="list-style-type: none"> ◊ Environmental management and compliance ◊ Energy management ◊ Addressing climate change ◊ Air pollutant control ◊ Water resources management ◊ Waste management 	<ul style="list-style-type: none"> ◊ Onsite participation in events ◊ Meetings, exhibitions, forums, etc. ◊ Company website ◊ WeChat corporate account ◊ Executive interviews ◊ Cooperation on publicity activities ◊ Sustainability reports

Materiality Assessment

We have systematically identified and updated sustainability/ESG issues in accordance with the latest national and industry policy guidelines, GRI standards, TCFD framework, the Ten Principles of the United Nations Global Compact, and mainstream global ESG rating systems,

combined with our key operational areas. In 2024, we identified a total of 27 material issues, adding "due diligence" and "circular economy" compared to the 2023 list, while also refining and improving the descriptions of some issues to ensure better clarity and comprehensiveness.

To assess the importance of each issue, we conducted an online survey to widely solicit feedback from various stakeholders, collecting a total of 741 valid responses. Based on the survey results and input from internal and external experts, we determined the final prioritization of the issues as shown below.



High materiality issues

15	Product quality and safety	10	Employment relations
05	Water resources management	27	Information security management
12	Human rights	23	Business ethics
11	Occupational health and safety	02	Energy management
08	Sustainable forest management	13	Employee training and development
01	Environmental management and compliance	24	Supply chain management
20	Risk and compliance management		

Medium materiality issues

04	Air pollutant control	03	Addressing climate change
25	R&D and innovation	21	Due diligence
19	Corporate governance	09	Ecosystem and biodiversity conservation
06	Waste management	07	Circular economy
14	Customer relationship management	17	Rural revitalization
22	Economic performance		
26	Digital transformation		

Low materiality issues

16	Win-win cooperation	18	Public welfare, charity, and community relations
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Environmental

APP China Green Transformation - Harmonious Coexistence with Nature

APP China regards green and sustainable development as an important guarantee for its long-term growth. The Company has formulated its Green Transformation strategy, and established its "dual carbon" goals of "peaking carbon emissions by 2030 and reaching carbon neutrality by 2060". From ecological forestry to environmentally friendly pulping and green paper-making, APP China has been implementing an integrated "Plantation-Pulp-Paper" green circular system, under which forestry operations and paper making operations support each other organically in an integrated way. The Company continues to explore and optimize sustainable forestry practices, with a number of forestry subsidiaries obtaining CFCC/PEFC-FM Forest certification and ISO 14001 Environmental Management System certification. In the production phase, all production sites vigorously implement energy-saving technological transformations, green energy applications, water resource recycling, and pollutant control, achieving efficient resource utilization while meeting various environmental protection requirements with indicators that exceed national standards. Meanwhile, APP China actively develops green and low-carbon products, cultivates a green brand, conducts product carbon footprint verification. A number of its products have obtained Carbon Neutral certification, the China Environmental Labelling product certification, as well as other green environmental certifications.



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Sustainable Forest Management

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

Annual progress:

- **293,107.89** hectares of plantations, up **0.05%** year-on-year
- **39.84** million seedlings cultivated in 2024, up **27.17%** year-on-year
- **274,851.70** hectares of plantations are CFCC/PEFC-FM certified, accounting for **93.77%** 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%** of our plantations are ISO 14001 certified
- **60%** of our plantations are High Conservation Value (HCV) 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

APP China always regards sustainably managed plantations as the strategic foundation for achieving the sustainable use of resources and green development. Since 1995, APP China has been engaged in large-scale afforestation. As of the end of 2024, the Company owned 293,107.89 hectares of plantations, among which 93.77% are CFCC/PEFC-FM certified, and 59% are ISO 14001 certified. We strive to continuously improve forest management through systematic sustainable development practices.

APP China Forestry started implementing the ISO 14001 Environmental Management System in 2001. In 2011, we also started implementing the CFCC/PEFC-FM Certification system. Each year, we carry out rigorous internal audits and contact authoritative third-party organizations to carry out regular external audits to ensure the effective implementation of sustainable forestry standards. This

systematic certification management mechanism ensures the deep integration of sustainable forest management concepts into all aspects of our daily operations, continuously enhancing the standardization and sustainable development capability of our forestry operations.

In 2024, APP China Forestry conducted a series of training for all plantations on forest management certification, ISO 14001 Environmental Management system and other international standards, as well as relevant legal knowledge. We also carried out rigorous internal audits to identify and promptly rectify deficiencies, laying a solid foundation for passing subsequent external audits. During the reporting period, 15 forestry subsidiaries successfully completed their annual CFCC/PEFC-FM Certification audits, and six forestry subsidiaries passed the surveillance audits for ISO 14001 certification.



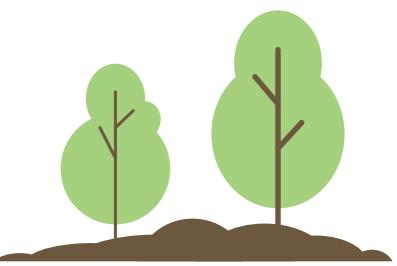
APP China Forestry conducting forest management certification audits

Number of forestry subsidiaries under APP China completed the annual CFCC/PEFC-FM forest certification audits

15

Number of forestry subsidiaries passed the surveillance audits for ISO 14001 certification

6



» Forestry Risk Management

In response to common risks in forest areas such as fires, wind disasters, frost damage, pest and disease outbreaks, and floods, APP China has developed and continuously optimized a series of disaster risk management measures, including the "Disaster Emergency Response Procedures", the "Lightning Disaster Plan", the "Typhoon Disaster Emergency Plan", the "Eucalyptus

Frost Damage Emergency Plan", and the "Forest Disaster Insurance Management Measures". These measures establish standardized processes covering pre-disaster prevention, disaster response, post-disaster handling, and awareness promotion, aiming to minimize the possible damage to our forest assets and ensure the resilience of the industrial chain.

In 2024, APP China had a total of 2,831 mu of forest land affected by fires, a 76% decrease year-on-year; 196,530 mu of forest land affected by pests and diseases; and 270,579 mu of forest land suffered damage from natural disasters, primarily due to typhoon disasters.

Forest fire prevention



- ◊ Implement the forest fire prevention policy of "prevention first, and active distinguishing". Clarify key fire prevention periods and time periods, and optimize the forest fire reporting system; develop emergency plans with graded responses based on fire risk levels to ensure rapid and rational firefighting; after a fire occurs, conduct a comprehensive investigation into the time, location, cause, and damage of the fire, and develop rectification plans to continuously optimize the fire prevention management mechanism.
- ◊ 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 relevant forest fire emergency plans for each management level. Fire control command center has also been established at the plantation level.
- ◊ Formulate prevention and patrol plans based on key fire prevention periods such as dry seasons or fire usage periods; regularly organize forest fire prevention education and fire drills to continuously strengthen employees' awareness of forest fire prevention as well as their emergency response capabilities regarding forest fire.
- ◊ Collaborate with local governments to raise fire safety awareness in local villages to ensure "year-round and everyone-included" awareness; establish a joint fire hazard prevention mechanism at each village, under which fire prevention activities are regularly carried out under government supervision, and with active participation of local community residents; actively participate in relevant information exchange and experience sharing activities such as fire prevention training organized by the government.
- ◊ 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 stretches 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, filing insurance claims immediately after fires to receive timely compensation.



Wind damage prevention



- ◊ Strengthen the research and experiment on wind-resistant varieties of trees. Avoid planting during peak 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) to minimize damage, and adopt timely reinforcement and caring measures to help the affected trees recover and grow.
- ◊ Purchase forest insurance.

Frost damage prevention



- ◊ Strengthen the research and experiment on frost-resistant varieties of trees.
- ◊ 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



- ◊ Strengthen the cultivation of 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.
- ◊ Rationalize the layout of varieties and scientifically implement variety rotation and intercropping to optimize planting structure and enhance ecological benefits.
- ◊ Develop a monthly disease and pest control calendar to ensure early prevention and control.
- ◊ Use drones to spray pesticides.
- ◊ Establish a professional disease and pest control team, and conduct training on disease and pest identification and control.
- ◊ Purchase forest insurance.

» Promote Forestry Research

Selecting and cultivating superior tree species and using scientific seedling and forestry management methods have great significance for increasing timber output and enhancing both economic and ecological benefits. APP China has been committed to the innovation and R&D of forestry technologies, striving to improve forest productivity, timber supply capacity, as well as forestry

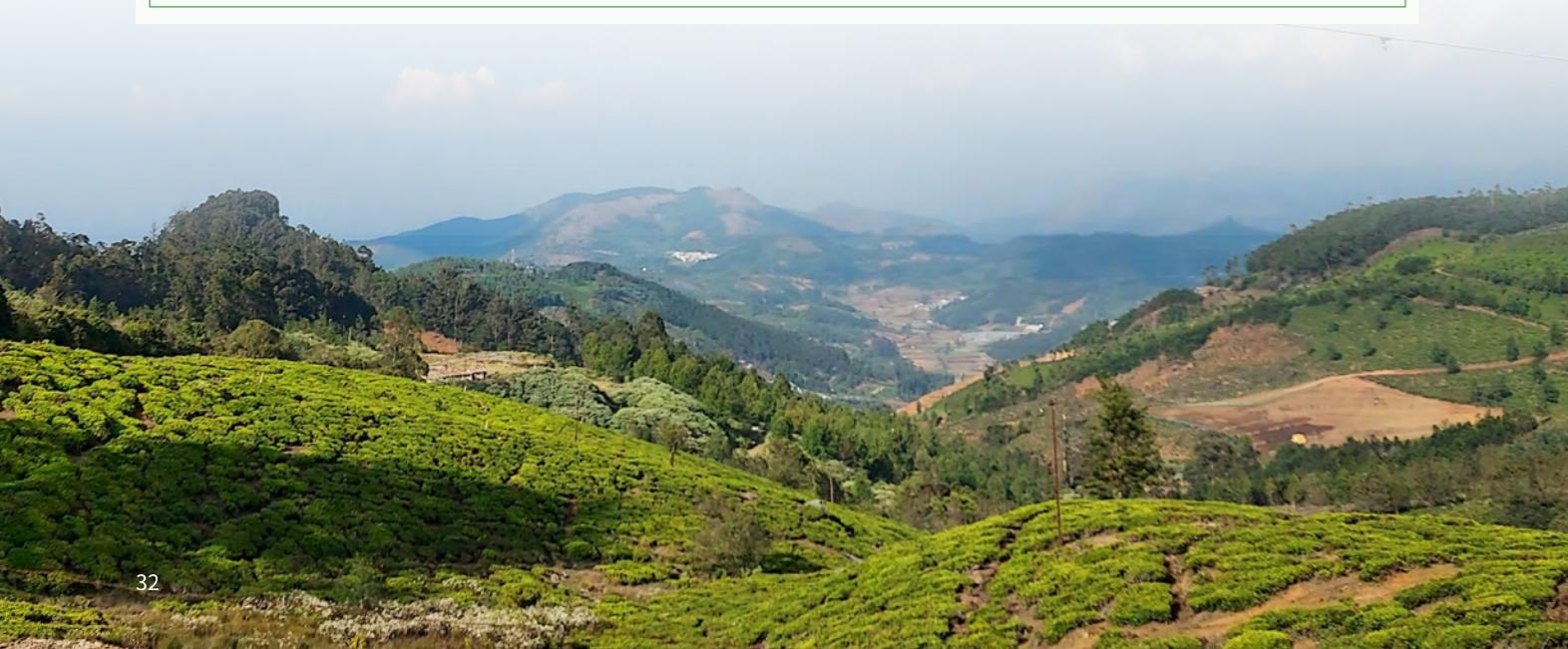
management performance through measures such as scientific seedling cultivation, variety optimization, scientific forest management and other scientific forestry practices.

APP China collaborated with prestigious research institutions, including the Research Institute of Fast-growing Trees of the Chinese Academy of Forestry, the Research Institute of

Tropical Forestry of the Chinese Academy of Forestry, and the Institute of Highland Forest Science of the Chinese Academy of Forestry, to conduct research. These researches have achieved multiple results in cultivating new breeding varieties and selecting superior varieties of eucalyptus, laying a solid foundation for the full utilization of forest land resources and ensuring stable timber output.

Key R&D Projects of APP China Forestry

- ◊ We conducted several joint research projects in collaboration with the Research Institute of Fast-growing Trees of the Chinese Academy of Forestry. The Development of New Varieties of *Corymbia citriodora* and *Eucalyptus torelliana* project successfully cultivated 24 hybrid varieties, obtaining seeds for 16 varieties, and the subsequent tissue culture propagation work was carried out smoothly. The Selection of High-Performance Eucalyptus Varieties for the Transition Zone between the Yunnan-Guizhou Plateau and the Hilly Areas in Guangxi project selected clonal eucalyptus species suitable for the transition zone between Wenshan in Yunnan and Baise in Guangxi. The Joint High-Yield and High-Efficiency Eucalyptus Technology Demonstration Plantation in Qinzhou cultivated and selected strains with excellent disease resistance, pest resistance, and growth performance.
- ◊ In collaboration with the Research Institute of Tropical Forestry of the Chinese Academy of Forestry, we launched the Long-term Research Base for Ecological Forestry of Eucalyptus, Acacia, and Indigenous Precious Tree Species project. Eight excellent clonal hybrids were successfully cultivated using eucalyptus tereticornis and eucalyptus microcorys as maternal parents, and eucalyptus tereticornis, eucalyptus grandis, and eucalyptus robusta as paternal parents. We also jointly launched the Large-scale Molecular Identification and Clonal Testing of Natural Hybrids of Eucalyptus project, focusing on selecting excellent clonal strains through hybrid breeding with mixed pollen, and using genetic testing to reverse identify parental lines to enhance the efficiency of eucalyptus breeding. In addition, our joint Integration and Demonstration of Efficient Cultivation Techniques for Eucalyptus Pulpwood Forests conducted experiments on various planting techniques such as eucalyptus strain selection, types and timing of fertilization, and planting density.
- ◊ In collaboration with the Guangdong Academy of Forestry Sciences, we launched the Breeding of New Varieties of Short-Cycle Pulpwood Such as Slash Pine and Wetland Pine and the Cultivation of Plantations project, starting conducting relevant progeny testing, density trials, and clonal testing in Ganzhou, Heyuan, and Wenshan in March 2024.



APP China 2024 Key Measures for Scientific Seedling Cultivation and Forest Management

Scientific seedling cultivation

- ◊ Effectively improved seedling output and survival rate by building additional temperature-controlled seedling rooting greenhouses, seedling greenhouses, and standardized seedling nurseries.
- ◊ Enhanced seedling effectiveness through infrastructure improvement of seedling greenhouses, such as spraying system upgrade and drainage system optimization, which effectively solved problems such as uneven spraying, insufficient permeability, and water logging.
- ◊ Strictly implemented the seedling operation SOPs, and strengthened tiered management by grading seedlings into large, medium, and small seedling groups.
- ◊ Optimized the seedling technology for *Acacia* and *Eucalyptus dunnii* to further improve their seedling rooting rates.

Scientific forest management

- ◊ Fully implemented differentiated management strategies, adjusting plantation zoning based on scientific evaluation of disaster risk levels, climate characteristics, and yield factors of each area, and implementing more accurately customized targeted planting plans.
- ◊ Increased the application of full-nutrient formula fertilizers.
- ◊ Promoted the application of mean annual increment (MAI) 3.0 high-efficiency cultivation technology to continuously improve the average annual growth rate of forest. A total of 43,071 mu of forest land applied the technology in 2024, and we plan to implement a full-scale application of the MAI3.0 responsibility system in 2025.
- ◊ Introduced the organic solid waste harmless treatment technology, using the passivated and harmless treated pulp and paper sludge as organic fertilizer for forest land, achieving both efficient resource conversion and ecological benefit enhancement.
- ◊ Continued to promote forestry operation mechanization. In 2024, about 72% of logs were harvested mechanically, and 67% of the forest land was prepared mechanically.

Experimenting Eucalyptus Biomass Energy Forest for Low-Temperature Areas in Wenshan

For APP China Forestry, plantations in high-altitude or high-latitudes areas often suffer from frost damage, resulting in low timber yield and poor economic benefits. To better utilize existing forest land resources as well as serve our development need for green energy, APP China collaborated with the Research Institute of Fast-growing Trees of the Chinese Academy of Forestry and jointly launched the Eucalyptus Biomass Energy Forest Transformation and Efficient Cultivation Experiment in Low-Temperature Frost Damage Areas project in Wenshan Business Area in Yunnan. Due to its strong sprouting ability and rapid growth characteristics, eucalyptus can be grown with a short-cycle management model to effectively avoid frost damage risks by completing logging operations before the frost season. Furthermore, its sprouting regeneration ability allows eucalyptus to achieve normal sprouting growth in the following year. This model not only addresses the low yield problem caused by frost damage but also provides a new approach for the sustainable supply of biomass energy.

Establishing Eucalyptus High-Yield and High-Efficiency Technology Demonstration Plantation Base in Qinzhou

APP China accelerated the transformation and upgrading of the raw material forest cultivation model, aiming to ensure better quality and higher efficiency, maintain soil fertility sustainably, and protect biodiversity. In collaboration with the Research Institute of Fast-growing Trees of the Chinese Academy of Forestry, we established the Eucalyptus High-Yield and High-Efficiency Technology Demonstration Plantation Base in Qinzhou. The project includes a 100-mu test plantation for clonal eucalyptus and a 1,000-mu plantation for research on refined high-yield and high-efficiency management techniques for eucalyptus. Different eucalyptus varieties were planted, with different fertilization and other forest management technologies applied in experiments. The growth dynamics, wind resistance, pest and disease occurrence patterns, and occurrence of lodging and breakage were monitored and recorded for study.

» High Conservation Value Monitoring

The High Conservation Value (HCV) is 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. In forestry activities, the key to HCV lies in the scientific identification of HCVs and setting up an effective long-term maintenance mechanism accordingly.

APP China Forestry attaches great importance to the assessment, management, and monitoring of HCVs. We have formulated the "High Conservation Value Management Procedures" to

provide a rigorous guideline for our plantations regarding the identification and maintenance of HCVs. Each forestry business area conducts HCV monitoring of their plantations annually. Each operational team fills out monitoring forms individually, which are summarized quarterly. In 2024, 60% of our self-operated plantations completed HCV assessment.

In 2024, protected plants and animals were identified in our plantations by 31 subcompartments, including one subcompartment discovered HCV. In Quarter 1 of 2024, in the Huimin Plantation in Yunnan, a subcompartment discovered a national first-class protected animal, the *Bos gaurus*. In our Guangdong Business Area, one subcompartment reported the

identification of a protected animal, the cobra, and three subcompartments reported the identification of a national second-class protected animal, silver pheasant. In Quarter 2 of 2024, in the Huidong Plantation in Guangdong, in addition to cobra and silver pheasant, a provincial protected animal, the stone frog, as well as the national second-class protected plant, the leafless beauty crown orchid (*Eulophila zollingeri*), were also identified. Our plantations immediately activated their protection plans upon the identification of protected species, cooperated with local forestry departments to promote protection awareness in surrounding communities, and continuously monitored them during subsequent patrols.



Animals in one of our plantations

Responding to Climate Change

APP China actively responds to climate change, continuously improving our climate change response governance system, and systematically promoting the implementation of our "dual carbon" strategy with the specific strategic goals of "peaking carbon emissions by 2030 and reaching carbon neutrality by 2060". We vigorously promote green and low-carbon transformation comprehensively through multiple measures such as forestry carbon sinks development, transition to clean energy, and green product innovations, striving to achieve a win-win development of both environmental benefits and economic benefits.

Annual progress:

- Total carbon storage capacity of our plantations reached **43.7** million tons
- Over **53,000** tons of biomass fuel supplied to our mills by APP China Forestry
- Maintained a RMB **32.98** million balance on our carbon quota trading account

» 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.

Our mills thoroughly implement the group's strategic deployment for climate change response. Each mill has established its own Carbon Peaking and Carbon Neutrality Committee, continuously optimizes their carbon emission management system, and conducts solid climate governance capacity building activities. The Company has established a 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, giving employees greater incentive to participate in energy conservation and carbon reduction activities and contribute to the green transformation of the Company.

The Company attaches great importance to capacity building training and has organized systematic training on climate change response, covering topics such as corporate carbon peaking and carbon neutrality strategic planning, greenhouse gas accounting and management, carbon verification system construction, carbon peaking and carbon neutrality fundamentals, carbon emission management system internal audit, and product carbon neutrality roadmap. These programs have effectively enhanced the professional competence and practical skills of our employees in the field of climate change response.

APP China's Governance System for Addressing Climate Change



Enhancing "Dual Carbon" Management System to Promote Green and Low-Carbon Transformation



Guangxi Jingui Pulp & Paper has established a Carbon Peaking and Carbon Neutrality Committee. The Director of the Committee is responsible for organizing and implementing its carbon peaking and carbon neutrality strategy. The Executive Deputy Director of the Committee, with the support of its "Dual Carbon" Office, is responsible for coordinating and supervising the carbon peaking and carbon neutrality activities of various departments, carbon emission data auditing, and employee dual carbon education and training. The company has clarified the responsibilities among departments in areas such as energy conservation and emission reduction, carbon emission management, product carbon footprint certification, supply chain management, external communication and cooperation, and publicity, forming a collaborative implementation mechanism to ensure the orderly advancement of its green and low-carbon transformation.

In 2024, the company actively carried out internal and external learning and exchange activities in the "dual carbon" field, effectively enhancing the team's professional capabilities in carbon management and carbon footprint verification. In terms of external communication, employees were organized to participate in greenhouse gas verifier training, and product carbon footprint training and exchanges. The company also organized regular "dual carbon" experience sharing meetings with sister mills within the group to share experience and best practices.

Meanwhile, the company fully utilized the MBOS management tool, establishing 29 green transformation-related improvement projects within the reporting period, and conducted 55 exchange and sharing activities on green transformation-related themes with sister mills.

» Strategy and Goals

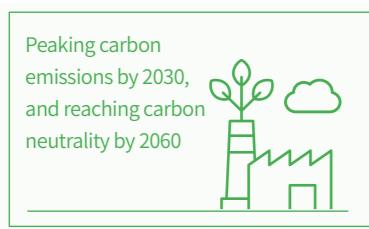
APP China officially started drafting its carbon peaking and carbon neutrality strategic plan in 2021, with the overall planning virtually completed in 2022. With 2021 set as the benchmark year for key carbon management targets, the strategic plan focuses on several key areas to ensure that the Company achieves its carbon neutrality goals, including reducing total carbon emissions and emission intensity, improving energy efficiency, utilizing renewable energy, developing and adopting 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, who set their specific targets accordingly based on their production operations, production scale, carbon emission baseline, and technological process levels. Their targets include the reduction ratio in product carbon footprint, renewable energy usage, biomass energy usage, and green electricity usage, etc.

Our mills are also steadily advancing the implementation of their specific energy saving and carbon reduction measures in accordance with the Company's strategic deployment and their own development plan. Hainan Jinhai Pulp & Paper, as a pilot unit, has formulated a plan to achieve carbon neutrality by 2050. Guangxi Jingui Pulp & Paper has set the overall goals of peaking

carbon emissions by 2030 and reaching carbon neutrality by 2060 with a systematic phased implementation roadmap in areas such as energy conservation, production capacity layout, and renewable energy usage, aiming at achieving a 10% reduction in carbon emissions by 2025, carbon peaking by 2030, a 15% reduction by 2035, a 35% reduction by 2040, a 75% reduction by 2045, and carbon neutrality by 2060. In 2024, Guangxi Jingui Pulp & Paper implemented multiple initiatives in energy conservation and emission reduction, resource utilization, and carbon emission management, creating benefits of approximately RMB145 million in total.



GHG Emissions of APP China Mills within the Reporting Scope*

Indicator	Unit	2023	2024
Total emissions	tons of CO ₂ e	14,365,240.99	14,458,881.99
Scope 1 emissions	tons of CO ₂ e	8,286,374.19	8,387,676.74
Scope 2 emissions	tons of CO ₂ e	6,078,866.80	6,071,205.25

*As of the completion of this report, the 2023 and 2024 GHG emission data of all mills within the reporting scope were completed. 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 greenhouse gas verification was performed in accordance with the ISO 14064 standard.

» Risk Management

APP China attaches great importance to addressing the challenges posed by climate change. We have systematically identified physical risks and transition risks, established a risk assessment mechanism, and formulated specific response strategies, effectively ensuring our operational stability and sustainable development capabilities.

Risks	Risk Factors	Response Measures
<p>Physical Risks</p> <p>Acute Risks</p> <p>Impact level High</p> <p>Timeframe Short-, medium- to long-term</p>	<ul style="list-style-type: none"> Climate change has led to an increase in extreme weather events, such as typhoons, heavy rains, and freezing conditions, which can damage vegetation growth, cause losses in timber resources, and affect the stability of the pulp supply chain. Extreme weather may also directly impact the safety of production facilities, increasing the risk of production interruptions. The risk of forest fires significantly increases under high-temperature and drought conditions, especially in arid regions where fire spreads more rapidly, threatening forest assets. 	<ul style="list-style-type: none"> Formulate and optimize emergency response plans covering various disasters such as fire, wind disaster, and pest infestation to ensure rapid response and scientific handling of disasters, and effectively carry out disaster relief and ecological restoration operations, minimizing losses of forest resources. Utilize technological means such as remote sensing monitoring and drone inspections to conduct intelligent monitoring of forest fires, comprehensively enhancing the efficiency of fire warning and emergency response. Implement differentiated management strategies based on the geographical location and growing environment with targeted measures. For example, in Hainan, we manage our plantations in three major categories: wind-resistant and stable-yield, humid and high-yield, and drought-resistant and yield-increasing, which with differentiated cultivation measures in terms of tree species quality, planting density, land preparation methods, fertilization, planting season, and disaster prevention. Our procurement strategy is formulated and implemented with emphasis on a strategy of intentional diversification, effectively mitigating the impact of climate factors by using multiple sourcing countries and regions, mixed tree species, and diversified transportation methods. Reasonable reserves are also established through forecast-based procurement to reduce supply risks. Our mills work closely with meteorological departments to obtain weather warning information in a timely manner, upgrade the construction of infrastructure for drainage, wind protection, and fire prevention, equip emergency supplies for typhoon and flood prevention, and conduct emergency drills to ensure timely disaster response.

Risks	Risk Factors	Response Measures	Risks	Risk Factors	Response Measures
Physical Risks Chronic Risks Impact level Medium-High Timeframe Long-term	<ul style="list-style-type: none"> Long-term rise of average temperature will affect the growth cycle of trees and fiber quality, which may lead to a decline in the stability of the raw material supply for pulp production. Warmer climate makes it easier for pests to survive through winter and reproduce, exacerbating pest problems for forest, which not only threaten tree health but also increase prevention and control costs, and may even affect the stability of the raw material supply for pulp production. Rising sea levels will directly threaten the safety of forests and mills in coastal bases, potentially leading to sustained losses of company assets. Water resource is vital to the paper industry. Climate change may cause frequent and persistent droughts and deteriorating water quality, which will significantly increase the difficulty of water resource acquisition and production costs for companies. 	<ul style="list-style-type: none"> Strengthen the R&D on seedlings with higher wind resistance, flood tolerance, pest and disease resistance, and high pulp yield to enhance the climate resilience of forest land. Optimize forest management measures to improve timber growth and yield stability through differentiated management and scientific nurturing. Enhance the disaster resistance standards of existing coastal facilities and implement dynamic optimization of asset allocation, and optimize the layout of production facilities in coastal areas in a timely manner. Systematically implement water-saving technology upgrade, deploy water recovery and reuse systems, and comprehensively improve the water efficiency of production operations and resilience against long-term drought. 	Technology Risks Impact level Medium Timeframe Medium- to long-term	<ul style="list-style-type: none"> The government's regulation on energy use and carbon emissions is becoming increasingly strict, and the Company's existing technologies and equipment may face the risk of premature elimination due to their inability to meet new environmental standards. To comply with regulatory requirements, the Company needs to make investment in equipment upgrades, thereby increasing operational costs. Carbon capture, utilization, and storage (CCUS) technology is a key approach to achieve carbon neutrality and has significant environmental benefit. However, its large-scale commercialization is still affected by a few challenges, such as implementation complexity and high investment costs due to insufficient technological maturity, as well as the concerns regarding the safety and monitoring reliability of long-term geological storage. 	<ul style="list-style-type: none"> Develop a systematic low-carbon transition strategy, formulate a phased technological upgrade plan, gradually increase investment in advanced technologies and equipment, and reduce upgrade costs through green finance channels. Meanwhile, continuously enhance independent R&D capabilities, and apply innovative R&D achievements in mills, gradually achieving technological self-reliance and effectively reducing the costs of technological upgrades. Actively expand external cooperation networks, establishing strategic partnerships with universities and research institutions, promoting the industrial application of cutting-edge technologies, and jointly carrying out frontier R&D demonstration projects, such as the application of CCUS technology in the paper industry.
Transition Risks Policy Risks Impact level Medium-High Timeframe Short-, medium- to long-term	<ul style="list-style-type: none"> The Chinese government is accelerating the transition of the focus of the "dual control" carbon management from energy consumption to carbon emissions, with more stringent carbon reduction policies expected, which may incur higher compliance costs for the Company. The power plants owned by our primary mills have been included in the national carbon emission trading market. The paper industry may be fully included in the carbon market system in the coming years. High carbon emission may cause the Company greater costs to fulfill the carbon market transactions. The cost may also be affected by changes in emission accounting methods in the power generation industry, as well as the tightening of carbon quota allocations. The EU Carbon Border Adjustment Mechanism (CBAM) will gradually reduce free quotas in phase starting in 2026. The paper industry may be included in the regulatory scope of CBAM in the future, which will increase the Company's export costs to Europe. 	<ul style="list-style-type: none"> Our BUs and mills conduct regular policy compliance management annually by creating a policy update list, implementing compliance self-inspections, and organizing dedicated training to ensure timely implementation of policy requirements. In December 2024, Guangxi Jingui Pulp & Paper completed the fulfillment of its carbon emission trading transactions for 2023, receiving a revenue of RMB32.98 million from its surplus quotas traded. Promote the low-carbon transformation of our mills by intensifying clean energy use, improving the efficiency of biomass energy utilization, and implementing energy-saving technological upgrades. Strengthen product carbon footprint management, setting the target of reducing product carbon footprint by 30% by 2030. Efforts are underway to establish a group-level energy and carbon management system to actively respond to emerging regulatory risks in the future. 	Market Risks Impact level Low-Medium Timeframe Medium- to long-term	<ul style="list-style-type: none"> With the significant increase in consumers' environmental awareness, market preferences are rapidly shifting towards eco-friendly paper products with attributes such as biodegradability and recyclability. Failure to timely adjust product structure to meet the growing demand for green consumption may affect our overall profitability. 	<ul style="list-style-type: none"> Launch multiple biodegradable and "Carbon Neutral" product series; multiple industrial paper, cultural paper, and tissue products have received authoritative green product certifications such as the China Environmental Labelling product certification. The company will increase investment in R&D, accelerate the innovation in green products, and optimize production processes, to fully seize the low-carbon opportunities.
			Reputation Risks Impact level Low Timeframe Short- to medium-term	<ul style="list-style-type: none"> As the global low-carbon transition accelerates, the climate actions of manufacturing enterprises are receiving heightened attention from stakeholders such as investors, consumers, and regulatory authorities. Companies that fail to demonstrate a commitment to climate action as well as concrete progress may face lost trust from stakeholders and damage to their brand value and reputation. 	<ul style="list-style-type: none"> Comprehensively promote the implementation of the Green Transformation strategy; our mills continue to optimize climate governance and carbon emission management systems, and accelerate the planning and implementation of their low-carbon transformation action plans. Continuously improve the ESG and climate information disclosure mechanisms, enhancing transparency as well as stakeholder participation.

» Climate Response Practices and Progress

APP China actively responds to China's carbon peaking and carbon neutrality strategy through innovative practices, committed to creating a low-carbon development model that covers both upstream and downstream of the industrial chain by promoting the development and trading of forestry carbon sinks, cultivating biomass energy plantations, and accelerating the research and development of green products and technologies. Meanwhile, the Company continues to deepen the advocacy of green concepts and actively promotes the collaborative low-carbon transformation of society.

|| Developing Forestry Carbon Sinks

Forestry carbon sink is an important way to achieve the carbon peaking and carbon neutrality goals. Through scientific afforestation and sustainable forest management, forests can not only effectively absorb carbon dioxide from the atmosphere but also provide quantifiable carbon sink contributions to achieving carbon neutrality. APP China places great importance on forestry carbon sinks and actively carries out measures to monitor carbon sink volumes, explore carbon sink project development, and purchase carbon sinks. In 2024, we conducted the fourth carbon stock accounting of our plantations over the period from January to December 2023, which shows that the carbon stock of APP China's plantations was 43.7 million tons of carbon dioxide.

In October 2024, an update of the VCS methodology "VM0010 Methodology for Improved Forest Management" made adjustment to the applicability conditions for VCSs and explicitly excludes all plantations projects. As a result, our Hainan VCS Carbon Sink project no longer met the requirements and was terminated. In the future, we will continue to pay attention to the development of domestic and international forest carbon sink-related policies and methodologies, and actively explore in the development of forestry carbon sink projects.

In July 2024, Hainan Jinhai Pulp & Paper purchased the carbon sink generated from the Hainan Tropical Rainforest National Park Tropical Rainforest Carbon Sink project,

paying RMB150,000 for 1,500 tons of carbon dioxide equivalent. It is one of our efforts to support the development of the Hainan carbon sink project, and contribute to tropical rainforest ecological compensation, protection and restoration.



Tropical Rainforest Carbon Sink Certificate

|| Developing Biomass Energy Plantations

APP China Forestry continues to explore the cultivation of biomass energy plantations as a source of biomass fuel for our mills. In 2024, APP China Forestry supplied 39,707 tons and 13,457 tons of biomass fuel to Hainan Jinhai Pulp & Paper and Guangxi Jingui Pulp & Paper respectively.

APP China Forestry Yunnan Business Area launched a biomass timber experimental project in low-temperature frost damage areas in 2023. The experiment aims to reduce frost damage losses through selecting the optimal asexual strains of eucalyptus biomass energy plantations, as well as efficient biomass energy timber cultivation technology and process, so as to develop a duplicable solution for other frost damage areas. The experiment selected three asexual lineages, adopting an

ultra-short rotation management model in six comparison groups in terms of planting densities. Planting trials were conducted simultaneously in the experimental sites of Yanshan, Guangnan, and Funing. Experiment data, such as growth measurements, biomass weighing, and key indicators such as heat and ash content of the timber were systematically measured and analyzed. In March 2024, experiment data from the Research Institute of Fast-growing Trees of the Chinese Academy of Forestry shows that during the first year of the experiment, the three 34-mu experiment areas in Yanshan, Guangnan and Funing, yielded a total of 95.43, 121.68 and 130.37 tons of biomass timber respectively, preliminarily verifying the production potential of the experimental project.

|| Developing Green Products

APP China actively practices the concept of green development, fully integrating its R&D resources to launch a diversified portfolio of environmentally friendly products. Multiple products from our mills have completed carbon footprint verification, and the categories of products certified through carbon neutrality, China Environmental Labelling product certification and other green environmental certifications are increasing year by year. Gold Hongye focused on its green product initiatives around the

APPGreen system. The company created the "Breeze Commercial" brand as a dedicated green and environmentally friendly product line targeting business customers, providing customers with professional green commercial solutions with the launches of products such as zero-plastic paper, zero-carbon paper, and biodegradable product series. Gold East Paper actively promotes zero-carbon products, with the sales of its "Golden Flagship" zero-carbon copy paper series rising from 238 tons in 2023 to 774 tons in 2024.

Quantity of biomass fuel supplied by APP China Forestry to Hainan Jinhai Pulp & Paper

39,707 tons

Quantity of biomass fuel supplied by APP China Forestry to Guangxi Jingui Pulp & Paper

13,457 tons

Sales volume of "Golden Flagship" zero-carbon copy paper series in 2024

774 tons



Showcasing Green Innovation Achievements at the 7th CIIE



APP's booth at CIIE

The 100% Fluorine-free oil-proof food-grade board products are made from 100% virgin pulp, free from perfluoro and polyfluoroalkyl substances, fully biodegradable and compostable, with full recyclability and re-pulping capability. The products have obtained multiple international certifications including PEFC Forest Management certification, ISO 9001 Quality Management System certification, ISO 14001 Environmental Management System certification, ISO 14001 Environmental Management System certification, and FDA certification.



100% fluorine-free oil-proof food-grade board products

The Paperline Green multi-purpose recycled copy paper product series are made from 100% recycled materials using advanced production processes and green energy. They have received a series of international certifications including PEFC Forest Management certification, ISO 9001 Quality Management System certification, ISO 14001 Environmental Management System certification, and ISO 9706 certification. The deinking system of the Paperline Green production line is fully powered by solar energy with significant energy conservation and emission reduction benefits.



Paperline Green multi-purpose recycled copy paper product series

APP China actively participates in industry initiatives for green and low-carbon product innovation. We collaborated with industry peers and jointly launched the Green and Low-Carbon Pioneer Alliance initiative. Under the slogan of "Small Cup, Big Future", the initiative focuses on promoting the recycling of disposable paper cups and related innovations of industry standards, committed to promoting the upgrade of disposable paper cup related environmentally friendly technology through cross-sector technological innovation, and improving the recycling rate of paper cups. In addition, we also jointly launched the Zero-Carbon Recycling Paper Cup Pioneer Alliance with several peer enterprises to facilitate the establishment of a circular industrial chain for the production, use, recycling, and regeneration of paper cups through innovative solutions.



Launch Ceremony of "Zero-carbon Recycling Paper Cup Pioneer Alliance"

Sinar Mas Group Showcasing Green Innovation Achievements at its CISCE Debut



The Second China International Supply Chain Expo (CISCE) was hosted from November 26 to 30, 2024. Sinar Mas Group debuted with exhibits under the theme "APP & Supply Chain, Painting a Smart Dream of Green". In its 180 square meter exhibition booth, APP recreated a three-dimensional forest landscape to demonstrate its integrated "Plantation-Pulp-Paper" concept. Following the two key concepts of "Green Value Chain" and "Digital Innovation Chain", the exhibits comprehensively showcased the Group's achievements across the entire industrial chain from seedling cultivation, forest management, equipment manufacture, intelligent production, to product implementation. The exhibits also highlighted its high-quality green product solutions for both domestic and international markets, including "Golden Flagship" zero-carbon copy paper, VIRJOY zero-carbon tissue, zero-plastic food-grade coated kraft product, thermal paper, white kraft paper, and elegant white card paper, as well as other products for industrial, cultural and household uses.

Advocating Green Concepts

In September 2024, the roadshow of the "China Forest Certification in Action" program arrived in Chengdu. The program was jointly initiated by China Forest Certification Council (CFCC), Programme for the Endorsement of Forest Certification (PEFC), and APP China. Various forms of roadshow activities, such as exhibition bulletins, curations, and displays of "zero-carbon" products, were carried out in local communities and the zoo, promoting awareness and knowledge about forest certification and the concept of green consumption, attracting over 4,000 participants.



"China Forest Certification in Action" Chengdu Station

Managing Our Operational Environmental Footprint

APP China continues to deepen its green development practices and optimize its environmental management system, and fully promotes the construction of "Green Factory". The Company is committed to integrating sustainability principles into all aspects of its production and operation through measures such as implementing green energy transformation, optimizing water resource utilization, strengthening pollutant management, and implementing sustainable logistics.

Annual progress:

- RMB **1,536.2167** million in environmental investment, up **14.53%** year-on-year
- The annual energy savings generated through energy conservation and emission reduction projects: **142.3** thousand tons of standard coal
- Average industrial water reuse rate: **95.19%**
- Atmospheric pollutant emissions and wastewater discharges are **100%** compliant with regulatory standards
- Waste classification disposal rate: **100%**
- Comprehensive utilization rate of non-hazardous waste: **99.31%**

» Environmental Management Mechanism

Our mills have established environmental management policies and objectives, with the ISO 14001 Environmental Management System as the core framework, systematically 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. Our mills have established a comprehensive standardized management system with specific policies on energy management, wastewater management, atmospheric pollutant control, waste disposal, environmental monitoring, environmental impact assessment, and environmental performance evaluation.

To ensure the effective operation of the system, each mill has established a dedicated EHS Department and formulated an environmental management manual, which clearly defines the responsibilities and authorities of relevant departments. Our mills also strictly supervise the implementation of their management policies and continuously optimize these systems. In 2024, the Company invested RMB1,536.2167 million on environmental protection initiatives in total.

Our mills systematically conducted environmental risk identification and assessment to ensure the comprehensive control of environmental risks and enhance

the adequacy and applicability of our environmental management system. The identified problems were promptly addressed and rectified to effectively mitigate their harmful impact on the environment. Our mills have also formulated relevant emergency plans for various environmental emergencies, establishing a scientific and standardized emergency response mechanism through measures such as establishing and optimizing prevention and early warning mechanisms, standardizing emergency response procedures, and optimizing emergency response measures.



Rudong Base
Gold East Paper
Guangxi Jingui Pulp & Paper

Rudong Base systematically sorted out its production and operation links, and formulated a detailed list of significant environmental factors, with all possible environmental hazard factors comprehensively identified and assessed. For the major environmental risks confirmed through assessment, the company formulated targeted management plans and control measures, as well as the relevant mechanism for monitoring the effect of their implementation, ensuring that all environmental protection measures are implemented effectively and are continuously improved.

Gold East Paper carried out a comprehensive dynamic assessment of environmental factors. All departments systematically identified a total of 1,998 environmental factors based on operational content adjustments, regulatory standard updates, changes in material usage, and the operational status of production equipment, providing a scientific basis for subsequent targeted control measures.

Guangxi Jingui Pulp & Paper conducted the identification and assessment of environmental factors, reviewing 112 control documents from 33 departmental units across the mill and revising 65 documents. Each unit had developed corresponding preventive measures or emergency plans for the identified environmental factors within the year.



Hainan Jinhai Pulp & Paper conducted a comprehensive environmental hazard inspection focusing on the operational status of the company, the implementation of its environmental management system, pollutant emissions and discharges, the operational status of environmental protection facilities, as well as environmental issues regarding its surrounding areas. There were no major environmental risks identified in 2024. During the year, the company conducted over 400 mill boundary inspections, 350 daily checks, and 6 targeted checks, with 166 environmental hazards rectified in total, achieving a same-year rectification completion rate of 97%. These measures allowed the company to realize the proactive prevention and control of environmental safety hazards.

Guangxi Jingui Pulp & Paper conducted regular inspections focusing on key aspects such as boundary odors, noise pollution, dust control, rainwater ditch conditions, marine discharge pipeline operation, as well as the environment of its surrounding areas, building a solid environmental protection defense line through systematic and standardized environmental supervision and rectification measures.



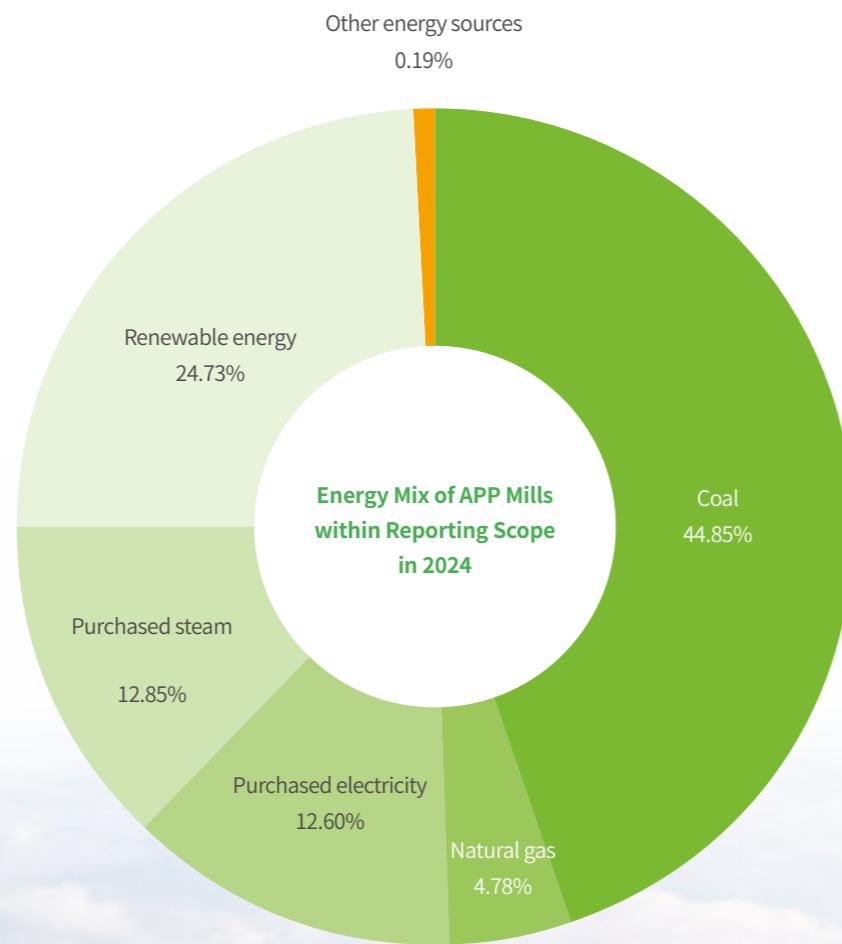
» Energy Management

Our mills have established their own energy management systems strictly in compliance with the 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 national standards and industry regulations, 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 "Energy Management Systems—Guidelines for a Phased Implementation" (GB/T 15587-2023). 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 the departments, and continuously optimizing energy management effectiveness through a regular evaluation mechanism.

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 their targets into scientific, reasonable and progressive annual goals focusing on key indicators such as the 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. The Group has included key indicators such as the comprehensive energy consumption

in its KPI evaluation system for its mills. We strive to deepen our energy conservation and emission reduction efforts to effectively accelerate the realization of our carbon reduction targets.



Note: Renewable energy includes black liquor and other biomass fuels, solar energy, and purchased green electricity.
Other energy sources mainly include gasoline, diesel, fuel oil, and liquefied petroleum gas.

Promoting Energy Conservation and Emission Reduction

As an important measure to achieve its carbon neutrality strategy, APP China is continuously upgrading its energy-saving technologies, a key component of its short- to medium-term emission reduction roadmap. The Global Technology R&D Department of APP China actively explores the research and application of cutting-edge energy-saving and carbon-reduction technologies. Through systematic technological upgrade plans, a series of energy-saving upgrade projects have been implemented at various mills, providing solid technical support for the Company's green and low-carbon transformation.

In 2024, under the coordination of the Global Technology R&D Department of APP China, our mills implemented a series of energy-saving technology upgrade demonstration projects, effectively enhancing their energy efficiency performance in production.



The Global Technology R&D Department actively explored motor technology, and promoted energy-saving motor technology regarding the replacement and upgrading projects of our mills. Among them, Jiangsu Base of Bohui Paper implemented an energy-saving upgrade project of the 2,500 kW low-concentration grinding motor in chemical-mechanical pulp production, achieving significant results with an annual electricity saving of 1.65 million kWh. Hainan Jinhai Pulp & Paper has put into operation a permanent magnet motor project and a wet grinder direct drive motor upgrade project. With the permanent magnet motor project alone, the company achieved an annual electricity saving of 898,100 kWh annually.



In response to the high unit consumption of clarified water, electricity, and steam during the production process of Gold East Paper, the Global Technology R&D Department conducted systematic diagnostic analysis, and helped the mill implement a series of measures, including seal water recovery, restoring the use of steam boxes, optimizing the heat recovery system, adjusting pulper operation time, and replacing traditional motors with high-efficiency permanent magnet motors. As the results, Gold East Paper achieved significant reductions in its unit water, electricity, and steam consumption indicators.



The Global Technology R&D Department has been focusing on maglev turbine vacuum pump as a key energy-saving technology due to its significant energy-saving effects and quiet operation characteristics. In 2024, Rudong Base replaced its Roots vacuum pump with maglev turbine vacuum pumps, achieving a 31% reduction in electricity consumption per ton of paper produced. In 2025, the Global Technology R&D Department has a plan to install 21 maglev turbine vacuum pumps at major mills to achieve greater energy-saving benefits.



Every year, our mills conduct a systematic diagnosis and assessment of their full-process energy-saving potential based on the characteristics of their respective production processes and energy usage. On this basis, our mills have established a number of targeted improvement project teams to develop and implement optimization plans for identified energy-

saving opportunities, achieving significant energy-saving and carbon reduction results. In 2024, our mills achieved a total annual energy-saving equivalent to 142.3 thousand tons of standard coal through the implementation of various energy-saving technological upgrades and management optimization measures.

The cumulative annual energy savings achieved

142.3 thousand tons of standard coal

Gold East Paper

Gold East Paper saved 25.66 million kWh of electricity and 160,000 tons of steam in 2024 through measures such as eliminating "fugitive emissions and leaks", optimizing and upgrading energy-consuming equipment, and improving electricity generation efficiency, reducing carbon emissions by 67,000 tons of carbon dioxide equivalent and achieving the economic benefits of RMB36.02 million.

Guangxi Jingui Pulp & Paper

Guangxi Jingui Pulp & Paper implemented a total of 81 energy-saving measures during the year, such as the upgrade of steam pipes for high-concentration chemi-mechanical pulp grinder and the use of dual-net processes to reduce dry pulp usage, achieving an annual energy saving of approximately 32,000 tons of standard coal. The energy consumption per ton of white cardboard decreased by 3 kilograms of standard coal compared to 2023.

Hainan Gold Hongye

Hainan Gold Hongye carried out a series of energy-saving and consumption reduction action plans, focusing on the refined management of electricity consumption per unit and drying energy consumption targets. The company reduced energy consumption per ton of paper by 3 kWh by using GPAM chemicals to reduce pulp grinding power. The exploration of direct-dive application of permanent magnet motors significantly reduced electricity consumption. In addition, the company also reduced steam pipeline losses with a digital model formulated with steam pipeline energy-saving optimization software, in combination with the application of new low-energy composite insulation materials.

Ningbo Asia

Ningbo Asia developed a three-year energy-saving and consumption-reduction plan for 2024-2026, and implemented a number of improvement projects to effectively reduce electricity consumption, such as replacing the circulating water pump motor from 500 kW to 250 kW, and using permanent magnet motors for the waste paper grinders and wet grinders.

Jiangsu Base of Bohui Paper

Jiangsu Base of Bohui Paper achieved an annual energy saving of approximately 22,002.12 tons of standard coal, which is equivalent to the carbon dioxide emissions reduction of 54,125.21 tons, through 16 energy-saving measures such as retiring high energy-consumption motors, using high-efficiency permanent magnet motors, and refined energy management.

Shandong Base of Bohui Paper

Shandong Base of Bohui Paper achieved an annual energy saving of approximately 734.02 tons of standard coal, which is equivalent to the carbon dioxide emissions reduction of 3,043.88 tons, through measures such as reducing the use of cooling water pumps, optimizing the tooth shape of pulping machine blades, and reducing the number of grinding discs in wet grinders.

Results of Energy-saving Projects in 2024

Gold East Paper

22 thousand tons of standard coal/year

Bohui Paper

23 thousand tons of standard coal/year

Guangxi Jingui Pulp & Paper

32 thousand tons of standard coal/year

Rudong Base

11 thousand tons of standard coal/year

Hainan Jinhai Pulp & Paper

28 thousand tons of standard coal/year

Ningbo Asia

22 thousand tons of standard coal/year

Hainan Gold Hongye

4.3 thousand tons of standard coal/year

Green and Low-Carbon Transformation of Energy

APP China vigorously develops renewable energy, taking self-built photovoltaic and biomass energy as key emission reduction paths to achieve its carbon neutrality strategy, promoting the transformation towards a greener and low-carbon energy structure. Our mills actively adopt photovoltaic power and biomass energy, achieving green electricity production and carbon reduction through photovoltaic power generation, while increasing the blending ratio of biomass fuel to effectively reduce coal consumption and the related carbon emissions.

In terms of photovoltaic power, the 50-MW rooftop distributed photovoltaic project of Gold East Paper generated a total of 55.55 million kWh in 2024, increased by 25.17 million kWh compared to 2023. This project can realize an energy saving equivalent to approximately 15 thousand tons of standard coal per year, reducing carbon dioxide emissions by approximately 32.5 thousand tons. The Phase II 24.74-MW distributed photovoltaic project of Hainan Jinhai Pulp & Paper is expected to generate approximately 28 million kWh of electricity annually, which can reduce carbon dioxide emissions by about 24 thousand tons. Ningbo Asia's 15-MW rooftop distributed photovoltaic project

started operation on August 21, 2024, generating 4.6291 million kWh of electricity in 2024, equivalent to the saving of 1,319.29 tons of standard coal.

In terms of biomass energy utilization, Gold East Paper increased the blending ratio of biomass, cumulatively utilizing approximately 50,000 tons of its own biomass and waste throughout the year. Hainan Jinhai Pulp & Paper improved the operational efficiency of the peeling machine to strictly control the quality of biomass fuel, and collaborated with its sister company Hainan Jinhua Forestry to procure tree roots to effectively increase the ratio of biomass fuel. Ningbo Asia used over 120,000 tons of biomass fuel of wood chips, bean stalks, and bean ash, saving 47 thousand tons of standard coal. Guangxi Jingui Pulp & Paper blended 104 thousand tons of biomass fuel, including 45 thousand tons of wood chips, 44 thousand tons of pulp residue, 13.7 thousand tons of bark, and 2,095 tons of waste wood, which allowed the mill to save 17.8 thousand tons of coal, reducing carbon emissions by 31.8 thousand tons, and creating a total emission reduction benefit of RMB3.12 million.

In addition, Ningbo Asia purchased 159.774 million kWh of green electricity in 2024, which is equivalent to a reduction of 19,636.22 tons of standard coal.

Solar power generation

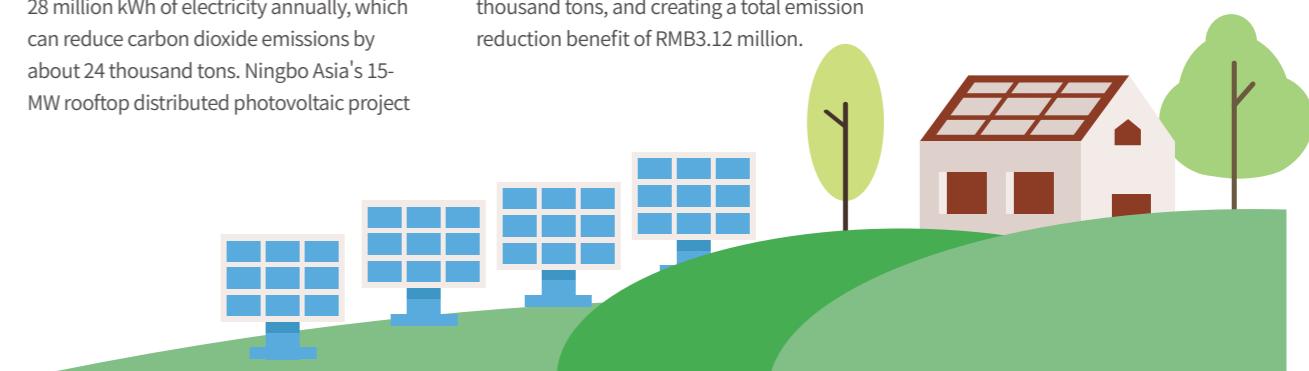
60.1812 million kWh

Proportion of renewable energy

24.73%

Proportion of biomass fuel

24.30%



» Water Management

APP China fully implements national regulations on water resources management in production and operation, 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 monthly assessment mechanism. Water conservation improvement project teams are also established to identify water conservation opportunities. 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 white water to effectively reduce the intake

of fresh water. Each mill also regularly carries out environmental protection awareness-raising campaigns to promote employees' awareness about water conservation as well as their participation in water conservation activities.

In 2024, Gold East Paper was selected for the "Industrial Wastewater Recycling and Reuse Model Cases List" and became a national pilot enterprise for industrial wastewater recycling. Guangxi Jingui Pulp & Paper was recognized as both a "Clean Production Enterprise of Guangxi Zhuang Autonomous Region" and a "Benchmark Enterprise for Industrial Water Conservation in Guangxi Zhuang Autonomous Region". Gold East Paper, Guangxi Jingui Pulp & Paper, and Hainan Jinhai Pulp & Paper were awarded the national title of "Water Efficiency Leaders among Key Water-using Enterprises and Industrial Parks". In 2024, our mills achieved an annual average industrial water reuse rate of 95.19%.

In January 2024, China Everbright Bank Nanjing Branch issued a RMB20 million Water Right Loan to Gold East Paper, marking the first water right pledge loan in Zhenjiang City. The issuance of the loan reflected the recognition of Gold East Paper's water resource management effectiveness by financial institutions, and also provided a demonstration case of financial support for the green transformation of the paper industry. Subsequently, Gold East Paper obtained a RMB50 million Water Right Loan from Jiangsu Bank and a RMB80 million Sustainability-Linked Loan from China Everbright Bank. A total of RMB835,000 can be saved as lower interest expenses from these three loans over their terms.

In 2024, Ningbo Asia also obtained a RMB100 million Water-Saving Loan, which was mainly used for water-saving renovations and maintenance of water-saving facilities.



Gold East Paper

- ◊ Implemented a project to reduce the clarified water consumption per ton of paper produced, taking measures such as optimizing the production process, recycling seal water, reusing vacuum pump water, and utilizing condensate from white water heaters, effectively reducing clarified water usage and achieving a significant reduction of 3.45 tons of water consumption per ton of paper produced per production line.
- ◊ Conducted a water balance testing, implemented over 10 water-saving technological upgrade projects, and used effluent to replace fresh water for landscaping, road cleaning and other miscellaneous uses, achieving a total annual water savings of 7 million tons and an annual water reuse rate exceeding 95%, creating an annual economic benefit of RMB8.76 million.

Hainan Jinhai Pulp & Paper

- ◊ Continuously conducted water-saving technological upgrades by systematically analyzing workshop water usage and implementing optimization plans, further enhancing water reuse with a water reuse rate of over 96%.

Rudong Base

- ◊ Actively promoted the reuse of reclaimed water by adding a MBR (membrane bio-reactor) process after the A/O effluent in the wastewater system. Part of the wastewater was treated through the MBR membrane to further remove pollutants such as suspended solids and bacteria, ensuring that the membrane effluent meets reuse standards and is reused in papermaking production. This project achieved not only water conservation but also significant pollution control results, with its overall water reuse rate increased to 92%.

Our mills strictly conduct wastewater treatment in accordance with the limit requirements of the "Discharge Standard of Water Pollutants for Pulp and Paper Industry" (GB 3544-2008). By continuously optimizing wastewater treatment system and implementing online monitoring and refined discharge control measures, we ensured that our wastewater discharge 100% meets the requirements of relevant discharge standards, with discharge concentrations significantly better than national standard limits.

Gold East Paper <ul style="list-style-type: none"> ◊ Constructed a clarified water sludge concentration tank to recover the sludge water generated during the production process of its water plant, reducing wastewater discharge by approximately 1 million tons annually. ◊ Deployed 24-hour automatic online monitoring devices at the wastewater discharge outlet that send water quality data in real-time to the government environmental supervision platform, ensuring that discharge indicators are open and transparent. Third-party testing with China Metrology Accreditation (CMA) qualification is conducted monthly for manual sampling monitoring, further ensuring the accuracy and compliance of monitoring data.
Ningbo Asia <ul style="list-style-type: none"> ◊ Implemented 24-hour real-time automatic monitoring of wastewater discharge, with manual sampling and testing of the entire wastewater process conducted every 8 hours, achieving early warning of risks and timely adjustment to management measures. ◊ Ensured timely advance notification for wastewater treatment regarding abnormal discharges due to production downtime, so as to ensure sufficient capacity in the emergency pool and adequate chemical supplies. Managed production scheduling to avoid simultaneous downtime of both paper machines, and utilized the two wastewater treatment lines for mutual support to ensure the reliability of wastewater treatment.
Guangxi Jingui Pulp & Paper <ul style="list-style-type: none"> ◊ Strictly ensured compliant wastewater discharge through optimizing wastewater treatment process, improving the operational efficiency of the wastewater treatment plant, and establishing an abnormal wastewater discharge management mechanism and a regular inspection mechanism. ◊ Developed a real-time wastewater discharge PI warning system. When the concentration of pollutants exceeds the preset threshold, the system automatically triggers a warning SMS notification, allowing relevant personnel to check and take response measures in a timely manner to prevent the risk of exceeding discharge limits.

Indicator	Unit	2022	2023	2024
Wastewater discharge per ton of paper produced (National standard* limit: 20 tons)	ton	5.79	6.18	6.07
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	9.60	10.05	10.01
COD emissions per ton of paper produced (National standard limit: 1.6kg)	kg	0.24	0.21	0.21
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	0.60	0.52	0.50

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

APP China Forestry actively carries out water resource management during forest cultivation by promoting scientific afforestation techniques and ecological measures to enhance the water retention capacity of soil, and reduce water resource consumption, forming a sustainable water resource management model.

- ◊ Scientifically planned afforestation operations during the rainy season, completed the preparation of land and seedlings in advance, accurately coordinated the planting with rainfalls to fully utilize natural precipitation, significantly reducing the water used for manual irrigation while ensuring seedling survival rates.
- ◊ Updated nursery irrigation system, effectively reducing water runoff losses by replacing traditional manual spraying operations with an efficient micro-sprinkler irrigation system.
- ◊ After each seedling is removed from its bag, a deep planting method of over 20 centimeters is used to ensure its root system penetrates deep into the soil, effectively enhancing the drought resistance of the seedlings and improving their survival rates.
- ◊ Based on the actual conditions of the forest land, water-retaining agents are applied at an appropriate time after land preparation for planting, significantly improving soil moisture utilization efficiency and seedling survival rates.
- ◊ Scientifically retain natural vegetation as buffer zones to form an ecologically isolation area, which not only reduces the interference of plantations on surface runoff but also effectively helps maintain local hydrological balance and reduce water consumption from vegetation transpiration.
- ◊ Implement a mixed afforestation model of acacia and eucalyptus to improve soil structure through their complementary effects, effectively enhancing the water retention capacity of soil.
- ◊ Regularly apply organic fertilizers to continuously increase soil organic matter content and enhance the water retention capacity of soil.
- ◊ Implement measures to return logging residues and fallen branches and leaves to the soil, combined with shrub and weed coverage, to reduce soil moisture evaporation and maintain soil humidity.
- ◊ Promote the dark pit afforestation technique, ensuring simultaneously digging, planting, and soil covering soil to minimize moisture evaporation due to prolonged exposure of soil.



» Air Pollutant Management

Our mills continuously optimize their exhaust gas 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 implement comprehensive control measures through source control, process management, and end treatment, to ensure that the concentration of atmospheric pollutant emissions is consistently better than the national emission standard limits,

with total emissions strictly controlled within the limits defined by the pollution discharge permit. In 2024, atmospheric pollutant emissions of our mills within the reporting scope continued to meet emission standard limit requirements.

Hainan Jinhai Pulp & Paper

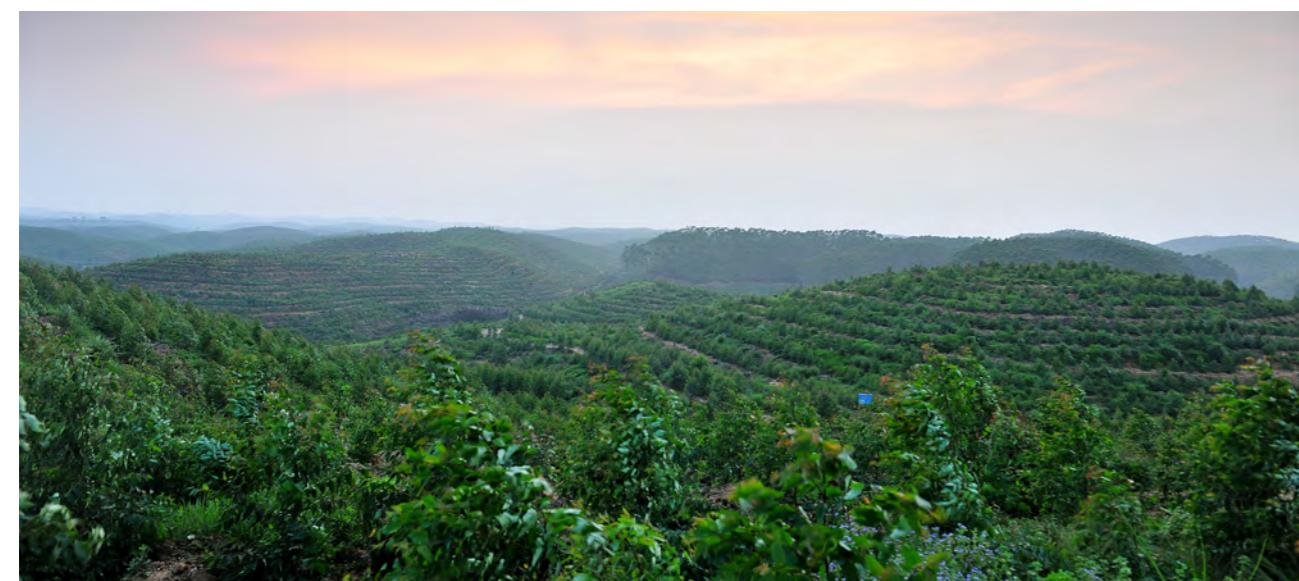
In 2024, Hainan Jinhai Pulp & Paper conducted three targeted inspections for wood dust and four targeted inspections for odor and promptly rectified the identified issues. A comprehensive approach was taken to effectively treat the identified dust leakage issues, including sealing leaks, repairing dust-proof nets, and spraying water and using mist cannon for dust suppression, effectively controlling dust diffusion.

Hainan Gold Hongye

Hainan Gold Hongye strictly implements pollution discharge permit management requirements and has entrusted professional institutions to conduct regular compliance testing for organized and unorganized exhaust gases. In 2024, the company replaced the natural gas hoods of five drying cylinders with steam hoods, and stopped all natural gas use in December, effectively reducing the generation of atmospheric pollutants such as sulfur dioxide and nitrogen oxides during natural gas combustion.

Ningbo Asia

Ningbo Asia invested RMB30 million to implement an odor treatment project in 2024 to effectively improve the air quality around the mill, with measures such as upgrading open cooling towers for wastewater to closed cooling towers, implementing deep treatment of exhaust from chem-mechanical pulp production, and raising the exhaust stacks of paper machines to promote gas diffusion, and adding a flotation pretreatment unit in the chem-mechanical pulp wastewater treatment process. The project significantly improved the odor issue, which was widely recognized by the government and local residents.



» Solid Waste Management

Our 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 18597-2023), and have formulated and revised relevant waste management system. Our mills implement a management system for non-hazardous waste and hazardous waste, with detailed operating procedures established for waste segregation at source, standardized collection, safe storage, and compliant treatment of different types of waste, fully practicing waste management principle of "reduction, recycling, and safe disposal". By continuously optimizing its solid waste management measures, Gold East Paper was recognized as one of the first batch of enterprises with the title of "Waste-Free Factory" in Zhenjiang in 2024.

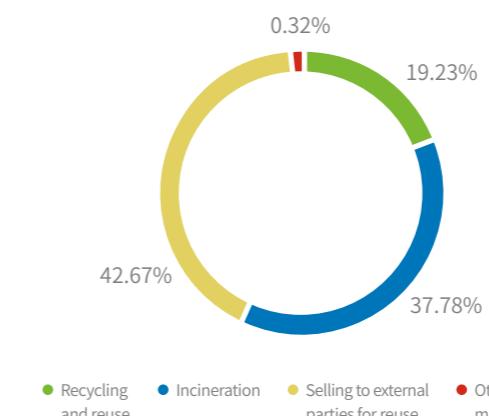
APP China implements classified management and resource utilization for non-hazardous waste generated during the production process, which include fly ash, slag, sludge, white mud, green mud, gypsum, waste alumina, wood chips, and pulp residue, aiming to achieve a win-win situation for both environmental benefits and economic benefits. For example: white mud is reused as a desulfurizer for the boiler flue gas in self-owned power plant; green mud, wood chips, and pulp residue are used for co-firing in self-owned power plant; recycled paper fibers are used for co-firing and sold externally for the production of corrugated paper, yarn tube paper, and organic fertilizers; fly ash, coal bottom ash, and gypsum are all sold externally as raw materials for cement or concrete; and waste alumina is sold externally for ceramic manufacturing.

Our mills strictly manage hazardous waste generated during the production process, which mainly include waste mineral oil, used chemical containers, waste catalysts, waste activated carbon, waste ink, and oil-

containing waste. Strictly in accordance with the requirements of environmental regulations, we established standardized hazardous waste storage areas with warning signs and information bulletins, implementing classified and zoned storage management with regular inspections. All hazardous waste is entrusted to third-party organizations with professional qualifications for compliant disposal.

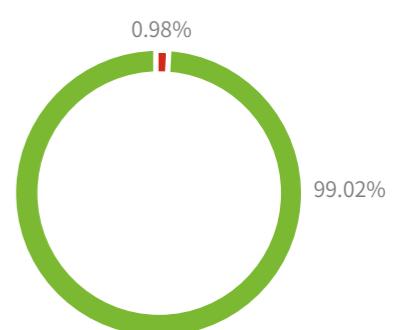
To reduce the generation of waste from the source, the Company strengthens product lifecycle management through measures such as optimizing production processes and technological innovation. For example, Gold Hongye Paper innovatively developed the water-dissolvable core tube paper technology for the production of rolled toilet tissue, effectively reducing waste generation during the production process and product usage.

Methods of Non-hazardous Waste Disposal at APP China Mills in 2024



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

Energy Recovery from Waste Incineration



Ningbo Asia Promoted the Utilization of Sludge

Ningbo Asia operates two bubbling fluidized bed incinerators, which utilize wastewater sediment sludge, wood chips, and heavy residues from chemi-mechanical pulp production as fuel to effectively reduce the use of coal and biomass fuel. The steam generated is reused in the paper-making workshop, forming an energy recycling system. In 2024, the company processed a total of 389,003 tons of sludge, including 20,472 tons from external sources. The company also utilized 9,289,524 cubic meters of biogas generated from wastewater treatment, equivalent to saving 6,596 tons of standard coal, further reducing its sludge treatment cost by RMB6.644 million.

"Battle Against Plastic" - Promoting PET Bottle Recycling

On April 22, 2024, World Earth Day, APP China launched the "Battle Against Plastic" campaign across the group. The campaign aimed to reduce plastic pollution and promote resource recycling by promoting better recycling services to transform waste plastic into reusable resources.

We put up dedicated PET bottle recycling bins on each floor of our headquarters. Collected bottles were regularly transferred to a dedicated recycling agency for reuse. The campaign also planned to launch a series of cultural products made with the recycled material in the future. All APP China subsidiaries participated in this campaign. As of the end of 2024, the campaign had covered over 15,000 employees of the Company and collected and recycled a total of over 3,000 PET bottles.



"Battle Against Plastic" PET bottle recycling bin

» Developing Green Logistics

APP China vigorously develops green logistics, focusing on strengthening the application of green packaging and new energy logistics vehicles, and logistics route optimization, continuously promoting energy conservation, carbon reduction, and efficient resource utilization in the logistics process.

The Company actively promotes the application of green packaging and integrates green concepts into packaging management. Through measures such as recycling and reuse wooden pallets, corn starch bulk packaging, and used packaging, we have reduced the consumption of packaging materials and the use of plastic packaging, effectively increasing the recycling rate of packaging materials.

Our mills have been gradually replacing their transportation vehicles with new energy vehicles, and implementing a "diesel-to-electric" for forklifts, continuously increasing the proportion of new energy vehicles and reducing energy consumption and pollution caused by traditional fuel vehicles. During the reporting period, Hainan Jinhai Pulp & Paper took measures to improve the utilization rate of shore power at its terminals. Reduced use of generators not only reduced air pollutant emissions and noise pollution, but also contributed to building a cleaner and quieter operational environment in the port area.

We continued to optimize our logistics system by increasing the proportion of water transport, railway transport, and water-

Preserving Biodiversity

» Biodiversity Conservation Measures

In recent years, APP China has continuously monitored rare or protected plants and animals near our mills, plantations and surrounding areas. In July 2024, black-winged stilts and egrets were spotted resting at Shandong Base of Bohui Paper. Jiangsu Base of Bohui Paper is located within 25-kilometer straight-line distance from the Dafeng Milu (*Elaphurus davidianus*) National Nature Reserve, with wild Milu, a national first-class protected animal, were sighted frequently near the mill. In addition, a number of our plantations have identified protected plants and animals in forest land. The presence of

wildlife close to our operating area is not only an indication of well-protected biodiversity, but also a reminder for us to pay greater attention to and take active measures to better preserve biodiversity.

To this end, we have intensified the efforts for monitoring and protecting wild animals and plants in our daily production operations and forest 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 of the People's Republic of China", the "Environmental Protection Law of the People's Republic of China", and the "Wildlife Protection Law of the People's Republic of China". We have formulated relevant policies and regulations, such as the "Wildlife (RTE Species¹ Included) Protection Regulations", and the "Measures for the Administration of Biodiversity Conservation and Monitoring", to comprehensively standardize and deepen our biodiversity conservation efforts.

APP China Forestry's Key Biodiversity Conservation Measures



¹RTE Species: A collective term for rare, threatened, and endangered species.

Targeted Measures to Enhance Forestland Ecological Quality



To better preserve the biodiversity of our plantations, Jiayao Plantation in APP China Forestry's Guangdong Business Area has explored a scientific and sustainable cultivation model regarding the impact of chemical substances on the environment. Regarding weed control in the early stages of afforestation, we prioritize manual weeding over using chemical herbicides to minimize the interference with the ecosystem. Regarding fertilization management, we strictly adhere to the precision fertilization principles of "precise quantity, precise distance, and precise location" to improve nutrient utilization efficiency, prevent soil and water pollution caused by fertilizer runoff due to rainfall, and effectively reduce the overall use of fertilizers and pesticides. All fertilizer bags have to be recovered after use to prevent secondary pollution. We also fully implement green operational standards to ensure a certain level of biodiversity in our plantations.

Jiayao Plantation has also been conducting internal and external audits under the CFCC framework, systematically evaluating its forest management system and operational activities. Regarding the observation items and minor issues identified by the auditors, the plantation promptly formulated rectification measures to continuously optimize its sustainable forest management practices with closed-loop management. Through a series of targeted measures and continuous improvements, the plantation has not only optimized the ecological quality of the forestland but also accumulated practical experiences, which could be replicated to support the green development and biodiversity conservation of the Company.

» Biodiversity Identification

APP China Forestry has established a systematic identification, recording, and training mechanism, aiming to strengthen the protection of biodiversity in forest areas based on the identification of protected species. Before each operation, forestry workers must conduct comprehensive surveys of the forest and surrounding areas based on national/provincial guidelines for key protected wildlife species, as well as reference documents such as the "Color-Illustrated Guide to Understory Plants" compiled by the Company. Forestry workers are required to identify national/provincial protected species and native tree species, and complete standardized record keeping

process, including photo taking, location positioning, filling out the "Biodiversity Survey Record Form" or the "Wildlife (Including RTE) Species Record Form", and map marking with GPS coordinates. These records will provide a basis for subsequent ecological protection efforts. Meanwhile, we organized trainings for forest workers on wildlife identification and protection to enhance their capabilities to identify and protect these species during operations.

APP China Forestry has been conducting HCV assessment of our plantations and the surrounding areas for years. In 2024, during the implementation of the HCV assessment,

a number of animal species of conservation significance were monitored in various plantations, including owl, silver pheasant, egret, stone frog, marsh frog, cobra, green snake, python, wild boar, and *Bos gaurus*. Our forestry subcompartments also discovered rich understory vegetation during the biodiversity surveys, including national key protected plants such as *Alsophila spinulosa*, *Anoectochilus roxburghii*, *Cibotium barometz*, and *Nepenthes mirabilis*. In response, we promptly took corresponding conservation measures and carried out relevant public awareness raising and education activities.



Stone frog identified at our Guangdong Business Area

» Biodiversity Impact Monitoring



APP China continues to strengthen biodiversity monitoring and ecological environmental assessment. We have established long-term monitoring sample areas for eucalyptus plantations in Hainan, Guangdong, Guangxi, and Yunnan. Systematic monitoring and assessment of ecological indicators such as vegetation diversity, water quality, and soil nutrients are conducted to objectively and accurately evaluate the impact of forestry activities on the ecosystem. In addition, the Company plans to further strengthen its capacity to independently conduct routine ecological monitoring, laying a solid foundation for comprehensively enhancing the ecological and environmental benefits of its forestry operations.



Monitoring biodiversity impact

Scientific Assessment of the Ecological Functions of Eucalyptus Plantations



To objectively assess the impact of eucalyptus plantation on ecological environment, Guangdong Business Area of APP China Forestry conducted a comparative study with the guidance of experts from the Research Institute of Fast-Growing Tree of the Chinese Academy of Forestry, and APP China Forestry Technical Center. Four sample plantations were selected, including Shaoguan, Zijin, Jiayao, and Yuexi. The control plots were established in monoculture eucalyptus plantations, while the comparison plots were established in surrounding secondary broadleaf forests, as well as monoculture slash pine (*Pinus elliottii*) forests. Methods such as vegetation surveys, water quality testing, and soil sampling monitoring were used to systematically compare the differences in ecological functions of the three different types of forests in terms of biodiversity maintenance, soil and water conservation, and soil nutrients.

The 2024 survey results show that on average there are about 50 different types of plant species, including rare and protected species, growing under eucalyptus forests. In addition, the water quality monitoring results from the test areas all meet the standards for farmland irrigation water, while the soil fertility indicators of eucalyptus plantation are similar to those of adjacent forests of other tree species.

Ecological Monitoring in Hainan



In August and October 2024, APP China Forestry and its Hainan Business Area conducted ecological environmental monitoring operations in several sample areas in Tunchang, Lingao, and Dongfang. The scope of monitoring included biodiversity surveys, water quality sampling and testing in runoff plots, as well as soil sample collection. The collected soil samples were sent to the Hainan Academy of Forestry for testing and analysis. The monitoring data will be used to help us better implement precision ecological improvement measures.



Ecological monitoring in Hainan

» Biodiversity Conservation Capacity Building

APP China continuously enhances biodiversity conservation capabilities through systematic capacity building initiatives. We have developed an illustrated catalog of national/provincial-level key protected species. In addition, we conduct regular trainings on the identification and protection of wildlife for various functional departments and frontline forestry workers, post illustrations of protected species on operation sites, and carry out on-site briefings to ensure better understanding and application of the relevant knowledge. For contractors and relevant forestry operational personnel, we provide them with targeted pre-operation training and require them to know how to identify and protect key protected species, and post illustrated materials at the entrances of work sheds and operation areas. In addition, the Sustainability Development Team of APP China Forestry took the lead and formulated a guideline for recording and protection operations for protected species, including RTE species. We also organize training for relevant personnel to ensure the effective implementation of protection policies at the grassroots level.



Water Source Monitoring in Yunnan



In March 2024, Yunnan Business Area of APP China Forestry launched the first water source monitoring of the seventh year of its operation. The monitoring focused on a comparative analysis of changes in water flow width and depth between March 2023 (same period last year) and December 2023 (previous period). Monitoring results show that the water flow width and depth had no significant changes compared to the same period last year, but a decrease compared to the previous period, mainly due to less rainfall in the first quarter. The water resource conditions at all monitoring points were relatively stable. This monitoring operation further enriched our long-term data accumulation on the ecological characteristics of water sources in our operation areas, which is of great value for future water ecological protection efforts.

Social

Working Together to Create a Community of Responsibility

APP China strives to maintain its original intention of doing good and to grow and thrive together with our diverse stakeholders such as employees, customers, and the community. We firmly believe that talent is our most valuable asset. We are committed to protecting employees' rights and interests, cultivating professional talent, and ensuring employee health and safety. We adhere to our service concept of "customer first", insisting on providing safe, reliable, and high-quality products to meet customer needs while actively listening to customer feedback. Furthermore, we take the initiative to fulfill our social responsibilities, focusing on key areas such as rural development, education support, and healthcare, promoting the deep integration of business value and social value, and continuously creating shared value for society.

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Employee Development and Training

APP China regards talent as its most valuable asset. While safeguarding employees' rights and interests, we are committed to providing comprehensive support for employees' career development. We have established a sound training system and career development platform to help employees achieve their career aspirations. We have also set up a scientific and effective incentive mechanism to encourage employees to fully leverage their innovative capabilities and initiative, contributing their wisdom and strength to the development of the Company.

Annual progress:

- Percentage of female employees: **20.89%**
- Percentage of female employees in management: **17.67%**
- Proportion of positions filled through internal recruitment and internal transfers: **86.43%**
- Total employee training hours: **1,225,387.55** hours
- 117** positions provided for people with disabilities

» Protecting Employee Rights

APP China strictly adheres to national and local laws and regulations, such as the "Labor Law of the People's Republic of China", the "Labor Contract Law of the People's Republic of China", and the "Civil Code of the People's Republic of China", upholding the principles of equality, voluntariness, and consensus, and fully implementing a labor contract management system. The Company strictly prohibits the use of child labor, resolutely eliminates any form of forced labor and employment discrimination, effectively ensures equal pay for equal work, and continuously strives to build a fair, just, and harmonious labor relationship.

The Company provides employees with the five social insurances and housing provident fund, and continuously optimizes its employee welfare system comprehensively. Through a dedicated Employee Care

Fund, we provide employees with serious illness with additional financial support. We also provide female employees with financial support for accident insurance and medical insurance coverage for their underage children. Our mills also offer a number of additional benefits such as meal allowances, high-temperature subsidies, complementary insurance, and employee dormitories based on actual conditions. Our Shanghai headquarters implements a flexible working hour mechanism with a staggered work schedule, and employees can also apply for telecommuting under special circumstances.

To fully listen to the voices of employees and continuously optimize corporate management, we have established various communication channels, such as employee representative meetings, employee satisfaction surveys, and regular

employee townhall meetings. Guangxi Jingui Pulp & Paper and Gold East Paper organized "Family Open Day" events in 2024. Employees invited their families to experience their work environment and corporate culture through on-site visits and interactive experiences, which allowed their families to better recognize and support their work, and effectively enhanced the positive interaction between employees' families and the Company.

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 libraries, basketball courts, table tennis rooms, badminton courts, and gyms, etc., and regularly organize diverse activities to create a healthy and proactive cultural atmosphere.



Guangxi Jingui Pulp & Paper organized the 2024 "Family Open Day" event

Employee Townhall Meeting at Hainan Gold Hongye

In March 2024, Hainan Gold Hongye organized the departmental Q1 Employee Townhall Meetings. A total of 389 of company management, department supervisors, as well as employee representatives participated in the event. Employees shared their work experiences and insights, and gave their suggestions and advice for the company's development. During the Q&A session, the company's management provided detailed answers and explanations to the questions raised by employees. The Townhall Meeting not only enhanced communication among employees but also bridged the gap between employees and management, as well as strengthened employees' sense of participation and ownership in the company's development.



Hainan Gold Hongye held an Employee Townhall Meeting

Mental Health Lecture at Hainan Jinhai Pulp & Paper



To better ensure the physical and mental health of employees, in June 2024, Hainan Jinhai Pulp & Paper organized a lecture on mental health knowledge for employees with the support of the Hainan Federation of Trade Unions. An expert lecturer from the Southwest University delivered the training session with the theme of "Happy Work, Happy Life", using case studies and interactive communication to help employees get familiar with the concepts of mental health cognition and psychological adjustment methods. The lecturer also conducted an on-site psychological assessment to guide employees to effectively utilize the positive effects of psychology to establish a rational, calm, and healthy workplace mindset.



Experts explained mental health knowledge to employees

» Promoting Talent Introduction

APP China continues to improve its talent introduction mechanism and implement its talent recruitment plan to optimize its talent structure, aiming to gradually build a multi-level, sustainable talent echelon. In 2024, the Company intensified its recruiting efforts, conducting campus recruitment fairs in 87 universities and colleges, reaching over 10,000 students, attracting outstanding young talents to join and injecting fresh vitality into the development of the Company.

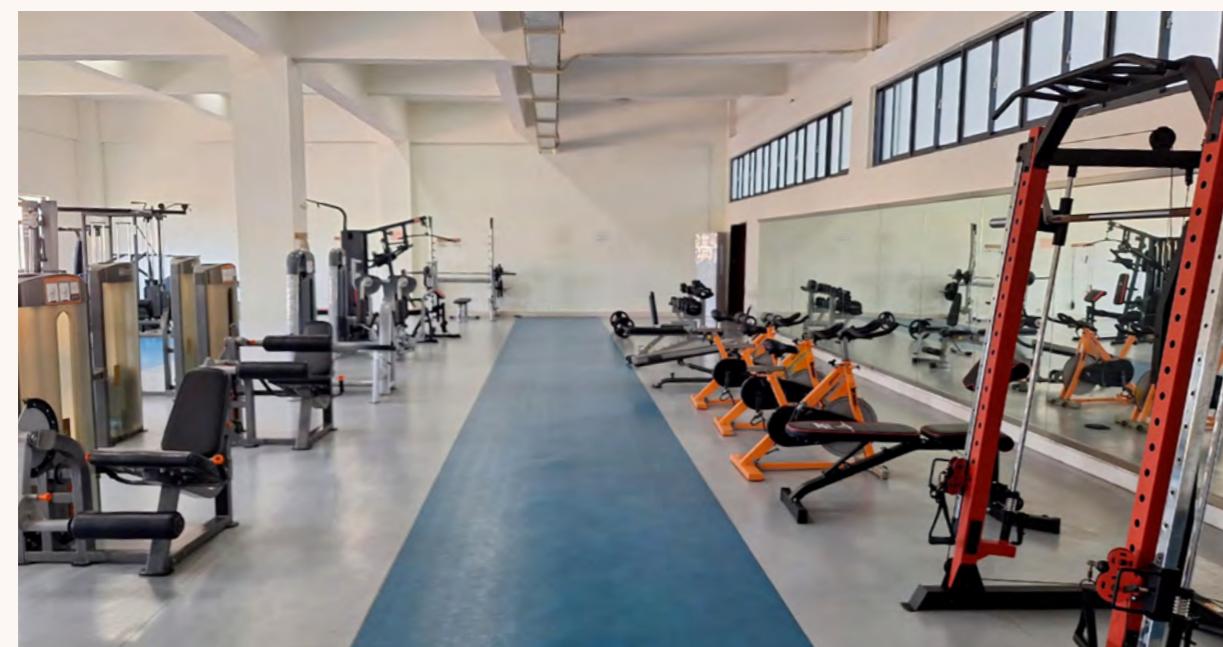
To deepen the industry-academia integration and promote resource sharing and mutual development, the Company continues to strengthen its exchange and cooperation with higher education institutions in areas such as talent cultivation, technological innovation, and industrial development. In 2024, Gold East Paper hosted exchange events for experts, professors and students from the School of Chemistry and Chemical Engineering of Southeast University and the Harbin

Far East Institute of Technology, as well as hosted a visit by a government delegation from Zhenjiang, engaging in in-depth discussions on topics such as "industry-academia-research" cooperation and talent introduction and cultivation. In addition, Gold East Paper also signed a university-enterprise cooperation agreement with Harbin Far East Institute of Technology.

Guangxi Jingui Pulp & Paper Promotes Employee Participation in Sports Activities



Guangxi Jingui Pulp & Paper has equipped its Workers' Home with convenient fitness facilities for employees. To provide employees with a more comfortable and professional fitness experience, and to create a refreshing and vibrant space for physical exercise, the company renovated its gym and billiard room in October 2024, adding new fitness equipment, replacing fitness equipment cushions, billiard table covers, as well as carpets in the billiard room. In 2024, the company's Badminton Association, Table Tennis Association, and Basketball Association actively organized employees to participate in internal and external sports events and competitions, effectively promoting employees' physical and mental health.



Renovated gym at Guangxi Jingui Pulp & Paper

"Youth Iron Army" University-Enterprise Cooperation Program



In 2024, APP China launched the "Youth Iron Army" university-enterprise cooperation program. Focusing on academic resources in Ningbo and surrounding areas, the program aims to explore the cultivation of high-quality young technical talent reserves through industry-academia integration. The program successfully established partnerships with two institutions after conducting systematic evaluation, signing cooperation agreements, and establishing professional orientation classes. As of the end of 2024, the program cultivated 21 students that were employed by us. We developed a customized teaching plan and implemented a rotation training mechanism to help these newly employed students complete their internships.

"APP Dream Plan" Summer Internship Program



In 2024, the Company continued to implement its "Dream Plan" program in various locations. Participating students received full tuition scholarships, accommodation subsidies, and partial living and transportation stipends, as well as career opportunities at APP China. Guangxi Jingui Pulp & Paper formulated a comprehensive summer internship training program for the 2023 cohort of the program, covering job practice, skill practice, and corporate culture awareness, aiming to help them better fit in and further hone their professional knowledge and skills. A total of 139 students participated in this summer internship training.



"Dream Plan" summer internship training program

Field Study Trip for University Students



In September 2024, 91 students from the Pulp and Paper Engineering major of the Department of Food Science and Engineering at Nanjing Forestry University, led by their professors, visited Gold East Paper for a field study trip. Following the "on-site observation, field teaching, and cognitive improvement" learning structure, the students visited the intelligent production lines, the wastewater treatment plants, and the product showrooms of the company, learning about the production process and product performance from professional lecturers. The field study effectively deepened the students' understanding of professional knowledge. Gold East Paper will further leverage its experience as a "Jiangsu Province Employment Internship Demonstration Base" to explore an integrated industry-academia learning model with universities, jointly promoting the effective implementation of a collaborative education mechanism.

» Talent Cultivation and Development

APP China has established a "dual-track" career development path for technology and management, providing employees with broad growth space and diverse choices for career development, while also focusing on cultivating core technical talents and excellent management talents. Meanwhile, the Company also adopts a variety of measures, such as opening internal job mobility channels and implementing a tiered performance evaluation mechanism, to comprehensively support employees' growth and values realization. In 2024, a total of 1,776 job positions were released internally within the Company, with 86.43%

of which filled through internal recruitment and internal transfers.

The Company continues to promote the construction of a multi-level and multi-dimensional talent training system, ensuring that employees at different levels and in different business units can all enjoy a rich variety of training opportunities and resources. In 2024, we further optimized the "Tuition Subsidy Policy for On-the-job Continued Education", providing stronger support for employees' career development by raising the tuition reimbursement ratio to 80%.

Job positions released internally within the Company in 2024

1,776

Proportion of positions filled through internal recruitment and internal transfers

86.43%

Optimizing Management Trainee Program



As one of our hallmark talent programs, the Management Trainee Program has a mature training system and a clear training path with years of experience and continuous improvement. To ensure the continuous supply of young talent, we further optimized its program mechanism in 2024, launching a two-year management trainee training program for 542 management trainees. Our headquarters collaborated with our BUs to jointly cultivate the trainees with learning, on-the-job practical training, mentoring, and evaluation and examination, aiming to help the trainees quickly fit in with our corporate culture and strengthen their professional skills, accelerate their growth into key business personnel or frontline managers, and become part of our core talent reserve in a step-by-step way, achieving a win-win development for both individuals and the enterprise. After the conclusion of the Training Camp, the 2024 Management Trainee Program received a score of 9.1 from the participating trainees regarding the training courses.



APP China's 2024 Management Trainee Program Training Camp

LEAP801 Mid-Level Leadership Excellence and Acceleration Program



To cultivate the management backbone, in October 2024, we launched the APP China LEAP801 Mid-Level Leadership Excellence and Acceleration Program. 74 employees from the group headquarters and various BUs participated in the opening ceremony and the first learning module lasting two and a half days. The course included core leadership development, strategic thinking, digitalization insights, and financial management fundamentals, aiming to help mid-level managers systematically enhance their leadership skills through lectures, workshops and case studies.



LEAP801 Mid-Level Leadership Excellence and Acceleration Program

Empowering the Growth of Internal Trainers



Internal trainers are an important bridge for knowledge transfer within an enterprise, and their teaching capabilities directly affect the learning outcomes and knowledge retention of their trainees.

In August 2024, APP China held a three-day group-wide certified train-the-trainer training for internal trainers, providing interactive demonstration, scenario simulation, video learning and other related training for over 40 internal trainers to help them enhance their teaching skills. Focusing on the core goal of "livening up your classroom", the participants learned the COOL model (Connecting, Organizing, Offering Support, and Livening Up), conducted simulation teaching, and completed course certification, effectively helping the participants master the teaching skills and enabling them to turn theory into vivid teaching practice.

Guangxi Jingui Pulp & Paper organized an "Internal Trainer Course Development and Teaching Skills" training in 2024, aiming to facilitate efficient knowledge transfer by helping the internal trainers improve their professional skills in course development, PowerPoint slides optimization, and more effective teaching. More than 60 grassroots supervisors and outstanding internal lecturers participated in the training.

Training and Development Program for "Strivers"

We have held the "APP China Striver Selection" campaign for three consecutive years from 2018 to 2024. The "Group-level Strivers" selected through a multi-level rigorous selection process have become an important talent pool for us. We are committed to providing them with resources and support in career development, professional skills enhancement, and humanistic care, so as to encourage more employees to join the ranks of strivers and continuously expand our talent pool and innovation capacity. In 2024, we launched the "Striver Mentorship Program". 44 pairs of mentors and mentees across multiple dimensions within the same mill, or across different mills and BUs were formed to become a learning network that connects points to areas. Over a hundred practical experiences and tips were accumulated and replicated during the process. The mentors fulfilled their responsibilities and imparted knowledge and skills with an open mindset, fully supporting the growth of young employees.

"Experts Share"

"Experts Share" is an online light knowledge sharing program that we produced for our employees. In 2024, the program focused its topic on "Innovation and Change" and introduced a short video segment for the first time. We invited senior managers and industry experts from different departments and business areas, and created an open knowledge-sharing platform for all employees through relaxed dialogues and in-depth sharing. A total of 18 high-quality short video programs were released in 2024, which not only enriched employees' knowledge reserves but also effectively stimulated the innovation awareness within our organization.

» Employee Motivation and Engagement

In APP China, employee compensation consists of fixed salary and performance-based salary. The Company implements a position-based salary system. Salary levels of employees are set in a fair and unbiased way, taking into account factors such as the job position, qualifications, experience, performance, and capabilities of each employee. We establish a performance evaluation mechanism centered on goal setting at the beginning of the year, mid-

year goal revision, year-end performance assessment, and comprehensive evaluation. This mechanism serves as a key reference for decisions on employee bonus, promotion and raise, providing positive incentives for employee development. In addition, we also adopt the MBOS (Management by Olympic System), where employees can earn generous bonuses by completing innovative projects and participating in collective competitions.

In 2024, we continued to carry out various MBOS proposal activities across the entire group, effectively motivating employees' innovative vitality and promoting the transformation of innovative concepts into actual results. Through this platform, the rationalization suggestions put forward by employees were given full attention and implemented, effectively promoting efficiency improvement and innovation-driven growth of the Company.

Hainan Gold Hongye Sought Improvements through Collective Wisdom

In July 2024, Hainan Gold Hongye organized a brainstorming meeting themed "Inspiring New Vitality, Promoting New Dynamics" focusing on cost reduction for non-wood pulp. Managers, directors, and heads of various departments from the mill gathered to discuss how to enhance production efficiency and reduce costs through innovative management and technological means. Participants engaged in in-depth discussions and exchanges based on their experiences and insights in their respective fields, covering aspects such as energy, chemicals, auxiliary materials, labor, and material consumption. The brainstorming session resulted in a number of ideas for innovative solutions and the relevant implementation plans, which emphasized the importance of sustainability and resource utilization while focusing on technological innovation and process optimization. A total of 176 improvement plans were proposed, including 90 energy saving plans. A bi-weekly tracking plan was outlined for each prioritized improvement project to ensure their implementation.

Health and Safety

APP China always places safety as the top priority with a people-oriented approach. We specify safety management responsibilities to enhance the intrinsic safety of production, and continuously strengthen safety culture construction to create a robust safety atmosphere and make safety part of the behavior patterns of employees. We also comprehensively prevent and manage occupational disease risks, actively undertaking our primary responsibility for occupational disease prevention and control, and fully safeguarding the occupational health of all workers.

Annual progress:

- **958,398.16** hours of safety training carried out in total, up **19.81%** year-on-year
- RMB **9.8917** million spent on personal protective equipment
- Number of emergency drills: **986**
- Average hazard rectification rate: **97%**

» 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. We continuously optimize our

EHS management system to ensure a safe and sustainable working environment.

Our mills have also formulated their own occupational health and safety management system in accordance with the ISO 45001 standard. A dedicated Safety Production Management Committee has been established at each mill, which oversees the implementation of risk classification control and the dual prevention mechanism for safety hazard identification and rectification, as well as the certification of safety management standardization, aiming to comprehensively

enhance the safety management of the mill. In 2024, to fully leverage the technical expertise of various professions in safety management and promote the solid implementation of specialized safety initiatives, some mills established specialized safety subcommittees. For example, Guangxi Jingui Pulp & Paper established five subcommittees under its Safety Committee, focusing on Fire Safety, Forklift, Electrical, Chemicals, and Cranes respectively. Shandong Base of Bohui Paper established Fire Safety and Electrical subcommittees, effectively strengthening safety management in related specific areas.

APP China EHS Organizational Structure

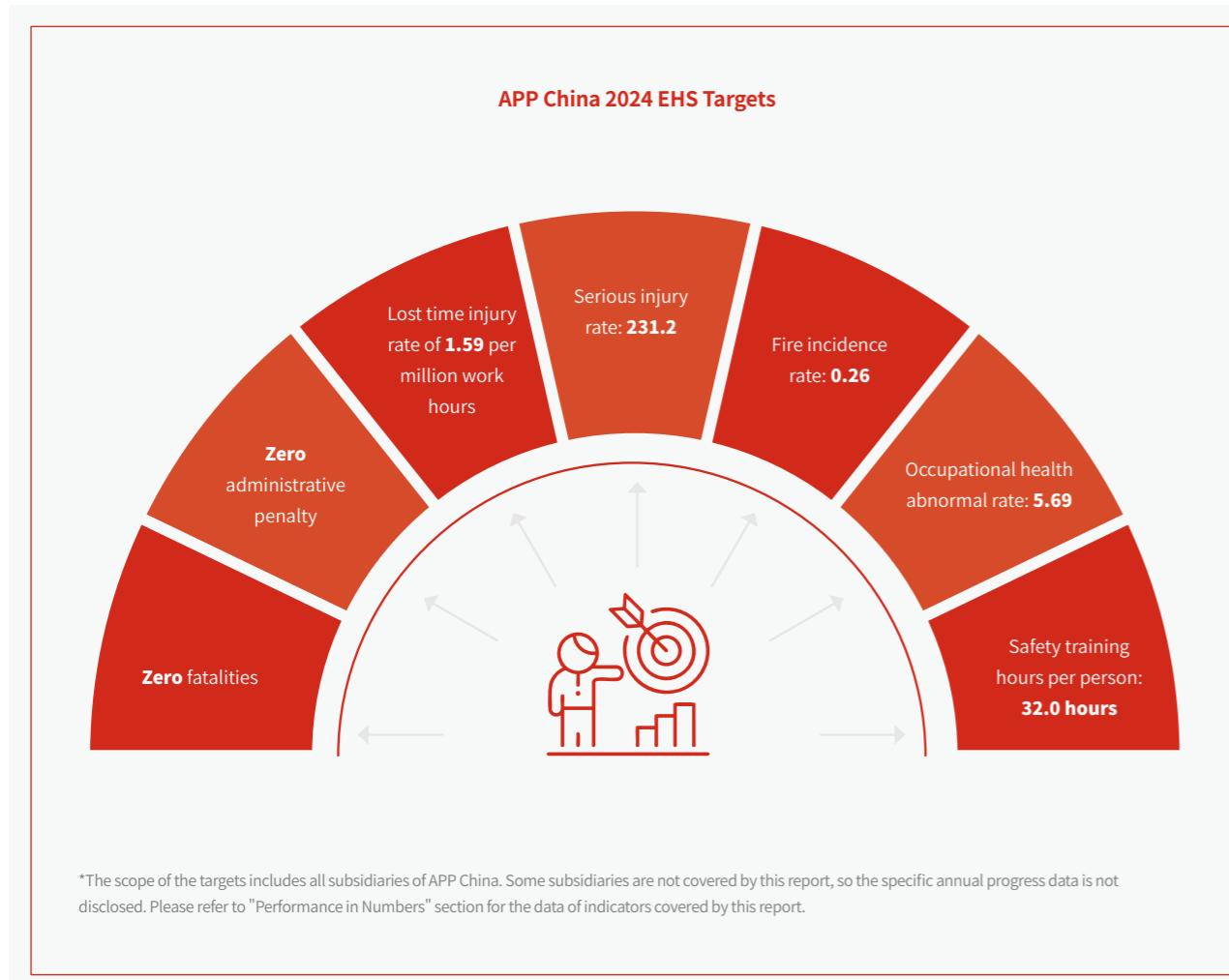


Responsible for formulating EHS strategic planning and providing guidance on the key EHS initiatives.

Responsible for formulating EHS-related policies, coordinating and supervising the EHS departments of various business units in conducting inspections, system construction, operation control, and other related tasks.

Responsible for conducting inspections and audits and establishing systems at the mills under management, and providing guidance on the operation of their EHS system.

Responsible for the operation and control, development and implementation of Standard Operating Procedures (SOPs), on-site management, and daily audit of the EHS system, to ensure comprehensive coverage and efficient operation of the EHS management system across all production processes.



Compared to 2023, APP China has set stricter annual EHS goals for 2024. The Company broke down its EHS goals level by level and organized MBOS competition activities. Both competition results and goal performance reviews were reported to the Company's leadership every quarter. In addition, each subsidiary has set more specific goals based on their actual situation, such as hazard rectification rate, safety training qualification rate, and number of occupational disease incidents, which were tracked and reviewed monthly.

In order to further promote the implementation of EHS responsibilities, improve the EHS reward and punishment mechanism, and strengthen the awareness

of EHS responsibilities among personnel at all levels, APP China formulated the "EHS Accountability Policy for Abnormal Incidents" in 2024. The accountability mechanism is based on the concept of "those who manage business must also manage safety", which is proposed by the "Law of the People's Republic of China on Work Safety". Therefore, the primary responsibility for safety management falls with the "business line", with the direct responsible personnel, the direct supervisors, the person-in-charge, and the primary person-in-charge of the "business line" as the responsible parties. In addition, EHS regulatory personnel in general are not held accountable for any particular abnormal incident, unless there is evidence showing that they have failed to fulfill their

regulatory duties, in which case they should also bear certain regulatory responsibilities. Disciplinary actions include warnings, demerits, serious demerits, and termination of contracts without compensation. Based on the severity of the incident, responsible individuals may face punishment such as demotion, downgrade, salary reduction, and deduction of performance bonuses.

To establish a continuous improvement mechanism for EHS performance, our headquarters scientifically collect and analyze EHS data through an online system to assess and monitor the EHS performance data of the group headquarters, BUs and mills in real-time. An EHS data dashboard system has been developed for relevant supervisors.

Consolidating Fundamental Safety

In 2024, Guangxi Jingui Pulp & Paper, Hainan Gold Hongye, and several other mills formulated a "Three-Year Action Plan for Enhancing Fundamental Safety (2024-2026)", aiming to effectively prevent the occurrence of major safety accidents and comprehensively improve safety management. The action items focus on strengthening the source governance of safety production, safety hazard screening and rectification, safety production management system standardization, intrinsic safety management, safety management capabilities of personnel.

In terms of strengthening intrinsic safety management, Guangxi Jingui Pulp & Paper increased its investment in safety production technology projects during the year. With an annual safety production expenditure of approximately RMB7.04 million, the company carried out a number of projects, such as automation of paper cutting and packaging, explosion-proof upgrade of dust collectors, and replacement of safety and fire-fighting facilities, significantly reducing related safety risks.



» Enhancing Work Safety Practices

Strengthening the Safety Culture

In June 2024, APP China organized the "Safety Production Month" campaign, uploading its "2024 Safety Month Work Safety Law Examination" and safety videos such as "Safety Production, Our Responsibility" to the Safety Management column on the APP Cultural Voice platform. All employees were required to take the examination and watch the videos, allowing them to deepen their awareness of the "Law of the People's Republic of China on Work Safety". Besides, we also launched a safety micro-video campaign, focusing on themes such as safety operations and safety precautions. We also encouraged our mills to organize safety knowledge competitions to promote the dissemination of safety culture in an entertaining way. The outstanding videos collected from the competition were published on the APP Cultural Voice platform.

In 2024, APP China and its BUs and subsidiaries carried out diversified safety education and training programs based on their actual situations, continuously strengthening employees' safety awareness and cultivating safety concepts.

Guangxi Jingui Pulp & Paper Cultivating a Safety Culture



In 2024, Guangxi Jingui Pulp & Paper conducted a total of 42 safety training sessions, covering 73 batches of new employees, 411 contractors and 266 employees, as well as 160 interns from Indonesia, and organized the learning of typical incidents cases.

In terms of safety culture promotion, the company published over 100 safety-related articles on internal platforms, and further implemented the visual management practices, completing the standardized installation of over 10,000 signs to make safety management more visual and direct. In addition, a total of 55 sessions of safety culture presentations and discussions were held during the year, with a total of 1,926 participants.

During the Safety Month event, the company effectively enhanced employee safety awareness through activities such as hanging promotional banners, creating Safety Month exhibits, showing safety warning education videos, conducting inter-departmental safety inspections, and carrying out safety accident cases warning education.

Safety Education and Training at Hainan Jinhai Pulp & Paper



Hainan Jinhai Pulp & Paper has established a dedicated program aimed at achieving a 100% participation rate in "three-level" safety education and training. The company updated the list of newly hired and transferred employees every month, asked its workshops to implement the "three-level" safety education and training, and supervised the implementation of on-site safety training programs. Training materials were reviewed to ensure that they met the requirements. Training hours of each department were calculated monthly, and the departments failed to achieve their monthly training hour targets were required to take timely improvement measures.

Gold East Paper Held a Safety Knowledge Competition



Gold East Paper held its annual Safety Knowledge Competition in August 2024. All departments actively participated in the competition. Eight teams passed the preliminary selection to participate in this competition. The competition consisted of three rounds: mandatory questions, buzzer questions, and risk questions, covering key areas such as production safety, equipment operation procedures, emergency response, fire safety, and occupational health. This event created a strong safety culture atmosphere, helping employees to enhance their safety awareness to ensure the timely identification and elimination of safety hazards.

Hazard Identification and Rectification

APP China strictly adheres to the requirements of laws and regulations such as the "Law of the People's Republic of China on Work Safety". The Company has established and implemented a safety risk classification and control system to fully implement the dual prevention mechanism for hazard screening and rectification, and continuously enhanced its safety accident prevention and control capabilities. With its hazard screening system, we systematically record hazard information identified during production operations and the hazard screening process. All production and operation units are required to conduct quarter and annual statistical analyses of their safety hazard screening and rectification results. In 2024, these units carried out safety inspections and targeted safety checks to promptly identify

and eliminate safety hazards, with an average annual hazard rectification rate of 97%.

In 2024, our mills actively carried out safety emergency drills around various scenarios. For example, Guangxi Jingui Pulp & Paper conducted a typhoon and flood emergency drill with the simulated scenario of a category 17 super typhoon hitting Qinzhou Port; and Ningbo Asia organized an emergency response drill for a simulated biogas leakage accident. With 986 emergency drills carried out in total during the reporting year, we effectively enhanced the emergency response capabilities and coordination of our employees, and further optimized our emergency management system, laying a solid foundation for ensuring safe production in our enterprises.

Ningbo Asia Actively Implemented Hazard Screening



In 2024, Ningbo Asia carried out a series of hazard screening activities. For example, before holidays, comprehensive safety and fire inspections were carried out led by department heads, with all hazards identified required to be rectified before holiday. The company leadership team took the lead in conducting monthly safety inspections. Supervisors at all levels took the lead in managing employee safety behaviors and daily safety inspections within their departments. There were also targeted safety checks focusing on employee outfit, electric vehicle charging, fire safety, and other aspects. In addition, the company also hired a third-party organization to carry out hazard screening, with all identified deficiencies fully rectified within the reporting period.

Rudong Base Deeply Implemented Hazard Management



Rudong Base established a detailed monthly EHS hazard master ledger, which records safety hazards identified in comprehensive inspections and targeted safety checks on fire safety, forklift operations, dust control, unsafe behaviors, and contractor safety management, as well as the self-inspection and rectification activities of various departments. The identified hazard factors were managed through graded classification with specific requirements on the responsibilities, measures and deadlines for rectification. Rectification progress was tracked regularly to ensure closed-loop management.

Each department has meticulously identified the hazard factors involved in their operations and assessed their risk levels and severity. Based on these analyses, the company has developed an "Unacceptable Risk List" and formulated specific management plans for the relevant risk factors accordingly.

Average hazard rectification rate in 2024

97%

Total number of emergency drills carried out in 2024

986

Contractor Safety Management

Contractor safety management is a key aspect of an enterprise's safety management. APP China has incorporated contractors into the Company's EHS management system, steadily standardizing and strengthening contractor safety management with a series of measures, such as qualification review, communication on safety factors, regular safety training and contractor meetings, in-process supervision, and contractor safety inspections at least once a month. In 2024, to further clarify the EHS qualifications and safety review requirements for contractors, we standardized the documents for contractor safety and environmental management, including the "Safety and Environmental Management Agreement", the "Contractor EHS Pre-Assessment Form", and the "Qualification Review Checklist", aiming to prevent safety risks during the cooperation process from the source by standardizing the access process and strengthening the pre-review mechanism.

Strengthening the Contractors' Primary Responsibility for Safety



In 2024, Hainan Jinhai Pulp & Paper and Hainan Gold Hongye revised their "Contractor Safety Assessment Management Measures". The revisions mainly included classified and graded management for contractors and their safety personnel, quantitative assessment and dynamic reward and punishment mechanism, and closed-loop supervision. We strove to strengthen the contractors' primary responsibility for safety management and encourage them to continuously improve their safety management.

During the reporting period, Hainan Jinhai Pulp & Paper and Hainan Gold Hongye jointly organized case-based warning education sessions for directors and safety personnel of contractors. Typical violations and work-related injuries involving contractors in recent years were analyzed to effectively enhance the safety awareness and safety management capabilities of the management team of contractors. We also organized a contractor safety knowledge competition to further encourage contractors to actively engage with our safety cultural system, and improve safety management with shared responsibilities.

» 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 related management policies, forming a robust management system with the Headquarters EHS Department in charge of the overall management, EHS Departments of BUs provide guidance and conduct regular audits, and the EHS Department of each mill implements the specific occupational health-related initiatives.

In 2024, APP China initiated an occupational health improvement project at the group level, and launched an Occupational Disease Hazard Notification System. The system collects and summarizes occupational disease hazard factors from various entities within the group. With specific information of positions with exposure to occupational disease hazards as well as the relevant hazard factors, the system can quickly generate occupational health hazard notifications for different positions, which not only

significantly improved the efficiency and accuracy of occupational hazard notification for new employees, but also enhanced the standardization of the Company's overall occupational health management through digitalization, providing more comprehensive protection for employees' occupational health.

In 2024, various units under APP China vigorously implemented occupational disease prevention and control initiatives. Our mills comprehensively ensured employee health with measures such as regular monitoring and public disclosure of occupational disease hazard factors, strict enforcement of pre-job, on-the-job, and post-job occupational health examinations, and the establishment of personal health records. Employees were equipped with appropriate personal protective equipment, and its use was closely monitored and regulated. To effectively safeguard employees' occupational health, the Company also held regular occupational health training and awareness raising activities, filed occupational disease hazard reporting in accordance with the law, and implemented the "three simultaneities" requirements for new projects (Occupational

disease prevention and control measures must be designed, constructed, and put into operation simultaneously with the project). Rudong Base conducted identification and assessment of occupational health and safety risks and opportunities based on a series of internal and external factors and developed corresponding response measures, and organized basic knowledge training and examinations on occupational hygiene and occupational disease prevention for various departments. Hainan Jinhai Pulp & Paper conducted an online occupational health knowledge quiz for all employees during the "Law of the People's Republic of China on Prevention and Control of Occupational Diseases" Publicity Week event, with a total participation of 2,861. Guangxi Jingui Pulp & Paper invited expert lecturers from hospitals to conduct health education lectures for employees, provided training on first aid knowledge and emergency response skills, and conducted a themed health training and posted posters in workshops on the prevention of high temperature related risk factors, such as heatstroke, to help employees better understand how to deal with high temperature and respond to relevant emergencies.

Product Responsibility

APP China prioritizes quality management enhancement as its core responsibility, systematically improving product quality control by rigorously implementing the incoming inspection standards for raw materials, continuously optimizing production processes, and consistently refining the quality management system. We are committed to providing customers and consumers with safe, reliable and high-quality products, and continuously meeting the market's growing demands for product quality.

comprehensive quality control procedure, which also covers the management of non-conforming products and products with potential safety hazards.

We continuously strengthen total quality management, and implement comprehensive quality supervision activities. We strive to promote all employees to pay greater attention to quality improvement through providing training for production personnel on quality awareness and self-inspection procedures, as well as conducting major quality inspection activities. To continuously improve our product quality, our mills not only strengthened their quality

inspection efforts, but also engaged in in-depth cooperation with their suppliers to jointly explore quality improvement solutions, effectively boosting the stability of raw material quality.

We actively utilize advanced technologies to enhance our quality management system. In 2024, Ningbo Asia introduced the infrared spectral analysis technology. The mill established a raw material infrared spectrum database, and systematically collected the spectral data of standard samples, building a digitalized quality comparison system for raw materials, which plays a positive role in ensuring the stability of raw material quality.



Ningbo Asia Launched the "Hundred-Day Quality Campaign"



From September to December 2024, Ningbo Asia launched the "Hundred-Day for Quality Campaign". Through a series of measures such as systematic employee skills training, strengthening quality awareness education, and conducting job skills competitions, the company enabled all employees to significantly improve their total quality management capability and product quality control capabilities. Customer complaint losses of the company achieved a significant reduction during the campaign. A number of outstanding quality control model teams were also identified accordingly. This campaign not only effectively consolidated product quality advantage of the company, but also laid a solid foundation for it to establish a long-term quality management mechanism and continuously enhance market competitiveness.

Gold East Paper's Off-White Eye Protection Paper Received CQC Certification



Gold East Paper attaches great importance to the health and safety attributes of its products. The company has developed a number of healthy and environmentally friendly paper products, such as green publishing paper, cream white double-coated paper, and non-fluorescent double-coated paper. In 2024, the company's off-white eye protection paper successfully passed the China Quality Certification Center (CQC) product certification in accordance with the "Hygienic Requirements for Preventing Myopia in Children's and Adolescents' Learning Supplies". This product features a soft tone and excellent printing performance, making it widely applicable for printing children's books, textbooks and other learning materials.

Guangxi Jingui Pulp & Paper Strengthened Raw Material Quality Control



In 2024, Guangxi Jingui Pulp & Paper continued to implement the "Management Measures for Quality Assessment of Chemical Raw Material", conducting systematic quality assessments of bulk supplied chemicals quarterly, and achieving closed-loop tracking and management of suppliers. The suppliers with low assessment scores were urged to take timely improvement measures. In 2024, nine suppliers completed their quality improvement activities at our request.

To enhance the accuracy of raw material quality control, the company revised 21 testing procedure documents during the year, covering key aspects such as testing methods and inspection instructions, significantly improving the accuracy of inspections. The company also comprehensively revised 14 raw material acceptance standard documents. By adding testing items such as pulp permeability, pulping curves, chemical infrared spectral analysis, and latex functionality, and adjusting control indicators, the company further optimized its acceptance standards to ensure the quality of raw materials, laying a solid foundation for product quality.

High-Quality Food-Grade Packaging Paper of Bohui Paper



Bohui Paper aims to "create the most stable liquid packaging paper", and adopts various measures to ensure stable and reliable product quality that meets the stringent standards for aseptic liquid packaging paper, including strict control of raw material quality, establishing aseptic laboratories, upgrading the WIS system and microbial control system of the paper machine, and conducting multiple rounds of training for production line employees. The company's aseptic liquid packaging paper has received widespread acclaim from customers since its commercial launch in May 2023, with monthly orders of several thousand tons.



Customer Relationship Management



"Little A Classroom"

APP China has established efficient service processes and a diversified customer communication system adhering to its customer-oriented service philosophy. The Company strives to provide customers with full lifecycle solutions covering pre-sales consultation, in-sales support, and after-sales services. We respond promptly to help customers solve problems related to using paper products through both remote and on-site technical support, and are committed to creating product value and service experiences that exceed customer expectations. We actively promote experience exchange and knowledge sharing among our mills, forming a collaborative improvement mechanism by regularly sharing customer service skills and best practices for handling customer complaints, continuously optimizing the overall quality of our customer service.

We regard customer feedback as an important driving force for continuous improvement. Our mills not only quickly respond to customer complaints, but also conduct systematic analysis based on survey results

Ningbo Asia Comprehensively Promoting Customer Communication



Ningbo Asia has implemented a number of effective measures to promote customer communication and improve service quality. The company timely responded to customer needs through phone, WeChat, video conferencing, and other forms of online consultations, organized "Little A Classroom" and technical exchange meetings regularly to educate customers on scientific paper usage knowledge and provide better printing solutions, and conducted online lectures to share product application cases and experience with customers. In addition, the company has established a mentoring mechanism within the department to accelerate experience transfer through paired mentoring, continuously enhancing customer service capabilities of the marketing team.

Public Welfare and Community Engagement

Upholding our charity philanthropy of "helping the frail, the needy, the elderly, and the young, and building a harmonious society", APP China actively fulfills corporate social responsibility with diverse programs and activities. The Company continuously carries out a series of public welfare projects focusing on rural development, education support, healthcare, and other key livelihood areas, striving to promote the deep integration of business value and social value, as well as deepening the exploration of business for good.

Annual progress:

- RMB **1.69** billion donated cumulatively in China
- **33** charity projects implemented in 2024 by the Huang Yicong Foundation, with a donation totaling around RMB **85.55** million
- **14,345** hours of volunteer services from our employee volunteers

» Supporting Philanthropic Undertakings

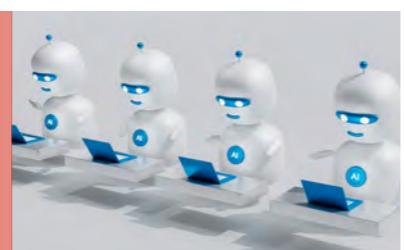
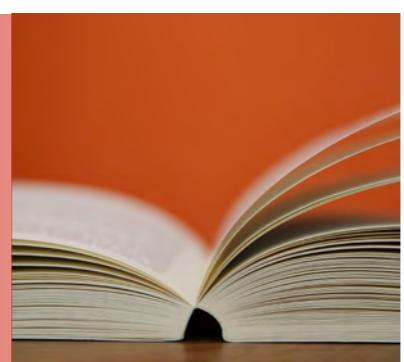
Huang Yicong Foundation actively explores sustainable public welfare models that meet the needs of social development and conveys love and warmth through practical actions. The Foundation has been continuously deepening its exploration in promoting equity in education, cultivating youth talent, and supporting scientific research, healthcare, and rural revitalization, striving to create lasting and far-reaching value for society by constantly optimizing project implementation efficiency.

In addition to providing direct funding and in-kind support and disaster relief, the Foundation attaches great importance to the transition of its role from "donor" to "enabler". The Foundation has established sound project management and follow-up mechanisms, forming a closed-loop management cycle of "implementation-feedback-optimization" with regular communication with beneficiaries, on-site visits, and satisfaction surveys, ensuring the

transparency and sustainability of its public welfare projects. Meanwhile, the Foundation actively encourages APP China employees to volunteer in project implementation, practicing the spirit of volunteering in various public welfare activities such as educational assistance and material donations.

Progress of Key Programs of the Huang Yicong Foundation in 2024

Huang Yicong Scholarship
Since 2002, APP China has established scholarships at multiple universities across China 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. The Foundation holds annual meetings with scholarship recipients to communicate study and career development. In 2024, the Foundation continued this scholarship program at East China Normal University, Nanjing Forestry University, Chinese Academy of Forestry, and Huqiao University with optimized application guidelines. As of the end of 2024, the Foundation had already granted RMB7.9639 million in scholarships to over 2,745 recipients.



Supporting AI research

To support the cultivation of forward-looking 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 in the form of endowment funds from 2022 to 2024. The funding will be used for supporting academic activities and the development and construction of research institutes under the General Artificial Intelligence Training Program.

Mathematics Leading Talent Program

To help cultivate leading talent with a solid foundation in mathematics and theoretical physics, the Foundation made the plan to donate RMB20 million to establish an endowment fund, with the interest from the fund to be used as scholarships to support 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 for student scholarships and hiring distinguished scholars. By 2024, the program had completed the donation of RMB20 million cumulatively. After paying out the scholarships for the year, the investment proceeds had a balance of RMB668,600 as of the end of 2024.



Supporting Geriatric Medicine Research

From 2021 to 2025, the Foundation collaborated with Shanghai Ruijin Hospital on several programs such as the Guangci APP and Geriatric Hospital Center. In 2024, the Foundation donated RMB3 million to the "Guangci APP" program, with a total donation of RMB17 million made cumulatively to this program in support of the development of geriatric medical research. The Foundation also donated RMB30 million to the "Geriatric Medical Center" program, with a total donation of RMB100 million made cumulatively, mainly for high-level research cooperation, promoting the development of geriatric medical disciplines, and training clinical and nursing talent in geriatrics.



Green Finance and Carbon Neutrality

The Foundation has committed to donating RMB15 million from 2021 to 2025 to the Tsinghua University Education Foundation to fund research projects related to green finance, and RMB20 million from 2022 to 2026 to fund the Institute for Carbon Neutrality of Tsinghua University to carry out research on key technologies, publish research reports, and cultivate talent. As of the end of 2024, RMB12 million had been donated cumulatively for each program respectively.



"Heart · Liver Baby" and "e-Heart Health"

Since 2022, the Foundation has collaborated with the Chen Haozhu Academician Medical Development Special Fund of the Shanghai Fudan University Education Development Foundation with a RMB5 million donation to support the "Heart · Liver Baby" medical charity program and the "e-Heart Health" medical science popularization program.

- ◊ The "Heart · Liver Baby" medical charity program aims to establish a three-in-one multi-level medical support model featuring "patients come to Shanghai – doctors go local - local treatment". The program deepens cross-region collaboration of hospitals, greatly expanding the coverage of assistance. In the past three years, the program has provided assistance to a total of 102 financially disadvantaged patients with heart and liver diseases from Yunnan, Xizang, Xinjiang, Qinghai, Jiangxi, Sichuan, and Zhejiang.
- ◊ The "e-Heart Health" medical science popularization program has trained over 200 pop science lecturers, which consist of experienced experts from various disciplines, innovative young doctors, and young medical students who have more time and diverse presentation styles. The multi-level structure of the lecturers can better meet the diverse needs of different enterprises and communities, thereby delivering more high-quality medical science popularization content to grassroots audiences.



Promoting Sino-US Youth Exchange

In August 2024, the Foundation, in collaboration with Tsinghua University Education Foundation and the Sports Department of Tsinghua University, initiated a summer basketball exchange program for universities in China and the United States. More than 50 male and female basketball players from Tsinghua University and US Ivy League schools participated in the event, engaging in in-depth exchanges during basketball training camps and friendship games, learning from each other in areas such as technical and tactical training and team spirit. During the event, the US players also toured historical and cultural heritage sites such as the Great Wall and the Summer Palace, and experienced traditional Chinese culture through activities like lacquer fan making.



» Contributing to Rural Revitalization

In 2020, Sinar Mas Group incorporated the goal of "improving the lives of millions" into its "Sustainability Roadmap: Vision 2030". Since then, APP China has been continuously implementing rural revitalization projects around this goal, contributing to the achievement of China's rural revitalization strategy through measures such as developing local industries, enhancing the agricultural industry chain benefits, and cultivating new types of business entities. With its active exploration, practice and outstanding contribution, APP China was awarded the "2024 Rural Revitalization Contribution Award" presented by the 14th Philanthropy Festival and 2024 ESG Summit.



APP China was recognized with the "2024 Rural Revitalization Contribution Award"

Talent Revitalization and Rural Education

Since its inception, the Foundation has 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 of different age stages in remote areas.

To support talent cultivation for rural revitalization, the Foundation has established the Huang Yicong Rural Talent Revitalization Scholarship at Jiangxi Environmental Engineering Vocational College. Scholarship is granted to students with excellent academic performance, exceptional skills, and well-rounded characters, encouraging them to apply what they have learned and actively participate in the construction of their hometown.

In 2014, the Foundation collaborated with non-profit organizations specializing in early childhood education and launched the Sunshine Preschool Project in remote rural areas in Yunnan Province. The project provides preschool education for children aged 3-6 and also focuses on supporting the cultivation of local preschool teachers. From 2019 to 2022, the program was primarily implemented in Lancang County. Since August 2022, the project has expanded to Honghe County, with an implementation period from 2022 to 2025, with 530 enrolled children supported currently. As of the end of 2024, the program had benefited a total of 1,110 children with a donation of RMB2.1 million.

Yunnan Lancang Rural Revitalization Pilot Project

In October 2023, the Foundation officially signed a pairing assistance agreement with the Lancang County government, launching a rural revitalization pilot project based on local natural resource endowments. The project focuses on the comprehensive utilization of local bamboo resources, aiming to advance the development of a bamboo shoot industry chain based on local conditions as well as market potential.

In 2024, the project achieved phased progress after completing its preliminary research. An industrial development plan was formulated by Lancang County Bamboo Industry High-Quality Development Taskforce, which can be implemented upon government approval. The government signed an investment agreement for the Sichuan Good Food Bamboo Shoot Processing and Base Construction Project, with specific implementation details currently being developed. Lancang Lvja Vegetable Distribution Company finished the construction of a bamboo shoot fine processing plant and started purchasing raw materials, with production set to begin after obtaining the necessary licenses.

The Golden Orchard Program

The Golden Orchard program, launched in March 2023, was funded by the Foundation and implemented in collaboration with APP China Forestry. The program aims to steadily advance local specialty crop growing, accelerate industrial integration, and promote employment. The 1,000-mu industrial park is located in Xingjin Village, Datangbu Town, Xinfeng County, Ganzhou City in Jiangxi Province. The project focuses on various activities related to the growing of a local specialty cash crop – navel orange, including fruit picking tourism, fruit deep processing, ecological sightseeing, and leisure tourism, aiming to create a complete industrial chain ecology.

In 2024, the Golden Orchard program continued to implement standardized construction and achieved the GAP (Good Agricultural Practices) Level 1 Certification with significant progress in seedling management, green crop protection practices, and orchard development. In September, representatives from the All-China Federation of Returned Overseas Chinese and the overseas Chinese community visited the park for a special research on rural revitalization. In November, the park had its first harvest, making a positive contribution to the development of rural cooperatives, and stable employment and capacity building for farmers.

As of the end of 2024, a total of about 20,600 navel orange seedlings have been planted. The construction of power facilities, a water and fertilizer integration system, and park roads were also completed, with the digitalization project progressing as planned. The program provided technical training to a total of 689 participants and had benefited 6,010 individuals with a donation of RMB9.25 million cumulatively.

Goals of the Golden Orchard Program

Short-term Goals 2022-2024

Mainly develop the primary industry: Focusing on growing and producing fruits and other agricultural and forestry operations, choosing businesses that meet the needs of local residents, and developing smart agriculture.

Mid-term Goals 2025-2027

Gradually expand to the secondary industry: Developing processing and other related projects of agricultural products, including deep processing, branding, and marketing.

Long-term Goals 2028-2030

Develop the tertiary industry: Developing services and technology services based on previous results, and accelerating the development of the service, technology, information, and leisure tourism industries.



One Plus One Matching Fund Project

Since 2012, the Foundation has partnered with APP China employees in Shanghai to support schools in rural areas through paired funding activities. APP China employee volunteers make monthly donations to provide financial assistance to primary and middle school students from impoverished families, while the Foundation provides matching funds to support the paired schools to improve their facilities. In 2024, the project was implemented in four locations: Huining and Zhentai in Gansu, Hongsibu in Ningxia, and Xunhua in Qinghai. As of the end of 2024, 1,101 employee volunteers had participated in the project, donating a total of RMB2.46 million, benefiting approximately 4,000 students in total.

Total donations from employee volunteers

RMB 2.46 million

Total number of benefited students approximately

4,000 person-times



The Sunshine Preschool project is being carried out in Honghe County, Yunnan

» Supporting Community Development

APP China actively practices corporate social responsibility by organizing and carrying out various public welfare activities, continuously contributing to and injecting positive energy into community development with programs focusing on community development, ecological protection, and promoting educational equity.

"Love · Never Stops on Paper" Girl Hygiene Program

The "Love · Never Stops on Paper" Care from Overseas Chinese was jointly initiated by APP China and the Shanghai Overseas Chinese Foundation in 2020. The program provides menstrual products as well as health education for left-behind girls in economically disadvantaged areas. The project has been implemented in several middle schools in Yunnan, Guangxi, Chongqing, Gansu, and other regions.

In 2024, the program came to the Dorje Dan Ethnical Vocational and Technical School in Jiuzhi County, Guoluo Tibetan Autonomous Prefecture, Qinghai Province, donating menstrual products for students and inviting lecturers to teach children about the physical and psychological changes, self-protection, and other puberty-related health knowledge, safeguarding the healthy growth of children both physically and mentally.

Paper Culture Promotion

Since its opening in April 2021, Ningbo Asia's Green Papermaking Culture Center has been actively carrying out papermaking culture promotion activities, adhering to the concept of "inheriting and promoting Chinese papermaking culture and modern ecological environmental protection". On Earth Day 2024, Ningbo Asia held a special environmental education event at its Green Papermaking Culture Center with the theme "Green and Low-Carbon, Global Action Against Plastic". More than 30 children participated in immersive activities, including interactive commentary, multimedia displays, traditional papermaking practices, environmentally themed creations and other elements, gaining a close understanding of sustainability concepts. The event significantly enhanced the ecological awareness and sense of social responsibility of the participants. As of the end of 2024, the Center had received a total of 280 groups totaling over 4,000 visitors.



Children participated in activities at the Green Papermaking Culture Center

Community Care

Hainan Jinhai Pulp & Paper has long been committed to community public welfare. The company regularly visits the elderly, children, and households 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 festivals and holidays. On the eve of the 2024 Spring Festival, the company donated RMB126,600 to care for 132 elderly citizens and 14 low-income households with both financial assistance and warm festive greetings. In addition, Hainan Jinhai Pulp & Paper has been supporting the Danzhou Children's Welfare Orphanage for sixteen consecutive years with regular visits and donations.

In the field of educational public welfare, Hainan Jinhai Pulp & Paper has donated office equipment, traditional Chinese instruments, and other teaching supplies to local kindergartens and schools, and sponsored campus festive activities such as Children's Day celebrations to enrich the teaching and learning experience of teachers and students. In addition, the company also supported university student volunteers from Yangpu to carry out rural public welfare classroom projects, helping to improve the quality of basic education in rural areas and promoting educational equity and more inclusive development through practical actions.

Disaster Relief

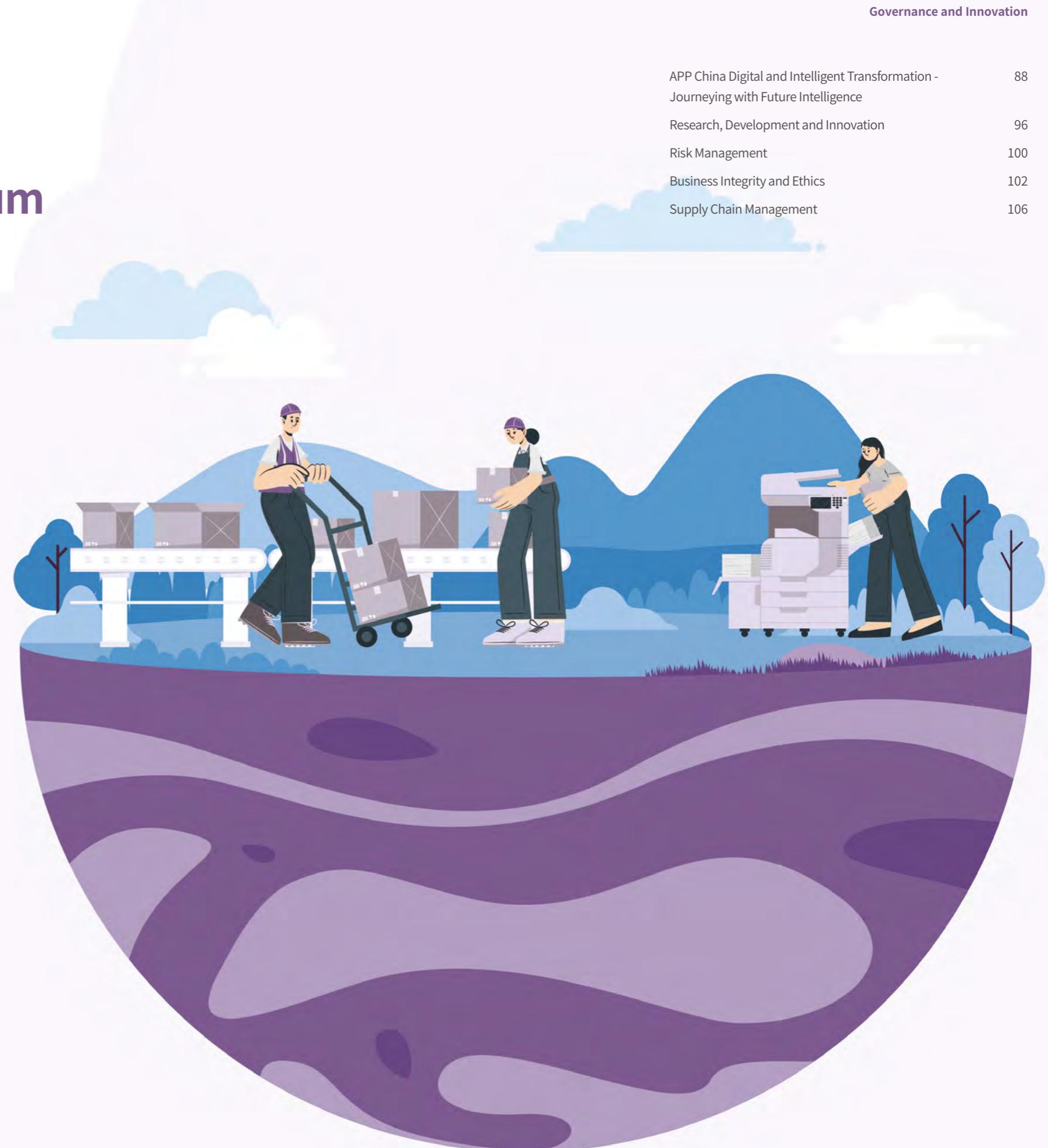
In September 2024, Typhoon Yagi struck Hainan, causing a severe disaster. Besides promptly initiating its own disaster response actions, APP China Forestry also actively responded to the call for help from the government, reaching out to local governments, and landscaping and forestry bureaus to identify need for assistance, and taking actions to help clear fallen branches and debris. Within 12 days after the disaster, the company had dispatched 50 cleaning machinery and 40 transport vehicles to areas severely affected by the typhoon, deployed 1,575 person-times of personnel for disaster relief activities, and removed 26,000 tons of fallen branches and debris, effectively supporting the restoration of transportation in the disaster-stricken areas and helping to ensure the recovery of normal living conditions.

Governance and Innovation

Building a Solid Foundation and Activating Development Momentum

A robust and efficient governance system is the cornerstone of the sustainable development of enterprises. Guided by its Digital and Intelligent Transformation strategy, APP China continues to promote the digital and intelligent development of pulp and paper production and forestry operations. The Company strives to build a digital intelligence system that covers the entire industrial chain from production to consumption by leveraging advanced technology to empower decision-making, enhance operational efficiency, and unlock business value. Meanwhile, we continue to increase our investment in research and development, improve our risk management system, adhere to business ethics and integrity, deepen supply chain management, so as to promote the formulation of a governance ecosystem with advanced technologies, efficient and stable operations, reliable compliance, and shared responsibilities.

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APP China Digital and Intelligent Transformation - Journeying with Future Intelligence

APP China takes digital and intelligent transformation as a core driving force. We continuously integrate cutting-edge digital technologies and intelligent solutions to optimize processes, improve operational efficiency, enhance product quality, and achieve efficient resource utilization. These measures have fully activated our green productivity and development potential, effectively promoting the high-quality and sustainable development of the Company.

Annual progress:

- A total of **1,416** employees obtained the junior-level data analyst certification in 2024

Adhering to its "Digital and Intelligent Transformation" strategy, APP China has been accelerating the application of digital technologies in various fields such as sales, mill production, supply chain management, 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.



» Empowering Sustainable Development with Digitalization and Intelligence

APP China continues to deepen its digital and intelligent transformation strategy, accelerating technological innovation and application in intelligent manufacturing, energy conservation and environmental protection, safety management, and smart forestry. With a continuously improving technological support system for high-quality development, we have effectively promoted the coordinated enhancement of production and operation efficiency and green development capabilities.

Adhering to the development concept of "customer-centric", the Company is committed to building a fully interconnected system covering order taking, production, delivery, and supply chain financial support. By utilizing cutting-edge digital intelligence technologies such as big data, artificial intelligence (AI), and the Internet of Things, we have developed a four-layer digital intelligence construction plan, including an infrastructure layer, a data

Sales management

Through the Customer Relationship Management system (CRM), sales assistance tools, WeChat Official Account, and intelligent customer service technology, we have established a mechanism to ensure close communication and interaction with customers, striving to provide them with timely and customized services. Meanwhile, we have equipped our business sales team with mobile office capabilities to enhance the responsiveness of our customer service.

Driven by the digital and intelligent transformation strategy, our Tissue BU integrated cutting-edge technology with business scenarios and developed a multi-dimensional customer service ecosystem including an intelligent business visit system, the Zhiyue online platform, and a service platform for potential customers. Tissue BU also optimized its supply chain collaboration efficiency through its Dealer Management System (DMS) and dropshipping platform, ultimately realizing data-driven decision-making, providing customers with more timely, customized and forward-looking service experiences.



Intelligent manufacturing

We independently developed a production line operation control platform based on five core modules: intelligent production management, intelligent equipment management, warehouse management, quality management, and energy consumption management. We also significantly optimized our production efficiency by integrating big data analysis, AI technology, KPI visualization management, as well as an automatic early warning mechanism.

- » Unplanned downtime rate: down by 56% year-to-year;
- » Paper loss rate: down by 4.16% year-to-year;
- » Inventory turnover days: down by 31.1% year-to-year;
- » Reduced inventory capital occupation, with the amount of spare parts inventory: down by 30.1% year-to-year; and
- » Energy consumption per unit product effectively reduced.

During the reporting period, both Gold East Paper and Rudong Base successfully passed the Integrated-Level Assessment Certification of the China Manufacturing Maturity Model (CMMM). Only three paper companies in China have passed this assessment. In addition, these two mills have also been awarded the Smart Factory (Advanced Level) certification, and Gold East Paper was selected as a digital transformation "Leader" of China's light industry.



Intelligent supply chain

We are committed to promoting the digital and intelligent transformation of our value chain, facilitating the formation of a comprehensive, end-to-end intelligent supply chain system. All our mills have achieved integrated management of order management, acceptance appointment, access control system, and unmanned weighing scales, significantly enhancing our intelligent inventory management and logistics distribution efficiency. Our Logistics Transportation Management Platform consolidates AI recognition scenarios, OCR business recognition, and other applications, allowing us to further improve our business management efficiency and the effectiveness of intelligent monitoring of business risks.



Digitalized procurement

We have effectively enhanced the transparency and overall efficiency of the procurement process with the launch of several medium to large projects, such as the Procurement Fishbone Diagram Analysis and Comprehensive Materials Performance Evaluation of Suppliers. We also set up a Macro Market Information Dashboard to monitor market dynamics and macroeconomic indicators in real-time, providing a scientific basis for procurement decisions. We have successfully implemented multiple digitalization projects in areas such as bulk logistics planning and scheduling, logistics transportation visualization, in-mill logistics automation, and automated warehouses, and are planning to build a Supply Chain Control Tower.



Big data application

We built a big data middle-end platform, and implemented data governance strategies to standardize data standards, quality, authorization, and application processes to support the data needs of various business domains with greater efficiency. Based on the concept of "everyone is a data analyst", we developed an integrated self-service reporting platform, publishing a total of 745 high-value data assets within the year, and empowering 636 key business personnel to independently create reports for problem analysis and business opportunity exploration.

**AI application**

We built a computing power platform with localized deployment of Alibaba's Tongyi and the DeepSeek R1 models, and developed a number of applications, such as intelligent employee assistants, knowledge bases, and contract comparisons. We also improved office efficiency through the use of tools like Copilot, and explored the application of artificial intelligence-generated content (AIGC) in various fields. We also developed proprietary algorithm services for over 150 business scenarios, including intelligent security, quality inspection, equipment health prediction, process optimization, and inventory supervision, significantly enhancing our business efficiency. In 2025, we plan to deepen AI empowerment by expanding new application scenarios, building a full-chain AI solution, and strengthening the standardized output capabilities of core scenarios.

**Intelligent Construction of Energy and Carbon Management: Driving dual control of energy and carbon, facilitating green and low-carbon transformation**

To actively implement the national "carbon peaking and carbon neutrality" strategic goals, achieve refined and data-driven intelligent upgrades of the group's energy and carbon management, and effectively promote the realization of our core goal of "reducing product carbon footprint by 30% before 2030", the APP China Digitalization Office launched a group-level energy and carbon management platform construction project in 2024.

The project aims to build a centralized digital management and control hub for energy and carbon, covering six core functional modules at the group level - group overview, GIS map, energy consumption ranking analysis, KPI performance management, emission reduction project tracking, and carbon asset management. With the project, we can achieve comprehensive, visualized, and precise control of our overall energy consumption, carbon emissions accounting, and carbon footprint tracking. At the mill level, the project will provide data-driven decision-making support for lean operations through functions such as monitoring visualization, alarm management, KPI breakdown, daily energy operation management, energy and carbon digital modeling, and full-process carbon management, as well as big data energy consumption analysis, covering key carbon reduction scenarios, including energy-saving potential diagnosis, energy use optimization, equipment energy-saving transformation, and product carbon footprint tracking.

The project was first piloted at Guangxi Jingui Pulp & Paper in 2024. During the reporting period, in-depth on-site studies and demand assessments have been completed in key areas including carbon emission management systems, energy management performance evaluation mechanisms, production process flows of pulp and paper, and the operational and energy consumption status of the power plant, laying a solid foundation for platform design and development. We plan to deploy the platform at Ningbo Asia, Gold East Paper, and Hainan Jinhai Pulp & Paper in 2025, and achieve group-wide application in 2026.

Rudong Base has established an intelligent energy management system to conduct real-time monitoring and dynamic optimization of the electricity operation of the mill. By deploying intelligent control systems and high-precision measuring instruments, the company can accurately collect key equipment electricity data in real-time and synchronize it to the central control platform. Management personnel can monitor energy consumption status at any time through the platform, and the system automatically alerts abnormal energy consumption points, significantly improving the response speed and accuracy of equipment fault diagnosis and production process optimization, and ensuring more precise management and control of energy consumption.

Intelligent Soot Blowing System for Reducing Steam Consumption

In the alkali recovery workshop of Hainan Jinhai Pulp & Paper, two alkali recovery boilers serve as core equipment. Although operating efficiently, they face chronic issues such as scaling on heat exchange surfaces like economizers, superheaters, and evaporators, causing a gradual decline in thermal efficiency. Traditional soot blowing technology operates on fixed time sequences, patterns, and constant pressure settings, resulting in problems such as uneven soot blowing effects and high steam consumption, which severely limit the energy utilization efficiency of the entire system.

To address these issues, Hainan Jinhai Pulp & Paper deployed an advanced intelligent soot blowing optimization system. The system can achieve one-way or two-way flexible soot blowing, with the core advantage of the deep integration of real-time process operation data and intelligent computing models. By employing multidimensional big data analysis algorithms, the system can dynamically and accurately identify the differences in soot accumulation tendencies in various heated areas, and intelligently determine the optimal soot blowing points, adapted pressure intensity, and timing, thereby achieving on-demand and dynamically optimized refined soot blowing operation.

The launch of the intelligent soot blowing system achieved significant results. The comprehensive steam consumption of the alkali recovery boiler decreased from 130 tons per hour to 105 tons per hour, effectively achieving energy conservation and carbon reduction targets by saving approximately 21,000 tons of standard coal annually.

Intelligent System for Operation Safety

In 2024, Bohui Paper further enhanced the "video surveillance + AI intelligent recognition" model to the comprehensive management of personnel, equipment, vehicles, materials, and production facilities, achieving real-time monitoring, early warning, and timely effective management of various safety hazards, further enhancing the safety management capabilities of the Company. Shandong Base of Bohui Paper upgraded its forklifts with a smart supervision system, equipping them with functions such as face recognition, speed limiting, and violation monitoring alarm, effectively ensuring the safety of personnel, materials, and operation of forklifts.

In 2024, Guangxi Jingui Pulp & Paper optimized the safety prevention and monitoring capabilities at multiple production management operations. The company implemented explosion-proof technical upgrades to the dust removal system of PM1 and PM2 cutting machines, achieving key point sensing, remote video monitoring, data collection, and intelligent monitoring of key risk points. The system automatically assesses risk levels and issues relevant "assessment warnings", greatly enhancing the company's safety management capabilities in explosive-related areas. In addition, its hydrogen peroxide workshop launched a personnel positioning system that monitors and tracks the location of personnel on the production site in real-time, achieving intelligent early warning for hazardous areas, providing data support for enterprise safety management through data analysis functions, and supporting the safe production of hydrogen peroxide.

In 2024, Rudong Base has introduced advanced digital means and hardware facilities, establishing an integrated safety control system with visual technology and AR/VR technology based on its lean operation system. The company identified 75 scenarios including security, fire protection, production, quality assurance, warehousing and logistics, energy supply, and material handover, etc., and developed over 60 AI algorithms accordingly to form a production safety and protection network with layered defense, intelligent monitoring, and early warning functions. In addition, the system can set customized management permissions based on job positions and functions, achieving precise control. In emergency scenarios, the platform can automatically trigger early warnings following pre-set processes, quickly coordinate resources and generate data analysis to assist in optimizing safety management strategies, effectively reducing accident risks, and enhancing the protection of employees' personal safety, enterprise property safety, as well as compliance with production processes.

Enhancing Intelligent Manufacturing Capabilities with the Production Control Tower

The Company has built a comprehensive intelligent production platform based on automated infrastructure, achieving comprehensive data empowerment and deep analysis of production operations, comprehensively implementing the transformation towards refined and intelligent management and decision-making. The Production Control Tower platform functions as the core hub for the intelligent upgrade of our mills. Aiming at reconstructing the full-link data at the core of order management, the system has integrated functions such as equipment management, production processes, quality control, inventory scheduling, and energy monitoring, to achieve the goals of "excellence in intelligent manufacturing" and "fully automated management", ultimately enhancing our core competitiveness indicators such as overall efficiency and order delivery quality.

Gold East Paper	Thermal Paper Production Control Tower	<p>Achieved closed-loop management from thermal planning to production, improving the operational efficiency of the paper machine, as well as order management capabilities and production automation levels, with a comprehensive value creation of RMB15.86 million per year.</p> <ul style="list-style-type: none"> » Optimized production planning and scheduling to reduce losses » Automatic management of raw material demand » Realized visualized tracking of orders and production » Data integration enabled full-line control of on-site paper roll stacking, and automatically rewind planning for abnormal paper rolls based on algorithm
	Packing Production Control Tower	<p>Combining digitalization empowerment with AI based algorithms, further leveraging the advantages of automated production lines.</p> <ul style="list-style-type: none"> » Improved equipment operation efficiency » Reduced packaging costs through refined packaging material management, with a 7.8% decrease in unit packaging cost

Hainan Jinhai Pulp & Paper	Paper Production Line Operation Control Console	<p>Strengthened production chain monitoring to improve production efficiency, product quality, and output.</p> <ul style="list-style-type: none"> » Automatically issued machine scheduling plans » Real-time tracking machine efficiency across all sections, with immediate control of production anomalies to reduce working hour loss » Added a PE film online visual monitoring function and an automatic printing tracking sheet for paper cutters, which reduced the working time of inspection personnel, improved inspection accuracy, and ensured better product quality, effectively reducing customer complaints » The output of flat paper increased by 3.4%
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Intelligent Logistics

In 2024, the Company fully advanced the digital transformation of logistics management focusing on three strategic goals: data integration, process restructuring, and intelligent decision-making. With a three-in-one architecture of "control tower hub + data lake foundation + AI engine", we achieved the structural optimization of both business efficiency and costs.

Built a data foundational framework and developed data application scenarios
Achieving the goals of data assetization and business visualization by ensuring transparency across the entire supply chain.

Integrated 116 core data tables into the data lake, breaking down barriers between different systems, with over 80% of user data having self-service analytical capabilities, providing a solid foundation for data-driven business optimization.

Built a supply chain control tower system, integrating indicators covering the entire process of sales, procurement, production, warehousing, and transportation, achieving end-to-end visualization of business operation progress and in-depth analysis and early warning through BI dashboards, and forming a closed loop of "monitoring - early warning - decision-making".

The digital and intelligent transformation of logistics management allows us to improve operational efficiency and realize greater value. For example, the automated route planning has shortened our process cycle by 50%, enhancing agility in supporting the expansion of business plans. With over 80% of user data having self-service analytical capabilities, we are able to better support business decision-making with data, transforming from "decision by people" to "decision by data". The combination of intelligent sorting equipment and optical character recognition (OCR) technology allows us to reduce logistics costs, bringing down the total costs of our operations. The early warning mechanism of the control tower system has effectively reduced the occurrence of abnormal business losses and enhanced our supply chain resilience.

Upgraded process intelligence
Achieving cost reduction, efficiency enhancement, and risk control goals through the transition from automation to autonomous decision-making.

Completed the upgrade from process automation to intelligent decision-making through digital and intelligent optimizations such as transportation process automation, anti-fraud system for wood chip transportation, self-service queuing system, receipt recognition and document verification, and online performance assessment of logistics suppliers, effectively controlling risks and achieving cost reduction and efficiency improvement goals.

Smart Forestry

In 2024, APP China Forestry successfully launched its "Smart Forestry" project in its business areas in Hainan, Yunnan, Guangxi and Guangdong. The "Smart Forestry" project was developed in accordance with the principle of "a centralized platform for business applications, an integrated network for IT resources, and a comprehensive map based on sensing system". The application of this project allowed us to achieve the full lifecycle management of forestry subcompartments as well as the "all-on-one-map" forest management.

The project relies on advanced technologies such as satellites, drones, ground video monitoring, and GPS positioning to build a comprehensive system for remote sensing image data applications, LiDAR applications, video surveillance applications, IoT applications, and terminal patrol applications, forming a multi-scale sensing network system that integrates sky, ground, and personnel. By utilizing advanced information technologies such as the Internet, IoT, cloud computing, big data, and remote sensing, the entire forestry operation process can be managed intelligently, automatically, and scientifically. The project helps us to utilize forestland resources more efficiently, achieve more precise and efficient forest management, and enhance our risk resistance capabilities, significantly promoting the sustainable development of our forest management.

The deployment of the "Smart Forestry" system has significantly enhanced the refined management and decision-making support capabilities regarding our forestland management operations. In 2024, the annual MAI (Mean Annual Increment) of timber arriving at our mills increased by 0.03 tons per acre per year, which is equivalent to a 63,000 tons reduction in external timber procurement. In the future, APP China Forestry will continue to deepen the application and promotion of the Smart Forestry system to achieve more achievements with its digital and intelligent transformation.

» Cultivating Digitalization and Intelligence Talent

Digitalization and intelligence talent constitute a core element and key support for the continuous development of APP China. Since 2023, the Company has organized over 25 group-wide lectures on digitalization both online and in-person, covering core processes of various business segments and the application of digital intelligence technologies.

To enhance our data application capabilities, we officially launched a data analyst training program in 2024. As of the end of 2024, we had successfully trained over 1,400 participants and helped them obtain junior-level data analyst certification. The training content covers skills such as data analysis

fundamentals, data modeling, visualization project development, and self-service data analysis. In the future, we plan to add training for intermediate-level data analysts. These pioneers, who possess both data analysis and business analysis capabilities, will lead and guide our junior-level data analysts to jointly explore the potential of our data assets, and provide support for the business insights and intelligent decision-making of the Company.

To regularize the learning of digitalization and intelligence, we launched a special monthly event themed "Digital-driven Intelligence Learning" in 2024, aiming to accelerate the cultivation of digitalization talent through

a dual-track approach of digitalization and intelligence. The activities included company-wide digitalization knowledge learning and competitions, as well as AI training for all employees, submission and review of data analysis application projects, and digitalization training for executives. By deeply integrating business scenarios with digitalization and intelligence technologies, the Company encourages all employees to actively participate in digitalization learning, so as to cultivate the talent needed for empowering our sustainable development with digitalization and intelligence.

Research, Development and Innovation

APP China insists on an innovation-driven development approach, continuously improving the collaborative mechanism of "industry, academia, and research", strengthening intellectual property management, and enhancing independent R&D efforts to formulate a virtuous cycle of the innovation system. We continuously enhance our R&D capabilities, accelerate the commercialization of R&D results in practical applications, and strive to provide customers and consumers with high-quality products that are greener, more environmentally friendly, safer, and healthier.

Annual progress:

- R&D investment in 2024: RMB **2.649** billion

» Strengthening R&D Mechanism

Following an innovation-driven development approach and targeting industry needs, APP China continuously intensifies its independent R&D efforts and actively strengthens the integrated mechanism for "industry, academia, and research" collaboration to realize the synergy among enterprises, universities, and society resources, to achieve a virtuous cycle of technological breakthroughs and industrial upgrades. In 2024, Ningbo Asia was rated as a "Technology-Leading Demonstration Enterprise" in Ningbo; Shandong Base of

Bohui Paper was approved as "Shandong Provincial Engineering Research Center for Biomass Recycling and Plastic Replacement with Paper".

APP China strictly 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 standardized management procedures regarding patent rights, copyrights, trademark rights, and trade secrets, aiming to effectively safeguard the legitimate rights and interests of the Company and all stakeholders.

In 2024, the total R&D investment from all entities under the reporting scope was RMB2.649 billion.

Promoting the Development of Research Platforms

In 2023, APP China established two academician workstations in Nanning, Guangxi and Ningbo, Zhejiang. The establishment of these workstations aims to build a high-level "industry, academia, and research" collaboration platform. The platforms gather academicians, experts, and university research teams to jointly promote the R&D of cutting-edge technologies as well as their industrial application, achieving a win-win situation for technological innovation, industry advancement, and socio-economic development.

In 2024, we further deepened this collaboration mechanism. In April, Gold East Paper and Ningbo Asia signed a strategic cooperation agreement with the Hangzhou Research Institute of Chemical Industry. Previously, our mills had been discussing with the institute on cutting-edge technologies, such as the efficient utilization of pulping and papermaking wastewater, applications of nanotechnology, and the development of new paper-based materials. Relevant feasibility analyses and tests were also carried out. The signing of this strategic cooperation marks a new implementation phase in the collaboration between APP China and the institute.

In September, APP China signed a strategic cooperation agreement with the Nanjing Forestry University, aiming for deeper cooperation in research projects, talent training and exchange, and research platforms development, promoting the transformation of cutting-edge scientific and technological achievements in the field of raw material forest cultivation into practical productivity.

» Technological Innovation

In addition to its priority on ensuring product quality, APP China continuously deepens the innovation of production processes and the efficient use of resources, steadfastly implementing the green manufacture concept by continuously reducing energy and raw material consumption through technological upgrade.

Innovative Pulping Technology

In the papermaking production process, the refining process is a key step that modifies the fiber morphology through physical methods in order to optimize the physical properties of the pulp and ensure that the quality of the final product meets standards. The refining process consumes a large amount of electricity. To reduce energy consumption and improve refining efficiency, Gold East Paper has independently developed an enzyme-assisted refining method, which can reduce the refining time by about 15% and short fibers by around 30%.

Hainan Jinhai Pulp & Paper has significantly increased the usage of pipelined wet pulp in its production process through optimizing ratios of pulp and fillers, and adjustments in hard calendering and super calendering technologies. As a result, energy consumption in the pulp processing stage was effectively reduced, so was the cost of pulp handling and transportation.

Optimize coating formulation

Gold East Paper developed a high rheology and porosity coating formulation. This measure can increase the solid content and reduce the water content of coating, making it easier for moisture to escape during the drying process. As a result, drying efficiency was significantly improved, reducing the consumption of natural gas required for drying.

Promote the Application of Corn Starch

In 2024, our mills deepened the research on the application of corn starch as a substitute for cassava starch, focusing on technological breakthroughs, production process optimization, and adaptability enhancement to promote raw material substitution and improve production capability and efficiency.

Guangxi Jingui Pulp & Paper conducted its first application of corn starch in the production of coated white cardboard within the year. Hainan Jinhai Pulp & Paper further increased the proportion of corn starch used, using 100% domestic corn starch in both coating and surface sizing processes through cooking and production process optimization, achieving an annual cost saving of over RMB15 million. Gold East Paper introduced ECO-R filters in the surface sizing process, effectively reducing the content of screening residues and enhancing the operation stability of the production line, with some machines achieving 100% application of corn starch. In addition, Gold East Paper developed a surface coating process formula for winter use, which improves the stability of corn starch glue in winter, allowing greater usage of corn starch.

Breakthrough in MFC Technology

Microfibrillated cellulose (MFC) is a new material obtained from graded papermaking fibers. MFC has both the properties of cellulose and one-dimensional nanomaterials, such as high specific surface area, high mechanical strength, and biodegradability. However, MFC material faces technical bottlenecks such as low retention rate and difficulty in dewatering during the industrial application process regarding high-speed paper machines. In response to these challenges, Ningbo Asia independently developed MFC filler coating technology and in-pulp reinforcement technology, effectively solving the retention problem of MFC and fillers by enhancing the shear resistance of the filler coating. As a result, the strength of the paper has been increased. Meanwhile, the dewatering efficiency has also improved, providing reliable technological support for the production of high-ash-content paper. This technology also improved the retention rate of ash in broken paper and the interlayer bonding strength of paper by enhancing the strength of the pulp and improving the flocculation effect. In this way, the paper machine can stop spraying starch, which brings down the operating cost.

Innovative Nanofiber Technology

Gold East Paper has successfully developed a fully biodegradable modified nanofiber material using renewable plant fibers as raw materials. The new material has the characteristics of high aspect ratio, uniform size, and high surface activity, which can effectively enhance the strength performance of paper. The proportion of fiber raw materials can also be lowered by increasing the ash content, which helps to reduce the consumption of timber resources.

» Product Innovation

APP China is committed to developing high-quality products that are green, healthy, and environmentally friendly, continuously meeting the growing sustainable development needs of customers and consumers. In recent years, we have developed multiple innovative environmentally friendly product solutions focusing on product lightweighting, convenience of use, carbon neutrality, and zero plastic, striving to build a green and low-carbon future.

Green Paper Products from Gold Hongye Paper



Product Series with Biodegradable Film Packaging

As APP China's solutions for commercial customers, "Breeze Commercial" partnered with China Southern Airlines to launch a series of hygiene solutions for airline passengers, including facial tissues, toilet paper, napkins, and hand towels. These products use PLA biodegradable packaging, which is 100% compostable biodegradable without producing toxic or harmful residues during the decomposition process. Compared to traditional packaging, the new product series can help reduce the use of 10 to 20 tons of plastics each year.



"Breeze Commercial" biodegradable film packaged products

Professional Wiping Paper

The General and the Enhanced versions of our professional wiping paper products are specially developed for cleaning industrial oil stains, featuring innovative high oil absorption rate and quick oil absorption processes, and are suitable for removing oil stains from components, and in metal processing, machinery manufacturing, and equipment maintenance.

The Low-Dust version of professional wiping paper is specially designed for cleaning lenses, which is suitable for cleaning precision instruments, camera lenses, laboratory glassware, and glasses. The product strictly controls the linting rate through fine fiber control technology. The technology ensures that it does not shed fibers when wiping lenses or glassware to avoid paper dust residue. Meanwhile, the product also uses surface smoothness technology to significantly increase the smoothness of the paper to effectively prevent scratches on lenses or glassware.



"Breeze Commercial" professional wiping paper product series

Gold East Paper Developed "Paper for Plastic" Products



Gold East Paper successfully developed the CCK release paper product, which can be used in the carbon fiber processing field. The product is made with a plastic-free coating process. A dense and smooth surface structure is formed by applying a coated clay layer on the surface of the base paper, which both effectively prevents the penetration of release agents, and significantly enhances the product's high-temperature resistance and dimensional stability. This technical route completely avoids the use of plastic substrates, which is in line with the core requirements of global plastic bans and domestic plastic reduction policies. In 2024, the company successfully developed five "Paper for Plastic" products, including flour package paper, paper folder, food-grade white kraft paper, straw base paper, and plastic-free release liners. In the future, the company plans to develop high-barrier products to gradually replace traditional aluminum foil and coated materials, exploring more practical solutions for the environmental transformation of the paper industry.

Bohui Paper Core Tech Breakthrough in Aseptic Liquid Packaging Paper



Bohui Paper successfully achieved the breakthrough of the core technological barrier for aseptic liquid packaging paper production with continuous technological innovation and green production practices. The Company invested over RMB40 million to implement intelligent upgrades and transformations on the PM1 production line, and carried out full-process quality control and technological innovation, which included "raw material screening - system cleaning - process optimization - finished product inspection". The Company also overcame the technical challenge of meeting sterile-grade standards with the independently developed spore control production technology. As a result, a sterile liquid packaging paper product with characteristics such as high strength, lightweight, waterproof, impermeable, and antibacterial properties was successfully developed and achieved commercial production. In addition, the technological team has also successfully developed the unbleached needle wood pulping technology, which allowed the Company to expand into the global liquid packaging kraft cardboard market with the production of high-strength unbleached liquid packaging paper.



Risk Management

APP China continuously enhances its risk management and internal control system to improve corporate governance effectiveness, and strengthen the Company's adaptability to complex operational environment and resilience against various risks. The Company has established a robust information security management system based on the ISO 27001 standard, building a solid security barrier for digital and intelligent transformation and business development with effective protection against cybersecurity risks and data leakage hazards.

Annual progress:

- **46** audit projects valuing RMB **950** million in total conducted in 2024



- **Zero** incidents of data leaks or cybersecurity incidents



» Risk Management System

In 2024, APP China continued to deepen its risk management and internal control system construction, further improving the risk control mechanism centered on the "Three Lines of Defense" by optimizing the processes of risk identification, assessment and response, continuously enhancing the overall governance and risk prevention capabilities of the Company. The Company

conducted a total of 46 audit projects during the year covering all BUs under APP China, effectively reducing operational risks and facilitating the implementation of business opportunities.

During the reporting period, the Company continued to implement business audits through benchmarking and MBOS peer

learning and competition. A total of 202 improvement projects were established to address issues identified in 11 key business areas including cost, efficiency, sales, procurement, logistics, and others identified during the audits, assisting business units in uncovering improvement opportunities and realizing an audit value of RMB950 million.

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

Shareholder Meeting		
General Manager and Governance Team		Risk Management and Audit Committee
Business Unit Management		
First line of defense:	Second line of defense:	Third line of defense:
Primary responsible personnel of Business Control and risk compliance and internal control of BUs	The Internal Control Department coordinates and supervises risk management and internal control	The Internal Audit Department independently supervises the audit operations of the Company
<ul style="list-style-type: none"> • BUs formulate risk management and internal control measures under the coordination of the Business Control Department. • BUs directly manage various processes required by policies. • The Business Control Department supervises the implementation of internal policies and processes from the strategic model, process system, personnel, and other aspects. • Ensure that various business operations provide effective support for the Company's organizational business objectives. 	<ul style="list-style-type: none"> • Provide professional knowledge, support, and guidance in risk management, compliance, and internal control, and conduct supervision. • Promote risk, compliance, and internal control development through internal control supervision and inspection. • Lead the implementation of risk management and internal control framework, and improve internal control systems. • Assist and follow-up on internal audit rectification. 	<ul style="list-style-type: none"> • Provide independent and objective confirmation and consulting advice on all matters related to achieving goals. • Conduct independent audits as a deterrent against fraud. • Emphasize communication and collaboration with BUs, making sure that internal audit is independent but not isolated. • Improve the value and operation of the organization.
Direct responsibility for risk management and internal control	Overall coordination, planning, and monitoring	Independent assessment, and supervisory audit

External Auditors and Other Providers of External Assurance

» Information Security Risk Management

APP China promotes the construction of the information security management system based on the ISO 27001 Information Security Management System, and has formulated a series of regulations and policies covering 14 security domains related to information security and cybersecurity, all of which are posted on our OA platform accessible by all employees. 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 General Manager of Information Technology Department of APP China, and Audit Committee members of Sinar Mas Group. The General Manager of Information Security Department of Sinar Mas Group serves as the Executive Director, overseeing information security management affairs across the entire Group.

In 2024, the Company further enhanced its cybersecurity risk detection capabilities by introducing Breach and Attack Simulation (BAS) and Network Threat Analysis (NTA) technologies based on its existing information security technology architecture. Meanwhile, the Company also deployed a real-time attack monitoring dashboard and a unified SIEM platform

to strengthen real-time alerts and rapid responses to cybersecurity incidents during operations, thereby continuously improving its overall risk detection and proactive defense capabilities.

The Company has formulated the "Guidelines for the Management of Major IT & OT Information Security Incidents", specifying the incident response process of its business continuity plan, continuously optimizing its emergency response mechanism. In 2024, we organized and implemented a simulated ransomware outbreak emergency drill. Employees can report suspected information security or cybersecurity issues via a specific email, or directly to the Information Technology Department of their business unit or the SSC Service Sharing Center. Violations of the Company's information security policies will be disciplined in accordance with the relevant regulations and provisions in the "Employee Handbook". A loss assessment and accountability procedure may be initiated depending on the severity of the incident.

The Company has incorporated privacy protection into the Group's risk management and compliance system covering sectors such as e-commerce, human resource

management, and real estate business, with the Information Security Department and the Legal Department jointly in charge. In 2024, a number of systems passed the National Information Security Protection Level III Certification, including the e-commerce applet, SFA distributor system, and community group buying system of the Tissue BU, as well as the membership system of the Real Estate Company. Meanwhile, the Company has purchased cybersecurity insurance, covering key risk areas such as data recovery, emergency response, and network ransomware losses.

The Information Security Department organizes monthly trainings for all employees, continuously deepening the penetration of security concepts into employees' daily work and effectively enhancing their information security awareness through long articles pushed through WeCom, on-site announcements, online games, new employee onboarding training, and phishing email simulations.

In 2024, the Company had no incidents of cyber security or privacy data leaks.



Business Integrity and Ethics

Upholding its core ethical principles of "Honesty and Integrity", APP China vigorously intensifies integrity and compliance management, continuously strengthens the construction of an integrity and compliance culture, and is committed to creating a clean, upright, and fair business environment, laying a solid ethical foundation for achieving its sustainable development goals.

Annual progress:

- 7 consecutive years we have been launching the annual "Sunshine Integrity Month" event since 2018
- 100% employee training coverage on business ethics and integrity culture
- 100% suppliers are covered by our anti-corruption policies

» Integrity and Compliance Management

APP China continuously strengthens its Integrity Management Framework, which was formulated in accordance with the ISO 37001 Anti-Bribery Management System. With the Framework as guidelines, we apply the concept of compliance to all levels of employees, comprehensively promoting integrity and compliance management and practices.

The Company has established an Ethics Discipline Committee, responsible for reviewing the "APP China Employee Code of Ethics" as well as related policies. The Committee regularly reports to senior management of the Group on employee performance in terms of professional ethics, handles whistleblowing reports, and supervises investigations 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 Company has specially established the Corporate Risk and Integrity Department as 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 established and continuously optimized a robust ethical discipline management mechanism to strictly regulate the employee code of conduct and

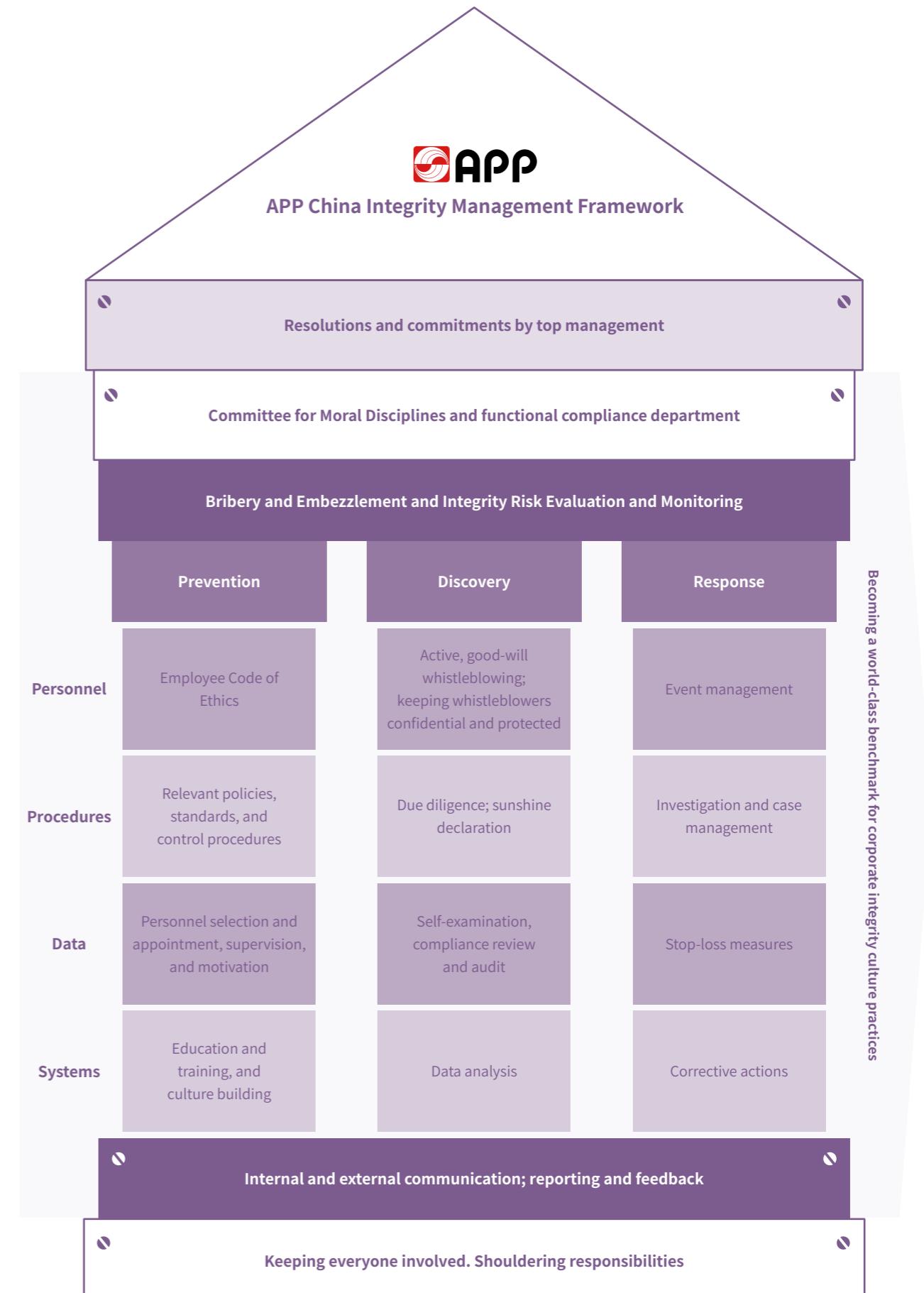
comprehensively strengthen the cultivation of responsibility awareness. The Company has incorporated the "APP China Employee Code of Ethics" into the "Employee Handbook", which regulates employees' daily behaviors in various aspects such as responsibilities to each other, to customers, to the Company, 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 implements and continuously promotes the awareness of the "Provisions for Prohibition of Gifts and Hospitality", which strictly prohibits employees from soliciting or accepting gifts and hospitality from any external business partners. Employees are required to report any gifts received, whether declined or not, through the OA system within three working days. In 2024, the Company formulated the "Guidelines for Prohibition of Gifts and Hospitality", further refining the standards and handling procedures for the prohibition of accepting gifts and hospitality, and strengthening the implementation of the policy.

The "Whistleblowing Operation Management Measures" includes 12 categories of abnormal behavioral risks to be reported, providing formal reporting channels, including a dedicated reporting email and hotline, for employees, partners, and other stakeholders. The Corporate Risk and Integrity Department

and the Internal Audit Department are jointly responsible for receiving, registering, evaluating, investigating, and providing feedback on reported incidents, ensuring that each reported case is handled promptly and effectively. The Company adheres to a "Zero Tolerance" principle in dealing with various illegal and irregular behaviors. The confidentiality of the identity of real-name whistleblowers is strictly protected, and whistleblowers are rewarded accordingly based on the value of the reported incidents. Through these measures, the Company strives to continuously strengthen its compliance defense line for the sustainable development of the enterprise.

APP China continues to extend the coverage of its compliance concepts, promoting integrity culture through diversified channels. The Company requires all suppliers to sign the "Sinar Mas Supplier/Partner Pledge on Business Compliance and Integrity" and "Corporate Social Responsibility Statement and Pledge", clarifying the basic integrity requirements and code of conduct for suppliers in business operations, commercial compliance, and social responsibility. The Company has also incorporated its anti-corruption policies into compliance communication with suppliers, ensuring that relevant policies cover 100% of its partners, effectively promoting the co-construction of a clean and fair business cooperation ecosystem throughout its supply chain.



APP China Integrity and Compliance Whistleblowing Mechanism	
Whistleblowing Channels	<ul style="list-style-type: none"> Email: GRW@app.com.cn Phone: 021-22839763
Principles of Whistleblowing	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Internal whistleblowers: Bonuses, rewards and credits External whistleblowers: Bonuses, Channel rewards



» Integrity Culture Building

APP China continues to deepen its integrity and compliance education system, enhancing the integrity awareness of all employees through diversified advocacy and training mechanisms. In 2024, in addition to implementing its regular online courses, internal training, thematic lectures, and the distribution of compliance manuals, the Company also included integrity and compliance content into the APP Learning Journey learning platform, using game-like learning activities such as online quizzes to promote the formation of a normalized learning mechanism with maximized employee participation.



"Sunshine Transparency, Win-win with Integrity" Sunshine Integrity Month Event

From September 1 to 30, 2024, APP China held the seventh annual "Sunshine Integrity Month" event themed "Sunshine Transparency, Win-win with Integrity", continuously strengthening the business ethics and compliance awareness of all employees through thematic lectures, incorruptibility pledge, case studies, interactive Q&A, and other activities.

Launch ceremony and pledge ceremony

Held an all-staff pledge-making ceremony with signing of the integrity commitment. Invited a professor from East China University of Political Science and Law to conduct a special interpretation of the key points of the "Amendment (XII) to the Criminal Law of the People's Republic of China", focusing on the revisions of legal provisions closely related to business operations, such as commercial bribery and embezzlement, to further enhance employees' awareness of business integrity and anti-fraud compliance.

Case studies and Sunshine Declaration

Carried out business ethics and integrity culture promotion activities through case study bulletin boards and online/offline lectures. All BUs required their employees to file the Sunshine Declaration on the OA platform to avoid conflicts of interest. Provided integrity training to suppliers, focusing on whistleblowing channels and reward policies of the Company.

Conducted interactive visits and collected suggestions

Emphasized the demonstration role of supervisors at all levels in terms of incorruptibility, requiring them to strictly lead by example in adhering to integrity norms and relevant guidelines, effectively helping employees enhance their risk prevention awareness, and accurately identify and timely report violations and illegal behaviors to responsible departments. Promoted employees' awareness of the importance of complying with integrity regulations through systematic training, and continuously enhanced the transparency and standardization of daily management behaviors.

Online exams, review and summary

Organized all employees to participate in an online integrity knowledge quiz to conclude the learning outcomes and practical results of the Sunshine Integrity Month Event, laying a solid foundation for establishing and improving a long-term integrity management mechanism.

Supply Chain Management

APP China continuously optimizes its supply chain management system, and implements strict supplier approval evaluation and dynamic assessment mechanisms. The Company continuously promotes responsible procurement strategies, steadily increasing the proportion of wood chips and wood pulp procurement from certified forests, and actively guides its supply chain to become greener and more sustainable.

Annual progress:

- Proportion of wood chips sourced from certified forests: **19.9%**
- Proportion of wood pulp sourced from certified forests: **39.89%**

The main supplier categories of APP China include raw materials, energy, technical services, equipment manufacturing, logistics, and engineering and construction. We continuously improve the supplier lifecycle management system and enhance the effectiveness of supply chain risk identification and control through digitalization, constantly increasing cooperation efficiency and business transparency. In 2024, we enhanced raw material grading management and strengthened source control of risks in the processing and certification segments. In 2024, we procured a total of 3.1416 million tons of certified wood pulp and 2.8259 million tons of certified wood chips, accounting for 39.89% and 19.9% of total wood pulp and wood chips procurements respectively. During the reporting period, the Company had no incidents of suppliers being terminated cooperation due to significant negative environmental or social events.

In 2024, the Company further strengthened transparency in key supplier management processes such as approval evaluation, daily supervision, and performance evaluation, and promoted the integration of sustainable development consideration into the supplier management process.

Conducted comprehensive supplier due diligence in financial status, credit profile, risk information, and compliance records. In 2024, we achieved automated acquisition of basic supplier information through third-party platforms such as Qixin.com, improving the efficiency and timeliness of the supplier approval review. We also adjusted the Supplier Approval Advantages and Disadvantages Analysis System, ensuring timely updates of supplier information by requiring and promptly conducting re-verification for evaluation results overdue or not timely updated.

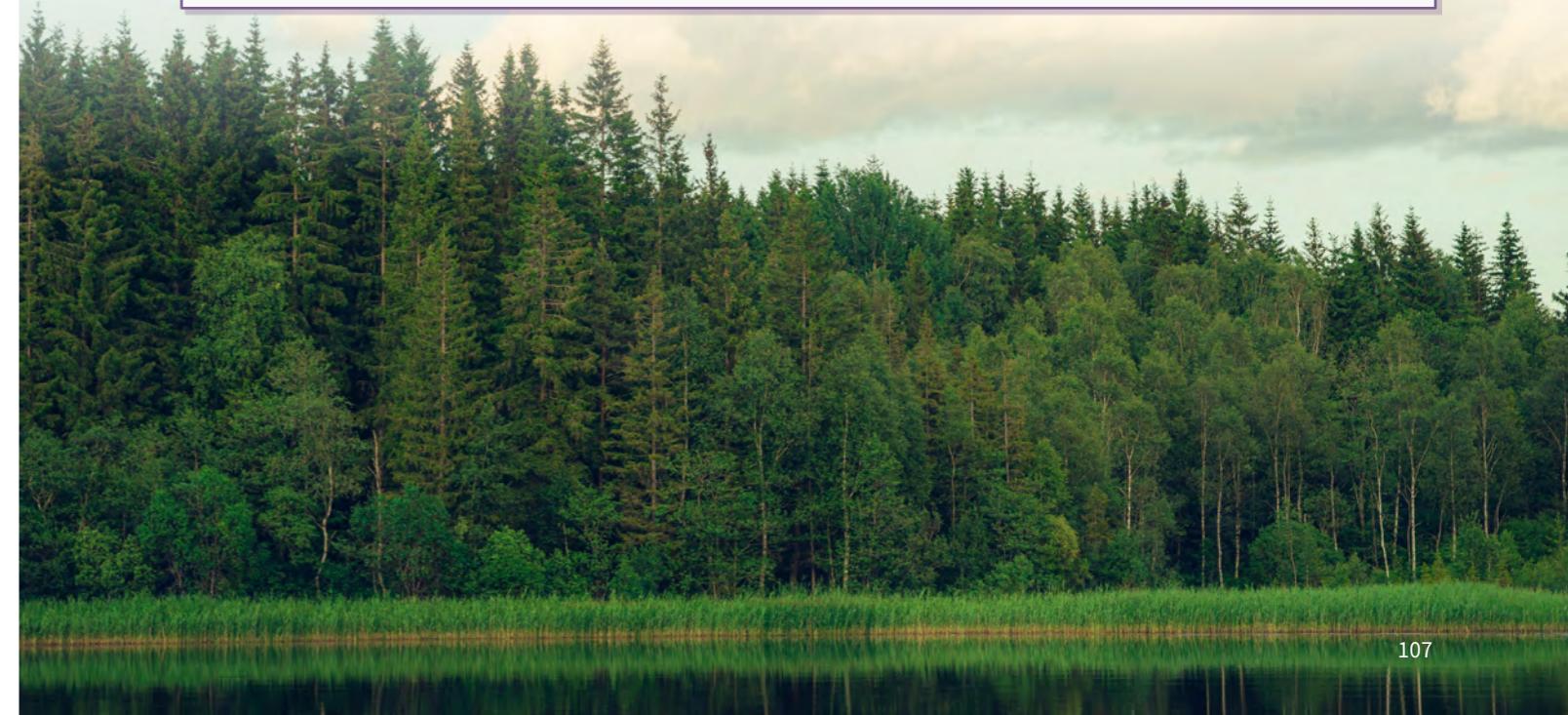
Following our sustainability strategy and requirements, we plan to gradually start piloting the integration of sustainability factors such as environmental protection, labor protection, anti-corruption, and human rights into the supplier selection and evaluation process.

Our Supplier Management System newly added a Dynamic Performance Report function for suppliers across all categories, enabling real-time monitoring and evaluation of supplier performance. Implementing hierarchical management based on performance evaluation results, suppliers who continuously fail to meet our requirements will be subject to elimination.

We are gradually incorporating suppliers' carbon emission data and energy conservation measures into consideration to make our supply chain greener and more sustainable.

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).



Performance in Numbers

Environmental Performance

» Energy

Indicator	Unit	2024	2023	2022
Coal	ton	4,128,345.20	4,018,244.02	3,533,945.33
Gasoline	ton	410.00	442.08	529.62
Diesel	ton	4,764.61	4,978.92	3,732.87
Fuel oil	ton	2,227.13	1,962.17	1,651.06
Natural gas	10,000 cubic meters	25,335.39	23,316.87	23,070.74
LPG*	ton	18.74	4,290.33	8,976.29
Kerosene	ton	0.00	0.00	0.66
Purchased electricity	10,000 kWh	639,737.31	698,973.70	427,144.95
Purchased steam**	GJ	23,501,617.35	15,654,807.44	15,460,124.74
Black liquor from pulp	ton	3,079,711.00	2,957,873.05	2,978,895.18
Other biomass fuels	ton	490,902.61	604,557.38	537,774.95
Solar power generation	10,000 kWh	6,018.12	3,038.15	3,102.42
Purchased green electricity	10,000 kWh	15,977.40	12,899.95	21,122.00

*Guangxi Jingui Pulp & Paper started reducing its LPG use in 2023 to reduce both cost and pollution, and completely stopped using LPG in 2024.

**The increase in purchased steam in 2024 has two reasons: Bohui Paper increased steam use due to production increase, and Gold East Paper stopped selling steam in July 2023, which resulted in a decrease in steam sales.

» Water resources and wastewater*

Indicator	Unit	2024	2023	2022
Total water withdrawal**	ton	162,067,331.29	158,457,617.63	140,426,381.96
Total wastewater discharge***	ton	134,286,548.33	127,005,726.42	109,903,311.37
Wastewater discharge per ton of paper produced	ton	6.07	6.18	5.79
Wastewater discharge per ton of pulp produced	ton	10.01	10.05	9.60
COD emissions per ton of paper produced	kg	0.21	0.21	0.24
COD emissions per ton of pulp produced	kg	0.50	0.52	0.60

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

**95.99% came from surface water, 4.00% from third-party facilities, and 0.01% from groundwater. The reasons for the increase in total water withdrawal in 2024 include: Guangxi Jingui Pulp & Paper increased production output, and its pulp mill switched process controls by replacing recycled condensate from alkali recovery with fresh water to enhance white cardboard quality; Gold East Paper's new project started production and reached capacity; Ningbo Asia increased the frequency of water replacement for chemi-mechanical pulp and paper machine white water due to odor control requirements, and the need to replenish fresh water for the modified closed cooling tower in wastewater treatment; and Forestry Business Unit increased seedling cultivation in Guangxi forest areas, leading to higher irrigation water demand.

***In 2024, there were zero incidents of major water body pollution at APP China. The reasons for the increase in total wastewater discharge include: an increase in production at Shandong base of Bohui Paper; Gold East Paper's new project started production and reached capacity; Ningbo Asia increased the frequency of water replacement for chemi-mechanical pulp and paper machine white water due to odor control requirements, resulting in higher wastewater discharge volumes; Guangxi Jingui Pulp & Paper increased production output, and its pulp mill switched from recycled alkali recovery condensate to fresh water for downstream white cardboard quality requirements, leading to reduced condensate reuse and higher wastewater discharge.

Mill*	Annual average discharge concentration (mg/L)				
	COD	NH ₃ -N	Total Phosphorous (TP)	Total Nitrogen (TN)	Suspended Solids (SS)
Gold East Paper	36.94	0.43	0.11	5.52	13.61
Hainan Jinhai Pulp & Paper	52.12	0.55	0.035	2.77	13.55
Ningbo Asia	46.16	1.03	0.06	2.46	15
Guangxi Jingui Pulp & Paper	34.52	0.52	0.018	3.06	8.4
Rudong Base	25.8	0.19	0.05	3.73	6.6
Shandong Base of Bohui Paper	31	1.09	0.02	4.66	-
Jiangsu Base of Bohui Paper	24.49	1.26	0.04	4.02	-

*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)		
	2024	2023	2022
Gold East Paper	674,520,000	664,730,400	650,109,600
Hainan Jinhai Pulp & Paper*	931,291,397	984,158,242	974,001,791
Ningbo Asia	248,811,159	250,158,336	245,318,915
Guangxi Jingui Pulp & Paper	738,546,719	642,083,786	430,151,971
Rudong Base	255,094,257	293,940,777	28,244,160

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

» Air pollutant emissions*

Indicator	Unit	2024	2023	2022
Total SO ₂ emissions	ton	505.12	511.70	688.82
Total NO _x emissions	ton	4,452.42	4,137.85	4,243.02
Total soot emissions	ton	279.58	292.46	342.10
Total VOCs emissions**	ton	0.83	3.32	0.04

*Not including the data of APP China Forestry.

**In 2024, the alkali recovery and sludge incineration operations at Shandong Base of Bohui Paper were transferred to Bohui Group's management, and thus the relevant emissions of SO₂, NO_x, and VOCs are excluded from the scope of Bohui Paper's air pollutant emissions.

Mill	Exhaust gas emissions (ton)			
	SO ₂	NO _x	Soot	Volatile Organic Compounds (VOCs) ***
Gold East Paper	68.93	266.77	11.84	0
Hainan Jinhai Pulp & Paper*	126.16	2,890.96	163.39	-
Ningbo Asia	172.79	561.71	13.88	-
Guangxi Jingui Pulp & Paper	132.73	690.78	89.58	-
Bohui Paper	-	-	-	0.828
Rudong Base	4.506	42.20	0.89	0

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

**In 2024, the alkali recovery and sludge incineration operations at Shandong Base of Bohui Paper were transferred to Bohui Group's management, and thus the relevant emissions of SO₂, NO_x, and VOCs are excluded from the scope of Bohui Paper's air pollutant emissions.

*** Bohui Paper's VOCs emissions mainly came from the chemi-mechanical pulp workshop; the VOCs emissions at Hainan Jinhai Pulp & Paper and Ningbo Asia are insignificant and not monitored; Guangxi Jingui Pulp & Paper's VOCs emissions were mainly unorganized emissions from the volatilization of gasoline, diesel and paint, which cannot be monitored.

» Waste*

Indicator	Unit	2024	2023	2022
Non-hazardous waste disposed of	ton	2,161,928.68	2,187,511.42	2,202,827.72
Recycling and reuse	ton	415,657.43	412,657.41	353,504.67
Onsite	ton	97,262.65	91,206.43	106,417.74
Offsite	ton	318,394.78	321,450.98	247,086.94
Incineration	ton	816,791.20	818,418.66	856,288.15
With energy recovery	ton	808,823.40	810,744.76	848,707.19
Without energy recovery	ton	7,967.80	7,673.90	7,580.96
Selling to external parties for reuse	ton	922,613.27	949,674.17	986,722.60
Centralized treatment by local sanitation departments	ton	6,249.56	6,561.22	5,986.41
Hazardous waste disposed of	ton	1,594.95	1,234.00	1,242.56

*Not including the data of APP China Forestry.

» Environmental investment

Indicator	Unit	2024	2023	2022
Environmental investment	RMB10,000	153,621.67	134,131.72	101,174.12

» Environmental compliance

Indicator	Unit	2024	2023	2022
Environmental fines	RMB10,000	0	0	0

Social Performance

» Employment*

Indicator	Unit	2024	2023	2022
Employees directly and indirectly employed	Person	20,521	19,914	21,361
Employees directly employed	Person	19,601	19,224	20,568
Male employees directly employed	Person	15,506	15,027	15,900
Female employees directly employed	Person	4,095	4,197	4,668
Employees with ethnic minority background	Person	1,052	1,017	1,039
Employees from Mainland China	Person	19,505	19,113	20,440
Employees from Hong Kong, Macao and Taiwan	Person	70	78	92
Employees from abroad	Person	26	33	36
Employees with disabilities	person	117	123	73
Employees indirectly employed	person	920	690	793
Male employees indirectly employed	person	681	617	651
Female employees indirectly employed	person	239	73	142
New employees	person	3,694	2,874	5,763
New male employees	person	3,197	2,433	4,621
New female employees	person	497	441	1,142
Employee turnover	person	3,380	4,028	3,577
Male employees who voluntarily resigned	person	1,975	2,208	2,246
Female employees who voluntarily resigned	person	369	484	564
Male employees who were involuntarily terminated**	person	690	859	492
Female employees who were involuntarily terminated**	person	135	195	99
Male employees who retired	person	99	106	65
Female employees who retired	person	112	176	111

*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	2024	2023	2022
Employee turnover rate	%	14.71	17.32	14.81
Male employee turnover rate	%	15.13	17.43	14.99
Female employee turnover rate	%	13.08	16.92	14.22
Turnover rate of employees aged 30 and below	%	28.61	30.73	29.23
Turnover rate of employees aged between 31 and 50	%	9.01	11.73	9.32
Turnover rate of employees aged 51 and above	%	12.02	19.12	11.28

» Employee retention after maternity/paternity leave

Indicator	Unit	2024	2023	2022
Female employees who took maternity leave	person	155	169	155
Female employees who returned to work after maternity leave	person	145	152	141
Female employees who resigned after maternity leave	person	10	16	12
Male employees who took paternity leave	person	365	402	400
Male employees who returned to work after paternity leave	person	351	382	383
Male employees who resigned after paternity leave	person	13	16	14

» Employee composition by level

Indicator	Unit	2024	2023	2022
Percentage of senior-level managers	%	0.84	0.93	0.95
Percentage of middle-level managers	%	9.58	9.38	9.70
Percentage of line-level employees	%	89.58	89.69	89.35

» Employee composition by gender

Indicator	Unit	2024	2023	2022
Percentage of female employees	%	20.89	21.83	22.70
Number of female employees in management	person	361	371	412
Percentage of female employees in management	%	17.67	18.72	18.80

» Employee composition by age

Indicator	Unit	2024	2023	2022
Percentage of employees aged 30 and below	%	23.13	21.56	22.21
Percentage of employees aged between 31 and 50	%	67.16	69.12	68.65
Percentage of employees aged 51 and above	%	9.71	9.33	9.14

» Employee training

Indicator	Unit	2024	2023	2022
Total training investment	RMB10,000	875.98	601.38	387.76
Total employee training time	Hour	1,225,387.55	918,971.80	1,052,512.80
Number of employees who participated in company-paid diploma programs	Person	93	104	79
Total investment in company-paid diploma programs for employees	RMB10,000	24.63	20.68	2.92
Average training time for senior management	Hour	49.51	40.21	32.71
Average training time for mid-level management	Hour	48.62	37.22	40.44
Average training time for line-level employees	Hour	64.14	48.99	41.40

» Occupational health and safety

Indicator	Unit	2024	2023	2022
Employee safety training time	Hour	958,398.16	799,932.12	631,233.50
Total investment in personal protective equipment*	RMB10,000	989.17	1,115.74	1,055.92
Work-related injuries of employees	person-time	44	70	51
Work-related fatalities of employees	person	1	1	1
Total lost worktime rate of employees**	/	674.53	1,892.97	1,307.74
Lost time injury frequency rate of employees***	/	1.01	1.57	1.25
Work-related injuries of contractors	person-time	0	4	4
Work-related fatalities of contractors	person	1	1	1
Total lost worktime rate of contractors**	/	110.05	251.93	159.33
Lost time injury frequency rate of contractors***	/	0.02	0.12	0.14

*The main reason for the reduction of total investment in personal protective equipment (PPE) in 2024 is that some mills had high demand and large procurement volumes for PPE in 2022 and 2023, leading to lower demand and reduced procurement in 2024: Rudong Base procured a large amount of PPE in 2022 due to the commissioning of the operations, made supplementary procurement in 2023, and had basic PPE with large inventory in 2024, thus no large-scale procurement was needed; Hainan Jinhai Pulp & Paper procured a large amount of PPE in 2023 as most of its PPE was due for replacement that year, and with fewer items due for replacement in 2024, no large-scale procurement was needed; Bohui Paper increased its PPE procurement due to a large number of new employees hired in 2023.

**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	2024	2023	2022
Employee volunteer hours	Hour	14,345	21,508	30,348
Donations	RMB10,000	8,555	13,863	13,712

Economic and Governance Performance

» Economic performance

Indicator	Unit	2024	2023	2022
Total assets	RMB100 million	2,291	2,427	2,445
Total taxes paid	RMB100 million	49	39	51
Sales revenue	RMB100 million	894	926	943
Total profit	RMB100 million	41	50	81
Net profit	RMB100 million	32	43	61

» Places of origin for APP China's pulp procurement*

Region	2024	2023	2022
China	43.89%	45.68%	45.03%
Other Asian regions	30.75%	31.02%	31.27%
North America	8.08%	8.82%	8.14%
South America	10.09%	8.48%	9.55%
Europe	7.19%	6.00%	6.01%
Oceania	0.001%	0%	0%

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

» Materials

Indicator	Unit	2024	2023	2022
Total amount of wood chips purchased	10,000 tons	1,420.36	1,121.99	1,390.55
Amount of certified wood chips*	10,000 tons	282.59	262.30	262.54
Proportion of certified wood chips	%	19.90	23.38	18.88
Total amount of wood pulp purchased	10,000 tons	787.61	816.26	752.82
Amount of certified wood pulp*	10,000 tons	314.16	334.34	154.72
Proportion of certified wood pulp	%	39.89	40.96	20.55
Total amount of waste paper purchased	10,000 tons	69.60	52.18	52.97

*Including CFCC/PEFC Certification and FSC Certification.

» Anti-corruption

Indicator	Unit	2024	2023	2022
Number of governance agency members reached by anti-corruption policies and procedures	person	20	23	20
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	20	23	20
Percentage of governance agency members receiving anti-corruption training	%	100	100	100
Number of senior-level managers receiving anti-corruption training	person	165	178	196
Percentage of senior-level managers receiving anti-corruption training	%	100	100	100
Number of middle-level managers receiving anti-corruption training	person	1,878	1,804	1,995
Percentage of middle-level managers receiving anti-corruption training	%	100	100	100
Number of line-level employees receiving anti-corruption training	person	17,558	17,242	18,377
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	19	7	19

*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 is 100%.

Assurance Statement

Independent Verification Statement



Verification Statement: EIV2 132857 0001 Rev. 00

To the management and stakeholders of Sinar Mas Paper (China) Investment Co., Ltd.,

TÜV SÜD Certification and Testing (China) Co., Ltd. (hereinafter referred to as "TÜV SÜD (China)") has been engaged by Sinar Mas Paper (China) Investment Co., Ltd. (hereinafter referred to as "APP China" or "the Company") to perform an independent third-party verification on its APP China 2024 Sustainability/ESG Report (hereinafter referred to as "the Report"). During this verification, TÜV SÜD (China)'s verification team strictly adhered to the agreed terms of the contract with APP China and conducted the verification within the authorized scope.

This Independent Verification Statement is prepared based on the data and information collected and provided by APP China. Accordingly, the verification scope is limited to the provided materials. APP China shall be held accountable for authenticity and completeness of the provided materials (contains assumptions, projections, and/or historical facts).

Scope of Verification

Time frame:

- ❖ Environmental, social and governance-related data and information, management approaches and operational measures for material topics, and sustainability performance during the reporting period (from 1st January 2024 to 31st December 2024).

Physical boundary:

- ❖ The on-site verification sampling took place at APP China Headquarters, 65th Floor, No. 501 Dongdaming Road, Hongkou District, Shanghai; Gold East Paper (Jiangsu) Co., Ltd., No. 8 Xinggang East Road, Dagang, Zhenjiang City, Jiangsu Province; APP China Hainan Forestry Division, D12 Zone, Yangpu Economic Development Zone, Hainan Province; APP China Wenshan Forestry Division, Wenshan Forest Farm, Yunnan Province.

Scope of data and information for the verification:

- ❖ The data and information of APP China and its subsidiaries or other affiliated enterprises, as well as companies under its operational control in the report.

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

- ❖ Any contents beyond the reporting period;
- ❖ The data and information of APP China's suppliers, partners and other third parties;
- ❖ The financial data and information audited by an independent third party.

Limitations

- ❖ The verification was conducted within the aforementioned scope. TÜV SÜD (China) applied sampling-based assurance procedures to the Report's data and information, and only the stakeholders within the Company are interviewed.
- ❖ The Company's standpoint, opinions, forward-looking statements and predictive information as well as the historical data and information before 1st January, 2024 are beyond the scope of this verification.
- ❖ The verification conclusions are based on the analysis of the data and information collected during the verification, which may not identify all potential issues or circumstances and shall not constitute a guarantee of the credibility or status of the subject of verification.

Independent Verification Statement



Verification Statement: EIV2 132857 0001 Rev. 00

Methodology

This verification was conducted by TÜV SÜD (China)'s expert team with extensive experience in environmental, social and governance-related areas and drew the conclusions thereof. The verification standards included:

- ❖ AA1000AS v3, Type 1, Moderate Assurance
- ❖ Sustainability Report Verification Programme Operation Rule (CCB_EIV_GR_002E Rev02)

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

- ❖ Conducted background and materiality research
- ❖ Verified the disclosure of material topics and related performance metrics in the Report
- ❖ Performed On-site verification of all supporting documents, data and information provided by APP China; with sampling-based verification of key performance data and information
- ❖ Conducted special interview with APP China's management; and held interviews with employees involved in the collection, compilation and reporting of the disclosed information
- ❖ Other procedures deemed necessary by the verification team

Verification Conclusions

Based on the verification, we believe that the data and information presented in the Report are objective, factual and reliable, without systematic problems, and can be used by stakeholders.

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

ID: CCB_EIV_F_10.03E Version: 3 Effective Date: 08 Feb 2025 Page 1 of 3	Inclusivity	APP China has comprehensively identified both internal and external stakeholders of the organization, such as employees, clients and consumers, suppliers/contractors, banks, government agencies, community representatives, industry associations, professional institutions, NGOs, media, etc., and has established a stakeholder communication mechanism to regularly gather genuine feedback from stakeholders.
ID: CCB_EIV_F_10.03E Version: 3 Effective Date: 08 Feb 2025 Page 2 of 3	Materiality	APP China has established a process for prioritizing material issues, identified sustainability topics highly relevant to the industry, and differentiated their priority levels. The Company has disclosed strategic approaches, management actions, and performance data in its sustainability management and operations. The overall reporting content demonstrates materiality.
ID: CCB_EIV_F_10.03E Version: 3 Effective Date: 08 Feb 2025 Page 2 of 3	Responsiveness	Focusing on stakeholder concerns, APP China has clearly disclosed its management approaches and performance regarding material issues such as occupational health and safety, product quality and safety, water resource management, and employment relations etc. The Company has also established multiple stakeholder communication mechanisms to fully address stakeholder demands and expectations.
ID: CCB_EIV_F_10.03E Version: 3 Effective Date: 08 Feb 2025 Page 2 of 3	Impact	APP China has established a sustainable development strategy, clearly defining key objective breakdowns under this framework's target pillars while continuously tracking strategic implementation progress. Furthermore, the Company has built a sustainable development management structure to progressively improve the Company's sustainability system development, while also monitoring, measuring, and enforcing accountability for impacts on broader ecosystems.

Page 1 of 3

TÜV SÜD Certification and Testing (China) Co., Ltd.
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Page 2 of 3

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Independent Verification Statement



Verification Statement: EIV2 132857 0001 Rev. 00

Recommendations on Continuous Improvement

- The verification team has communicated improvement recommendations to the Company's management during the on-site verification process.

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 28,000 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 (China) is one of TÜV SÜD's global branches and has an expert team whose members have professional background and rich industrial experiences.

TÜV SÜD (China) and APP China are two entities independent of each other and both TÜV SÜD (China) 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 (China) has not been involved in preparation and drafting of the Report, except for the verification itself and issuance of the verification statement.

Wenjun Zhu

TÜV SÜD (China) Technical Certifier

Shanghai, China, 24/06/2025



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GRI Standards (2021) Content Index

Statement of use		APP China has reported in accordance with the GRI Standards for the period from January 1, 2024 to December 31, 2024.
GRI 1 used		GRI 1: Foundation 2021

GRI Standard	Disclosure	Page Numbers
GRI 2: General Disclosures 2021	2-1 Organizational details	8; 126
	2-2 Entities included in the organization's sustainability reporting	126
	2-3 Reporting period, frequency and contact point	126
	2-4 Restatements of information	126
	2-5 External assurance	118-120
	2-6 Activities, value chain and other business relationships	8; 21-24; 106-107; 116
	2-7 Employees	112
	2-8 Workers who are not employees	76; 112
	2-9 Governance structure and composition	10
	2-12 Role of the highest governance body in overseeing the management of impacts	2-3; 35; 71; 100-102
	2-13 Delegation of responsibility for managing impacts	35; 71; 102
	2-14 Role of the highest governance body in sustainability reporting	126
	2-16 Communication of critical concerns	2-3; 102-104
	2-17 Collective knowledge of the highest governance body	18-19; 21-24; 35; 71; 100-102
	2-22 Statement on sustainable development strategy	2-3; 18-19
	2-23 Policy commitments	20-22; 64; 102-104; 106-107
	2-24 Embedding policy commitments	35; 65-70; 100-107
	2-25 Processes to remediate negative impacts	64-65; 68-76; 102-107
	2-26 Mechanisms for seeking advice and raising concerns	64-65; 70; 102-105
	2-27 Compliance with laws and regulations	111
	2-28 Membership associations	14-17
	2-29 Approach to stakeholder engagement	21-25
	2-30 Collective bargaining agreements	64-65
GRI 3: Material Topics 2021	3-1 Process to determine material topics	25
	3-2 List of material topics	25
	3-3 Management of material topics	18-19; 21-107
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	8; 116
	201-2 Financial implications and other risks and opportunities due to climate change	35-43; 46-49

GRI Standard	Disclosure	Page Numbers	GRI Standard	Disclosure	Page Numbers
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported 203-2 Significant indirect economic impacts	80-85 35-36; 80-85; 97; 115	GRI 401: Employment 2016	401-3 Parental leave 403-1 Occupational health and safety management system 403-2 Hazard identification, risk assessment, and incident investigation 403-3 Occupational health services 403-4 Worker participation, consultation, and communication on occupational health and safety 403-5 Worker training on occupational health and safety 403-6 Promotion of worker health 403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships 403-8 Workers covered by an occupational health and safety management system 403-9 Work-related injuries 403-10 Work-related ill health	113 71-73; 76 71-75 76 71-76 74-76; 115 76 71-76 115 71-73; 76; 115
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	106-107; 116	GRI 403: Occupational Health and Safety 2018	404-1 Average hours of training per year per employee 404-2 Programs for upgrading employee skills and transition assistance programs	115 67-70
GRI 205: Anti-corruption 2016	205-2 Communication and training about anti-corruption policies and procedures 205-3 Confirmed incidents of corruption and actions taken	102-105; 117 117	GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	112-114
GRI 301: Materials 2016	301-1 Materials used by weight or volume 301-2 Recycled input materials used	116 116	GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	Did not occur
GRI 302: Energy 2016	302-1 Energy consumption within the organization 302-4 Reduction of energy consumption	46-49; 108 47-49	GRI 408: Child Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	Did not occur
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	50-53	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
	303-2 Management of water discharge-related impacts	50-53	GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs 413-2 Operations with significant actual and potential negative impacts on local communities	28-34; 40-45; 57-61; 80-85 30-34; 44-45; 82-85
	303-3 Water withdrawal	109-110	GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria 414-2 Negative social impacts in the supply chain and actions taken	106-107 106-107; 116
	303-4 Water discharge	52; 109-110	GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories 416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	77-79; 97-99 Did not occur
	303-5 Water consumption	51; 109-110	GRI 417: Marketing and Labeling 2016	417-1 Requirements for product and service information and labeling 417-2 Incidents of non-compliance concerning product and service information and labeling	20-21; 41; 97-99 Did not occur
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	34; 57-61	GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	Did not occur
	304-2 Significant impacts of activities, products and services on biodiversity	34; 57-61			
	304-3 Habitats protected or restored	57-61			
	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	57-61			
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	36-37; 46-49			
	305-2 Energy indirect (Scope 2) GHG emissions	36-37; 46-49			
	305-3 Other indirect (Scope 3) GHG emissions	36-37; 46-49			
	305-5 Reduction of GHG emissions	36-37; 46-49			
	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	54; 110			
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	55-56			
	306-2 Management of significant waste-related impacts	55-56; 98-99			
	306-3 Waste generated	55-56; 111			
	306-4 Waste diverted from disposal	55-56; 111			
	306-5 Waste directed to disposal	55-56; 111			
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	106-107			
	308-2 Negative environmental impacts in the supply chain and actions taken	106-107			
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	112-113			
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	64-65			

TCFD Index

TCFD Recommended Disclosures	Page Numbers
Governance: Disclose the company's governance around climate-related risks and opportunities.	
a. Describe the board's oversight of climate-related risks and opportunities.	35-36
b. Describe management's role in assessing and managing climate-related risks and opportunities.	35-36
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.	
a. Describe the climate-related risks and opportunities the company has identified over the short, medium, and long term.	36-43; 97-99
b. Describe the impact of climate-related risks and opportunities on the company's businesses, strategy, and financial planning.	18-19; 36-43; 97-99
c. Describe the resilience of the company's strategy, taking into consideration different climate-related scenarios, including a 2° C or lower scenario.	36
Risk Management: Disclose how the company identifies, assesses, and manages climate-related risks.	
a. Describe the company's processes for identifying and assessing climate-related risks.	35-39
b. Describe the company's processes for managing climate-related risks.	35-39
c. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the company's overall risk management.	37-39
Metrics and Targets: Disclose the metrics and targets used to access and manage relevant climate-related risks and opportunities where such information is material.	
a. Disclose the metrics used by the company to assess climate-related risks and opportunities in line with its strategy and risk management process.	18-19; 36; 40-43; 46-49
b. Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	36-39
c. Describe the targets used by the company to manage climate-related risks and opportunities and performance against targets.	18-19; 36-43; 46-49

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	64-66; 71-76; 79-85; 102-104 106-107
	Principle 2: make sure that they are not complicit in human rights abuses.	64-66; 71-76; 102-104; 106-107
Labor	Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	64-70
	Principle 4: the elimination of all forms of forced and compulsory labor;	64-65; 106-107
Environment	Principle 5: the effective abolition of child labor; and	64-65; 106-107
	Principle 6: the elimination of discrimination in respect of employment and occupation.	64-65
Anti-corruption	Principle 7: Businesses should support a precautionary approach to environmental challenges;	28-61; 88-94; 97-99
	Principle 8: undertake initiatives to promote greater environmental responsibility; and	28-61; 88-94; 97-99
	Principle 9: encourage the development and diffusion of environmentally friendly technologies.	40-56; 88-95; 97-99
	Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.	11; 100-107; 117

About this Report

This is the 18th Sustainability Report issued by Sinar Mas Paper (China) Investment Co., Ltd. and its subsidiaries (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, 2024 to December 31, 2024. Our last Sustainability Report was released in July 2024. 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. 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)

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 accuracy, balance, clarity, comparability, completeness, sustainability context, timeliness, verifiability, 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.



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