

SSE ESG Practice in Two Decades Guided by “Two Mountains” Philosophy

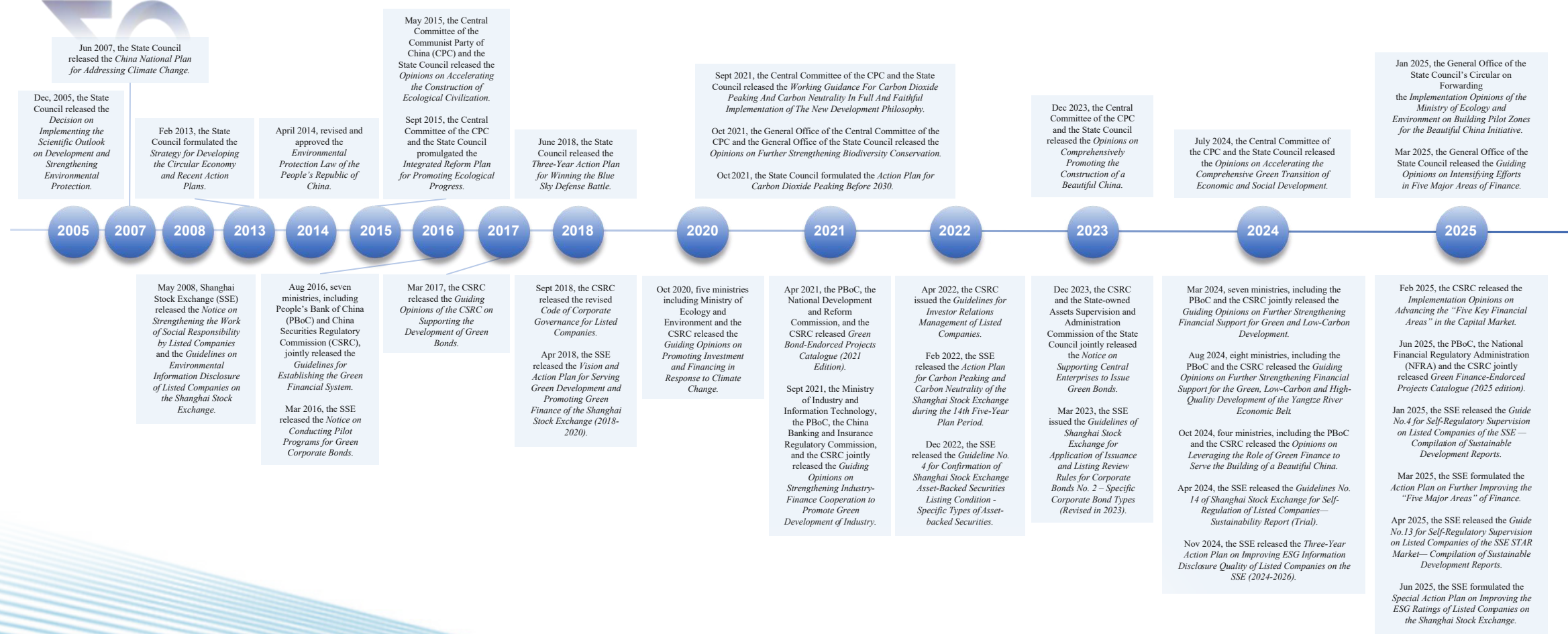


Preface

The concept that "lucid waters and lush mountains are invaluable assets" (the "Two Mountains" philosophy), proposed by General Secretary Xi Jinping in 2005, is a core principle of China's ecological civilization and an important theory guiding Chinese modernization. Under the overall guidance of China Securities Regulatory Commission (CSRC), Shanghai Stock Exchange (SSE) is committed to implementing the "Two Mountains" philosophy. Leveraging its pivotal role and function as a platform of the capital market, the SSE prioritizes ESG reforms in institutional framework, financial instruments and services, and guides listed companies, investors and other market participants to allocate more resources toward green and low-carbon transition as well as social responsibility, thereby facilitating the transformation between ecological conservation and economic prosperity.

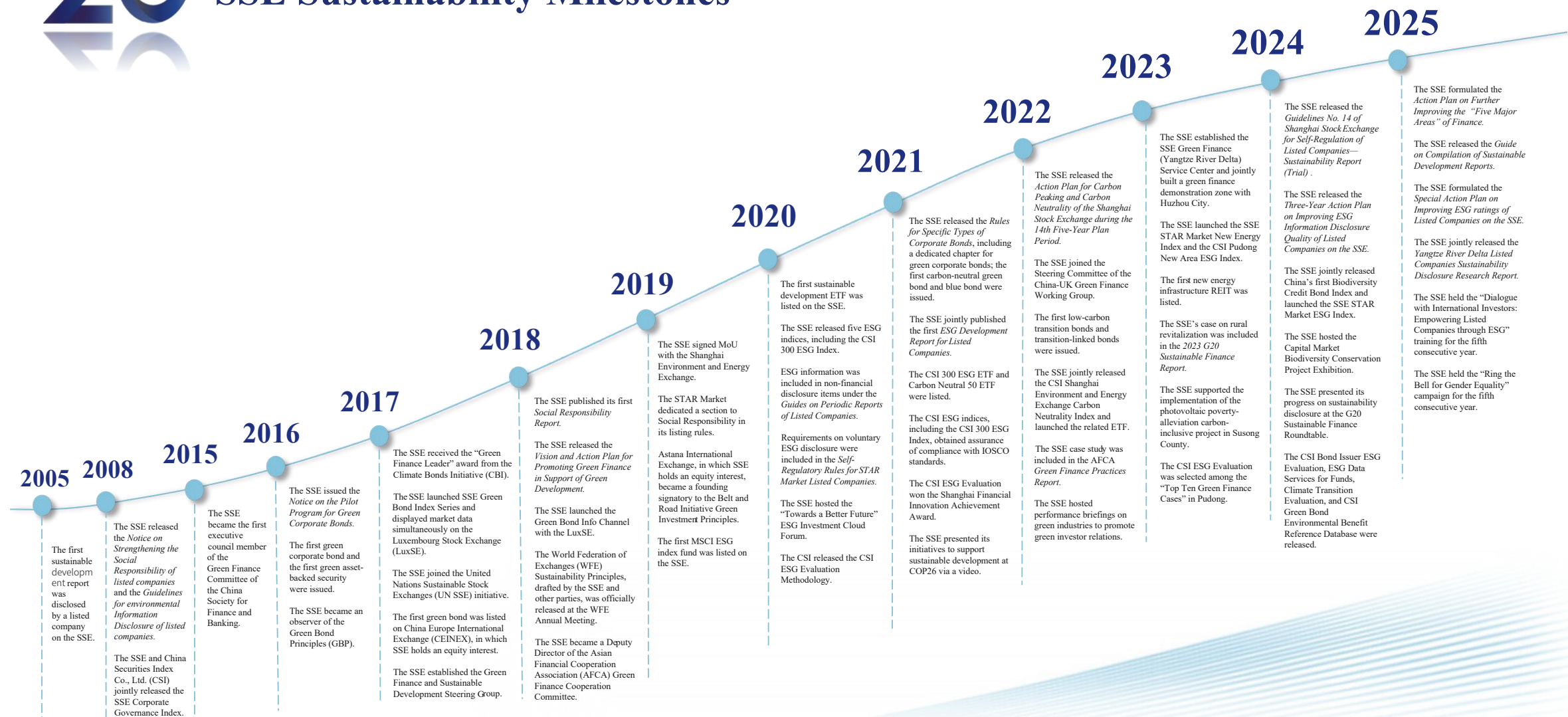
As 20 years has passed since the birth of the "Two Mountains" philosophy, it is meaningful to take a look back at the journey of ESG on the SSE market, which starts in experiments, grows in exploration and advances through deepened reforms. Starting from voluntary disclosure by only a handful of listed companies, ESG disclosure on the SSE market has turned standardized and systematic, resulting in solid progress towards green and low-carbon corporate transition and better fulfillment of social responsibility. More diverse offerings and a growing size of ESG-themed financial instruments have significantly boosted ESG investment and financing, and enhanced global competitiveness of the Chinese capital market. In the face of new developments of our time, to reinforce social awareness and spur synergistic efforts to further act on the "Two Mountains" philosophy, the SSE releases *SSE ESG Practice in Two Decades Guided by "Two Mountains" Philosophy*, to walk through ESG milestones and exemplary cases on the SSE market and promote sustainable development among market participants. By exploring more initiatives like this, the SSE will fully leverage its role in the finance sector to serve high quality development of the economy and the society.

20 years Policies and Supporting Systems on Sustainable Development



20 years

SSE Sustainability Milestones



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Part I: Top-level Policies and SSE ESG Development

I. From “Two Mountains” concept to green finance: building and developing the policy framework

The year 2025 marks the 20th anniversary of the concept “Two Mountains” philosophy. Over the past two decades, reforms and development in China’s capital market have advanced in tandem with the country’s drive toward ecological civilization. The principle of green development has been deeply embedded into institutional design and market practice, paving a sustainable development path suited to China’s national conditions.

In 2005, President Xi Jinping, who was at that time secretary of the Communist Party of China (CPC) Zhejiang Provincial Committee, first introduced the “Two Mountains” concept in Yucun Village, Anji County of Zhejiang Province. In this concept, he points out the mutually-reinforcing connection between economic development and ecological protection, pointing the way forward for the capital market to practice sustainable development. In the same year, the State Council issued the *Decision on Implementing the Scientific Outlook on Development and Strengthening Environmental Protection (the “Decisions”)*, elevating environmental protection to a more prominent strategic position and requiring enterprises to disclose environmental information. To implement the *Decisions*, under the guidance of the CSRC, the SSE released the *Notice on Strengthening the Work of Social Responsibility by Listed Companies and the Guidelines on*

Environmental Information Disclosure of Listed Companies on the Shanghai Stock Exchange in May 2008. These measures encouraged listed companies to fulfill social responsibilities and pay greater attention to environmental protection, laying an important institutional foundation for the start of sustainable development practices in the market.

Since its 18th National Congress, the Central Committee of CPC with Comrade Xi Jinping at its core has incorporated ecological civilization into the Five-sphere Integrated Plan (which is to promote coordinated progress in the economic, political, cultural, social and eco-environmental fields). In 2015, the CPC Central Committee and the State Council published *Integrated Reform Plan for Promoting Ecological Progress*, which outlines the goal to establish a green financial system for the first time. In August 2016, 7 ministries including People’s Bank of China (PBoC) and the CSRC jointly released *Guidelines for Establishing the Green Financial System*, setting out China’s top-level framework governing green financial system building. In 2017, the CSRC released *Guiding Opinions of the CSRC on Supporting the Development of Green Bonds*, guiding exchange bond market to further support sound and orderly development of green industries and facilitate the growth of the green securities market. These initiatives have kicked off China’s experiment with the green financial system, which has taken shape today with growing market ecosystem and improving capabilities in fulfilling the functions of resource allocation, market pricing and risk management in green finance.

Moving onto the new development stage, China has tasked green finance with serving carbon peak and carbon neutrality goals, and assisting in the historic mission of the Beautiful China Initiative. Its importance among national strategies is further elevated. In October 2023, the Central Financial Work Conference called

for efforts to advance five key areas in financial sector, including technology finance, green finance, inclusive finance, pension finance and digital finance. In particular, it requested swift actions to ride the trend of the time and break new ground before abolishing old practice in pursuit of green finance. In March 2024, 7 ministries including the PBoC and CSRC jointly published *Guiding Opinions on Further Strengthening Financial Support for Green and Low-Carbon Development*, outlining the guiding principles and main tasks around “giving play to the leading role of green finance” in the new era and new development stage, and measures from the financial sector to support green and low-carbon transition in a tailored and effective manner. In October of the same year, 4 ministries including the PBoC and CSRC jointly released *Opinions on Leveraging the Role of Green Finance to Serve the Building of a Beautiful China*, rolling out 19 key measures aimed at building a beautiful China through high quality green finance. Guided by these policies, the capital market has continued developing rules and regulations in sustainability disclosure and green financial products and services, with more sophisticated market practice implemented.

The third plenary session of the 20th CPC National Congress requested accelerated efforts to improve systems and mechanisms around the theme of the “Two Mountains”, which lays the ground for continuous green financial system building. In February 2025, the CSRC released *Implementation Opinions on Advancing the “Five Key Financial Areas” in the Capital Market*, which calls for better green finance standard systems and more green finance products in the capital market, and charts the course for allocating more factors and resources towards green and low-carbon areas. In July, the CSRC,

together with the PBoC and National Financial Regulatory Administration (NFRA), released *Green Finance-Endorced Projects Catalogue (2025 edition)*. The catalogue intends to enhance standardization and transparency of the green financial market through unifying and refining green project standards, aligning national green financial standards with standards that are internationally recognized, thus improving China’s influence and voice in global green financial area.

The 20 years marking the roll-out of the “Two Mountains” philosophy also witnesses the journey of significant upgrade in China’s green finance development, from testing out policies, making breakthroughs in a few areas to building a systematic framework capable of empowering the entire market. As China moves closer to its strategic goals of building a beautiful country and the carbon peak and carbon neutrality, the capital market will continue to play its role of facilitating resource allocation, provide higher quality green financial services in our response to the call for ecological civilization, and contribute China wisdom and China solutions to global sustainable development.

II. SSE initiatives in capital market sustainability

To fully implement the national green development strategy, the SSE has leveraged its pivotal role in the capital market and taken initiatives to develop green finance and provide targeted and effective support for green transition and the building of a beautiful China. With years of efforts, the SSE has established a relatively comprehensive product line and service system dedicated to green finance, setting examples in a wide array of capital market capabilities to implement the Two Mountains philosophy.

(1) Enhance competitiveness of listed companies based on sustainability disclosure

Improve sustainability reporting system. In as early as 2008, the SSE started to foster social responsibility awareness among listed companies by issuing notices on enhancing listed companies' social responsibility and guidelines on environmental information disclosure. In 2019, the SSE dedicated a chapter in its STAR Market stock listing rules to social responsibility, requesting compulsory disclosure on social responsibility fulfillment from STAR Market listed companies. Under the guidance of the CSRC, the SSE published *Guidelines No. 14 of Shanghai Stock Exchange for Self-Regulation of Listed Companies—Sustainability Report (Trial)* in April 2024 and released relevant guides on report compilation in January 2025. With these measures in place, the SSE has established a sustainability reporting system centered around compulsory requirements in the

guidelines, as well as cases and practice recommended for reference in the guides. Sustainability reporting by listed companies has become more standardized.

Promote ESG disclosure and governance of listed companies. Since November 2024, the SSE released *Three-Year Action Plan on Improving ESG Information Disclosure Quality of Listed Companies on the SSE* and the *Special Action Plan on Improving the ESG Ratings of Listed Companies on the Shanghai Stock Exchange*. These initiatives aim to promote systematic capacity building and service oversight of ESG disclosure by listed companies, with the hope that the disclosure will gradually improve corporate governance and sustainable competitiveness of listed companies. In 2024, both the quantity and quality of sustainability disclosures by companies listed on the SSE saw improvement: 57% of all listed companies disclosed sustainability reports, with constituents of the SSE 50 and STAR 50 indices achieving 100% disclosure. The disclosed sustainability information showed significant enhancements in standardization, relevance, comparability, verifiability, understandability, and timeliness. As of July 2025, among the MSCI ESG-rated entities, 31% of companies listed on the SSE saw their ESG ratings upgraded in the latest assessment. From 2022 to 2024, the number of companies listed on the SSE with CSI ESG ratings as A-AAA was 348, 420, and 440, respectively, representing a cumulative growth of 26.44%.

The ESG Ratings of SSE-Listed Companies Continue to Improve



(2) Optimize market resource allocation with a focus on facilitating green industry financing

Support equity financing and follow-on offerings for green industries.

The SSE actively supports key sectors in the carbon peak and carbon neutrality field and leading enterprises in the "Beautiful China Pilot Zones" in raising capital through IPOs and follow-on offerings. It leverages the multi-tiered capital market to better serve the green and low-carbon high-quality development and the transition toward green and low-carbon industrial structures. The SSE has continuously enhanced market services, including establishing the SSE Green Finance (Yangtze River Delta) Service Center, conducting specialized training for green industry enterprises, and utilizing the digital tool of "Xing Qi Hang" to expand outreach to green enterprises, accelerating their access to the capital market.

Support bond financing for green industries and projects.

In March 2016,

to guide the bond market in supporting green industries, the SSE issued the *Notice on the Pilot Program for Green Corporate Bonds*, launching the green corporate bond pilot program. In May and July of the same year, JiaHua Energy and Goldwind Science & Technology issued the first green corporate bond and the first green asset-backed security (ABS) on the SSE, respectively. In 2021, the SSE introduced the sub-category of carbon-neutral green corporate bonds under the green bond framework, focusing on green projects with carbon reduction benefits, as well as the sub-category of blue bonds, dedicated to projects supporting marine conservation and sustainable use of marine resources. In July 2022, with the release of the *China Green Bond Principles*, the SSE refined its green bond rules, further enhancing the standards for green bonds. By the end of July 2025, the SSE market had issued a total of 862.7 billion yuan in green bonds, including 492.4 billion yuan in green corporate bonds and 370.3 billion yuan in green ABS. Additionally, 7 publicly-offered REITs targeting clean energy and environmental protection sectors have been listed.

(3) Enrich the sustainable investment instruments with indices and fund products

Strengthen ESG evaluation systems and data base. The SSE guides China Securities Index Co., Ltd. (CSI) to develop an ESG evaluation system that balances international consensus with China's national conditions, establishing standardized and comprehensive ESG data resources. This leverages the guiding role of ESG evaluations in sustainable development practices and the benchmarking role of ESG in sustainable investment,

promoting high-quality development of listed companies. In September 2021, the CSI ESG Index, which applies CSI ESG evaluation results, received independent assurance from a professional audit agency regarding its compliance with the standards of the International Organization of Securities Commissions (IOSCO). Currently, CSI ESG ratings cover nearly 5,000 listed companies and nearly 2,500 bond issuers, extending to include fund ESG data services and climate transition evaluations.

Develop innovative instruments for green financial investment. To facilitate investors in accessing green assets through the exchange market, the SSE vigorously promotes the development of index-based sustainable investment instruments. Starting in March 2020, the SSE, in collaboration with the CSI, launched a series of indices including the CSI 300, CSI 500, and CSI 800 ESG indices, followed by the CSI High Dividend ESG Index in January 2022. This gradually built an ESG index series encompassing broad-based indices and indices employing strategies such as negative screening, best-in-class selection, multi-factor combinations, and thematic screening. By the end of July 2025, a total of 155 sustainability indices, including ESG indices, had been released, covering stocks, bonds, and multi-asset indices. There were 90 sustainability index-tracking products with a combined market cap of 73.192 billion yuan, and 157 broad-based index products using CSI ESG evaluations, such as the CSI A500 and SSE 180 indices, with a combined market cap of 252.848 billion yuan.

(4) Promote collaborative and win-win sustainable ecosystems through green finance international

cooperation

Participate in international green finance standards development. As a director of the World Federation of Exchanges (WFE), the first domestic exchange to join the United Nations Sustainable Stock Exchanges Initiative, the Deputy Director of the Green Finance Cooperation Committee of the Asian Financial Cooperation Association, a member of the Steering Committee of the China-UK Green Finance Working Group, and an observer of the International Capital Market Association (ICMA) Green Bond Principles, the SSE actively participates in green finance standards development across multiple international platforms. In 2018, during its tenure as WFE Chair, the SSE led the development of the WFE Principles for Sustainable Exchanges, laying a solid foundation for the global exchange industry to take a leading role in the sustainability agenda.

Strengthen exchange of insights and promotion of green finance. To build bridges between companies listed on the SSE and international capital, the SSE has designated ESG investment as a core topic at its Global Investors Conferences for six consecutive years, and hosted the "Dialogues with International Investors: Empowering Listed Companies with ESG" for five consecutive years, fostering consensus in sustainability and ESG value discovery for companies listed on the SSE. The SSE has also shared sustainability stories of China's capital market at international forums such as the 2024 G20 Sustainable Finance Roundtable and the ESG Global Leaders Summit. Related practices have been included in the *G20 Sustainable Finance Report*, with the narrative of Beautiful China becoming a new benchmark and anchor for international investors to invest in China.

Part II: Selected ESG Practice by SSE-listed Companies

Year 2005

Baosteel (600019) : Taking the lead in releasing Sustainability Report in the Shanghai Stock market, setting the benchmark for the green development of the steel industry

In 2005, the circular economy was elevated to a national strategy, and "building a resource-conserving and environment-friendly society" was first enshrined as a fundamental state policy and embedded in the core agenda of the "11th Five-Year Plan". Baoshan Iron & Steel Co., Ltd. (Baosteel) released its inaugural Environmental Report (covering 2003) in 2004 and in 2006 elevated environmental disclosure to full sustainability reporting with its first Sustainability Report (covering 2005), aligned with GRI.

China's "Eleventh Five-year" development period was full of strategic opportunities for Baosteel, which was crucial for Baosteel to implement circular economy and sustainable development, and build an enterprise featuring environmental protection and resource conservation. The company stated its intention that each main steel production unit of manufacture must pass the re-certification of "State Environment Friendly Enterprise" as a whole and achieve the goal of "building a first class clean iron and steel enterprise in the world". Baosteel intended to develop a specialized comprehensive resource utilization industry to realize the common development of comprehensive resource utilization industry and the iron and

steel business in accordance with the requirements of circular economy and the integration development strategy of Baosteel.

The company has published sustainability reports for 22 consecutive years to date. In 2020, the company established a dedicated ESG working group, developed a comprehensive ESG indicator system. In 2021, the report was independently assured by a third party and aligned with AA1000 Accountability Principles. By 2023, the company's 19th report had fully aligned with the CASS-ESG 5.0 Guidelines and the Shanghai Stock Exchange's regulations, mapped its actions against the United Nations' SDGs, shifting Baosteel's ESG governance from reactive compliance to proactive value creation. Currently, the report is prepared in accordance with the Exchange's Regulatory Guidance No. 14 and referring to ISSB standards, the report identifies double-materiality topics and discloses them in detail. In terms of special reports, in 2022, the company released China's steel industry's first "Climate Action Report", outlining the carbon-reduction roadmap and technological breakthroughs-signaling a strategic shift toward leadership in environmental disclosure. On World Environment Day 2025, the second "Climate Action Report" was released, further cementing its position as the industry benchmark for green development.



Figure: Baosteel No.1 Blast Furnace Memorial Square

Year 2006

Juhua (600160) : Pioneer in Clean Development Mechanism Projects, contributing to Global Greenhouse Gas Emissions Reduction

In accordance with the provisions of the United Nations Framework Convention on Climate Change (UNFCCC) ratified by China and the Kyoto Protocol approved by China, as well as relevant decisions made by the Conference of the Parties, China has strengthened the effective management of Clean Development Mechanism (CDM) project activities. In 2004, the National Development and Reform Commission (NDRC), the Ministry of Science and Technology, and the Ministry of Foreign Affairs jointly issued the Interim Measures for the Operation and Management of Clean Development Mechanism Projects, which came into effect on June 30, 2004. On October 12, 2005, the Measures for the Operation and Management of Clean Development

Mechanism Projects were reissued.

On the morning of March 10, 2006, as China's first fluorochemical enterprise to implement carbon dioxide emissions trading, Zhejiang Juhua Co., Ltd. held a grand groundbreaking ceremony for its CDM project—Decomposition of 500 Tons of HFC-23 per Year—in cooperation with Japan's JMD Corporation. At the time, this project was the largest carbon dioxide reduction project implemented internationally. Its launch also marked the official commencement of emissions trading involving China, the world's second-largest emitter. Subsequently, the company collaborated on CDM projects with Climate Change Capital China (UK). Over the course of these CDM projects, the company cumulatively transferred 60,839,533 tons of carbon dioxide equivalent CERs to the aforementioned buyers, making a significant contribution to the reduction of global greenhouse gas emissions. Over the years, Juhua Co., Ltd. has proactively reduced carbon dioxide emissions through the Clean Development Mechanism (CDM), which has had a positive impact on the company's adoption of advanced fluorochemical environmental technologies, the promotion of sustainable development in the fluorochemical industry, and the effective enhancement of corporate performance. At present, the company has retained its original CDM HCFC-23 decomposition facility and has also built a new HCFC-23 decomposition facility. All by-product HCFC-23 generated during the production of HCFC-22 is incinerated and decomposed, with the company bearing the full cost of treatment, voluntarily fulfilling its greenhouse gas emissions reduction responsibilities. In 2024, the decomposition rate of HCFC-23 reached 99%, resulting in a reduction of 45.85 million tons of carbon dioxide equivalent.



Figure: Commissioning of China's first HFC-23 decomposition Clean Development Mechanism (CDM) project

Sinopec Corp. (600028): The Sustainable Development Report released at the United Nations, proactively practicing the spirit of the Global Compact

China Petroleum & Chemical Corporation, also known as Sinopec Corp., officially joined the United Nations Global Compact in November 2004. The concept of sustainable development proposed by the Global Compact aligns with the Scientific Outlook on Development that our country initiated at that time. As a large international energy and chemical company, Sinopec Corp. adheres to the Scientific Outlook on Development and actively practices the principles of the Global Compact, achieving good results in promoting the harmonious development of enterprises and society. In order to help the international community better understand the efforts and achievements of Chinese enterprises in sustainable development, in 2007, Sinopec Corp.

globally released its 2006 Sustainable Development Report, following the Ten Principles of the United Nations Global Compact and the G3 standard of the Global Reporting Initiative (GRI) for sustainability reporting. The company cooperated with a well-known international environmental resources management company for consulting to enhance the quality and credibility of the report. The report was submitted to the United Nations Global Compact Office and published on its website, receiving wide recognition.

The report benchmarks with international standards and focuses on the measures and achievements of Sinopec Corp. in areas such as corporate governance, safety and the environment, corporate social responsibility, as well as products and services. In particular, in response to the global issues of climate change which were raised at that time and the countermeasures by domestic energy and chemical enterprises, Sinopec Corp. pledged to make endeavors to reduce greenhouse gas emissions through improving energy efficiency, developing circular economy, and promoting renewable energy. During the 11th Five-Year Plan, the company saved 20 million tons of standard coal each year, equivalent to reducing carbon dioxide emissions by 14 million tons, and provided more and cleaner natural gas. Since 2004, some provinces and cities in China have been promoting the use of ethanol gasoline.

To date, the company has continuously disclosed its annual sustainability report for 19 years, consistently aligning with advanced international standards, actively responding to the demands of stakeholders both domestically and internationally, narrating the Chinese enterprise stories well in the international community, and continuously forging the benchmark for

sustainable development in the industry.



Figure: Green Refining Plant of Sinopec Corp.

Year 2007

PetroChina (601857): Earnestly promoted carbon sequestration and emission reduction, and took practical actions to address global warming

On June 4, 2007, the State Council approved and officially released China's National Climate Change Programme, which was formulated by the National Development and Reform Commission in conjunction with relevant departments. PetroChina (also the "Company") actively supported and implemented China's National Climate Change Programme, earnestly promoted carbon sequestration and emission reduction, and took practical actions to address global warming.

In 2007, the Company donated 300 million yuan to jointly establish the China

Green Carbon Fund with the National Forestry Administration and the China Green Foundation, dedicated to promoting forestry carbon sequestration activities. It is estimated that 5-10 million tons of carbon dioxide can be absorbed and sequestered over a 10-year period. The Company signed a framework cooperation agreement on biomass energy with the National Forestry Administration and the governments of 7 provinces (autonomous regions) and built a demonstration base of 68,000 hectares of biodiesel raw material forests. The comprehensive utilization of new energy sources such as geothermal energy and solar energy was systematically advanced.

To meet the requirements of the 2008 Beijing Olympics for urban environmental quality, the Company successively put into operation the First Shaanxi-Beijing Gas Pipeline and the Second Shaanxi-Beijing Gas Pipeline, and constructed two underground gas storage facilities, contributing to the Green Olympics and positively impacting China's energy structure. By the end of this year, natural gas supply has covered 26 provinces, municipalities, and autonomous regions across the country, promoting the improvement of China's atmospheric quality. In particular, Beijing's air quality showed remarkable improvement, with 246 "blue-sky days" recorded - the highest annual count since 1999. This achievement laid a solid foundation for the successful hosting of the Green Olympics in Beijing in 2008.

The Company's commitment to green development never ceased. In 2020, the Company incorporated "green and low-carbon" into its development strategy and implemented the "three-step" work plan of clean substitution, strategic succession, and green transition. In 2023, the Company released and implemented the "Green and Low-Carbon Development Action Plan

3.0", carrying out "three major actions" and "ten major projects". In 2024, the Company established 10 self-contributed biodiversity conservation areas (OECMs), contributing to the construction of a "Beautiful China".



Figure: Green and Low-Carbon Development at CNPC Liaohe Oilfield

Year 2008

China Shenhua (601088): Actively implement the social responsibility of central enterprises, increase investment to promote environmental protection and harmonious development

In 2008, the State-owned Assets Supervision and Administration Commission of the State Council issued the "Guidance on the Performance of Social Responsibility by Central Enterprises" (SASAC Research [2008] No. 1), requiring central enterprises to enhance awareness of social responsibility, actively fulfill social responsibilities, play exemplary roles for legitimate

operation and honesty and trustworthiness, resources conservation and environment protection, as well as the people-oriented and harmonious enterprises construction, and strive to become the pillar of the national economy and an example for enterprises in the whole society.

China Shenhua Energy Company Limited ("China Shenhua") is the world's leading integrated coal-based energy company under Shenhua Group Corporation Limited. Since its establishment, China Shenhua has always been adhering to basic policies of the State including the scientific concept of development and environmental protection by dedicating efforts in complying with standards for environmental protection and requirements of emission in relevant industries in China and accepting supervision from local environmental authorities.

In 2008, in accordance with the principle of "controlling pollution at the source and implementing cleaner production to achieve harmonious development" and with the primary objective of building ecological mines and pollution-free power plants, China Shenhua reduced the effect caused on environment by its production and operation by focusing on increasing the investment in environmental improvement and energy conservation and emission reduction, improving the efficiency of energy utilisation, developing and utilising alternative energy and new energy, protecting water resources and building a number of facilities for pollution prevention and control and environmental protection.

In terms of reducing carbon dioxide emissions, China Shenhua has been actively researching and developing and spreading low carbon technology and new technology and new devices for energy conservation, exerting

itself in the development of advanced technology and industry such as coal transformation, enhancement of coal quality, power generation with clean coal and improvement of generating efficiency, and conducting study on CO₂ capture and storage (CCS) program. The technologies of upgrading brown coal by hot pressing and coal water slurry mixture by China Shenhua effectively enhanced the utilization rate of coal and reduced the amount of CO₂ generated from coal combustion. The success of “integrated gasification combined cycle” (IGCC), the key scientific research of China Shenhua, will effectively improve the generating efficiency of gas turbines, achieve efficient utilization of energy and reduce CO₂ emissions. In 2008, three power plants of China Shenhua pushed emission reduction of CO₂ (one of the greenhouse gases) through the implementation of Clean Development Mechanism (CDM) project, including emission reduction of CO₂ through application of clean energies such as gas turbine and wind turbines, as well as that from the application of less GHG emissions intensive technology- the million kWh ultra supercritical units power generating technology. The total annual amount of emission reduction of CO₂ is estimated to reach approximately 1.087 million tonnes.



Figure: Jinjie Energy CCUS Facility of China Shenhua

Ping An (601318) : China's First Environmental Liability Insurance Claim: Supporting High-Quality Development of Ecological Environment via Green Finance

In March 2007, the National Environmental Protection Administration and the China Insurance Regulatory Commission proposed the concept of environmental pollution liability insurance, aiming to improve the environmental damage compensation system and enhance mechanisms for resolving related disputes. Ping An, with its expertise in insurance innovation, actively participated in the development of this insurance product under regulatory guidance. After nearly a year of research, Ping An Property & Casualty launched its environmental pollution liability insurance in April 2008, marking a significant step in addressing environmental risks through

insurance.

In September 2008, Ping An handled the first-ever environmental pollution liability insurance claim in China. A chemical plant in Hunan Province caused crop damage to nearby villagers due to improper equipment cleaning. Ping An Property & Casualty promptly dispatched investigators to assess the situation, confirming the factory's liability and the compensation owed. This landmark case demonstrated the potential of environmental liability insurance to support sustainable development and environmental protection.

In recent years, Ping An has embraced sustainable development, expanding its support for green, low-carbon, and circular economies. By leveraging technology to monitor environmental risks like climate change, Ping An Property & Casualty has developed a range of green financial products and services. As of the first half of 2025, Ping An Property & Casualty's green insurance premiums reached 3.58 billion yuan, providing over 10.15 trillion yuan in risk coverage for green projects. This effort underscores Ping An's commitment to fostering green and high-quality development in China.



Figure: Ping An Property & Casualty Insurance participates in the 2025 renewal ceremony for "insurance application-insurance underwriting" entities of the Environmental Pollution Liability Insurance in Pudong New Area.

Year 2009

Jiangxi Copper (600362) : Advancing Mine Environmental Management and Full Implementation of Cleaner Production

In 2009, Jiangxi Copper Company Limited (JCCL) actively responded to the national call for green development. It vigorously developed a circular economy, implemented clean production, and explored a new path for a "green copper industry" by maximizing resource utilization, conserving energy, and thoroughly extracting value from the wastewater, exhaust gases, slag, and waste heat generated during production.

That year, JCCL deepened its circular economy initiatives, using technological innovation to solidify its green foundation, it generated 190 million kWh of

electricity using waste heat from smelting flue gas, saving 92,000 tons of standard coal equivalent; it extracted nearly 2,000 tons of copper annually from low-grade "copper-bearing waste rock" via hydrometallurgical technology on a large scale; energy consumption per 10,000 yuan of output value dropped to 0.358 tons of standard coal equivalent, a 28.4% decrease from 2005, demonstrating its commitment to energy conservation and consumption reduction.

JCCL achieved significant results: its industrial water reuse rate reached 85%, nearly 30 percentage points higher than the national average, saving 300 million tons of water annually; the Guixi Smelter utilized the "double-conversion double-absorption" process to recover sulfur dioxide, producing over 1.7 million tons of sulfuric dioxide to acid, raising the overall sulfur utilization rate to 97.64%; pioneering China's first copper recovery project from flash furnace slag, it extracted 8,000 tons of copper annually from waste slag, while supplying all slag to cement enterprises for reuse, achieving "turning waste into treasure."

Responding to the Ministry of Land and Resources' "Regulations on Mine Geological Environmental Protection" and Jiangxi Province's "Supervision Measures for Funds in Special Accounts for Mine Environmental Treatment and Ecological Restoration Bonds," JCCL established dedicated guarantee fund accounts for ecological restoration bonds at all 6 of its operating copper mines. Putting the principle of "who damages, who reclaims" into practice, it conducted greening on decommissioned tailings ponds and carried out ecological restoration on mine pit slopes and waste rock dumps, revitalizing the mining areas.

As of 2024, JCCL's green development achievements have continued to rise, cumulative waste heat power generation exceeded 2.5 billion kWh; copper extracted from low-grade waste rock surpassed 40,000 tons; comprehensive energy consumption per 10,000 yuan of output value dropped to 0.011 tons of standard coal equivalent; industrial water reuse rate reached 96.61%; total sulfur recovery rate exceeded 98%. JCCL now boasts 12 national-level green mines and factories. The Yongping Copper Mine was selected as one of China's first batch of exemplary cases for mine ecological restoration. Through continuous action, JCCL interprets the profound meaning of the "Two Mountains" theory (lucid waters and lush mountains are invaluable assets).



Figure: Panoramic View of Guixi Smelter: A National-Level Green Factory

Industrial Bank Co., Ltd (601166): A Practitioner of Sustainable Finance, released the First Sustainability Report in China's Banking Industry

In 2009, China further integrated climate change response into the national economic and social development plans and continued to adopt robust measures. Industrial Bank established its Sustainable Finance Center in the same year, responsible for developing carbon finance, energy efficiency finance, environmental finance, and other sustainable finance businesses. The following year, it released the first sustainability report in China's banking industry, as well as the first corporate social responsibility report with sustainability as its core indicator—Industrial Bank Sustainability Report (2009).

As a joint-stock bank born during China's reform and opening-up era, Industrial Bank diligently fulfills its corporate social responsibilities and continuously explores and innovates financial service models to support sustainable development. Through its pioneering exploration and practice in green finance, Industrial Bank has been honored with numerous domestic and international awards, including the “Best Green Bank Award” from *The Economic Observer*, the “Asian Sustainable Bank of the Year” jointly awarded by the *Financial Times* and the International Finance Corporation, and the “Outstanding Supporter of Nature Conservation Award” from the World Wide Fund for Nature(WWF), providing a financial model for the implementation of the “Two Mountains” theory.

To date, Industrial Bank has achieved a number of first-of-its-kind products in China, including the first carbon quota pledge loan, the first forestry bond pledge loan, and the first blue sustainable offshore USD bond. Industrial Bank was among the first to adopt the “CLIMATE NEUTRAL NOW” initiative of the United Nations Framework Convention on Climate Change, established

the Industrial Bank Carbon Finance Research Institute to build a national green finance think tank, and developed China's first integrated “dual carbon management platform” combining corporate and individual carbon accounts. Meanwhile, the bank has signed green cooperation agreements with people's governments of Qinghai, Gansu, Yunnan and other provinces, injecting financial resources into regional green transitions. In this process, Industrial Bank has received authoritative certifications both domestically and internationally: it has been consecutively awarded the title of “Advanced Unit in Green Banking Evaluation” by the China Banking Association for five consecutive years; it is the only bank to have received the highest ESG rating from MSCI for six consecutive years, and is the first domestic bank to be included in the S&P Global *“Sustainability Yearbook (China Edition).”* It has also been listed on the “Fortune China ESG Influence List” for three consecutive years.



Figure: Industrial Bank's green loan supports the construction of Wang Tuodu Reservoir

Year 2010

CRCC (601186): Practicing the concept of "Green Engineering" to build a resource-saving and environmentally friendly enterprise

The 2010 Report on the Work of the State Council called for waging an uphill battle and a protracted war on energy conservation and emissions reduction, with a focus on industry, transportation, and construction, vigorously promoting energy conservation and improving energy efficiency. CRCC resolutely implemented the directives of the Central Government and the State, actively promoted the "Green Engineering" initiative, and committed itself to building a resource-saving and socially responsible enterprise. By enhancing energy conservation, emission reduction, and environmentally friendly construction practices, CRCC achieved harmonious development between corporate growth and environmental protection. In the same year, the Company officially joined the United Nations Global Compact.

2010 marked the final year of the 11th Five-Year Plan, during which the Company achieved remarkable results in energy conservation and emissions reduction in key areas. The proportion of newly constructed buildings complying with mandatory energy-saving standards reached 100%, energy consumption per RMB10,000 of operating revenue decreased by 27% compared to the previous year, comprehensive utilization of industrial solid waste exceeded 60%, pollutant emissions were controlled and reduced, and all emissions met national or industry-leading standards. The Company successfully accomplished the energy conservation and emissions reduction management target set by the State-owned Assets Supervision

and Administration Commission (SASAC) of the State Council reducing comprehensive energy consumption per RMB 10,000 of operating revenue of central enterprises by 20% by the end of the 11th Five-Year Plan compared to 2005.

To date, the Company has continuously disclosed annual sustainability reports for 17 consecutive years. In 2023, CRCC formulated the "Green and Low-Carbon Development Strategy of CRCC under the 'Dual Carbon' Goals", clarifying the objectives and pathways for green and low-carbon development. In 2024, CRCC established the Green and Low-Carbon Industrial Technology Research Institute, focusing on strategic emerging green industries such as low-carbon construction, new low-carbon materials, low-carbon energy utilization, and carbon monitoring and assessment. In its latest medium- and long-term corporate development strategy, the Company explicitly identified "greening" as one of the key transformation tasks, aiming to build a green ecosystem with the distinctive characteristics of CRCC.



Figure: The Nanjing Yangtze River Tunnel constructed by CRCC was officially opened to traffic.

Year 2011

COSCO SHIPPING Holdings (601919): Practicing Green Shipping Strategy, Leading Low-Carbon Logistics Era

In 2011, the International Maritime Organization (IMO) adopted the first mandatory global energy-efficiency measures for ships through amendments to MARPOL Annex VI, while China's Ministry of Transport simultaneously released the 12th-Five-Year Plan for Energy Conservation and Emission Reduction in Highway and Waterway Transportation. Responding proactively to international conventions and national policies, COSCO SHIPPING Holdings aligned itself with the energy-saving and emission-reduction guidelines of the State Council and the State-owned Assets Supervision and Administration Commission of the State Council (SASAC). The company established "comprehensive management, resource conservation, and environmental protection" as its core environmental principles, formulating systematic energy-saving and emission-reduction plans and operational procedures to ensure strict compliance with domestic and international environmental regulations. Green transition was deeply integrated into the company's corporate strategy.

In 2011, COSCO SHIPPING Holdings achieved breakthrough emission reductions through energy-efficiency management. Building on its 2010 achievement of reducing speed by 10% and saving 338,000 tons of fuel, the company upgraded the main engine fuel injectors of 42 large container ships (each over 3,400 TEU), further reducing fleet speed by 5%. Despite a 22.75% year-on-year increase in shipping capacity, the company achieved

a 12.56% reduction in daily fuel consumption per TEU and a 5.02% drop in energy consumption per unit of turnover. Annual fuel savings reached 30,500 tons (equivalent to 46,700 tons of standard coal), reducing CO₂ emissions by 94,900 tons and SO_x emissions by 1,800 tons—exceeding the energy efficiency targets set in the 12th Five-Year Plan.

After successive rounds of business restructuring and deepening reform, COSCO SHIPPING Holdings continues to set the pace in green shipping. In 2024, the company is accelerating the large-scale deployment of methanol dual-fuel vessels (both newly built and retrofitted) while simultaneously trialing fully electric ships and biofuel pilots. Pure-electric autonomous container tractors are creating low-carbon port benchmarks. Recognized as a national priority for promotion, this technology has already completed commercial validation at core hubs such as Tianjin Port and Jingtang Port, inaugurating an agency-operation model of autonomous driving, that offers a Chinese solution to global green logistics.



Figure: COSCO SHIPPING Holdings' M/V XIN YA ZHOU Successfully Completes Largest Single-Ship Biofuel Bunkering Operation in China

Year 2012

Haier Smart Home (600690): Based on a global perspective, it implements the strategy of "green products, green enterprises, green culture" and provides high-quality green living solutions

In 2012, Haier Smart Home integrated the green concept into its corporate development strategy and corporate culture, responding to the country's basic national policy of comprehensively promoting energy conservation, emission reduction, and environmental protection, as well as the goal advocated by the "12th Five-Year Plan" to accelerate the construction of a resource-conserving and environment-friendly society. The company has incorporated energy conservation and environmental protection into every link from design to recycling, jointly creating a harmonious ecosystem with

consumers, suppliers, etc. While continuously improving economic efficiency, it adapts to the needs of the times and continuously promotes the low-carbon and harmonious development of society.

During this year, Haier Smart Home has focused on researching key technologies in green design, such as product modularization, disassembly, material recycling, energy conservation, and noise reduction, through analyzing the green characteristics of products throughout their lifecycle, thereby elevating the green management of product lifecycle to an internationally advanced level. Relying on the construction of the company's national-level eco-industrial park for venous industries, the company has improved the recycling system, established a waste home appliance treatment system that combines manual disassembly and mechanical sorting by recycling waste home appliances through multiple channels, and achieved green recycling of products and resource reuse of materials. In addition, during the processes of market survey, design, manufacturing, sales, recycling, and resource utilization, Haier products have always focused on quantifying the environmental impact of the product lifecycle, explored "carbon footprint management", calculated the carbon footprint of typical products during procurement, manufacturing, sales, use, and recycling processes by establishing an ecological design platform for the entire product lifecycle, optimized the ecological design of products to reduce the impact of carbon footprint, and integrated the concept of green consumption throughout the entire lifecycle.

To date, Haier Smart Home has guided low-carbon and green consumption by carrying out carbon footprint certification throughout the product

lifecycle, advanced the implementation of carbon reduction strategies in an orderly manner, and has conducted carbon inventory work for four consecutive years. In 2024, Haier Smart Home accelerated the advancement of carbon reduction planning and achieved phased results, committing to use 2024 as the base year and to reduce the intensity of greenhouse gas emissions in "Scope 1" and "Scope 2" in China by 10% by 2030.



Figure: Haier launched a themed event titled "Earth Hour, Inspiration DJ Channel" and put forward the initiative of "turning off the lights for one hour and listening to the natural sounds of the Earth"

SPD BANK (600000): Innovating Green Financing Practices to Establish a Full Chain for Low-Carbon Financial Services

In 2012, the China Banking Regulatory Commission (CBRC) issued the Guidelines on Green Credit to strengthen financial support from the banking sector for environmental protection and sustainable development.

SPD Bank firmly responded to policy requirements by deepening its ESG (environmental, social and governance) practices. With "green credit innovation" as its core strategic objective, the Bank upgraded its product and service models to provide financial support for clean energy and projects of energy conservation and emission reduction in the whole life cycle, thereby promoting the coordinated development of the real economy and the ecological environment.

In 2012, SPD Bank made several breakthroughs in the field of green finance. It completed the second drawdown of the green intermediate loan from the French Development Agency (AFD) and promoted the International Finance Corporation (IFC) to add 14 new projects with a total loan amount of nearly RMB2.5 billion. These projects covered the fields of photovoltaic power generation, clean coal utilization and renewable energy, resulting in annual reductions of 1.7 million tonnes of standard coal and 4.5 million tonnes of carbon dioxide emissions. The Bank also developed "five sectors and ten innovative products" (including energy efficiency financing, clean energy financing, environmental finance, carbon finance, and green equipment supply chain financing) that covered the low-carbon industrial chain, providing special credit for over 20 industries such as construction, power, steel and cement across more than 30 provinces and cities nationwide. Furthermore, SPD Bank became the first offshore custodian bank for Certified Emission Reductions (CERs) cooperating with China's domestic carbon emission rights exchanges, addressing challenges in cross-border carbon asset management.

Since its engagement in ESG finance in 2005, SPD Bank has achieved fruitful

results in its green finance practices. The Bank pioneered four landmark firsts in domestic carbon finance (AFD green intermediate credit, CDM financial advisory, international carbon factoring and energy performance contracting factoring), with a first-mover advantage in the industry. Aligned with China's dual carbon goals of peaking carbon emissions and achieving carbon neutrality, the Bank integrated green and low-carbon requirements into its top-level design, strengthened financial innovation and the building of a green financial ecosystem, and continuously upgraded its financial service models. By doing so, it constructed a digital and intelligent operational service platform with three major product pillars: green finance, transition finance and carbon finance. Focusing on six major areas of green and low-carbon transition in low-carbon energy, energy conservation and carbon reduction, green infrastructure, environmental protection, green services, and recycling, it leveraged its eight product lines of green equity, green bonds, green loans, green asset management, green leasing, green wealth management, green trust, and green consulting to derive solutions in "N" specific scenarios. It thus established a "1+6+8+N" green and low-carbon transition finance service framework, continuously setting a benchmark for green finance practices in China.



Figure: Shanghai Pudong Development Bank provides financial support to Shanghai Caojing Thermal Power Co., Ltd. for the purchase of clean energy for power generation

Year 2013

Shanghai Electric (601727) : National First Batch of Circular Economy Demonstration Project

In 2013, Shanghai Electric anchored itself to one of the first national circular economy demonstration projects, deeply integrating the concept of "green manufacturing" into its core corporate development strategy. That year, the Company built 4 x 1000MW ultra-supercritical coal-fired power generation units for the Tianjin Beijiang Power Plant project, creating the world's first large-scale integrated system operating under the "power generation-seawater desalination-concentrated seawater salt production-land conservation-solid waste recycling" model, and became one of the world's largest steam extraction units at the time, providing replicable experience for energy recycling in the coal power industry.

For over a decade, the Company has driven efficient resource utilization and circular economy by advancing technological innovation and process optimization while upholding the core principles of circular economy. In 2024, the Company promoted green operations through the construction of green factories, development of green products, and resource utilization and circular economy, committed to reducing carbon emissions, improving resource efficiency, and fostering sustainable development. In terms of green factory construction, the application scale of rooftop photovoltaic power has continued to expand, with 12MW of newly installed capacity throughout the year, reaching a cumulative total of 70MW and generating over 40 million kWh annually. In terms of green product development, nearly 47% of the Company's investments focused on clean technology, with around 70% of clean-tech R&D expenditures dedicated to breakthroughs in clean energy technologies such as wind energy, photovoltaic energy, energy storage, and hydrogen energy. In terms of resource utilization and circular economy, the Group's reclaimed water usage exceeded 1.25 million tons in 2024. Its factories achieved water recycling and pollutant reduction through technologies such as biodegradation, distillation and filtration technologies. By promoting reusable containers, packaging costs have been reduced by 72% compared to traditional cardboard boxes, highlighting the economic benefits of circularity. In terms of circular technology, Electric Wind Power Group, the subsidiary of the Company, innovated in green blade recycling technology, aiming to achieve over 95% material recyclability.



Figure: Shanghai Electric Demonstration Project for Improving Quality and Efficiency of Reclaimed Water Utilization

Year 2014

TBEA (600089): Continuously Advancing Green Technology and Strategically Empowering and Leading the Global Power System

TBEA closely aligns with the major national strategy of the "Belt and Road Initiative," accelerating its internationalization and "going global" efforts. TBEA continues increasing investment in technological innovation, focusing on new products, processes, technologies, and methods, while undertaking a significant amount of innovative work and consistently leading the development of green, energy-saving, and intelligent technologies in the industry. In 2014, TBEA was authorized to establish the "National UHV Transformer Engineering Technology Research Center," which will take on the crucial responsibility of leading energy-saving, emission-reduction,

intelligent economy, and innovative developments in the transformer industry both domestically and internationally. This institution will guide the development of green and energy-efficient UHV transmission and transformation technologies worldwide, further solidifying the TBEA's technological advantage in the UHV transformer sector. In May 2014, the Postdoctoral Research Station of TBEA Xi'an Electric Technology Co., Ltd. was officially established, laying a solid talent foundation to promote the development of inverter technology and accelerate the market conversion of scientific research achievements.

The company has consistently refined its environmental governance system, embedding environmental protection requirements into the comprehensive lifecycle management of projects and products. In the design phase, ecological protection considerations are incorporated; in the construction phase, strict implementation of the "Three Simultaneities" system is enforced; and in the operation phase, pollution prevention measures are systematically reinforced. In the realm of environmental protection, TBEA has systematically established and continuously improved its environmental management system and achieved remarkable outcomes. To date, 37 TBEA subsidiaries have obtained ISO 14001 Environmental Management System certification; 12 companies were successfully selected as national-level "Green Factories"; and 5 companies have been rewarded national-level "Green Supply Chain Management Enterprises." In energy management, TBEA adopts tailored strategies for different business segments, conducting energy audits and energy-saving diagnostics through systematic approaches to explore energy-saving and carbon reduction potential, subsequently

planning and executing energy-saving technological transformation projects. In 2024, 51 energy-saving technical transformation projects were implemented, yielding an annual energy saving of 123,000 tons of standard coal, and a corresponding reduction of approximately 320,000 tons of CO₂ emissions. In addressing climate change, TBEA has developed a carbon peak roadmap and established supporting measures. TBEA has built a carbon footprint management system, completed carbon footprint certification for over 80 products and helped Changji Prefecture become one of the first cities in China to participate in the national product carbon footprint labeling certification pilot program. Additionally, TBEA has independently developed a carbon footprint edge intelligent control device for transformer products, enabling precise "order-level" carbon footprint tracking and calculation throughout the product lifecycle, from cradle to gate, and has passed verification by authoritative institutions.

In the journey toward green and low-carbon development, TBEA has adhered to the principle of driving industrial transformation and upgrading through technological innovation. TBEA has successfully developed a series of green power equipment independently, including the domestically produced 110kV ester oil transformer, GIS products based on clean air insulation, and UHV low-noise reactors. These innovations play a pivotal role in empowering the construction of a new power system, contributing green power to the national achievement of the "dual carbon" goals and the development of new productive forces.



Figure: A 1,000kV UHV AC transformer, is applied in the Zhangbei-Shengli 1,000kV UHV AC project

Year 2015

Minfeng Special Paper Co., Ltd (600235) :
Based on the production of special industrial paper,
we are committed to building a benchmark for green
recycling of water resources

In 2015, the CPC Central Committee and the State Council issued “the Opinions on Accelerating the Construction of Ecological Civilization” and “the Overall Plan for the Reform of the Ecological Civilization System” to accelerate the establishment of a systematic and completes system for ecological civilization. In the same year, the State Council issued “the Action Plan for Water Pollution Prevention and Control” , which requires systematic promotion of water pollution prevention and control, water ecological protection and water resources management. Minfeng Special Paper is based on the production of special industrial paper, while

promoting industrial transformation & upgrading and upgrading products, it has increased investment in environmental protection, improved the comprehensive utilization rate of energy and resources, issued the 2015 Annual Environmental Report, and released the annual Environmental Report for many consecutive years, clearly disclosing environmental governance measures and achievements.

In the face of the severe situation of energy conservation and emission reduction, on the one hand, the company through the strategic measures of "three lines", continues to actively promote industrial transformation and upgrading, product upgrading, technology, process, production mode and management transformation and upgrading; on the other hand, the company will continue to increase investment in environmental protection and take measures to effectively promote clean production and circular economy. In terms of water consumption in 2015, tap water usage in the company was 0.3704 million tons, 66.92% of total annual planned usage; river water usage in the company was 3.0824 million tons, 56.04% of total annual planned usage. In terms of sewage treatment, the amount of sewage entering the network was 0.8833 million m³ in 2015. The company's waste water is pre-treated by the network wastewater pretreatment system to meet the standards of pipeline management All the sewage is included in the network collection system of Jiaying Jiayuan Sewage Treatment Co., LTD, to be centralized disposed of and discharged. The discharge of pollutants from the network of Minfeng special paper meets the standard and the situation is good.

The company always adheres to the business philosophy of "Green Minfeng,

Ecological Minfeng, Dynamic Minfeng and Harmonious Minfeng", strives to build an environment-friendly, resource-saving enterprise. In 2024, the company cooperated with Wery Environmental Protection to add two sets of sewage biochemical treatment units in a limited space in the water supply and drainage area of the Haiyan plant, with a single treatment capacity of 4,000 cubic meters per day. In which, the reclaimed water treated by unit I is recycled to the production system to realize water recycling; the waste water treated by unit II is discharged directly into the urban pipe network. Using the existing white water equipment with a new white water flotation facility to optimize the process and integrated into the DCS system, after air flotation and filtration treatment, the white water is directly used for low-pressure spray, reducing the water consumption by 16.57%. By optimizing the production process and adopting measures such as water classification and water replacement, the recycling rate of wastewater was increased to 93.2%. In terms of equipment update, the turbine fan is used to replace the raw water ring vacuum pump; after being put into use, 35% electricity is saved. At the same time, water is no longer used as sealing water, saving 100% water. The company was awarded the honorary title of "Excellent Water-saving Unit in 2024" by Jiaxing Water Industry Association.



Figure: Sewage biochemical treatment project constructed jointly by Minfeng Special Paper and Wery Company

Year 2016

Zhejiang Jiahua Energy and Chemical Co., Ltd. (600273): China's First Publicly Issued Green Corporate Bond on an Exchange Listed on the Shanghai Stock Exchange

Developing green finance is a crucial measure for the country to achieve green development. On March 16, 2016, the Shanghai Stock Exchange issued the "Notice on Carrying Out a Pilot Program for Green Corporate Bonds," actively guiding the bond market to support green industries and promoting the transformation of economic development patterns and the structural transformation and upgrading of the economy. On August 31, the People's Bank of China, the Ministry of Finance, and five other ministries and commissions jointly issued the "Guiding Opinions on Establishing a Green Financial System," making China the first economy globally to establish a relatively complete green financial policy system.

On June 8, 2016, the company's green corporate bond, "G16 Jiahua 1," publicly issued to qualified investors, was listed on the Shanghai Stock Exchange, becoming the first green corporate bond publicly issued on an exchange in China. The total fund raised by the company's green bond was 300 million yuan, with a term of 5 years and a fixed coupon rate of 4.78%. The project funded by this bond issuance—the expansion of the cogeneration power plant—meets the relevant requirements of the "Catalog of Green Bond-Supported Projects" (2015 edition) compiled and published by the Green Finance Professional Committee of the China Finance Association. It belongs to a green industrial project. The project will effectively improve the stability and economy of the company's products, reduce energy consumption and emissions, and significantly improve the environmental conditions caused by traditional thermoelectric power. Upon completion and reaching designed capacity, the project can provide annual heat supply of 14.1 million gigajoules and annual power supply of 404.088 million kilowatt-hours, with annual social savings of standard coal amounting to 260,176.50 tons (including 210,666.20 tons for the heat supply portion compared to the standard coal consumption rate of 55 kilograms per gigajoule for decentralized industrial small boilers, and 49,510.30 tons for the power supply portion compared to the average standard coal consumption rate of 307 grams per kilowatt-hour for thermal power plants in the Zhejiang province in 2011).

The company has always relied on its industrial characteristics, practiced the ESG sustainable development values, and actively followed the national green development concept. It has disclosed social responsibility reports

for seven consecutive years and environmental, social, and corporate governance (ESG) reports for four consecutive years. Firstly, it has built an internal recycling industrial system from the source process, achieving comprehensive development and efficient utilization of resources and energy, reducing energy consumption and material costs of products, improving equipment operating efficiency, and enhancing the competitiveness of the company's various businesses and its overall strength. Secondly, starting from the production end, it has continuously optimized through technological renovations and equipment upgrades, focusing on energy conservation and emission reduction, building green factories, and actively participating in carbon peaking and carbon neutrality goals. Thirdly, from the industrial chain layout, it has vigorously developed green energy industries such as photovoltaics and hydrogen energy, and has provided long-term support for a green and low-carbon economy through measures such as industrial collaboration and technological research and development. It has successively won the titles of "Odor-Free Enterprise" in the port area, "Green Factory" at the municipal level, and "Water-Saving Enterprise" at the provincial level.



Figure: Expansion Project of Jiahua Energy Combined Heat and Power Unit

Year 2017

Chalco (601600): Took the lead in responding to and implementing the 19th National Congress' ecological protection principle of "conservation first, protection first, and natural restoration"

2017 marked a pivotal year for Chalco as it turned losses into profits and achieved substantial growth in performance. It was also a crucial year for Chalco in driving transformation, upgrading, and sustainable development. Chalco actively implemented the ecological protection scheme of conservation-first, protection-first, and natural-recovery-based proposed in the Report of the 19th National Congress of the CPC, and took measures such as deepening supply-side structural reforms, optimizing industrial layouts, advancing energy conservation and emission reduction, developing a circular economy, and protecting the ecological environment, aiming to build

a "resource-conserving and environmentally-friendly" industrial structure. In this year, Chalco successfully developed "FHEST" technology, which can enable a system with DC power consumption per ton $\geq 13,000$ kWh to realize power savings of more than 500 kWh/t-Al. For low-grade bauxite, the Company successfully developed a $\phi 6\text{m}$ large-scale no transmission flotation cell, achieving 39.72% energy conservation. These advancements have achieved both economic benefits and social benefits.

Over the years, by extensively implementing energy-saving and carbon-reduction technologies such as "full graphite cathode + ferrophosphorus casting technology" and "FHEST" technology, Chalco increased the proportion of new energy sources including wind power and photovoltaic power, expanded its circular economy initiatives, and carried out measures to reduce pollutant emissions and rehabilitate mining areas, contributing to sustained energy conservation and carbon reduction, as well as ecological environmental protection. The Company achieved a continuous decline in comprehensive AC power consumption per ton of aluminum; the proportion of clean energy used in electrolytic aluminum reached 45.2%, an increase of 5.2 percentage points; the Company has developed unique extraction technologies for associated metals such as gallium, lithium, and vanadium, as well as red mud iron recovery technology, achieving the world's largest production capacity for gallium; the absorption capacity of waste aluminum exceeded 200,000 tons per year; the red mud utilization rate reached 20.02%; the resource utilization technology for "three wastes" of electrolytic aluminum successfully entered the industrialization phase, with an annual disposal capacity of 100,000 tons; the Company reclaimed approximately

100,000 mu of land and operated 24 green factories and 23 green mines. In the future, Chalco will continue to anchor its efforts on the “New Chalco” strategy, and uphold its operation philosophy of “creating value and earning returns” with greater responsibility, more significant accomplishments and superior performance, to pioneer a new phase of sustainable, high-quality development and steadfastly advance toward becoming a world-class enterprise.



Figure: Chalco actively creating green factories

Year 2018

China Yangtze Power (600900): Prioritizing Ecology and Green Development, Championing Yangtze Conservation

In 2018, China Yangtze Power adheres to Xi Jinping Thought on Ecological Civilization, actively responds to the National Action Plan for the Yangtze

River Protection and Restoration Tackling Campaign, follows the concept of "ecological priority and green development", integrates the ecological protection of the Yangtze River into its enterprise development, practices the Yangtze River Great Protection Strategy with practical actions, maintains the health and stability of the Yangtze River ecosystem, and promotes the green and sustainable development of the Yangtze River Economic Belt.

China Yangtze Power has fully implemented relevant policies and systematically advanced the work of protecting the Yangtze River. The company optimizes the operation and dispatching plan of hydropower stations to ensure the ecological flow at key nodes in the basin. Cultivate rare animals and plants, carry out fish restocking, and contribute to the stability of regional ecosystems; Optimize shipping conditions, assist in the research and development of electric ships and hydrogen fuel cell ships, and reduce energy consumption and emissions in ship transportation; Improve the pollution prevention and control mechanism, innovate pollutant treatment technologies, and ensure that 100% of pollutants are discharged up to standard. Improve the living environment in the reservoir area, invest funds to improve facilities such as roads and water supply, and enhance the quality of life for residents.

In 2024, the cascade reservoirs cumulatively held back approximately 13.45 billion cubic meters of floodwaters and replenished over 37.07 billion cubic meters of water. During the ecological dispatching period, the total spawning scale of fish in the Yidu and Shashi River sections both reached record highs. The electric boat "Yangtze Three Gorges 1" and the hydrogen fuel cell boat "Three Gorges Hydrogen Boat 1" reduce carbon dioxide emissions by over

1,043.67 tons annually. An investment of 51.92 million yuan was made to improve the rural facilities in the reservoir area. Over 50 kilometers of roads were hardened and 5 kilometers of water diversion ditches were built, thus enhancing the environment of the reservoir area.

China Yangtze Power has demonstrated through its concrete actions that "green mountains and clear waters are as valuable as mountains of gold and silver", reaping long-term benefits in ecological protection and laying a solid foundation for the green and prosperous development of the river basin.



Figure: Three Gorges Hydroelectric Power Station

Shanghai Petrochemical (600688): The Company completed the first CCER replacement order and explored new channels for revitalizing carbon assets

The Interim Measures for the Administration of Voluntary Greenhouse Gas Emission Reduction Trading issued by the National Development and Reform

Commission propose the China Certified Voluntary Emission Reduction (CCER) mechanism, encouraging project-based voluntary greenhouse gas emission reduction trading and actively exploring and testing carbon emission trading procedures and regulations. As a major large-scale emission control enterprise with abundant quotas in the pilot market in Shanghai, Shanghai Petrochemical actively explores how to activate its carbon assets, save performance costs, and generate profits.

For many years, Shanghai Petrochemical has effectively reduced carbon emissions by implementing energy-saving measures and exploring participation in CCER and carbon quota trading. On the carbon trading platform of the Shanghai Environment and Energy Exchange on June 21, 2018, Shanghai Petrochemical completed its first delivery of carbon quota trading and CCER replacement with an energy company in Hangzhou, further optimizing the carbon asset portfolio and opening up new channels for energy conservation and efficiency improvement.

In addition, the company deeply practices ESG concepts and promotes green and sustainable development. The company has formulated the Shanghai Petrochemical Carbon Emission Management Measures to further strengthen carbon emission management, standardize carbon trading management, and promote green and low-carbon development. In 2024, the total CO₂ emissions of the company decreased by 10.31% year-on-year, and the CO₂ emission intensity decreased by 7.48% year-on-year. So far, the company has released sustainable information disclosure for 17 consecutive years. Starting from 2022, the company's social responsibility report has been optimized to an ESG report, marking a new stage in the company's relevant information

disclosure. In 2024, the company's ESG received a BBB rating from MSCI and an A rating from Wind, both of which are among the top in the domestic industry. The Company was selected as one of the best practice cases for sustainable development by the China Association for Public Companies.



Figure: Driving forward the Green Business Initiative

Year 2019

ENN Natural Gas (600803): Answering the Call of Poverty Alleviation: Committed to Targeted Support and Giving Back to Society through Public Welfare and Charity

ENN Natural Gas, in collaboration with the ENN Foundation, actively responded to and participated in the “Beijing-Tianjin-Hebei Social Organizations Follow the Party-Poverty Alleviation Initiative,” providing support for key poverty alleviation projects and addressing critical local livelihood issues. To maximize the impact of donated funds, the company

conducted in-depth research to understand the needs of impoverished villages, adopting tailored strategies for each village and focusing on practical results to genuinely implement targeted poverty alleviation. In 2019, ENN Natural Gas implemented 52 targeted poverty alleviation projects, with a total investment of RMB 7.256 million. At the same time, the company's subsidiaries also actively responded to local governments' poverty alleviation policies and calls for assistance, participating in various poverty alleviation initiatives. They supported infrastructure development and industrial growth in impoverished areas, helping local residents improve their livelihoods.

As a private enterprise that has flourished amid China's reform and opening-up, ENN Natural Gas remains grateful for its roots and actively participates in various social welfare and charitable initiatives. Leveraging its industrial strengths and corporate characteristics, the company continuously gives back to society through concrete actions. In 2024, its total investment in public welfare and charity projects reached RMB 31.27 million, with 47,352 employees participating in philanthropic activities. To ensure the systematic advancement of its charitable endeavors, the company established a Charity and Public Welfare Task Force. This team is responsible for formulating annual philanthropic plans, tracking and evaluating project progress, defining the direction of social welfare efforts, and ensuring the effective implementation of initiatives-ultimately sharing the company's developmental achievements with society.



Figure: In 2018, ENN Natural Gas (600803) participated in the project matchmaking conference for the “Beijing-Tianjin-Hebei Social Organizations Follow the Party-Poverty Alleviation Initiative”

COOEC (600583) : Comprehensively establish a green manufacturing system to promote the high-quality development of offshore oil and gas equipment manufacturing

Offshore Oil Engineering Co., Ltd. (hereinafter referred to as "COOEC") actively implements the new national energy security strategy of "Four Reforms and One Cooperation", and explores the manufacturing system with focus on green manufacturing plants as the core to promote the national energy technology revolution. In 2019, construction of COOEC Tianjin Intelligent Manufacturing Base was started in Tianjin Lingang Industrial Zone, which is the first "Intelligent Plant" in China for offshore oil and gas equipment. It covers an area of approximately 575,000 square meters, with a

steel structure processing capacity of over 80,000 structural tons per year. The plant takes the construction of green plants as the starting point, guided by "Informatization, Digitalization and Intelligence", and establishes the green manufacturing system for offshore oil and gas equipment through green and low-carbon actions such as organizational establishment, institutional construction, supply chain coordination, digital system construction, new energy engineering and carbon management capacity development following the principle of "intensive land use, harmless raw materials, clean production, waste recycling and low-carbon energy".

At present, COOEC has built three green manufacturing bases with a total area of 3.85 million square meters in Tianjin, Qingdao and Zhuhai, and has established such a strategic layout of COOEC green manufacturing bases spanning the north and south, with complementary functions, covering deep and shallow waters and serving customers across the world. It aims to gradually realize the high-end transformation of industries, green transition of energy consumption and digital transformation of information, and establish a robust long-term mechanism for industrial green development. COOEC will follow the development goals - "super energy efficiency" and "zero carbon factories", continuously optimize the construction of "green plants", enhance the meaningful significance of "green supply chain management enterprise", practice the concept of green development, so as to support the green development of the offshore oil and gas industry, and provide a stable guarantee for the national energy supply.



Figure: Asia's First Cylindrical FPSO "Haikui No.1"

Year 2020

LONGi (601012): Playing a leading role in the industry and advocating continuously for the development of green and low-carbon supply chains

In 2020, as the global carbon neutrality trend continued to deepen, China proposed its strategic goals of "peaking carbon emissions by 2030 and achieving carbon neutrality by 2060." Aligning with the national "dual-carbon" objectives, the company integrated them into concrete actions for green, low-carbon, and sustainable development. LONGi joined the Science Based Targets initiative (SBTi) and upgraded its 2020 Corporate Social Responsibility Report to a Sustainability Report.

At the same time, LONGi fully implemented the national "dual-carbon" goal, making commitments to action in the use of renewable electricity,

energy efficiency, and support for the development of electric vehicles. The company conducted operational carbon emissions accounting for the first time, established a traceable management system for the use of renewable electricity, with the proportion of renewable electricity usage reaching 41.83% that year. In addition, LONGi has achieved 100% renewable electricity usage in 5 factories in Yunnan, and has set goals of water and electricity conservation for 23\the next five years based on the 2020 benchmark. Also, the PV product packaging achieved a 100% recovery and reuse rate. In advancing supply chain decarbonization, LONGi initiated the development of a green and sustainable supply chain following a "three-step" strategy. At the 2020 Supplier Conference, 150 key suppliers joined and released the "Green Supply Chain Decarbonization Initiative", integrating renewable electricity and carbon emission management into supplier evaluation criteria and conducted capacity-building training to promote energy-saving projects and renewable energy alternatives among suppliers. In 2020, LONGi transitioned from commitments to actions that could be measured, verified, and benchmarked, establishing a baseline for future green, low-carbon, and sustainable development initiatives across the entire value chain.

By 2024, LONGi has been releasing Corporate Social Responsibility/ Sustainable Development Reports for 8 years. The company's MSCI ESG rating has been upgraded to BBB, ranking first in the photovoltaic industry. Water resource management has scored A- level climate change efforts have received a B-level for the second year. LONG's Jiaxing base successfully became LONGi's first zero-carbon factory, adhering to ISO 14068 standards, and is currently the first "Lighthouse" + "Zero Carbon" factory in the

photovoltaic industry. The company's overall proportion of renewable electricity has reached 47.5%. Also, LONGi is the first enterprise in our industry to obtain ISO 20400 certification for Sustainable Procurement.



Figure: Green Supply Chain Decarbonization Initiative

Year 2021

Zijin Mining (601899): Proactively Aligning with International Standards and Exploring Industry Best Practices

In 2021, under the guidance of its Board-level Strategy and Sustainability (ESG) Committee, the Company set out its vision to become a “green, high-tech, leading global mining company.” Twelve of the United Nations’ 17 Sustainable Development Goals were designated as high-priority issues, and a 2021–2030 roadmap for sustainable development was released, publicly committing the company to peak carbon emissions by 2029 and achieve full carbon neutrality by 2050. Guided by the TCFD recommendations, Zijin

actively participates in CDP climate, water and forest disclosures and the S&P CSA, driving information transparency in line with global standards.

Since 2021, the Company has advanced steadily along this path while benchmarking itself against the latest international standards: in 2023 it published the industry’s first TCFD-aligned climate report, “Climate Change Action Plan,” and in 2024 issued its first ESG report prepared in accordance with IFRS S1. By 2024, greenhouse-gas emissions per unit of industrial value added had fallen 21 % from the 2020 baseline, surpassing the 2025 interim target ahead of schedule; installed clean-power capacity has increased more than fivefold since 2021 to 767 MW; and RMB 1.363 billion has been invested in ecological restoration since 2021, rehabilitating 34.76 million square metres of vegetation. Guided by the common development philosophy of “Mining for a Better Society,” the Company’s total social contribution has grown at an average annual rate of over 30 % since 2021, reaching RMB 74.96 billion in 2024. Zijin has repeatedly received the China Charity Award and the “Best Practice in Sustainable Development” accolade from the China Association of Listed Companies, has been continuously included in the Hang Seng (China A) Corporate Sustainability Index (HSCASUS), and maintains strong positions in mainstream domestic and international ratings, including a Wind ESG AAA rating—the highest in its sector—and a leading LSEG ESG score that ranked first globally in 2022.

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Figure: The Zijinshan No.3 Sub-dam Photovoltaic Power Generation Project

Tongwei Co.,Ltd (600438) : "Fishery & PV Integration" Synergistic Development, Low-Carbon Innovation Solutions Take the International Stage

In 2021, China's "dual carbon" goals were formally written into the Government Work Report of the National People's Congress and Chinese People's Political Consultative Conference, becoming a national strategy. The Opinions of the Central Committee of the Communist Party of China and the State Council on Completely, Accurately, and Comprehensively Implementing the New Development Philosophy and Achieving Carbon Peak and Carbon Neutrality was released, proposing five main objectives, including building a green, low-carbon, and circular economic system. The Action Plan for Carbon Dioxide Peaking Before 2030 defined tasks and targets, outlining ten major actions, including the Energy Green and Low-Carbon Transition Action. Guided by the national dual carbon strategy, Tongwei established an Energy

Management Committee at its top management level. This committee is responsible for advancing the achievement of ESG management objectives, overseeing the execution of ESG strategic plans, and guiding ESG practices.

The company insists on driving enterprise development through product innovation. It actively engages in industry-academia-research collaboration to promote green product R&D and innovation. It also continuously implements the innovative "Fishery & PV Integration" development model, which organically combines aquaculture with photovoltaic power generation. This integration achieves a triple harvest in fisheries, electricity, and environmental protection, contributing to China's rural revitalization and the global dual carbon goals.

In 2021, the company transacted 87,000 parity photovoltaic green power certificates on the China Green Certificate Trading Platform, marking the largest single transaction since the platform's launch. At the COP26 UN Climate Change Conference, the company presented its low-carbon work plan titled Path to Zero Carbon Emissions in Steam Usage During High-Purity Polysilicon Production. Through methods like fuel substitution, energy efficiency improvements, and renewable energy electricity usage, the plan aims to reduce carbon emissions from steam usage in polysilicon production, providing best practices for the industry and demonstrating the low-carbon leadership of Chinese enterprises. By the end of 2021, Tongwei had built 48 photovoltaic power stations, primarily using the "Fishery-Light Complementary" model, spread across more than 20 provinces in China. The cumulative installed grid-connected capacity reached 2.7 GW. Annual settled electricity generation was 3.09 billion kWh, achieving carbon emission

reductions exceeding 2 million tons. This provides high-quality, clean photovoltaic power for millions of households, accelerating the nation's carbon neutrality process.

Currently, the company has been selected for inclusion in S&P Global's Sustainability Yearbook (China Edition) 2024. Its Hefei base received the highest EcoVadis sustainability score in the global photovoltaic industry. Furthermore, Tongwei has earned a place on multiple authoritative lists, including the UN Global Compact (UNGC) 20-Year Top 20 Best Practices, the Fortune China ESG Impact List 2024, and the Forbes China Sustainable Industrial Enterprises 2024, demonstrating its long-term efforts in sustainable development.



Figure: Tongwei Co.,Ltd "Fishery & PV Integration" Program

Year 2022

Yili (600887) : Driving Full-Lifecycle Green Action in the Dairy Supply Chain

In 2022, the Chinese government's work report identified "continuing to improve the ecological environment and facilitating green and low-carbon development" as one of its top priorities. In alignment with this national agenda, Yili has actively advanced its green development concept—from a blade of grass, to a cow, to a cup of milk—by comprehensively promoting an integrated planting and breeding model. This includes sustainable procurement, green production, eco-friendly packaging, and water footprint management, all aimed at promoting the construction of a green ecosystem across the entire value chain, minimizing environmental impact at every stage, and contributing to the achievement of China's "dual carbon" goals.

That same year, Yili released the Zero-Carbon Future Plan of Yili Group and the Roadmap for the Zero-Carbon Future Plan of Yili Group, becoming the first enterprise in China's food industry to release "dual carbon" goals and a roadmap for their achievement. The announcement confirmed that Yili had reached carbon peaking in 2012 and set a goal to achieve carbon neutrality throughout the industry chain by 2050, with specific milestones outlined for 2030, 2040, and 2050.

Also in 2022, Yili launched water footprint initiatives for both its products and operations. It carried out water scarcity footprint certification at both the organizational and product levels based on life cycle (LCA). Yili successfully established 5 zero-carbon factories and developed 5 zero-carbon products,

marking a significant breakthrough in the food industry's transition toward "zero." In parallel, in conjunction with 43 global strategic suppliers, Yili established the industry's first Net Zero Carbon Alliance, and together signed the Yili Group Sustainable Development Initiative: World Integrally Sharing Health, pledging collective action throughout the industry chain to reach carbon neutrality by 2050.

As of now, the Net Zero Carbon Alliance has grown to 154 member companies, with 90% having completed their low-carbon transitions. Yili has built 5 zero-carbon factories, launched 6 zero-carbon products, and has had 44 factories certified as national green factories—ranking first in the industry.



Figure: The Roadmap for the Zero-Carbon Future Plan of Yili Group

Hengrui Pharma (600276) : Implementing inclusive healthcare and promoting equity and accessibility in medical services

In 2022, the State continued its efforts to promote the development of an

inclusive medical service policy system. The National Healthcare Security Administration and two other government departments jointly issued the Notice on Advancing Basic Medical Insurance for Urban and Rural Residents in 2022, further deepening the reform of the medical insurance system, raising government subsidy standards for medical insurance, and aiming to improve the equity and accessibility of healthcare services.

Hengrui Pharma actively responds to policy guidance and enhances drug accessibility by including innovative drugs in China's National Reimbursement Drug List (NRDL), and fully leverages its international deployment advantage to promote exchanges and cooperation among industry, academia, research institutes, and application organizations in order to promote global accessibility to medicines and the common development of pharmaceutical disciplines. Meanwhile, the company has joined hands with the China Foundation for Rural Development to implement the "Health Assistance" project in several key counties for rural revitalization. Through a series of measures such as training and skill enhancement for primary medical workers, donations of intelligent medical equipment, to support the improvement of primary diagnosis and treatment capacity.

Hengrui Pharma fully supports medical insurance for the benefit of the people and uses pharmaceutical innovation to protect public health. By the end of 2022, a total of 93 Hengrui Pharma products were included in NRDL, including all of its 11 marketed innovative drugs, enhancing drug accessibility and affordability and allowing more new and good drugs to better benefit patients. In addition, Hengrui Pharma fully considers the differences in economic development and medical levels of different

countries and regions in the process of overseas market deployment and expansion and implements the principle of fair pricing for oncology drugs such as Cyclophosphamide Injection and albumin-bound paclitaxel in order to provide high-quality and affordable drugs in more developing and low- and middle-income countries and regions.

Hengrui Pharma has released ESG reports for four consecutive years since 2021, fully disclosing the company's outstanding performance in green and sustainable development, employee well-being and social responsibility to the public. Its MSCI ESG rating has been continuously upgraded to "AA", reaching the leading level among global peers. As of now, a total of 106 Hengrui Pharma products have been included in NRDL, including 15 marketed innovative drugs. Hengrui Pharma's products have entered over 40 countries, and are actively pursuing product registrations in over 55 countries. We are accelerating our internationalization strategy, addressing pressing global public health needs, and striving to bring more quality medicines from China to patients around the world.



Figure: Launching Ceremony of "Healthy China • Retravel the Journey of the Long March"

Trina Solar (688599): A Benchmark for ESG Disclosure in Sci-Tech Innovation Enterprises, Advancing Green Energy Product Manufacturing Through Global Top-Tier Certification

Trina Solar is among the first batch of enterprises to disclose corporate social responsibility/ESG/sustainability reports on the STAR Market of the Shanghai Stock Exchange. Since its listing on the STAR Market in June 2020, the company has maintained a commitment to transparent and public disclosure of management strategies, practices, and performance pertaining to its sustainable development initiatives. This approach is aimed at proactively responding to the concerns and expectations of all relevant stakeholders.

Adhering to the sustainability vision of "Solar Energy for All", Trinasolar has established a distinctive SOLAR sustainability management culture, focusing on Sustainability, Optimization, Leading, Action, and Responsibility, to

spearhead the Company's sustainability transformation.

In 2022, Trina Solar's full series of 210 Vertex modules received the Life Cycle Assessment (LCA) certification for PV modules from TÜV Rheinland, making us the first PV company to complete the generic LCA certification for 210 PV modules. In this year, Trina Solar signed a strategic cooperation agreement with the Qinghai Provincial Government to jointly build the "Source-Grid-Load-Storage" Integrated Net Zero Industrial Park; Trina Solar Yiwu production base completed the self-evaluation report for green factory. In 2023, Yiwu production base of Trina Solar obtained the Zero-Carbon Factory (Type I) Certificate, becoming the first Zero-Carbon Factory certified by an authoritative agency in the photovoltaic industry. Also in 2023, Trinasolar's Suqian production base was recognized as a National Green Factory. In addition, Trinasolar becomes the first enterprise in the photovoltaic industry to hold

the national titles of both "innovative" and "green" supply chain. In 2024, Trina Solar's Yancheng Dafeng production base passed the TÜV Rheinland "Zero Waste" and "Zero Carbon" factory certification audits. The factory has been recognized for its environmental sustainability, having been awarded the "Zero Waste" factory certification and the 2023 "Zero Carbon" factory (Type I) three-star certification. Notably, it is the first enterprise in the photovoltaic industry to obtain the TÜV Rheinland "Dual Zero" factory certification. These achievements fully recognize our long-term commitment to reducing waste and carbon, as certified by third-party organizations.

Trina Solar has set and broken the world record for photovoltaic conversion efficiency 35 times, with 3422 patent applications. The company has

achieved significant advancements in perovskite-silicon tandem technology, ranging from cell efficiency to module power output. Trina Solar are dedicated to being the first to commercialize tandem cells in this field. Trina Solar holds the global leading position in perovskite solar cell patents. Trina Solar was the first to propose international standards to the International Electrotechnical Commission (IEC), led the development of 230 industry standards, and published 155 standards. This work transformed leading-edge technological capabilities into high-power, low-cost-per-kilowatt-hour module products. In the future, Trina Solar is at the forefront of collaborative innovation, developing cutting-edge technologies that define the next generation of solutions. Trina Solar is committed to building an open and collaborative new ecosystem and driving the PV industry toward high-level collaborative development, as well as achieving high-quality development.



Figure: Trina Solar's Yancheng Dafeng production base

Year 2023

Guotai Haitong (601211): Developing Comprehensive Green Financial Service Framework to Lead the Advancement of the Green Finance Priority

The 2023 Central Financial Work Conference proposed focusing on five key priorities: technology finance, green finance, inclusive finance, pension finance, and digital finance. Excelling in these "five priorities" serves as a crucial focal point for financial services to support the high-quality development of the real economy and constitutes a vital component in deepening supply-side structural reforms in the financial sector.

Guotai Haitong Securities fully recognizes the significance of green and low-carbon transition for the sustainable development of the economy and society, actively contributing to the nation's "dual carbon" goals and global "net-zero" emissions through concrete actions. In 2023, the company established an ESG and Sustainable Development Committee, formulated and implemented the *Action Plan for Comprehensively Enhancing Green Financial Service Capabilities*, strengthened strategic guidance and governance-driven initiatives, optimized organizational structures and assessment mechanisms, and guided business departments to actively pursue green finance practices. After years of dedicated effort, Guotai Haitong Securities has achieved a series of landmark accomplishments in carbon finance, green financing, ESG investment, and green operations.

As one of the first securities firms to obtain a carbon trading license from the China Securities Regulatory Commission (CSRC) in 2015, Guotai Haitong Securities became the first Chinese securities company to join the

International Emissions Trading Association (IETA) in 2016. It has executed pioneering transactions in the industry, including the first CCER (China Certified Emission Reduction) trade and the first carbon-inclusive inclusive trading initiative. Its cumulative carbon trading volume has exceeded 90 million metric tons, providing industry-leading carbon financial services to help clients navigate domestic and international carbon markets, manage carbon assets, and achieve carbon neutrality.

The company continues to deepen its engagement in the green industry chain, offering leading-edge equity and debt financing services such as green bond underwriting and green ABS issuance. In 2024, it underwrote green bonds exceeding RMB 40 billion, ranked first in the industry for cumulative green ABS issuances, facilitated RMB 9.4 billion in equity financing for the new energy technology company IM Motors, and supported China Construction Bank in issuing RMB 20 billion in green financial bonds.

In 2023, Guotai Haitong Securities signed the Principles for Responsible Investment (PRI), committing to fully integrate ESG factors into its investment decision-making process group-wide. It consistently identifies investment opportunities in green and low-carbon industries such as energy conservation, emission reduction, environmental protection, and resource recycling, expanding its green equity and green bond investments while accelerating the creation of green low-carbon indices and investment products. The company actively provides asset custody and distribution services to professional investment institutions engaged in green investing, channeling more capital toward green and low-carbon sectors.

Thanks to its impactful green finance practices, Guotai Haitong Securities

achieved an MSCI ESG rating upgrade to AAA in 2024—the highest rating in the global investment banking and brokerage industry. Moving forward, the company will further consolidate its comprehensive advantages in green finance, diligently advance the "green finance" priority, and implement stronger measures to support the comprehensive green transition of economic and social development.



Figure: Guotai Haitong and Zhangjiakou Selin Forestry Group Signed Carbon Finance Framework Cooperation Agreement

Proya (603605): Transmitting the Concept of Sustainable Consumption and Building a Green Consumption Closed Loop from Source to Terminal in the Beauty Industry

In the face of global climate challenges, the wave of green consumption is reshaping the needs of the times. With the goal of "practicing the concept of sustainability with consumers", Proya actively guides consumers to transform

to low-carbon consumption through product innovation and communication systems.

Since 2023, Proya has adopted a series of measures to strengthen communication with consumers and promote their adoption of more sustainable consumption patterns. Proya has prominently introduced sustainable labels on product packaging. Through intuitive information transmission, it enables consumers to clearly understand the product's environmental attributes and recyclable value. Meanwhile, Proya fully leverages multi-channel communication platforms both online and offline to actively advocate for innovative environmental actions such as the use of refillable products and the transformation and reuse of empty containers. It encourages consumers to participate in practical actions to reduce waste and protect the environment while enjoying high-quality beauty products. These initiatives have enhanced green interaction between the brand and consumers, and promoted the elevation of consumers' awareness of sustainability. In 2023, Proya promoted the concept of refillable products on multiple mainstream social media platforms such as Weibo, Xiaohongshu, Zhihu, and Douyin, with a cumulative exposure exceeding 100 million times. This has effectively raised public awareness and participation in sustainable consumption of cosmetics.

In 2024, Proya implemented refillable design and packaging simplification for five product lines—including the Firming Nourishing Soft Cream and the Double Effect Brightening Essence—reducing plastic and aluminum usage by approximately 300 tons. This initiative translated to a reduction of about 938 tons in carbon dioxide equivalent emissions. In 2024, Proya joined hands with

the sustainable lifestyle brand "WUYUSTORY" to launch a brand initiative supporting sustainable living, which effectively enhanced and inspired the public's awareness of and participation in sustainable consumption of cosmetics.



Figure: Refillable option for the Double Effect Brightening Essence 3.0

Year 2024

China Unicom (600050): Taking the lead in launching the "Unicom Carbon Life" carbon-inclusive application, and facilitating Green Transition of National Production and Lifestyle

China Unicom continued to be guided by the new development philosophies of innovation, coordination, green, openness, and sharing, releasing the sustainability report 2024 titled "Leading a Fabulous Digital Future with Integrated Innovation" on March 18, 2025.

China Unicom is committed to the development of the network and

information industry and fulfilling the mission of a state-owned enterprise. It aims to enhance its core functions and competitive edge comprehensively. China Unicom thoroughly implements new development philosophies, accelerates the green transition of development methods, and adopts proactive strategies to address climate change.

This year, China Unicom was deeply advancing the integration of green low-carbon and digital intelligence development. Based on the original “China Unicom ‘Peak Carbon-emission, Carbon-neutrality’ 14th Five-Year Action Plan”, the “China Unicom Carbon Search Green Action Plan (2024–2025)” has been newly upgraded, implementing the new “3+5+1+1” green action plan to lead the industry’s green transition and empower societal green development.

China Unicom, leveraging the account capabilities of its payment company, took the lead in launching the “Unicom Carbon Life” carbon-inclusive application. The carbon emission reduction calculation model was the first to be certified by a national authoritative institution, filling the gap in the personal carbon account field within the telecommunications industry and empowering the green transition of the lifestyle of hundreds of millions of subscribers. “Unicom Carbon Life” was selected into the “Collection of Excellent Green and Low Carbon Practices of Central Enterprises” by the SASAC of the State Council and won 11 domestic and international honors, including the International Finance Forum’s “5th IFF Global Green Finance Innovation Award”.

In recent years, relying on the China Unicom Carbon Search Management Platform, the Company established and improved a “dual control”

indicator system of total volume and intensity that aligns with the characteristics of telecommunications operators, consolidating the foundation for energy consumption and carbon emission data management. By combining visualisation methods with digital twins and AI support, the Company laid the groundwork for the output of intelligent management strategies, enhancing the level of dual-carbon digital management. The Company promoted technological innovation and application in energy saving, carbon reduction, and zero carbon, with comprehensive energy consumption per unit of information flow decreasing by 27.9% compared to the end of the “13th Five-Year Plan” period.

In the future, China Unicom will adhere to actively serve the national strategy, courageously act as the leading contributor of digital information operation and services and the pioneer of digital technology integration and innovation, deeply implement the integrated innovation strategy, and make new contributions to the construction of Cyber Superpower and Digital China.

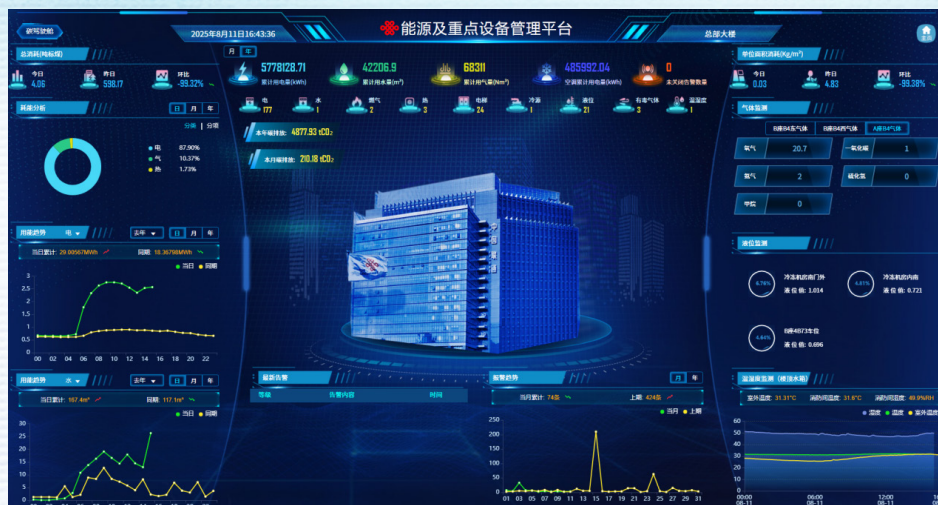


Figure: China Unicom Accelerates Construction of Energy and Carbon Management Operation System

WuXi AppTec (603259): Drive new environmentally friendly processes with breakthrough continuous manufacturing technologies and an integrated enzyme catalysis platform

In 2024, as global attention on sustainable development and ESG (Environmental, Social, and Governance) issues continued to intensify with nations worldwide implementing policies to drive environmentally friendly technologies and facilitate green industry transitions, WuXi AppTec proactively responded to climate change challenges. The Company consistently integrated green chemistry principles into its R&D and manufacturing processes.

Since 2014, WuXi AppTec has been implementing continuous manufacturing. Our end-to-end platform now offers continuous production capabilities for over 50 reaction categories and comprises more than 30 lines catering to

preclinical through commercial project needs.

In 2024, we supported over 150 global customers in more than 500 projects, producing over 300 tons of compounds, while reducing waste emissions by over 1,500 tons.

Furthermore, WuXi AppTec has significantly upgraded our integrated enzyme catalysis platform, encompassing screening to production—by expanding our enzyme library and developing high-efficiency biocatalytic processes to replace traditional energy-intensive and polluting chemical catalysis. Our platform now comprises over 3,000 enzymes with more than 200,000 mutants for rapid screening. In 2024, we supported over 50 customers around the globe in more than 80 projects to utilize enzyme catalysis processes, reducing organic solvent usage by approximately 1,800 tons. This approach has reduced reaction steps, enhanced efficiency, and decreased organic solvent usage by over 90% compared to traditional chemical methods.

WuXi AppTec remains firmly committed to ongoing investment in green chemistry innovation, with particular focus on expanding the application of continuous manufacturing and enzyme catalysis processes to increasingly complex molecular architectures, while systematically implementing these proven sustainable solutions across our global production network.



Figure: Enzyme catalysis reactor at WuXi AppTec Jinshan Site

Intco Recycling (688087): Adhere to Innovation-Driven Development and Build a Circular Economy Model

Intco Recycling adheres to an innovation-driven approach, fully leveraging the comprehensive advantages of its entire industrial chain to build a circular economy model of "recycling—regeneration—utilization" for plastics. While practicing the concept of environmental friendliness, it advocates green consumption, promotes social progress, and contributes significantly to the long-term goal of global sustainable development. Over more than 20 years since its establishment, the company has established over 1,300 global recycling networks for recycled plastics, providing consumers worldwide with one-stop overall solutions for home decorations. It has cumulatively saved 3.4 million tons of carbon emissions, 5.1 million tons of crude oil resources, and prevented 33 million trees from being cut down.

In 2024, Intco Recycling avoided 144,000 tons of plastic (PS, PET, PE) landfilling annually, reduced its carbon footprint by approximately 300,000 tons per year, and its recycled products achieved a carbon reduction of about 20%-30%. It serves 12,000 customers across 120 countries worldwide. With its outstanding operations, the company secured the first Blue Loan in China and Malaysia from IFC, a member of the World Bank Group. It is also the first enterprise on the STAR Market to obtain such a loan from an international financial institution. In addition, the company achieved a S&P CSA score of 60 in the United States, outperforming 94% of its global chemical industry peers, and has been listed in the Sustainability Yearbook (China Edition) for two consecutive years. It has also successively received high-standard recognitions from EcoVadis, CDP, Bloomberg, and other institutions.

Looking ahead, as an innovative enterprise that perfectly integrates plastic recycling and regeneration with the application of fashion consumer goods, Intco Recycling will continue to leverage its advantages in the entire industrial chain of resource recycling and reuse, align with the sustainable development trend of the industry, and contribute to achieving carbon neutrality and global sustainable development.



Figure: Intco Recycling, Upgraded quality, Creating a better future+Driving technological