



 **恒力石化**  
HENGLI PETROCHEMICAL  
Stock Code : **600346**

---

Hengli Petrochemical Co., Ltd.  
**2022 Annual Report Abridgement**

Focus on innovative nature  
build a better life

## Letter to shareholders, partners and employees

Dear shareholders, partners and employees:

The passing years never linger, yet our original aspirations endure. As seasons flow and another year dawns, we are reminded that 'there is no winter that cannot be surpassed, and no spring that will not arrive.' Through arduous trials and overcoming countless obstacles, we have braved challenges and surmounted difficulties, once again reuniting amidst this radiant springtime.



In the past year, our nation and homeland face great challenges. Geopolitical complexities persist, global economy remains sluggish, and external circumstances have been tempestuous, surpassing anticipated risks and challenges. Guided by the central leadership under the core of Comrade Xi Jinping, the Party has steered the course, leading the entire nation to vigorously accomplish the demanding tasks of reform, development, and stability, striving to turn the tide.

During this year, Hengli Petrochemical has also weathered numerous tests in its operations. Crude oil prices soared and fluctuated dramatically, while the end-market witnessed weak consumer demand and insufficient needs. The industry as a whole endured operational pressures arising from narrowed price differentials and the inability to shift costs. In the latter half of the year, the company's operational performance declined alongside industry fluctuations, resulting in losses. Confronted with formidable challenges, we have cut through thickets and advanced toward the light, steadfastly growing amidst tremendous changes and uncertainty, resolute in our forward pursuit.

"We venture into the most difficult challenges and strive for the farthest goals." Despite the tremendous difficulties faced in 2022, we confronted them head-on and achieved some small accomplishments. In terms of production and operation, we have implemented the "Dual Excellence Strategy" of strengthening production management, optimizing production processes,

enhancing new product development, and optimizing product structure, resulting in improved quantity and quality. In terms of industrial layout, we have relied on the integrated industrial system of "oil, coal, and chemicals" and leveraged the accumulated research and development in "new materials" in downstream sectors such as "fiber, membrane, and plastics" to consolidate our core business and strengthen the foundations for future development. In terms of capital operation, we have excavated highlights, extracted value, and comprehensively and vigorously promoted investment and market value management through various channels and forms, yielding noticeable results. In terms of safety and environmental protection, we have remained committed to green and low-carbon development, and our efforts have been recognized with multiple honors, including being awarded the national-level "Green Factory" and "National Low-Carbon Enterprise in the Textile Industry".

**Within the realm of life and the world, the path is long and perilous.** Standing at another historical juncture, we feel the howling winds of a century of upheaval: Geopolitical conflicts show no signs of abating, inflation reaches historic highs in Europe and America, and the "triple pressure" of shrinking demand, supply shocks, and weakening expectations remains heavy. Tearing apart and integrating, upheaval and reconstruction, all indicate that this year may yet be an extraordinary one. Undoubtedly, the recovery of demand cannot happen overnight, and the economic revival may be a lengthy healing process.

**With hope in our hearts and stars in our sights,** despite the immense uncertainty that lies ahead and the potential for unexpected factors to disrupt, we, united as one with our country and homeland, will navigate through treacherous waters and embark on an era of vast possibilities with tremendous resilience. We will continue to uphold the patience and determination to fight a tough battle, with the resolve and conviction to achieve victory, and address the essential questions that belong to Hengli people.

Strength in action leads to greater progress, and deep understanding leads to more effective action. Regardless of the ever-changing world, we remain steadfast and unwavering. Hengli continues to be a company that perseveres through hard work and steadfast dedication, and Hengli people remain pioneers who willingly explore and firmly believe that even a tiny stream can

break through towering cliffs. With an unwavering commitment to our original aspirations and unwavering determination, in the new year, we will continue to focus on "one goal, two strategic implementations, three fundamental foundations, four key industries, and six comprehensive systems," upholding our craftsmanship spirit and striving for upward advancement.

**After enduring hardships, the mountains and rivers regain their radiance.** Each trial and tribulation, each callus and scar left behind from countless storms and tempests, is a testament to our growth and a gift from time. Recognizing our inadequacies, we forge ahead, gazing at distant mountains while taking determined steps. We are more acutely aware that only by "putting forth efforts that are no less than anyone else's" and courageously advancing can we persist amidst the storms and flourish.

Catching up with a great era, the grand journey of Chinese-style modernization has begun. Achieving grand visions and far-reaching goals requires passing through obstacles together with millions of like-minded individuals and the diligent perseverance of countless unsung heroes. Each one of us is both a witness and a participant.

"With a heart reaching beyond the sky and a body committed to the present." The stars will not disappoint those who strive forward. We believe that the journey we embark on will not be in vain! The winds and waves will carry us forward, and we will meet again in the vast blue expanse, farther and wider than ever before!

Chairman:



## Content

Chapter 1	Definitions.....	5
Chapter 2	Company Profile and Key Financial Indicators.....	9
Chapter 3	Management Discussion and Analysis.....	13
Chapter 4	Corporate Governance.....	45
Chapter 5	Environmental and Social Responsibility.....	64
Chapter 6	Important events.....	78
Chapter 7	Share Changes and Shareholders.....	85
Chapter 8	Information of Bonds.....	93

Reference File Directory	Financial statements signed and sealed by the legal representative, person in charge of accounting, and person in charge of the accounting organization (accounting supervisor).
	Original audit report sealed by the accounting firm and signed and sealed by a certified public accountant.
	Original copies of all company documents and announcements publicly disclosed during the reporting period.

## Chapter 1 Definitions

### I. Definition

In this report, the terms listed below are defined as follows, unless the context otherwise implies:

Definition of Frequently-Used Terms		
Reporting Period	Refer to	From 1/1/2022 to 31/12/2022
Company, the Company, or Hengli Petrochemical	Refer to	Hengli Petrochemical Co., Ltd.
CSRC	Refer to	China Securities Regulatory Commission
Ministry of Industry and Information Technology	Refer to	Ministry of Industry and Information Technology of the People's Republic of China
SSE	Refer to	Shanghai Stock Exchange
《Company Law》	Refer to	《Company Law of the People's Republic of China》
《Securities Law》	Refer to	《Securities Law of the People's Republic of China》
《Articles of Association》	Refer to	《Hengli Petrochemical Co., Ltd. Articles of Association》
Hengli Group	Refer to	Hengli Group Co., Ltd., controlling shareholder of the listed company
Hailaide	Refer to	Hailaide International Investment Ltd., person acting-inconcert with controlling shareholder of the listed company
Tak Shing Li	Refer to	Tak Shing Li International Holdings Ltd., person acting-inconcert with controlling shareholder of the listed company
Hegao Investment	Refer to	Jiangsu Hegao Investment Co., Ltd., person acting-inconcert with controlling shareholder of the listed company
Hengneng Investment	Refer to	Hengneng Investment (Dalian) Co., Ltd., person acting-inconcert with controlling shareholder of the listed company
Hengfeng Investment	Refer to	Hengfeng Investment (Dalian) Co., Ltd., person acting-inconcert with controlling shareholder of the listed company
Hengli Chemical Fiber	Refer to	Jiangsu Hengli Chemical Fiber Co., Ltd., subsidiary to the listed company
Susheng Thermal Power	Refer to	Suzhou Susheng Thermal Power Co., Ltd., subsidiary to the Hengli Chemical Fiber, sub-sub-sidiary to the listed company
Hengke Advanced Materials	Refer to	Jiangsu Hengke Advanced Materials Co. Ltd., subsidiary to the Hengli Chemical Fiber, sub-sub-sidiary to the listed company
Deli Chemical Fiber	Refer to	Jiangsu Deli Chemical Fiber Co., Ltd., subsidiary to the Hengli Chemical Fiber, sub-sub-sidiary to the listed company
Kanghui New Material	Refer to	Kanghui New Material Technology Co., Ltd., subsidiary to the listed company
Hengli Petrochemical Chemical	Refer to	Hengli Petrochemical (Dalian) Chemical Co., Ltd., subsidiary to the listed company
Hengli Investment	Refer to	Hengli Investment (Dalian) Co., Ltd., subsidiary to the listed company
Hengli Petrochemical (Dalian)	Refer to	Hengli Petrochemical (Dalian) Co., Ltd., subsidiary to the Hengneng Investment, sub-sub-sidiary to the listed company

Hengli Petrochemical (Huizhou)	Refer to	Hengli Petrochemical (Huizhou) Co., Ltd., subsidiary to the Hengneng Investment, sub-subsidiary to the listed company
Hengli Petrochemical Refining	Refer to	Hengli Petrochemical (Dalian) Refining Co., Ltd., subsidiary to the listed company
Crude Oil	Refer to	Crude oil is petroleum directly exploited from an oil well without being processed, and is a dark-brown or dark-green viscous liquid or semisolid flammable substance that is composed of various hydrocarbons.
Aromatic Hydrocarbon	Refer to	A hydrocarbon containing a benzene ring structure in its molecule. Aromatic hydrocarbons, mainly including benzene, methylbenzene, xylene, etc., are one of the most important basic raw materials for the production of petrochemicals.
Ethylene	Refer to	A compound consisting of two carbon atoms and four hydrogen atoms. It is the basic chemical raw material of synthetic fiber, synthetic rubber, synthetic plastic (polyethylene and polyvinyl chloride), synthetic ethanol (alcohol), and also used in manufacturing chloroethylene, styrene, ethylene oxide, acetic acid, acetaldehyde, ethanol, and explosives, etc.
Polyethylene	Refer to	A thermoplastic resin obtained by polymerization of Ethylene. Polyethylene is odorless, non-toxic, feels like wax, has excellent low temperature resistance, good chemical stability, and is resistant to most acids and alkalis.
POLYPROPYLENE (PP)	Refer to	A semi-crystalline synthetic resin material with strong acid and alkali resistance, excellent electrical insulation performance, harder and higher melting point than PE.
Styrene	Refer to	An organic compound, usually a colorless, aromatic liquid, used primarily in the production of plastics, resins, and rubber.
Butadiene	Refer to	An organic compound, a colorless gas with a special smell, the main raw material for the production of synthetic rubber.
PARAXYLENE (PX)	Refer to	A kind of Aromatic Hydrocarbon, a colorless transparent liquid, is one of the raw materials for the production of purified terephthalic acid (PTA), which is used to produce plastics, Polyester Fiber and films.
PURIFIED TEREPHTHALIC ACID (PTA)	Refer to	It is white crystal or powder at normal temperature, non-toxic, flammable, if mixed with air within a certain limit, it will burn when exposed to fire.
METHYLENE GLYCOL (MEG OR EG)	Refer to	Colorless, odorless, sweet, viscous liquid, mainly used in the production of Polyester Fiber, antifreeze, unsaturated polyester resin, lubricants, plasticizers, non-ionic surfactants and explosives.
BDO, 1, 4-Butanediol	Refer to	Colorless oily liquid, flammable, miscible with water. Soluble in methanol, ethanol, acetone, slightly soluble in ether.
Acetic Acid	Refer to	Organic compound, a colorless liquid with a pungent odor. It is the raw material for the manufacture of rayon, film, aspirin, etc.
Polyester, Polyester Chip or PET	Refer to	Polyethylene terephthalate (referred to as polyester) is a fiber-forming high polymer prepared from PTA and MEG as raw materials through transesterification or esterification and polycondensation reactions. Fiber-grade

		polyester chips are used to make polyester staple fiber and Polyester Filament Yarn (PFY), and film-grade chips are used to make various film products.
PBAT	Refer to	Polybutylene terephthalate-adipate, a petrochemical-based biodegradable plastic, has excellent biodegradability. It is very active in the research of biodegradable plastics and one of the best degradable materials in the market.
PBS	Refer to	Polybutylene succinate, polymerized from succinic acid and 1, 4-butanediol (BDO), has good thermal performance and mechanical processing performance, and is easily destroyed by various microorganisms in nature or animals and plants. Enzyme decomposes, metabolizes, and finally decomposes into carbon dioxide and water, which is a typical fully biodegradable material.
Polyester Fiber	Refer to	Synthetic fiber obtained by spinning polyester obtained by polycondensation of organic dibasic acid and dibasic alcohol. Industrialized mass-produced Polyester Fiber is made of polyethylene terephthalate, and the trade name in China is polyester. It is the largest variety of synthetic fibers at present.
Polybutylene Terephthalate (PBT), PBT	Refer to	Also known as polytetramethylene terephthalate, it is a condensation polymer of terephthalic acid and 1, 4-butanediol. It can be obtained by polycondensation through transesterification or direct esterification. Together, PBT and PET are known as thermoplastic polyesters.
Biaxially-Oriented Polyethylene Terephthalate (BOPET), BOPET	Refer to	Biaxially-Oriented Polyethylene Terephthalate (BOPET) has the characteristics of high strength, good rigidity, transparency, high gloss, excellent wear resistance, folding resistance, pinhole resistance and tear resistance, etc.; heat shrinkage is extremely small and has good antistatic properties.
Denier (D)	Refer to	A fiber of 9, 000 meters in length weighs 1 gram and is called 1 Denier (D).
Polyester Filament Yarn (PFY)	Refer to	Filament with a length of more than one kilometer, the filament is wound into a ball.
PFY for Civil Use, Textile Yarn	Refer to	Polyester Filament Yarn (PFY) for apparel or home textiles.
PFY for Industrial Use, Industrial Yarn	Refer to	It is a polyester long fiber with high strength, high modulus and large denier used in industrial fields.
Differential Fiber	Refer to	Through chemical modification or physical deformation, mainly to improve the wearing performance, there are great innovations in technology or performance, or new fiber varieties with certain characteristics that are different from conventional varieties.
POY	Refer to	Polyester pre-oriented yarn, full name PRE-ORIENTED YARN or PARTIALLY ORIENTED YARN, is an incompletely drawn Polyester Filament Yarn (PFY) obtained by high-speed spinning with an orientation degree between the unoriented yarn and the drawn yarn.
DTY	Refer to	Stretched textured yarn, also known as polyester stretched yarn, full name DRAW TEXTURED YARN, is made of POY as raw yarn, stretched and false twisted, and often has a certain degree of elasticity and shrinkage.
FDY	Refer to	Full drawn yarn, also known as polyester drawn yarn, full



		name FULL DRAWN YARN, is a synthetic fiber filament further prepared by spinning and drawing process. The fiber has been fully drawn and can be directly used for textile processing.
--	--	---

## Chapter 2 Company Profile and Key Financial Indicators

### I. Company information

Company's Chinese Name	恒力石化股份有限公司
Abbreviation of Chinese Name	恒力石化
Company's Foreign Name	HENGLI PETROCHEMICAL CO., LTD.
Legal representative of the Company	Fan Hongwei

### II. Contacts and contact information

	Secretary of the Board	Securities Affairs Representative
Name	Li Feng	Wang Shan, Duan Mengyuan
Contact address	Floor 31, Building B, Victoria Plaza, No. 52 Gangxing Road, Renmin Road Street, Zhongshan District, Dalian City, Liaoning Province	Floor 31, Building B, Victoria Plaza, No. 52 Gangxing Road, Renmin Road Street, Zhongshan District, Dalian City, Liaoning Province
Telephone	0411-39865111	0411-39865111
Fax	0411-39901222	0411-39901222
E-mail	lifeng@hengli.com	wangshan@hengli.com duanmengyuan@hengli.com

### III. Basic information

Registered address	OSBL Project-Public Office Building, No. 298, Changsong Road, Lingang Industrial Zone, Changxing Island, Dalian City, Liaoning Province
Company office address	Floor 31, Building B, Victoria Plaza, No. 52 Gangxing Road, Renmin Road Street, Zhongshan District, Dalian City, Liaoning Province
Postal code of the Company's business address	116001
Company website	hengliinc.com
E-mail	hlzq@hengli.com

### IV. Information disclosure and location

Media name and website of the Company's annual report disclosure	China Securities Journal, Shanghai Securities News, Securities Times, Securities Daily
Website of the stock exchange where the company discloses the annual report	www.sse.com.cn
The place where the Company's annual report is ready for inspection	Office of the Company's board of directors

### V. Company stock profile

Company stock profile				
Stock category	Stock exchange	Stock abbreviation	Stock code	Stock abbreviation before change
A shares	Shanghai Stock Exchange	Hengli Petrochemical	600346	Hengli Stock

**VI. Other relevant information**

Accounting firm engaged by the Company (Domestic)	Name	Zhonghui Certified Public Accountants (Special General Partnership)
	Office address	Room 601, Building A, Hualian Times Building, No. 8 Xinye Road, Jianggan District, Hangzhou
	Name of signing accountant	Han Jian, Fang Sai

**VII. Key accounting data and financial indicators in the past three years****(I) Key Accounting Data**

Unit: ten thousand yuan Currency: RMB

Key Accounting Data	2022	2021	Increase/decrease (%)	2020
Revenue from operations	22,232,358.40	19,797,034.49	12.30	15,237,339.57
Net profit attributable to shareholders of listed company	231,830.32	1,553,107.67	-85.07	1,346,178.57
Net profit attributable to shareholders of listed company after deduction of non-recurring gains and losses	104,528.51	1,452,069.80	-92.80	1,287,432.41
Net cash flows from operating activities	2,595,397.08	1,867,017.37	39.01	2,414,288.13
Net assets attributable to shareholders of listed company	5,286,254.36	5,723,138.30	-7.63	4,690,507.69
Total assets	24,143,047.46	21,029,622.56	14.80	19,102,872.66

**(II) Key Financial Indicators**

Key Accounting Data	2022	2021	Increase/decrease (%)	2020
Basic earnings per share (Yuan/Share)	0.33	2.21	-85.07	1.92
Diluted earnings per share (Yuan/Share)	0.33	2.21	-85.07	1.92
Basic earnings per share after deducting non-recurring gains and losses (Yuan/Share)	0.15	2.07	-92.75	1.83
Weighted average return on equity (%)	4.30	30.07	Reduced by 25.77 percentage points	32.55
Weighted average return on equity after deducting non-recurring gains and losses (%)	1.94	28.11	Reduced by 26.17 percentage points	31.13

Note of the key accounting data and financial indicators of the company in the prior three years at the end of the reporting period

During the Reporting Period, the prices of crude oil and other major raw materials rose rapidly and oscillated at high levels and in a wide range. The prices of products near crude oil also rose sharply due to the impact of crude oil prices. At the same time, the traditional demand for the company's main products such as chemicals, functional films, civilian yarns, and industrial yarns related to terminal consumption and infrastructure real estate is at a low market level. The weak recovery of market demand in the industry, the delayed transmission of upstream and downstream product prices, and the company's double operating squeeze of historically high operating costs and low industry demand are the main reasons for the company's revenue from operations growth but profit decline. Secondly, the company implemented a refinery overhaul in the second half of 2022, which affected the overall load rate and processing cost level of the refining and chemical integration unit, and in accordance with the requirements of accounting standards, the inventory loss caused by the periodic decline in the international crude oil price has been accounted for, which has further affected the company's annual profitability.

### VIII. Main financial data by quarter in 2022

Unit: ten thousand yuan Currency: RMB

	First quarter (January to March)	Second Quarter (April- June)	Third quarter (July- September)	Fourth quarter (October- December)
Revenue from operations	5,339,665.19	6,575,862.87	5,120,188.76	5,196,641.58
Net profit attributable to shareholders of listed company	422,268.92	380,346.92	-193,946.96	-376,838.56
Net profit attributable to shareholders of listed company after deducting non-recurring gains and losses	411,359.48	330,324.85	-262,602.68	-374,553.14
Net cash flows from operating activities	1,061,775.26	601,761.03	583,868.05	347,992.74

### IX. Non-recurring gains and losses items and amount

Unit: yuan Currency: RMB

Item of non-recurring gains and losses	2022	2021	2020
Gain or loss on disposal of non-current assets	-8,794,093.17	1,788,290.01	-2,353,388.34
Government subsidies included in the current profit and loss, except for government subsidies that are closely related to the company's normal business operations, comply with national policies and regulations, and are continuously enjoyed in accordance with certain standards or quantities	1,594,250,334.30	760,570,495.82	937,331,851.91
Gain on investment costs in acquisition of subsidiaries, associates and joint venture less than the fair value of identifiable net assets of the investees	79,415,493.16		
Except for the effective hedging business related to the Company's normal business operations, income from the holding of trading financial assets, Derivative financial assets, Trading financial liabilities, and derivative financial	-46,001,895.50	375,366,888.97	-158,168,853.40

liabilities generates changes in fair value gains and losses, and the disposal of Trading financial assets, Derivative financial assets, Trading Investment income from financial liabilities, derivative financial liabilities and other debt investments			
Other non-operating income/(expenses), net	10,695,487.35	-5,096,728.57	-11,127,746.48
Other gain or loss items met the definition of non-recurring item	3,692,791.90	45,080,477.29	1,561,440.57
Less: Impact on income tax	360,240,063.26	183,394,674.73	200,533,876.52
Impact on minority interests (after tax)	-	-16,064,003.29	-20,752,079.27
Total	1,273,018,054.78	1,010,378,752.08	587,461,507.01

### X. Items measured at fair value

Unit: ten thousand yuan Currency: RMB

Item	Beginning balance	Closing balance	Changes in the period	Impact on profit for the current period
Derivative financial assets	69,643.31	49,043.06	-20,600.25	45,675.63
Derivative financial liabilities	29,681.70	34,602.07	4,920.37	-50,022.39
Wealth management products and structured deposits	2,000.00	6,500.00	4,500.00	243.05
Receivable financing	341,995.77	228,727.12	-113,268.65	-
Fund trust and asset management products	9,793.85	4,698.39	-5,095.46	-150.78
Treasury bond reverse repurchase	16,499.00	1,734.90	-14,764.10	59.41
Total	469,613.63	325,305.54	-144,308.09	-4,195.08

## Chapter 3 Management Discussion and Analysis

### I. Business discussion and analysis

In 2022, under the impact of complex geopolitical conflicts, deep adjustments in global supply chains, and frequent major climate disasters, prices of commodities such as energy, industrial metals, and food continued to rise, leading to a global surge in inflation. Weaker global economic fundamentals further intensified financial market volatility, prompting central banks in developed economies to swiftly and significantly tighten monetary policies, resulting in a phase of capital outflows. The central banks of some emerging markets and developing economies took a more aggressive stance in raising interest rates, greatly weighing down their economic growth. The global economic growth rate significantly declined in 2022, and the divergence in the recovery became more pronounced. As geopolitical influences deepen, the subsequent effects of rapid interest rate hikes by major central banks, and inflationary pressures, the world economy may face even greater challenges in its recovery in 2023. The International Monetary Fund predicts a global economic growth rate of only 2.9% in 2023.

From a domestic perspective, "China's economy maintains strong resilience, has great potential, and remains vibrant, with the long-term positive fundamentals unchanged." Faced with a complex and challenging situation, China adheres to the principle of seeking progress while maintaining stability, efficiently coordinates economic and social development, and has achieved positive results, stabilizing the overall macroeconomic situation. In 2022, China's gross domestic product (GDP) reached 121.02 trillion yuan, an increase of 3.0% compared to the previous year. It outpaced the growth rates of other major economies in the world, maintaining a continuous expansion of the overall economic size and solidifying its development foundation. However, despite this, the international situation remains complex and challenging, and the Chinese economy still faces significant "contractions in demand, supply shocks, and weakened expectations, " with a fragile foundation for economic recovery. In 2023, the Central Economic Work Conference made it clear that it will adhere to the principle of seeking progress while maintaining stability, vigorously boost market confidence, emphasize stable growth, employment, and prices, promote overall improvement in economic performance, and strive for qualitative and quantitative improvements. "Placing the restoration and expansion of consumption in a prioritized position, " adopting multiple measures to promote stable consumption growth, enhance residents' consumption capacity, improve the consumption environment, and cultivate new drivers of consumption growth. "Persisting in making the focus of economic development on the real economy and promoting new industrialization." Cultivating and expanding emerging industries, continuously focusing on key areas such as 5G, artificial intelligence, biomanufacturing, industrial internet, intelligent connected vehicles, green and low-carbon sectors, and constantly enriching and expanding new application scenarios.

In our industry, in 2022, affected by the slowdown in macroeconomic growth, rising energy prices, weak terminal consumption, and a continued decline in the real estate sector, the industry as a whole faced the dual pressures of high costs and insufficient demand, resulting in a general decline in profitability. From the cost side, the high prices of major energy sources such as crude oil and natural gas have increased production costs for enterprises. International crude oil prices experienced fluctuations after an initial increase. According to monitoring data from the China Petroleum and Chemical Industry Federation, in 2022, the average spot price of Brent crude oil was \$101.2 per barrel, a year-on-year increase of 43.0%, and the average spot price of WTI crude oil was \$94.5 per barrel, a year-on-year increase of 39.1%. From the demand side, insufficient terminal consumer demand and ineffective price transmission between upstream and downstream products have led to

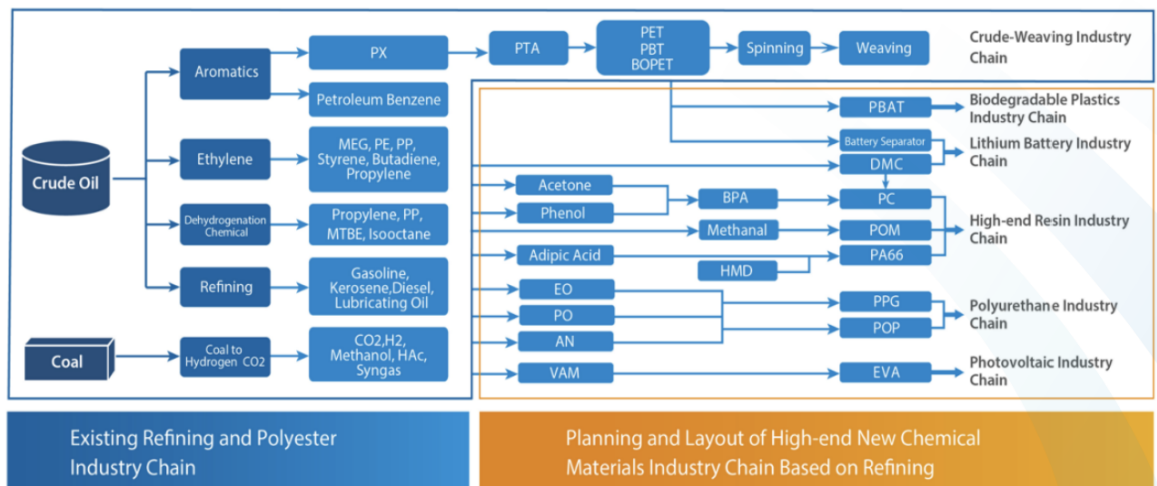
lower product price increases compared to upstream raw materials, further squeezing enterprise profit margins. In the aromatics-PTA-polyester fiber industry chain, downstream textile and apparel are important terminal consumer markets. In 2022, due to factors such as slowing growth in household income and slow recovery of consumption scenarios, the domestic consumer market faced pressure, and domestic demand for textile and apparel products was insufficient. Although export volumes reached new highs, export growth rates declined month by month in the second half of the year. According to data from the National Bureau of Statistics, the retail sales of apparel, shoes, hats, and textiles above the quota nationwide decreased by 6.5% compared to the previous year, and the growth rate has remained negative since March. Insufficient downstream demand for textile and apparel products led to a general decline in the operating rates of major industries in the chemical fiber downstream, compared to the same period in 2021. In the olefin chemical industry chain, real estate and infrastructure, as important terminal consumer markets, bear enormous consumption volumes. Due to multiple factors, the deep adjustment trend in the real estate market continued in 2022. Data from the National Bureau of Statistics shows that nationwide real estate development investment decreased by 10.0% compared to the previous year.

Against the backdrop of high and volatile crude oil and natural gas prices, prices of products closer to crude oil have also risen significantly, influenced by crude oil prices. On the other hand, the prices of chemical products closer to the consumer end depend more on their own supply and demand dynamics. According to data from the National Bureau of Statistics, the profits of the upstream oil and gas sector increased by 1.15 times year-on-year, while the profits of the downstream refining and chemical sectors experienced negative growth. In the face of a turbulent external environment, the integrated operation of high value-added and multi-variety industrial chains and the supply composition of products highlight the industry's prominent risk resistance and profit capturing capabilities in the face of high oil price volatility and market fluctuations.

Year 2023 is the starting year for comprehensively implementing the spirit of the 20th National Congress of the Communist Party of China and a crucial year for carrying forward the goals set in the 14th Five-Year Plan. "High-quality development is the primary task for building a socialist modern country." The new generation of information technology and new materials serve as the two fundamental technologies of the manufacturing industry, with new materials being the cornerstone of upgrading traditional industries and developing strategic emerging industries. The chemical new materials industry is an important basic material for strategic fields such as new energy, high-end equipment, green environmental protection, and biotechnology. In recent years, driven by the implementation of the domestic "dual carbon" strategy, the green transformation and upgrading of the national industry, and changes in consumption patterns, the demand for upstream chemical new materials has continued to grow. This has prompted industry enterprises to actively transition from "energy + chemicals" to "platformization + new materials" and from "scale economy dominance" to "green and circular-driven" business models. Leading industry players, such as Hengli Group, have implemented fully integrated development of the entire industry chain, relying on a rich portfolio of basic chemical raw materials from integrated refining and petrochemical projects. They have extended their presence into downstream new materials fields such as high-end polyolefins, lithium battery materials, engineering plastics, and petroleum-based degradable plastics. By increasing value-added and internally consuming intermediate products, these companies effectively buffer the intense homogenized competition and structural imbalances in high-end scarcity in the upstream sector, aiming to achieve secondary growth.

In recent years, the company has actively adapted to new situations, new developments, and new changes, closely focusing on the innovation chain based on national industrial

strategic transformation deployments, and deploying the industrial chain based on the innovation chain. The company has focused on "supply chain enhancement and research and development innovation." Building upon the advantageous integration of "oil, coal, and chemicals" in the deep integration of the "large-scale chemical platform," and relying on fine chemical park projects, the company has accelerated the development of a high-end fine chemical industry cluster. This aims to further expand the industry's support and development foundation for high-end chemical raw materials, solidify the role and operational efficiency of the upstream "large-scale chemical" platform. Targeting new directions and markets in downstream polyester and polyesters, as well as fine chemicals and specialty new materials in the olefin downstream sector, the company aims to consolidate its traditional market advantages, benchmark breakthroughs in key new materials areas, and focus on the development of PBS/PBAT degradable materials, functional polyester materials, high-performance resin materials, high-end fiber materials, and new energy materials. The company strategically positions itself in high-growth tracks with high technological barriers and high added value, actively constructing an ecological circle for the fine chemical and new materials industry chain in the "Dalian Changxing Island," and striving to become a leading enterprise in the entire value chain of research, development, and manufacturing of platform-based chemical new materials.



During the reporting period, the listed company faced the dual operational pressure of historically high operating costs and low industry demand in a challenging economic environment and a complex and volatile market situation. As a result, the company experienced a significant decline in profitability. The company achieved operating income of 222.324 billion yuan, a year-on-year increase of 12.30%, and a net profit attributable to shareholders of the listed company of 2.318 billion yuan, a decrease of 85.07% compared to the same period last year. The decline in profit was mainly due to the rapid and volatile increase in prices of major raw materials such as crude oil, coupled with weak recovery in industry market demand. The company faced the dual operational squeeze of historically high operating costs and low industry demand. The company's main products, such as chemical products, functional films, civilian silk, industrial silk, and others related to traditional demand in end-consumption and infrastructure construction, were at a low level in the market, putting pressure on the company's profitability. In the second half of 2022, the company implemented a major overhaul of its refinery, which affected the overall load rate and processing cost level of its integrated refining and petrochemical units. The company also made provisions in accordance with accounting standards for inventory losses caused by the temporary downward trend in international crude oil prices, further impacting the company's annual profitability.



Despite the extremely challenging external environment in 2022, under the correct leadership of the Board of Directors, the company's management actively sought certainty amid uncertainty, maintained composure, and sought steady progress. Through overall coordination and actively eliminating environmental factors, the company efficiently and rapidly advanced key project construction, continuously expanded the industrial chain, improved scarce production capacity, and strengthened the development of new supports. The company solidified the foundation of safety and environmental protection, actively promoted green and low-carbon transformation, and achieved efficient operations with high standards, green practices, and environmental protection. The company also strengthened its risk control, refined management, and flexible operational capabilities, controlled costs while increasing efficiency, and maximized the stability and efficiency of production and operations.

During the reporting period, the company's key operational highlights are as follows:

**I. Steady operations, flexible management, and strengthened fine management level and cost advantage, striving to achieve overall maximization of benefits.**

During the reporting period, faced with a complex market environment, the company fully leveraged the unique advantages of Hengli's quality and speed in maximizing profits through "quality, cost, and rapid response, " as well as the characteristics of flexibility, efficiency, and agility in its mechanisms. The company made every effort to ensure the efficient and coordinated operation of production facilities and industrial parks in the refining, petrochemical, chemical, and polyester new materials major production bases. On the "mega-chemical" platform, the company fully utilized the technological and process advantages of refining, ethylene, and integrated coal chemical units, continuously optimized unit operations, timely adjusted product structures based on fluctuations in raw material prices and market demand trends, and organized production according to the principle of maximizing benefits, achieving a balance between production and sales, smooth operations, and maximized efficiency.

During the reporting period, the company continued to strengthen fine management and explore potential for quality improvement and efficiency enhancement. By carefully calculating production needs, analyzing raw material trends and market conditions, optimizing procurement plans, and properly controlling raw material inventory, the company achieved the best matching of raw material inventory, processing units, and product structures, while simultaneously focusing on risk prevention and efficiency improvement. In equipment management, the company diligently implemented daily equipment maintenance and repair, addressing any issues promptly and ensuring the long-term stable operation of production units. Spare parts management was strengthened, and spare parts were procured in the most economical and reasonable quantities and batches while meeting the requirements for equipment maintenance and repair. Common supplies were shared to reduce inventory costs. Through measures such as equipment technology transformation, technological innovation, refurbishment, production increase, and consumption reduction, and optimization of performance indicators, the company achieved cost control and efficiency improvement.

**II. Efficient and rapid progress in key project construction, solid acceleration of the layout in the new materials and new energy industries, accumulating momentum for promoting high-quality development.**

1. In the field of fine chemicals and chemical new materials, relying on the "mega-chemical" platform and leveraging years of experience in new material development, the company accelerated the layout of downstream high-end chemical new material production capacity, optimized the raw material supply structure of the "mega-chemical" platform,

continuously expanded the industrial chain, and improved scarce capacity. The progress of major projects is as follows:

(1) The 1.6 million tons/year high-performance resin and new materials project is expected to gradually commence production in mid-2023. The project mainly includes 200,000 tons/year battery-grade dimethyl carbonate (DMC), 300,000 tons/year ABS, 231,800 tons/year bisphenol A production capacity, and 260,000 tons/year polycarbonate (PC) downstream. This project achieves efficient penetration and deep integration from raw material supply to process technology to the consumer market, further consolidating the synergy and industrial depth of the listed company's chemical new materials business segment and optimizing market coverage.

(2) The Hengli Chemical New Material supporting project (300,000 tons/year adipic acid project) is expected to gradually commence production in mid-2023. After its completion, the project will further integrate and improve the company's fully degradable new material industry chain from "crude oil-PTA, adipic acid-PBAT." Adipic acid is also an important raw material for the production of nylon 66 and the purification of carbon dioxide emissions from low-temperature methanol washing equipment to food-grade level (purity of 99.99%), enabling the recovery of industrial waste gas carbon dioxide while increasing the company's benefits.

(3) The 600,000 tons/year BDO (1, 4-butanediol) and supporting project is progressing in an orderly manner and is expected to gradually commence production in mid-2023. The project mainly includes 411,600 tons/year BDO, 60,000 tons/year PTMEG, 100,000 tons/year adipic acid, and other high-end chemical products. After the project is completed, the company will have a complete degradable new material industry chain from "crude oil-PTA, adipic acid-BDO-PBAT," enhancing its profit-generating capabilities.

2. In the field of polyester new materials, based on consolidating the existing polyester new material production capacity and industrial competitiveness, the company relies on Hengli's research and development efficiency and the upstream "mega-chemical" platform support to further develop and expand emerging market demands and business areas such as PBS/PBAT degradable new materials, high-performance industrial fibers, high-end polyester films, lithium battery separators, electrolytes, PET copper foils, and solar photovoltaic backsheets. The progress of key projects is as follows:

(1) Jiangsu Kanghui New Materials' annual production of 800,000 tons functional films and functional plastics project mainly includes 470,000 tons of high-end functional polyester films, 100,000 tons of specialty functional films, 150,000 tons of modified PBT, and 80,000 tons of modified PBAT. This project is expected to commence production gradually in the first quarter of 2023.

(2) The 450,000 tons PBS/PBAT/PBT degradable new materials project has gradually reached production in the first quarter of 2023, effectively expanding the company's capacity and scale in the degradable new materials sector, and increasing its market share in degradable plastics.

(3) Jiangsu Xuanda (Hengke Phase III) 1.5 million tons/year green multifunctional textile new materials project mainly includes 150,000 tons/year new elastic fibers, 150,000 tons/year environmentally friendly fibers, 300,000 tons/year cationic POY, 300,000 tons/year fully dull POY, and 600,000 tons/year differentiated fibers (300,000 tons/year POY, 300,000 tons/year FDY). Currently, the production of 150,000 tons/year elastic fibers, 150,000 tons/year environmentally friendly fibers, and 250,000 tons/year fully dull POY has been successfully completed, achieving breakthroughs in differentiated polyester production.

3. Lithium battery separator project: The Yingkou plant will have an annual production capacity of 440 million square meters of high-performance wet-process lithium battery separators (including 220 million square meters of coated separators), with the first production line expected to commence operation in May 2023. The Nantong plant will have

an annual production capacity of 1.2 billion square meters of wet-process lithium battery separators and 600 million square meters of dry-process lithium battery separators. The project is progressing in an orderly manner, and gradual production is expected in the first quarter of 2024.

### **III. Innovation-driven efficiency and gains, continuous promotion of digital transformation, and the creation of a powerful development "engine."**

In recent years, the company has implemented the "end-to-end bidirectional quality management model," establishing an integrated technology innovation system throughout the upstream and downstream sectors, overcoming numerous bottleneck technologies, and acquiring a significant number of core patents both domestically and internationally. These efforts have facilitated the transformation and application of scientific and technological achievements in production. During the reporting period, the company's research and development investment amounted to 1,184.71 million yuan, representing a year-on-year growth of 16.21%. As of December 31, 2022, the company has accumulated a total of 1,116 domestic and foreign patent authorizations, including 261 new patents granted during the reporting period.

Leveraging its advantages in raw materials, the company continuously enhances the research and development attributes, technological content, and technical weight of the polyester new materials business segment. This further increases the added value of downstream new material products and upgrades the product structure of the polyester new materials business segment. As for polyester fibers, the company persistently develops in the direction of refinement, differentiation, high-end, and high-quality. For instance, Deli Chemical Fiber, adhering to the concept of "achieving the utmost in a single strand," has excelled in the field of ultrafine fibers, becoming the first in China to achieve large-scale production of 5-8D/6f high-uniformity super-soft polyester fibers through melt direct spinning. This fiber has the finest bus density among domestically produced polyester fibers, breaking through technological bottlenecks. During the reporting period, Deli Chemical Fiber was awarded the title of "National Intellectual Property Advantage Enterprise," becoming the second subsidiary of the listed company to receive national recognition for its intellectual property efforts.

In the field of chemical new materials, the company aims at the application demands for new materials generated by the integration of new consumption, new energy, and new manufacturing in China. During the reporting period, Kanghui New Materials independently developed PET composite film for copper foil/aluminum foil has been validated by downstream battery factories, enabling mass production. The independently developed solar backsheets film has achieved mass production with an annual capacity of 24,000 tons, equivalent to 62.4 million square meters, and its production and sales have steadily increased. The release liner film product for LCD polarizing films has also achieved mass production, ensuring stable production of conventional and wide-width liner films. Furthermore, a significant breakthrough has been made in low-tilt angle polarizing film release liners, successfully replacing imports and becoming the first Chinese enterprise to pass the full industry chain verification.

Empowered by technology, the continuous drive for digital transformation persists. Hengke Advanced Materials' intelligent factory for functional polyester fibers is equipped with fully automated equipment throughout the production process. Through the establishment of information systems such as the DeltaV-DCS distributed control system, ERP, and MES, it collects production data and realizes real-time monitoring, fault alarms, and diagnostic analysis of production equipment operations. Hengke Advanced Materials has also established a factory-level industrial Internet, achieving 100% equipment

connectivity. The intelligent factory, through the integration and interconnection of intelligent equipment and software-level basic networks, achieves centralized control and intelligent production throughout the process, maximizing the efficiency of raw materials, equipment, and human resources. In 2022, Hengke Advanced Materials was awarded the "Jiangsu Province Intelligent Factory" title. Hengli Refining & Chemical vigorously promotes intelligent management, implements advanced process control (APC) projects, and achieves on-edge operation of key parameters based on stable plant production. By utilizing Petrosim process simulation software, it assists in problem-solving and provides robust data support for optimizing company benefits.

#### **IV. Continuously strengthening the foundation of safety and environmental protection, reducing pollution and carbon emissions, and promoting coordinated efficiency to achieve high standards, green, and environmentally friendly operations.**

Based on high starting points in design planning, construction, operation, and detailed management, the company practices high standards of inherent safety and green, low-carbon operations, which serve as the lifeline, efficiency line, and scenic line for promoting stable, efficient, and sustainable development of the listed company.

The company adheres to the principle of "safety first, prevention-oriented, and comprehensive management" to enhance the level of inherent safety and establish a solid defense line for safety production. It comprehensively implements the responsibility of enterprise safety, signing responsibility agreements at all levels, ensuring that responsibility is implemented at the workshop, team, and individual levels, forming a safety production responsibility system that extends horizontally and vertically. The company improves safety regulations and systems, conducts self-assessment based on updated HSE standards and specifications, analyzes policy guidance, and timely revises and improves the company's HSE system. It strengthens employee safety skill training to enhance compliance with safety regulations. It strengthens process control in key areas, risk control in operations, conducts safety hazard investigations and rectification, emergency drills, enhances risk prevention and control capabilities, eliminates various major safety risks, visualizes inherent and residual risks, and ensures the safe operation of employees and production facilities.

The company firmly implements the concept of green development, consistently pursuing high-quality and low-carbon energy-saving development, reducing pollution, and carbon emissions, and promoting coordinated efficiency to transform environmental advantages into economic benefits. It integrates green development into project design, process package selection, equipment procurement, installation, and operation, achieving substantial energy savings. It strengthens the efficient and economical use of energy and resources, reduces resource and energy consumption through optimizing process operations, technological innovations, and other multidimensional approaches, improves energy efficiency, and establishes an integrated upstream and downstream flow, mutual supply of materials, and energy coupling in the entire industry chain, achieving energy savings and sustainable development throughout the production process. For example, Hengli Petrochemical (Dalian) recovers and treats the oxidized residue produced in the oxidation process of purified terephthalic acid through R2R equipment, recovering valuable cobalt and manganese catalyst components and benzoic acid, which are returned to the oxidation unit for recycling, and the generated benzoic acid is sold as a by-product. Hengli Refining optimizes the operation of the distillation tower by replacing catalysts, increasing the production capacity of xylene and reducing the comprehensive energy consumption of the unit. Hengli Chemical's ethylene glycol unit adds a decarbonization tower on the basis of the current washing tower, improving the performance of the catalyst, increasing product

yield, and reducing carbon dioxide emissions by 39,600 tons annually. The ethylene unit utilizes a back-pressure turbine unit to utilize surplus high-pressure steam for power generation, meeting the process requirements while increasing electricity generation by 24.53 million kWh per year and reducing energy consumption by 3,014 tons of standard coal.

Incremental progress and unwavering dedication are key. Since the introduction of the "dual carbon" targets, the company has focused on technological innovation and technical research, continuously working on wastewater recycling, solid waste disposal, cascading utilization of energy, waste heat utilization, carbon emissions reduction, VOCs management, and other aspects through equipment upgrades and process improvements, actively pursuing energy-saving, cost reduction, and efficiency enhancement, yielding certain results. Hengli Refining, Hengli Chemical, and Hengli Petrochemical (Dalian) were respectively awarded the "2022 Key Energy Efficiency Leader" champion in the xylene industry, ethylene industry, and purified terephthalic acid industry, jointly issued by the Ministry of Industry and Information Technology, the National Development and Reform Commission, and the State Administration for Market Regulation. Hengli Refining ranked second in energy efficiency as a "leader" in the crude oil processing industry. At the same time, Hengli Refining and Hengli Chemical were awarded the "2022 Key Water Efficiency Leader for Enterprises and Industrial Parks" by the Ministry of Industry and Information Technology, the Ministry of Water Resources, the National Development and Reform Commission, and the State Administration for Market Regulation. Hengli Refining and Hengli Chemical topped the water efficiency index in the petroleum refining industry, coal-to-methanol industry, and ethylene industry. For example, in the petroleum refining industry, Hengli Refining's unit water intake was 0.27 m<sup>3</sup>/t, with a water reuse rate of 98.79%. In the ethylene industry, Hengli Chemical's unit water intake was 0.43 m<sup>3</sup>/t, mainly using seawater, with a water reuse rate as high as 99.87%.

Following Hengli Petrochemical (Dalian), Hengli Petrochemical Refining, Hengke Advanced Materials, and Hengli Chemical Fiber, Hengli Petrochemical Chemical was awarded the national-level "Green Factory" title at the beginning of 2023. With this, the company now has five subsidiaries recognized as national-level "Green Factories".

In response to the future trend of "carbon neutrality" in industrial development, the listed company firmly embraces the direction of green and low-carbon development and actively promotes the transition to green and low-carbon. It vigorously develops green manufacturing, leveraging distinctive industries to drive innovation and inject robust vitality into the company's development.

#### **V. By fully utilizing the capital platform for financing, operations, and incentives, the listed company is driving standardized and sustainable development.**

1. Successful completion of the third and fourth phase of share repurchase: During the reporting period, to safeguard the interests of the company and its shareholders, the company successfully implemented the third and fourth phase of share repurchase plans, with a total repurchase fund of 2 billion yuan. Despite the complex and challenging domestic and international economic conditions in 2022, as well as the irrational downward valuation of the A-share market, the company consistently fulfilled its market responsibilities towards all shareholders, especially small and medium shareholders. Through tangible actions, the company effectively maintained reasonable and stable market value and protected the core interests of all shareholders. This also fully demonstrates the firm and long-term confidence of the listed company and its management in the company's operating performance, strategic development, and investment value.

2. Completion of the sixth phase of employee stock ownership plan: In order to

effectively motivate the management team, core employees, and all staff of the listed company, and achieve a close integration and mutual promotion of employee value and corporate value, the company implemented the sixth phase of the employee stock ownership plan on a larger scale and with a broader range of participants, allowing employees to share in the company's development achievements.

3. High proportion of cash dividends: To share the company's growth benefits with shareholders, the company completed the annual equity distribution for the year 2021, with a total cash dividend of 7.109 billion yuan (including taxes). The amount of a single cash dividend reached a historical high, in line with the company's established "Shareholder Returns Plan for the Next Five Years (2020-2024)", which provides shareholders with stable expectations and mechanisms for returns. This fully reflects the company's business philosophy of consistently and sustainably rewarding investors.

4. Completion of a 2 billion yuan short-term financing bond issuance: To ensure diversified financing channels, meet the working capital turnover needs of business operations, and enhance the flexibility of fund management, the company applied to the China Interbank Market Dealers Association to register for the issuance of short-term financing bonds with an amount not exceeding 3 billion yuan (inclusive). As of now, the company has successfully issued 2 billion yuan of short-term financing bonds.

## II. Industry situation of the company during the reporting period

### (1) Petroleum Refining Sector:

The company has a designed production capacity of 4.5 million tons per year of paraxylene (PX), primarily used to meet the raw material demand of downstream purified terephthalic acid (PTA) production. Additionally, the company is involved in the production of high-value and domestically scarce chemical products, such as 1.8 million tons of ethylene glycol, 400,000 tons of acetic acid, 1.2 million tons of benzene, 850,000 tons of polypropylene, 720,000 tons of styrene, 400,000 tons of high-density polyethylene, and 140,000 tons of butadiene. It also produces finished oil products, including gasoline, diesel, and aviation kerosene meeting China VI emission standards. As smaller and outdated refineries with high production costs are gradually phased out, the industry concentration and the competitiveness of large-scale new refineries will significantly improve. The company stands out in terms of policy support, process technology, and industrial synergy. Compared to other oil refining companies, it has a distinct advantage of high quality and low cost, making it highly competitive in the market.

### (2) PTA Sector:

PTA is the direct upstream raw material for polyester production, and China is the world's largest producer and consumer of PTA. The company currently has a PTA production capacity of 16.6 million tons per year, making it the largest PTA producer with the most advanced technology and the most significant cost advantage in the industry. It is the only company with a capacity exceeding 10 million tons.

### (3) Polyester New Materials Sector:

One of the company's main business segments involves the research, production, and sale of polyester-related new materials. The main products include PET, POY, FDY, DTY, BOPET, PBT, PBS/PBAT, and other polyester and chemical new materials. The company ranks among the top five in civil filament production capacity nationwide and second in industrial filament production capacity. It is one of the largest and technologically advanced manufacturers of polyester filament in China.

The company's subsidiary, Kanghui New Materials, has an annual production capacity of 240,000 tons of PBT engineering plastics in its Yingkou base, making it the largest PBT producer in China. The PBT is mainly used in automotive parts, polymer alloys, optical cables, and electronics industries. It also has an annual production capacity of 386,000 tons

of BOPET functional films, which are used in high-value-added sectors such as optical equipment, release protection, electronics, automotive decoration, construction, and packaging. With independently developed technology, the company has the largest domestic annual production capacity of 33,000 tons of PBAT, which is used in environmentally friendly applications such as food-grade shopping bags, tableware, and straws made from PBS/PBAT. The company partially commenced production of a 450,000-ton biodegradable plastic project on Dalian Changxing Island during the reporting period. In Suzhou Fenhu, the construction of a 470,000-ton high-end functional polyester film, 100,000-ton specialty functional film, 150,000-ton modified PBT, and 80,000-ton modified PBAT is underway. Additionally, a 2.6 million-ton high-performance polyester engineering project and a new lithium battery separator project in Nantong are making efficient and steady progress. The company possesses strong overall competitiveness in the market.

### **III. Business situation of the company during the reporting period**

The company's main business encompasses the entire industry chain of refining, petrochemicals, and polyester new materials, including the production, research, and sales of PX, acetic acid, PTA, ethylene glycol, polyester chips, civil filament, industrial filament, functional films, engineering plastics, and PBS/PBAT biodegradable new materials. It is the first listed company in the industry to achieve integration of the entire industry chain from crude oil to aromatics, olefins to PTA, and ethylene glycol to polyester new materials.

In the upstream segment, the company has an annual production capacity of 4.5 million tons of PX and 400,000 tons of acetic acid. In the midstream, it possesses 16.6 million tons of PTA capacity and 1.8 million tons of fiber-grade ethylene glycol capacity. Some of the self-produced PTA and ethylene glycol are for internal use, while the remainder is sold externally. In the downstream segment, the company offers a wide range of chemical new materials with various product specifications, targeting the medium and high-end market demand. These products include civil filament, industrial filament, BOPET, PBT, PBS/PBAT, and other polyester and chemical new materials, which are used in textile, pharmaceutical, automotive, environmental new energy, electronics, photovoltaic, and optical industries, meeting the extensive demand for industrial and civil applications.

With the complete production of key capacities in world-class refining and ethylene projects in the upstream, as well as the consolidation and expansion of its competitive advantage in the midstream PTA business and various scarce chemical raw material products, the company has accelerated the establishment of a "large-scale chemical" platform to support and complement downstream high-end new materials and fine chemical industries. This has created a continuous and extended value chain for new material industries.

### **IV. Analysis of Core Competitiveness in Reporting Period**

#### **1. Strategic Leadership in Full Industry Chain Development**

The company is the industry leader in implementing the strategy of full industry chain development for polyester new materials in China. It actively promotes the coordinated and balanced development of various business segments and vigorously expands high-end capacity in the upstream and downstream. The company is committed to building a world-class integrated platform for the entire industry chain, from "crude oil-aromatics, olefins-PTA, ethylene glycol-polyester-civil filament, industrial filament, films, plastics." The Hengli Integrated Refining and Petrochemical Project with an annual capacity of 20 million tons and the Ethylene Project with a capacity of 1.5 million tons have been fully put into operation, achieving strategic breakthroughs in the refining, aromatics, and olefins segments. The company has become the first enterprise in the industry to achieve integrated operation and

development of the entire industry chain from "crude oil-aromatics, olefins-PTA, ethylene glycol-polyester new materials." With the sequential construction and operation of newly built capacities, such as PTA, chemical new materials, PBS/PBAT biodegradable new materials, the company continuously upgrades and optimizes its industrial model, consolidates and expands the advantages of each link's production capacity, promotes the quantitative change in business scale, and the qualitative change in business structure. It establishes a strategic leadership advantage in adapting to the high-quality competitive situation of the industry's full industry chain collaboration, production capacity structure quality, equipment scale cost, technological process accumulation, project start-up speed, and the development of listed platforms.

## 2. Comprehensive Operation Advantage of Scale, Technology, and Support

The company continuously introduces internationally leading production equipment and mature technology packages, digests, absorbs, and utilizes them, and continuously innovates and improves technology and processes. It has established a high-quality and efficient production capacity structure and supporting public engineering in the upstream, midstream, and downstream of the polyester new materials industry chain, characterized by "large-scale equipment, large-scale production capacity, integrated structure, advanced technology, green and environmental protection, and comprehensive supporting facilities." Whether it is individual equipment, total production capacity, or production processes, the company is at the industry's leading processing scale and technological level. This ensures the company's advantages in unit investment cost, material and energy consumption saving, unit processing cost, product delivery cycle, product quality, and diversification. Moreover, the company has the most comprehensive supporting capabilities in the industry, including power supply, energy, ports, terminals, tank farms, storage, and transportation. It stands out in terms of comprehensive cost savings, service quality performance, and operational efficiency improvement. The complementary relationships among refining, petrochemicals, and coal chemicals in the industrial park form an efficient synergy of operations and costs. The refining business has the largest coal-to-hydrogen unit in the country, producing low-cost coal chemicals such as pure hydrogen, methanol, acetic acid, and synthesis gas. In addition, the advantages of raw material and product storage and transportation systems greatly enhance the operational flexibility and comprehensive cost advantages of projects.

## 3. Market Competition Advantage Driven by High-end Research and Development

The company follows a development path that emphasizes market differentiation, high-end technology, and large-scale facilities while integrating business operations. It has a long-term accumulated market-technology innovation mechanism and has established an international R&D team and a high-level scientific research platform. Its technological research and development strength and innovation capability in new products are leading in the industry. The company can quickly respond to the latest market consumption demand changes and has a stable reserve of mid-to-high-end customer resources. The four main operating entities of the company, Hengli Fibre, Deli Fibre, Hengke Advanced Materials, and Kanghui New Materials, are all national high-tech enterprises. Through fine management of the production process and continuous improvement of technology and processes, the company has independently developed and accumulated a series of differentiated and functional products, holds numerous production patents for various products, and has gained wide market recognition. The company's products are superior to competitors in terms of quality and stability. It is the only company in China that can produce specification 5DFDY products on a large scale. Its market share in MLCC separator films exceeds 65% domestically. It is also the only domestic and the second global enterprise capable of producing 12-micrometer silicon-coated stacked lithium battery protection films online. The company has absolute technological advantages and process accumulation in functional



films and civil polyester filament, forming a competitive moat that is difficult to replicate in the industry in the short term.

#### 4. Efficient Management Advantage of Intelligence and Lean Manufacturing

The company strives to promote the deep integration of "Internet, big data, artificial intelligence, and the real economy" and develop advanced manufacturing capacity to regenerate internal growth momentum. It regards "intelligent interconnection" as an important entry point for industrial upgrading and transformation. By gradually implementing methods such as "machine replacing human," "automatic equipment change," "complete set replacement of single machine," and "intelligence replacing digitization," the company transforms its development model from relying on "population dividends" to "technology dividends." Through the integration and application of intelligent manufacturing, the Internet, and the Internet of Things, the company continuously improves the level of intelligent manufacturing throughout the entire process. It seamlessly integrates key links such as control, research and development, manufacturing, business management, and finance through self-developed product testing systems, automatic barcode systems, intelligent warehousing systems, and sales systems, and interfaces with ERP systems to achieve product traceability and full-process control. This promotes the company's transformation from "manufacturing" to "intelligent manufacturing" and from single business management to highly synergistic operation of the industrial chain.

#### 5. Accumulated Talent Management Advantage

The company has formed a multidisciplinary and multi-professional scientific research team, including disciplines such as refining, petrochemicals, polymer materials, chemical fiber engineering, textile engineering, electrical engineering, etc. Its scientific research and development capabilities are ahead of domestic peers. While introducing external talents, the company attaches great importance to the cultivation of internal talents and provides a good career development path for employees. The company has also established a sound internal training system, covering research and development, production, sales, management, and other aspects, and has cultivated a large number of backbone personnel.

## V. Main operating information in the reporting period

As of the end of 2022, the company's total assets were 241.430 billion yuan, a year-on-year increase of 14.80%, and the net assets attributable to shareholders of listed companies were 52.863 billion yuan, a year-on-year decrease of 7.63%.

In 2022, the Company recognised a revenue from operations of 222.324 billion yuan, a year-on-year increase of 12.30%; a net profit attributable to shareholders of listed company of 2.318 billion yuan, a year-on-year decrease of 85.07%.

### (I) Analysis of Primary operations

#### 1. Analysis of changes in items related to income statement and cash flow statement

Unit: ten thousand yuan Currency: RMB

Item	Amount in the reporting period	Amount in the same period of last year	Variance (%)
Revenue from operations	22, 232, 358.4	19, 797, 034.49	12.30
Cost of sales	20, 407, 759.71	16, 751, 808.61	21.82
Selling expenses	39, 276.92	29, 136.58	34.80
Administrative expenses	188, 929.87	198, 539.57	-4.84
Financial expense	428, 737.15	491, 620.56	-12.79
Research and development expenses	118, 471.10	101, 945.24	16.21
Net cash flows from operating	2, 595, 397.08	1, 867, 017.37	39.01

activities			
Net cash flows from investing activities	-2, 629, 706.99	-1, 309, 772.25	Not applicable
Net cash flows from financing activities	1, 040, 541.64	-738, 758.74	Not applicable

Reasons for changes in selling expenses: mainly due to the increase in employee salaries and storage-related expenses in the current period.

Reason for changes in Net Cash Flow from Operating Activities: The main reason for the change is a decrease in accounts receivable, an increase in advance payments received, and improved collection of sales proceeds. The increase in inventory is smaller than the previous year, and there is a decrease in purchase expenses.

## 2. Revenue and Cost Analysis

### (1). Segmentation of Main Business by Sector, Product, Region, and Sales Model

Unit: ten thousand yuan Currency: RMB

Segmentation of main operations by sector						
By sector	Revenue from operations	Cost of sales	Gross margin (%)	Year-on-year change of revenue(%)	Year-on-year change of cost of sales(%)	Year-on-year change of gross margin(%)
Petrochemical industry	20, 944, 731.95	19, 154, 348.71	8.55	16.12	27.64	-8.25 pts
Other industries	1, 223, 649.95	1, 232, 828.05	-0.75	-27.36	-28.13	1.08 pts
Segmentation of main operations by product						
By product	Revenue from operations	Cost of sales	Gross margin (%)	Year-on-year change of revenue(%)	Year-on-year change of cost of sales(%)	Year-on-year change of gross margin(%)
Refining products	12, 367, 533.63	10, 473, 930.91	15.31	17.86	29.44	-7.58 pts
PTA	5, 663, 585.82	6, 031, 109.58	-6.49	17.59	28.22	-8.83 pts
Polyester products	2, 913, 612.50	2, 649, 308.21	9.07	6.82	19.8	-9.85 pts
Others	1, 223, 649.95	1, 232, 828.05	-0.75	-27.36	-28.13	1.08 pts
Segmentation of main operations by region						
By region	Revenue from operations	Cost of sales	Gross margin (%)	Year-on-year change of revenue(%)	Year-on-year change of cost of sales(%)	Year-on-year change of gross margin(%)
Domestic	20, 449, 458.40	18, 704, 171.85	8.53	16.66	27.18	- 7.57 pts
Overseas	1, 718, 923.51	1, 683, 004.91	2.09	-21.6	-16.52	-5.96 pts

Description of main business by industry, by product, by region, and by sales model

Revenues, costs and gross margins for refined products, PTA and polyester products include sale revenues, purchase costs and gross margins.

## (2). Production and sales volume analysis

Main products	Unit	Production volume	Sales volume	Inventory quantity	Year-on-year change of production(%)	Year-on-year change of sale(%)	Year-on-year change of inventory(%)
Refining products	10,000 tons	2,338.95	2,135.85	93.27	-0.54	-7.85	101.19
PTA	10,000 tons	1,153.46	1,061.41	26.99	-5.35	-6.88	25.13
New material products	10,000 tons	357.68	326.20	42.20	7.36	4.10	33.29

Explanation of production and sales volume:

1. Refining and chemical products include all products of Hengli Refining and Hengli Petrochemical;
2. New material products include polyester new materials, engineering plastics, functional films, and biodegradable materials;
3. The sales volume of refining and chemical products and PTA includes trade volume but excludes internal consumption within the company.

## (3). Cost Analysis

Unit: ten thousand yuan

By Sector							
By sector	Cost composition	Amount in the reporting period	Proportion in total costs of the reporting period (%)	Amount in the same period of last year	Proportion in total costs of the same period of last year (%)	Year-on-year change (%)	Explanation
Petrochemical industry	Direct materials	17,435,956.16	85.52	13,661,754.88	81.7	27.63	
	Direct labor	168,283.79	0.83	161,635.81	0.97	4.11	
	Power fuel	703,924.33	3.45	543,939.11	3.25	29.41	
	Manufacturing expenses	673,959.64	3.31	639,526.39	3.82	5.38	
Other industries	Direct materials	1,154,573.45	5.66	1,540,512.50	9.21	-25.05	
	Direct labor	176,343.65	0.86	169,328.56	1.01	4.14	
	Power fuel	64,379.42	0.32	2,495.71	0.01	2,479.6	
	Manufacturing expenses	9,756.32	0.05	3,114.69	0.02	213.24	
By Product							
By	Cost	Amount in	Proport	Amount in the	Proportio	Year-	Explan

product	composition	the reporting period	ion in total costs of the reporting period (%)	same period of last year	n in total costs of the same period of last year (%)	on-year change (%)	ation
Refining products	Direct materials	9,574,213.92	46.96	7,340,860.24	43.9	30.42	
	Direct labor	56,910.15	0.28	58,156.39	0.35	-2.14	
	Power fuel	327,732.97	1.61	274,442.43	1.64	19.42	
	Manufacturing expenses	440,075.17	2.16	418,070.47	2.5	5.26	
PTA	Direct materials	5,681,885.50	27.87	4,454,279.79	26.64	27.56	
	Direct labor	24,616.91	0.12	21,314.61	0.13	15.49	
	Power fuel	143,261.15	0.70	107,722.00	0.64	32.99	
	Manufacturing expenses	113,145.96	0.55	120,496.65	0.72	-6.1	
Polyester products	Direct materials	2,179,856.74	10.69	1,866,614.85	11.16	16.78	
	Direct labor	86,756.73	0.43	82,164.81	0.49	5.59	
	Power fuel	232,930.21	1.14	161,774.69	0.97	43.98	
	Manufacturing expenses	120,738.51	0.59	100,959.27	0.6	19.59	
Others	Direct materials	1,154,573.45	5.66	1,540,512.50	9.21	-25.05	
	Direct labor	176,343.65	0.86	169,328.56	1.01	4.14	
	Power fuel	64,379.42	0.32	2,495.71	0.01	2,479.6	
	Manufacturing expenses	9,756.32	0.05	3,114.69	0.02	213.24	

#### (4). Key Sales Customers and Key Suppliers Situation

##### A. Overview of Key Sales Customers

The sales revenue from the top five customers amounted to 28.20 billion yuan, accounting for 12.68% of the total annual sales. Among the sales revenue from the top five customers, there were no sales made to related parties, representing 0% of the total annual sales.

##### B. Overview of Key Suppliers

The purchasing amount from the top five suppliers amounted to 72.55 billion yuan, accounting for 34.96% of the total annual procurement. Among the purchasing amount from the top five suppliers, there were no purchases made from related parties, representing 0% of the total annual procurement.

### 3. Research and Development Investment

#### (1). Table of Research and Development Investment Status

Unit: ten thousand yuan

Expensed research and development investment in the current period	118,471.10
Capitalized research and development investment in the current period	-

Total R&D investment	118,471.10
Percentage of research and development investment to operating revenue (%)	0.53
Percentage of capitalized research and development investment to total research and development investment (%)	-

## (2). Table of Research and Development Personnel Status

The number of R&D personnel in the company	3,128
The ratio of the number of R&D personnel to the total number of the company (%)	8.11
Educational structure of R&D personnel	
Educational Structure Category	Educational Structure Headcount
PhD student	12
Postgraduate	93
Undergraduate and below	3,023
Age structure of R&D personnel	
Age Structure Category	Age Structure Headcount
Under 30 years old (excluding 30 years old)	1,035
30-40 years old (including 30 years old, excluding 40 years old)	1,522
40-50 years old (including 40 years old, excluding 50 years old)	410
50-60 years old (including 50 years old, excluding 60 years old)	133
60 and over	28

## (II) Analysis of Asset and Liability Situation

### 1. Asset and Liability Status

Unit: ten thousand yuan

Item	Closing balance of current period	Ratio of closing balance of current period to total assets (%)	Closing balance of previous period	Ratio of closing balance of previous period to total assets (%)	Percentage change in closing balance compared between current period to previous period(%)	Explanation
Cash and bank balances	2,807,640.59	11.63	1,598,605.29	7.60	75.63	Mainly due to an increase in operating cash flow during the

						current period.
Accounts receivable	37,244.59	0.15	264,384.34	1.26	-85.91	Mainly due to the company intensifying its collection efforts on accounts receivable during the current period.
Receivable financing	228,727.12	0.95	341,995.77	1.63	-33.12	Mainly due to a decrease in the amount of cash received from bank acceptance bills and letters of credit during the current period.
Construction in progress	2,728,749.15	11.30	778,285.36	3.70	250.61	Mainly due to a further increase in investment in Construction in progress, including the Annual output of 5 million tons of PTA project and Annual output of 1.5 million tons of green multi-functional textile new materials project.
Deferred tax assets	89,222.72	0.37	18,882.71	0.09	372.51	Mainly due to an increase in deferred tax assets recognized as a result of the provision for decline in value of inventories made during the current period.
Other non-	632,724.84	2.62	390,259.25	1.86	62.13	Mainly due to

current assets						an increase in long-term asset purchase payments related to construction in progress made during the current period.
Contract liabilities	1, 209, 098.33	6.41	612, 654.68	4.00	97.35	Mainly due to an increase in advance payments received for sales contracts during the current period.
Non-current liabilities due within one year	934, 902.82	4.96	542, 322.70	3.54	72.39	Mainly due to an increase in the amount of long-term loans and bonds payable that will mature within one year.
Other current liabilities	338, 212.76	1.79	139, 926.92	0.91	141.71	Mainly due to an increase in output tax corresponding to advance payments received for sales contracts during the current period.
Long-term payables	85, 883.33	0.46	2, 189.93	0.01	3, 821.74	Mainly due to the addition of new financing leases payable during the current period.

## 2. Overseas Asset Situation

### (1) Assets Scale

Including: Overseas assets 73.42(Unit: hundred million yuan Currency: RMB), accounting for 3.04% of the total assets.

### 3. Major assets under restriction at the end of the reporting period

Unit: ten thousand yuan Currency: RMB

Item	Carrying value at year end	Reason of restriction
Cash and bank balances	761, 763.21	Pledge cash and bank balances to obtain financing credit from financial institutions
Cash and bank balances	1, 258.62	Security deposits for trading in futures and financial derivatives
Cash and bank balances	11, 960.00	Freezing funds involved in litigation
Financial assets held for trading	1, 000.00	Pledge financial assets held for trading to obtain financing credit from financial institutions
Receivable financing	146, 957.20	Pledge notes receivable to obtain financing credit from financial institutions
Fixed assets	8, 543, 637.15	Mortgage fixed assets to obtain financing credit from financial institutions
Fixed assets	154, 626.67	Mortgage is used to provide security for the sale and leaseback contract
Intangible assets	378, 138.19	Mortgage intangible assets to obtain financing credit from financial institutions
Construction in progress	67, 573.80	Mortgage construction in progress to obtain financing credit from financial institutions
Total	10, 066, 914.84	

## (III) Analysis of Industry Operating Information

### Analysis of Operating Information in the Chemical Industry

#### 1 Overview of the Industry

##### (1). Industry Policies and Their Changes

① 《Guiding Opinions on Promoting the High-Quality Development of the Petrochemical and Chemical Industry During the "14th Five-Year Plan"》

In March 2022, the Ministry of Industry and Information Technology and five other departments jointly issued the Guiding Opinions on Promoting High-Quality Development of the Petrochemical and Chemical Industry during the 14th Five-Year Plan. It proposed that by 2025, the petrochemical and chemical industry should establish a high-quality development pattern characterized by strong independent innovation capability, rational structural layout, green and low-carbon practices. The industry's ability to ensure the supply of high-end products should be significantly improved, core competitiveness should be noticeably enhanced, and substantial progress should be made in achieving self-reliance at a high level.

② 《Notification on Further Improving the Work Related to Excluding Raw Material Energy Consumption from the Total Energy Consumption Control》

In October 2022, the National Development and Reform Commission and the National Bureau of Statistics issued a notification on further improving the work related to excluding raw material energy consumption from the total energy consumption control. The notification explicitly states that "coal, petroleum, natural gas, and their derivatives used for the



production of non-energy purposes such as olefins, aromatic hydrocarbons, alkynes, alcohols, synthetic ammonia, and other products fall within the scope of raw material energy consumption."

③ 《Action Plan for Energy Conservation and Carbon Reduction Driven by Strict Energy Efficiency Constraints in the Petrochemical and Chemical Industry (2021-2025 years)》

In October 2021, the National Development and Reform Commission, the Ministry of Industry and Information Technology, and other departments jointly issued the "Opinions on Strict Energy Efficiency Constraints to Promote Energy Conservation and Carbon Reduction in Key Sectors" and the "Action Plan for Energy Conservation and Carbon Reduction Driven by Strict Energy Efficiency Constraints in the Petrochemical and Chemical Industry (2021-2025 years)". The plan aims to promote green and low-carbon transformation in the refining, ethylene, and synthetic ammonia industries and ensure the timely achievement of carbon peak targets.

《The "Action Plan" clearly puts forward the action goals of achieving a capacity ratio exceeding 30% at benchmark levels for the refining, ethylene, synthetic ammonia, and calcium carbide industries by 2025 through the implementation of energy conservation and carbon reduction measures. It aims to significantly improve the overall energy efficiency level, reduce carbon emissions intensity, and significantly enhance the capabilities for green and low-carbon development. Key tasks outlined in the plan include formulating a general implementation plan for technological transformation in key petrochemical industries, guiding the orderly phasing out of inefficient production capacity, promoting energy-saving and low-carbon technologies and equipment, and driving collaborative and clustered development in the industry. This includes selecting advanced and applicable energy-saving technologies for the refining, ethylene, and synthetic ammonia industries, as well as guiding technological transformation in enterprises with low energy efficiency. The plan also promotes the elimination of refining units with a capacity of 2 million tons/year and below, ethylene units with a capacity of 300, 000 tons/year and below, and imposes strict restrictions on the construction of certain types of units with limited capacities. Additionally, the plan encourages the promotion of low-carbon deep processing of heavy and poor-quality residual oil, one-step method for ethylene production from synthesis gas, and crude oil direct cracking to produce ethylene. It emphasizes the integration of refining and petrochemical industries, coal conversion and electricity heating integration, and the development of multiple co-production. The aim is to establish interconnected industrial chains where enterprises are connected from upstream to downstream, with mutual supply and demand and interconnectivity of production facilities. This will improve the level of comprehensive resource utilization, reduce energy consumption in logistics and transportation, and promote the recognition of chemical industrial parks.

④ 《The "14th Five-Year Plan" Development Guidelines for the Petroleum and Chemical Industry》

In January 2021, the China Petroleum and Chemical Industry Federation released the "Guidelines for the Development of the Petroleum and Chemical Industry during the 14th Five-Year Plan." In the petroleum and chemical fields, the emphasis is on shifting production from mass production of refined oil to the production of high-value-added oil products and chemical raw materials. This involves integrating refining capacity, optimizing the olefin industry, and improving the competitiveness of PX (paraxylene). In the field of chemical new materials, the focus is on accelerating the development of specialty engineering plastics, high-end functional membrane materials, thermoplastic elastomers, and other technologies. The aim is to break through the entire industry chain preparation technologies for high-end polyolefins, bio-based fibers, bio-based polyesters, and other materials. This will increase

the diversity and high-end level of chemical new material products, thus bridging the gaps and filling the blanks in the industry.

5 《The "14th Five-Year Plan" for the ecological economic development of Liaoning Province》

In January 2022, the General Office of the People's Government of Liaoning Province issued the "14th Five-Year Plan" for the ecological economic development of Liaoning Province. The plan highlights the following key points:

Extending the Petrochemical Industry Chain: The plan aims to maintain the scale advantage of bulk basic chemical raw materials such as ethylene, propylene, PX (paraxylene), and PTA (purified terephthalic acid). It also seeks to promote the development of the petrochemical industry towards higher value-added products, focusing on the olefin, aromatic hydrocarbon, new materials, and fine chemical industrial chains.

Promoting the "Reduction of Oil and Increase of Chemicals" in the Petrochemical Industry: The plan aims to transform the refining and chemical production towards safe, clean, green, and efficient practices. The goal is to achieve intensive, high-end, green, and integrated development of the refining and chemical industry. Key areas of focus include the development of high-end polyolefins, specialty resins, specialty engineering plastics, high-end membrane materials, and other chemical new materials.

## **(2). Basic information on the main industrial segment and industrial status of the Company**

### **① In the petroleum refining and chemical sector**

The company has a designed production capacity of 4.5 million tons of PX per year, which is primarily used to meet the raw material demand of downstream PTA production. Additionally, the company is designed to produce 1.8 million tons of ethylene glycol, 400,000 tons of acetic acid, 1.2 million tons of pure benzene, 850,000 tons of polypropylene, 720,000 tons of styrene, 400,000 tons of high-density polyethylene, 140,000 tons of butadiene, and other domestically scarce and high-value-added chemical products, as well as Refined oil products such as gasoline, diesel, and aviation kerosene that meet the national standards above China VI. As smaller refineries with higher production costs and outdated facilities are gradually phased out, the concentration of the refining and chemical industry and the competitiveness of large-scale newly built refineries will greatly improve. The company has prominent advantages in policy support, process technology, and industrial synergy. Compared to other refineries, it has characteristics of high quality and low cost, making it highly competitive in the market.

### **② In the PTA sector**

PTA serves as the direct upstream raw material for polyester production, and China is the world's largest producer and consumer of PTA. The company currently has a PTA production capacity of 16.6 million tons per year (including the capacity under construction in Huizhou). It is the largest PTA production supplier in the world in terms of capacity, with the most advanced technology and the most significant cost advantages. It is also the only company in the industry with a capacity of over 10 million tons per year.

### **③ In the polyester new materials sector**

One of the company's primary operations is the research, production, and sales of related products. The main products include PET (Polyethylene Terephthalate), POY (Partially Oriented Yarn), FDY (Fully Drawn Yarn), DTY (Drawn Textured Yarn), BOPET (Biaxially Oriented PET), PBT (Polybutylene Terephthalate), PBS/PBAT (Polybutylene Succinate/Polybutylene Adipate Terephthalate), and other polyester and chemical new materials products. The company ranks among the top five in the national civil filament capacity and second in the national industrial filament capacity. It is one of the largest and

technologically advanced manufacturers of polyester filament for both civilian and industrial applications in China.

The subsidiary company Kanghui New Material, located in Yingkou Base, has an annual production capacity of 240,000 tons of PBT engineering plastics, making it the largest PBT producer in China. The PBT products are primarily used in industries such as automotive components, polymer alloys, optical cable protective sleeves, electronics, and electrical appliances. Kanghui New Material also has an annual production capacity of 386,000 tons of functional BOPET (Biaxially Oriented PET) film. This high-value film is used in various applications, including optical equipment, release liners, electronics, automotive decorations, construction, and packaging. Furthermore, the company has the largest single-set annual production capacity of 33,000 tons of PBAT (Polybutylene Adipate Terephthalate) in China, based on its proprietary technology. PBAT is applied in eco-friendly applications such as food-grade shopping bags, utensils, and straws within the PBS/PBAT field. In Dalian Changxing Island, the company is gradually launching its project for 450,000 tons of degradable plastics, with qualified products already being produced. Additionally, in Suzhou Fenhu, the construction of a project for 470,000 tons of high-end functional polyester film, 100,000 tons of specialty functional film, 150,000 tons of modified PBT, and 80,000 tons of modified PBAT is underway. Overall, the company demonstrates strong comprehensive competitiveness in the industry.

## **2 Products and production**

### **(1). Main business model**

The company's main business model involves the procurement of crude oil and related additives, primarily producing PX products and finished oil, as well as other chemicals. The PX products are mainly used as raw materials for the company's PTA plant, with a portion of the PTA products being used internally by the company's polyester factory, and the rest being sold to downstream customers in the fiber industry for the production of polyester fibers and other products. Various polyester products are sold to downstream weaving factories for the production of textiles, industrial yarn is sold to construction and automotive component manufacturers, polyester chips are sold to spinning companies, BOPET films are sold to downstream printing, packaging, and electronics companies, and PBT resins are sold to downstream automotive, electronics, and machinery companies. The specific operating modes are as follows:

#### **(1) Petroleum Refining Sector**

Petroleum products, also known as oil products, are processed from crude oil through various refining processes such as atmospheric distillation, hydrogenation cracking, and reforming. These processes produce various fuel oils (gasoline, kerosene, diesel, etc.), lubricants, coke, paraffin wax, asphalt, basic organic materials (ethylene, propylene, butene, benzene, toluene, xylene, acetylene, naphthalene), as well as various synthetic organic materials derived from the basic organic materials.

#### **(2) PTA Sector**

PTA (Purified Terephthalic Acid) is an important bulk organic material widely used in various sectors of the national economy, including chemical fibers, light industry, electronics, and construction. In the domestic market, the main downstream products of PTA are polyester fibers, which are primarily used in clothing, home textiles, and industrial textiles. The main business process involves purchasing para-xylene (PX) and producing PTA through oxidation reactions, crystallization, drying, hydrogenation, and further crystallization processes, followed by selling the product to downstream customers.

The profit model in the PTA industry is based on producing and selling PTA products to generate profits. Since the fixed investment for the products is significant, improving profitability relies mainly on reducing the fixed cost per unit. Companies achieve this by

capitalizing on economies of scale, adopting advanced processing technologies and equipment, establishing efficient public infrastructure, enhancing production safety and product quality stability, and ultimately lowering production costs to increase profitability.

### (3) Polyester Sector

The primary business process involves the procurement of petrochemical products such as PTA, MEG, and other additives, followed by polymerization reactions using appropriate production equipment. Subsequently, the polyester filaments are produced through spinning and drawing processes, and the products are sold to downstream weaving companies for the production of civil and industrial textiles.

The profit model in the polyester filament industry is based on producing and selling polyester filaments to generate profits. Due to the significant fixed costs associated with the products, improving profitability depends on three main factors: reducing the fixed cost per unit, increasing the rate of new product development, and adding differentiated products. Companies achieve this by focusing on increasing the rate of new product development, pursuing differentiation in product lines, enhancing product value, and ultimately improving overall profitability.

### (4) Polyester Film Sector

The main business process involves the procurement of petrochemical products such as PTA, MEG, and other additives. Unlike the polyester industry, the equipment and process routes differ. In the polyester industry, equipment is used to extrude the film into polyester filaments, while in the polyester film industry, equipment is used to extrude the film directly. Consequently, the downstream customer base is different.

The profit model in the polyester film industry is based on producing and selling polyester films to generate profits. Due to the significant fixed investment required, improving profitability depends mainly on two factors: reducing the fixed cost per unit and developing new products. For companies, the future primarily involves capitalizing on economies of scale to seize market share, increasing product added value, and improving overall profitability.

### (5) Engineering Plastics Sector

The primary business process involves the procurement of petrochemical products such as PTA, BDO, and other additives. The production process includes polymerization, extrusion, pulverization, and granulation, ultimately producing engineering plastics. The products are then sold to downstream customers.

The profit model in the engineering plastics industry is based on producing and selling plastic pellets to generate profits. Due to the significant fixed investment associated with the products, improving profitability relies mainly on two factors: reducing the fixed cost per unit and developing new products. For companies, the future primarily involves capitalizing on economies of scale to seize market share, increasing product added value, and improving overall profitability.

## (2). Main products

Product	Business sector	Primary upstream raw materials	Applications of major downstream materials	Main factors affecting prices
Refined oil	Petroleum refining	Crude Oil	Aviation kerosene, gasoline, and diesel and other power fuels	Upstream raw materials like crude oil and downstream demand
PX	Chemical raw materials and chemicals manufacturing	Crude Oil	PTA	Upstream raw materials like crude oil and downstream demand

Ethylene	Chemical raw materials and chemicals manufacturing	Crude Oil	Polyethylene, ethylene glycol	Upstream raw materials like crude oil and downstream demand
PTA	Chemical raw materials and chemicals manufacturing	PX	Polyester fiber, bottle grade chips, film grade chips, etc.	Crude oil and PX supply and downstream demand
Polyester Filament Yarn (PFY)	Polyester manufacturing	PTA, MEG	Advertising light box cloth, geotextile, conveyor belt, automobile fiber and tire meridian, clothing and home textiles, etc.	Upstream raw materials like crude oil and downstream textile prosperity
Polyester Filament	Polyester manufacturing	PTA, MEG	Filature	Upstream raw materials like crude oil and downstream demand
BOPET	Plastics product manufacturing	PTA, MEG	Packaging film, insulating film, capacitor film, etc.	Upstream raw materials like crude oil and downstream demand
PBT	Plastics product manufacturing	PTA, BDO	Auto parts, electronic appliances, aerospace materials, etc.	Upstream raw materials like crude oil and downstream demand
PBS/PBAT	Plastics product manufacturing	PTA, BDO, Adipic acid	Packaging materials, shrink film, agricultural film, etc.	Upstream raw materials like crude oil and downstream demand

### (3). R&D and innovation

As of the end of 2022, the company has accumulatively held 1, 116 patents, of which 261 were newly approved during the reporting period.

### (4). Production Technology and Process

During the reporting period, there were no significant changes in the company's main products and their production processes.

For specific details regarding the production processes of the company's main products in the polyester fiber sector, please refer to Section 4, "Discussion and Analysis of Operating Conditions, " subsection "II. (IV) Analysis of Operational Information in the Chemical Industry, " and the section "Production Processes and Flow" (page 33) in the company's "2016 Annual Report."

For information on the production process of the company's PTA industry, please refer to Section 4, "Discussion and Analysis of Operating Conditions, " subsection "II. (IV) Analysis of Operational Information in the Chemical Industry, " and the section "Production Processes and Flow" (page 39) in the company's "2018 Annual Report."

Regarding the production processes of the company's refining and ethylene engineering, as well as the PBAT project, please refer to Section 4, "Discussion and Analysis of Operating Conditions, " subsection "II. (IV) Analysis of Operational Information in the Chemical Industry, " and the section "Production Processes and Flow" (page 34) in the company's "2020 Annual Report."

### (5). Production capacity and construction work

Unit: hundred million yuan Currency: RMB

Major plants/projects	Designed capacity	Capacity utilization(%)	Capacity under construction	Investment in capacity under construction	Planned completion time
Polyester Filament Yarn (PFY) of Suzhou plant	1.4 million tons/Year	100	High-performance industrial yarn project with an annual output of 400,000 tons	12.20	
PFY for civil use of Nantong plant	1.75 million tons/Year	100	Annual output of 1.5 million tons of green multi-functional textile new materials project(Part of the production capacity has been put into production during the reporting period)	54.24	
PFY for civil use of Suqian plant	200,000 tons/Year	100			
Polyester film of Kanghui New Material (Yingkou) Industrial Park	386,000 tons/Year	100			
Engineering plastics of Kanghui New Material (Yingkou) Industrial Park	240,000 tons/Year	100			
PBS bio-degradable advanced materials project of Kanghui New Material (Yingkou) Industrial Park	33,000 tons/Year	100			

PTA of Dalian plant	11.6 million tons/Year	99.44			
Refining and chemical project of Dalian plant	20 million tons/Year	102.44			
Ethylene project of Dalian plant	1.5 million tons/Year	106.06			
PBS biodegradable plastics in Kanghui Dalian plant	/	/	450,000 tons/Year	22.41	Gradually put into production in the first quarter of 2023
Lithium battery separator in Kanghui Yingkou Plant	/	/	440 million square meters/Year	1.15	Gradually put into production in the middle of 2023
PTA of Huizhou Plant	/	/	2 sets of 2.5 million tons/year PTA plant	86.25	Gradually put into production in the first quarter of 2023
Hengli Petrochemical Chemical New Material Supporting Chemical Project	/	/	300,000 tons/Year Adipic acid, etc.	3.01	Gradually put into production in the middle of 2023
Annual output of 1.6 million tons of high-performance resin and new material projects	/	/	Bisphenol A, isopropanol, ethylene oxide, electronic grade DMC (including EC, EMC and DEC), ABS, etc.	13.68	Gradually put into production in the middle of 2023
Annual output of 800,000 tons of functional films and functional plastics	/	/	Functional polyester film 346,000 tons/year device, high-end functional polyester film 124,000 tons/year device,	17.70	Gradually put into production in the first quarter of 2023

			functional film 100,000 tons/year device, modified PBT 150,000 tons/year device, modified PBAT 800,000 tons/year device		
--	--	--	---	--	--

Note: 1. The designed capacity of the plants and the projects listed above refers to what has been put into production, excluding those under construction.

2. The date of the invested amount of production capacity under construction is as of the end of 2022.

### Increase and decrease of production capacity

1. The production capacity of about 550, 000 tons of civil yarn in the Nantong factory was gradually put into production in the second half of 2022.

2. The first production line of PBS biodegradable plastics in Kanghui Dalian plant has entered trial production in October 2022.

## 3 Raw materials procurement

### (1). Basic situation of main raw materials

Unit:10, 000 tons

Major raw materials	Procurement model	Settlement model	Year-on-year price change ratio(%)	Procurement quantity	Consumption quantity
Crude Oil	Contract, spot	Letter of credit, Cable transfer	51.33	1, 967.87	2, 077.60
PX	Contract, spot	Cable transfer, Letter of credit, Bank acceptance bills	31.88	300.56	751.71
MEG	Contract, spot	Cable transfer		15.97	99.51
BDO	Contract, spot	Bank acceptance bills	-28.39	12.56	14.33

The impact of major procurement price changes on the Company's operating costs: the procurement prices of the raw material exerting positive impact on the Company's operating costs.

### (2). Basic situation of main energy

Major energy	Procurement model	Settlement model	Year-on-year price change ratio(%)	Procurement quantity	Consumption quantity



Electricity	Market-oriented procurement	Monthly settlement		4, 078.97 million kwh	4, 752.87 million kwh
Thermal coal	Market-oriented procurement	Monthly settlement		7.94 million tons	7.94 million tons
Natural gas	Market-oriented procurement	Monthly settlement		192.82 million cubic meters	199.79 million cubic meters

The price of major energy sources is directly proportional to the Company's operating costs. The prices of major energies are affected by national policies, the supply and demand structure of the regional markets, and the stability of supply.

### (3). Risk response measures for raw material price fluctuations

#### The main situation of holding derivatives and other financial products

To reasonably mitigate the significant price fluctuations of major raw materials, the company and its subsidiaries engaged in hedging activities during the reporting period. The hedging primarily involved commodities related to production and operations, such as Crude Oil, petroleum products, PTA, and chemicals (including but not limited to Styrene, Ethylene Glycol, Polypropylene).

## 4 Product sales

### (1). Basic situation of the company's main operations by segment

Unit: ten thousand yuan Currency: RMB

Business segment	Revenue from operations	Cost of sales	Gross margin (%)	YOY changes in operating revenue (%)	YOY changes in operating cost (%)	YOY changes in gross margin (%)	Gross margins among the peers
Petrochemical segment	20, 944, 731.95	19, 154, 348.71	8.55	16.12	27.64	-8.25	
Other segments	1, 223, 649.95	1, 232, 828.05	-0.75	-27.36	-28.13	1.08	

## (IV) Investment Status Analysis

### General Analysis on External Equity Investment

During the reporting period, the company did not have any significant equity investments. However, it initiated two major construction projects.

#### 1. Major non-equity investment

During the reporting period, the following are the basic details of the major investment projects undertaken by the company:

1. Hengli Petrochemical (Dalian) New Materials Technology Co., Ltd. - 1.6 million tons/year High-performance Resin and New Materials Project

The total investment is 19, 988.26 million yuan. The project is located in Hengli (Dalian Changxing Island) Industrial Park and has a construction period of 18 months. According to the feasibility study report, it is estimated that after the project reaches full capacity, the

annual average operating income will be 25, 375.37 million yuan, with an annual average total profit of 9, 151.57 million yuan.

2. Hengli Petrochemical (Dalian) New Materials Technology Co., Ltd. - 2.6 million tons/year High-performance Polyester Engineering Project

The total investment is 4,001.36 million yuan. The project is located in Hengli (Dalian Changxing Island) Industrial Park and has a construction period of 18 months. According to the feasibility study report, it is estimated that after the project reaches full capacity, the annual average operating income will be 16, 613.96 million yuan, with an annual average total profit of 990.54 million yuan.

## (V) Analysis of Major Holding and Participating Companies

Unit: hundred million yuan

Company name	Shareholding (%)	Business nature	Registered capital	Total assets	Net assets	Net profit
Hengli Petrochemical Refining	100.00	Manufacturing	175.96	1,249.62	297.26	13.66
Hengli Petrochemical (Dalian)	100.00	Manufacturing	58.90	355.93	114.04	-2.33
Hengli Chemical Fiber	100.00	Manufacturing	22.08	395.19	54.70	3.67
Hengli Petrochemical Chemical	100.00	Manufacturing	45.75	350.48	63.74	4.73
Kanghui New Material	100.00	Manufacturing	16.78	110.46	61.46	2.19

Note: Jiangsu Hengli Chemical Fiber Co., Ltd. includes its subsidiaries Jiangsu Hengke Advanced Materials Co., Ltd., Nantong Teng'an Logistics Co., Ltd., Jiangsu Xuanda Polymer Material Co., Ltd., Jiangsu Deli Chemical Fiber Co., Ltd., Suqian Deya New Materials Co., Ltd., Hengli Futures Co., Ltd., Hengli Hengxin Industry and Trade (Shanghai) Co., Ltd., Suzhou Susheng Thermal Power Co., Ltd., Suzhou Binglin Trading Co., Ltd., Sichuan Hengli New Material Co., Ltd., Hengli New Materials (Suqian) Co., Ltd., Suzhou Hengli Chemical New Material Co., Ltd., Hengli Petrochemical (Dalian) Co., Ltd. including its subsidiaries Hengli Shipping (Dalian) Co., Ltd., HENGLI PETROCHEMICAL Co., LIMITED, and Shenzhen Ganghui Trading Co., Ltd.

Hengli Petrochemical (Dalian) Refining Co., Ltd. includes its subsidiaries HENGLI PETROCHEMICAL INTERNATIONAL PTE. LTD., HENGLI OILCHEM PTE. LTD., HENGLI SHIPPING INTERNATIONAL PTE. LTD., Hengli Energy (Hainan) Co., Ltd., Hengli Petrochemical (Hainan) Co., Ltd., Suzhou Hengli Petrochemical Chemical Import and Export Co., Ltd., Shenzhen Shengang Trading Co., Ltd., Hengli Petrochemical Refining Product Sales (Dalian) Co., Ltd., Hengli Aviation Oil Co., Ltd., Hengli Oilchem (Suzhou) Co., Ltd., Hengli Energy (Suzhou) Co., Ltd., Hengli Energy (Jiangsu) Co., Ltd., Hengli Logistics (Dalian) Co., Ltd., Suzhou Hengli Chemical Polymer Co., Ltd., Suzhou Hengli Energy Chemical Import & Export Co., Ltd.

Hengli Petrochemical (Dalian) Chemical Co., Ltd. includes its subsidiaries Hengli Petrochemical (Dalian) New Material Technology Co., Ltd., Hengli Petrochemical Utilities (Dalian) Co., Ltd., Dalian Hengzhong Special Materials Co., Ltd.

## (VI) Structured entities controlled by the company

On December 31, 2022, structured entities related to the company but not included in the scope of the financial statements are mainly engaged in asset management business,

operating client assets, and providing clients with investment management services for securities, futures and other financial products. The total assets of this type of structured entity on December 31, 2022 are 227.29 million yuan.

## **VI. Discussions and analysis of the Company's future development**

### **(I) Industrial landscape and trend**

#### **1. Petrochemical industry**

##### **(1) Leaning towards intensive, efficient, and low-carbon development**

Under the goal of “carbon neutrality and carbon emission peaking”, our peers will work harder to reduce energy consumption and emissions, and improve crude oil conversion. Through process intensification, optimization of device design and process flow, and the development and application of energy management systems, the companies will minimize energy and raw material consumption, maximize device operation efficiency and production flexibility, reduce the restrictions of other factors, and efficiently respond to the changing development environment, to achieve low carbon and high-quality development.

##### **(2) Accelerating industrial upgrading and expanding demand for new chemical materials lead to a broader market space**

New chemical materials are important basic materials for strategic emerging materials such as new energy, high-end equipment, green environmental protection, and biotechnology. Entering the “14th Five-Year Plan” period, with the rapid growth of strategic emerging industries as high-end equipment, automobile manufacturing, electronic information, new energy, energy conservation and environmental protection, new construction, bio-medicine application, smart grid, and 3D printing, the demand for new materials such as high-quality synthetic resin, high-performance synthetic rubber, engineering plastics, degradable materials, electronic chemicals and high-performance membrane materials continue to grow, driving the rapid growth of new chemical materials production capacity. With the development of downstream industries, the future market space for new chemical materials tends to be broad.

#### **2. PTA**

China is the largest producer and consumer of PTA. Under the competitive landscape of the integrated industrial chain, leading companies in the PTA industry have strong market competitiveness in terms of the scale of a single set of facility, stable production and operation, material consumption, energy consumption, and product quality. As the PTA industry is going through more fierce competition, its concentration will be further increased.

#### **3. Polyester fiber**

##### **(1) Differentiated and high-end new fiber materials**

The Company will develop differentiated and functional fiber products such as intelligent, super-simulation, and dope dyeing, and expand the application of functional fibers in clothing, home textiles, industry, and environmental protection, continue to optimize the production and application of high-performance fibers, improve the technological maturity of high-performance fibers that have been engineered and industrialized, improve the stability and uniformity of the existing product quality, and meet the needs of downstream applications, enhance the differentiation and functioning of basic fibers through copolymerization, blending, and composite spinning to achieve high-quality, efficient production and low cost fibers, strive to make breakthroughs in key technologies for large-scale production of bio-based chemical fibers, develop high-quality differentiated products, and strengthen application technology development.

##### **(2) Accelerating intelligent and digitized transformation**

The Company will build an intelligent manufacturing standard system for the chemical fiber industry, improve the R&D and application of intelligent manufacturing industrialization technologies such as chemical fiber, seek breakthroughs in key software and hardware

systems, form integrated solutions and full-process intelligent manufacturing technology integration, and build smart factories based on big data, artificial intelligence, and the industrial internet.

The Company will push forward its digital transformation and the application of artificial intelligence, big data, cloud computing, and other emerging digital technologies in chemical fiber enterprises, improve the digitalization of the whole industrial chain such as R&D, design, manufacturing, operation and maintenance. By applying digital technology to dovetail business processes, management systems, and ANNUAL REPORT 2021 55 supply chain data, it will innovate the management model as organizational structure optimization, dynamic and accurate services, and auxiliary management decision-making to raise enterprise management capabilities.

### (3) Seeking green and low carbon transformation

The Company will carry forward energy-saving and low-carbon development, guide enterprises to purchase green electricity, expand the proportion of new energy applications such as solar energy. It will increase the R&D of green process technology and equipment, strengthen the technological transformation of clean production and the application of key energy-saving and emission-reduction technologies, accelerate the development and construction of green factories, green products, green supply chains, and green parks in the chemical fiber industry, carry out the construction of a leading water and energy efficiency demonstration company, and proceed with carbon footprint accounting and social responsibility building. Through the recycling improvement, the Company is to speed up the optimization of the industrial structure of recycled chemical fibers and the upgrading of itself.

## (II) Development strategy

General development strategy: we are committed to providing quality fiber and creating a better life for the society. Under the principle of “doing the right things at the right time”, we adhere to the development philosophy of “innovation, coordination, green, and sharing”, the operation concept of “winning global markets with surpassing quality, persistence, and will”, and the management ideal of “people-centered, scientific, institutionalized, and professional”, foster a company spirit of “solidarity, integrity, steadiness, and innovation”, increase the industrial innovation capacity, improve industrial structures, and drive the Company into high-end, intelligent, green, integrated, and international development.

(1) The Company will take solid steps in “improving the upstream and enhancing the downstream”. In the first place, the Company will continue to strengthen the upstream industrial platform to support the development of “refining+ethylene+coalification” underpinning the “big chemicals”, and implement “making up and enhancing the industrial chains” and “R&D and innovations”, reserving space and paving ways for the new downstream material businesses in the future. On top of that, the Company will redouble its efforts in the downstream businesses, consolidate traditional market strengths, benchmark the breakthroughs in major new materials as the development and upgrading of “new consumption” and “key&core technologies”, nurture new leading material business growth points in scale, and make strides toward a world leading petrochemical new material company that covers the whole industrial chain.

(2) The Company will take unswerving steps in adopting integrated development strategy across the board. The Company will focus on diversifying the specs of the products, expanding capacity, differentiating the products through R&D, technology and innovation upgrading, and strive to realize the industrial development goal of “industrial growth in bases, scale production, meticulous products, professional technology, and sound management”.

## (III) Operational plan

2023 is a crucial year for the implementation of the "14th Five-Year Plan" and a key year for the company's transition to a "platform + new materials" development model. The

company's management will adhere to a systematic approach in planning its development, with effective innovation and reform as important drivers. The focus will be on the core business, with a deep and meticulous approach, combining tradition with innovation, striving for growth and strength, and achieving high-quality development for the enterprise. The ultimate goal is to continue progressing towards the grand vision of "Centennial Hengli." The key areas of focus for the year include:

1. Continuously strengthening quality, cost, and rapid response to ensure high-quality and efficient operations.

Emphasis will be placed on quality and brand awareness, with a focus on research and development and innovation to continually improve quality standards and enhance product quality. Cost management will be strengthened through the rational integration of resources and control of expenses to achieve cost reduction and increased efficiency. The company will adhere to the business principles of "production based on sales, and sales driven by production," as well as the operational concepts of "customer-centered, market-oriented, and full-team marketing." By proactively adapting to the market and swiftly responding to changes, the company will continuously optimize its product structure, increase the production of high-efficiency products, strengthen the linkage between production and sales, and strive to achieve the annual production and operational goals, ensuring the company's high-quality growth and benefits.

2. Continuously optimizing and strengthening the four major business segments, consolidating the competitive advantages of the entire industry chain, and striving to improve business performance.

Based on maintaining the existing industrial advantages, Hengli Dalian Industrial Park will highlight the advantages of park scale and centralized management. It will coordinate and plan operations in a comprehensive and rational manner, leveraging the cost advantages brought by scale, and emphasizing the core competitiveness of products in the market. The construction of ongoing projects will be accelerated, with strict control over construction progress and quality to ensure timely completion and further enhance the company's performance center.

3. Continuously improving the company's management system, strengthening management empowerment, and laying a solid foundation for high-quality development.

Further improving the safety and environmental management system, enhancing the ability to prevent and resolve risks and hazards, strengthening safety supervision, and conducting special drills to ensure strict, meticulous, and practical work in safety production. Adhering to green development and low-carbon production, focusing on the research and development of green and low-carbon technologies.

Continuously optimizing and improving the internal management system, enhancing financial internal control mechanisms, timely identifying and preventing risks, strengthening internal supervision to ensure zero financial risk. Adhering to the principles of "managing people with systems, managing tasks with processes, and managing efficiency with forms" to enhance risk prevention capabilities. Continuously promoting intelligent transformation and digitalization, actively utilizing new technologies such as the Internet of Things and big data to accelerate industrial upgrading and enhance development quality and efficiency.

Continuing to promote the construction of talent and corporate culture systems, actively engaging in industry-academia-research cooperation, deepening school-enterprise cooperation, and cultivating high-quality, application-oriented, and innovative talents. Attracting high-quality talents to provide momentum for the company's development. Improving internal promotion mechanisms to provide a broader platform for outstanding talents. Fostering and promoting corporate culture to create a sense of belonging within the Hengli family. Strengthening brand building, enhancing brand competitiveness, and expanding brand influence.

#### **(IV) Potential Risks**

##### **1. Risk of industry cyclical fluctuations**

The development of the polyester fiber and petrochemical industry is influenced by industry demands and its own development status, thus featuring a certain level of cyclicity. Changes of the macro environment, such as China's national economy and export policy, would bring risks of cyclical fluctuations to the industry. During adjustment cycles, falling product prices, insufficient utilization of capacity and decreasing profitability would be seen.

##### **2. Risk of raw material price fluctuations**

The Company's production and operation are greatly affected by the price changes of upstream raw materials, especially crude oil and coal. If the Company's inventory, procurement management, and price adjustment of downstream product market cannot effectively reduce or absorb the impact of price fluctuations of raw materials, its operation, production and business performance could be adversely impacted.

##### **3. Foreign exchange risk**

If the RMB continues to fluctuate substantially, great uncertainties would be posed to the Company's exchange gains or losses, export product prices denominated in foreign currencies, raw material prices and other operational factors. The Company will leverage forward foreign exchange contracts and other methods to establish and improve the exchange rate hedging mechanism and reduce the amount of foreign currency receipts and payments in order to reduce the impact of exchange rate changes on the Company's profitability.

##### **4. Environmental protection and safety risk**

With the enhancement of environmental awareness and stricter environmental protection requirements from the government, the Company proactively takes environmental protection measures, increase corresponding investments, strictly complies with relevant laws, regulations and production specifications in its daily management and establishes strict standard operation procedures. However, environmental or safety production accidents caused by human errors or accidents still could not be eliminated, which could affect the Company's normal businesses. Therefore, there are certain environmental protection and production safety risks.

## **Chapter 4 Corporate Governance**

### **I. Notes on Corporate Governance**

In strict accordance with the requirements of the Company Law, the Securities Law, the Code of Corporate Governance for Listed Companies, the Rules Governing the Listing of Stocks on Shanghai Stock Exchange and other laws, regulations and regulatory documents, the Company continuously improved the corporate governance structure, established and improved a sound system of internal management including General Shareholders Meetings, the Board of Directors and the Supervisory Committee to regulate its operations. The Company has formed a corporate governance structure with clear rights and responsibilities, effective checks and balances, scientific decision-making and coordinated operations among organs of authority, decision-making organs, supervisory organs and the senior management teams. The structure ensures the effective implementation of the decision-making power of the general shareholders' meeting and the Board of Directors and the supervisory power of the supervisory committee as well as efficient and compliant operations and management of the senior management team. The Board of Directors of the Company established four special committees, i.e., the strategy committee, the audit committee, the nomination committee and the remuneration and appraisal committee, to provide consultation and advice for the Board of Directors and make sure that its deliberation and decision-making is professional and efficient. The Company continued to follow closely new changes in regulatory laws and rules, implement new regulatory policies and

requirements, strengthen risk prevention and control, push forward internal control management, carry out high-quality information disclosure, narrow the scope of insiders under the principle of validity, accuracy, timeliness, completeness and fairness to ensure equitable access to information of all shareholders. The Company managed investor relations proactively and treated all investors fairly with integrity and openness. The Company carried forward the ESG system and delivered its social responsibilities to safeguard the legitimate rights and interests of the Company and all shareholders and ensured a sustainable and stable development.

## II. Notes on General Shareholders Meetings

Meeting session	Date of meeting	Inquiry index of the designated website where the resolution is published	Disclosure date of resolution publication	Meeting resolution
2022 First Extraordinary Shareholders' Meeting	January 18, 2022	<a href="http://www.sse.com.cn/">http://www.sse.com.cn/</a>	January 19, 2022	For details, please refer to the "Announcement on Resolutions of Hengli Petrochemical's 2022 First Extraordinary General Meeting of Shareholders" (Announcement No.: 2022-008)
2022 Second Extraordinary Shareholders' Meeting	February 11, 2022	<a href="http://www.sse.com.cn/">http://www.sse.com.cn/</a>	February 12, 2022	For details, please refer to the "Announcement on Resolutions of Hengli Petrochemical's 2022 Second Extraordinary General Meeting of Shareholders" (Announcement No.: 2022-015)
2022 Third Extraordinary Shareholders' Meeting	March 22, 2022	<a href="http://www.sse.com.cn/">http://www.sse.com.cn/</a>	March 23, 2022	For details, please refer to the "Announcement on Resolutions of Hengli Petrochemical's 2022 Third Extraordinary General Meeting of Shareholders" (Announcement No.: 2022-033)
2021 Annual General Meeting	April 27, 2022	<a href="http://www.sse.com.cn/">http://www.sse.com.cn/</a>	April 28, 2022	For details, please refer to the "Announcement on the Resolutions of Hengli

				Petrochemical's 2021 Annual Shareholders' Meeting" (Announcement No.: 2022-054)
--	--	--	--	--

#### Note to the general meeting of shareholders

During the reporting period, the company held a total of four shareholder meetings, including one annual shareholder meeting and three extraordinary shareholder meetings. The convening and procedures of the shareholder meetings complied with the provisions of laws, administrative regulations, the "Rules of Shareholders' General Meetings of Listed Companies, " and the company's articles of association. The attendees and the convener of the meetings were qualified and valid. The voting procedures and results of the shareholder meetings were legal and effective.



### III. Information about directors, supervisors and senior executives

#### (I) Changes in shareholding and remuneration of current and resigned directors, supervisors and senior executives within the reporting period

Unit: Share

Name	Position (Note)	Sex	Age	Position start date	Position end date	Number of shares held at the beginning of the year	Number of shares held at the end of the year	Increase or decrease of shares during the year	Reason for increase or decrease	The total pre-tax remuneration received from the company within the Reporting Period (10,000 yuan)	Whether to get paid at the company's related party
Fan Hongwei	Chairman of the board	Female	56	2022-04-27	2025-04-27	886,105,969	791,494,169	-94,611,800		120	No
Wang Zhiqing	General Manager	Male	61	2022-12-29	2025-04-27	-	-	-		0	No
Li Feng	Director, Deputy General Manager, Board Secretary	Male	44	2022-04-27	2025-04-27	-	-	-		84	No
Gong Tao	director	Male	43	2022-04-27	2025-04-27	-	-	-		107.55	No
Liu Dunlei	Director, Deputy General Manager	Male	51	2022-04-27	2025-04-27	-	-	-		72.64	No
Liu Jun	Independent Director	Male	59	2022-04-27	2025-04-27	-	-	-		13.28	No
Wu Yongdong	Independent Director	Male	43	2022-04-27	2025-04-27	-	-	-		13.28	No

Xue Wenliang	Independent Director	Male	44	2022-04-27	2025-04-27	-	-	-	13.28	No
Kang Yunqiu	Chairman of the Supervisory Board	Female	43	2022-04-27	2025-04-27	4,340	4,640	300	0	Yes
Shen Guohua	Supervisor	Male	45	2022-04-27	2025-04-27	-	-	-	32.47	No
Tang Fangming	Employee Supervisor	Male	43	2022-04-06	2025-04-27	10,000	0	-10,000	22.18	No
Liu Qianhan	Deputy General Manager	Male	46	2022-04-27	2025-04-27	-	-	-	72.63	No
Liu Xuefen	Deputy General Manager, Chief Financial Officer	Female	51	2022-04-27	2025-04-27	-	-	-	158.17	No
Liu Jian	Deputy General Manager (retired)	Male	57	2019-05-06	2022-04-27	-	-	-	51.83	No
Li Li	Independent director (resigned)	Male	68	2019-05-06	2022-04-27	-	-	-	5	No
Fu Yuanlue	Independent director (resigned)	Male	70	2019-05-06	2022-04-27	-	-	-	5	No
Cheng Longdi	Independent director (resigned)	Male	64	2019-05-06	2022-04-27	-	-	-	5	No
Wang Weiming	Chairman of the	Male	44	2019-05-06	2022-04-27	-	-	-	0	Yes

	Supervisory Committee (resigned)										
Mo Youjian	Employee Supervisor (resigned)	Male	39	2019-05-06	2022-04-06	-	-	-		10.39	No
Xu Yinfei	Supervisor (resigned)	Male	37	2019-05-06	2022-04-27	-	-	-		18.25	No
Total	/	/	/	/	/	886,120,309	791,498,809	-94,621,500	/	804.95	/

Name	Main work experience
Fan Hongwei	Born in 1967, Chinese nationality, no overseas permanent residence, college degree. From May 1994 to December 2001, he served as the general manager of Wujiang Chemical Fiber Weaving Factory Co., Ltd.; from January 2002, he served as the director of Hengli Group Co., Ltd.; from November 2002 to August 2011, he served as the director of Jiangsu Hengli Chemical Fiber Limited; From August 2011 to March 2016, served as the vice chairman and general manager of Jiangsu Hengli Chemical Fiber Co., Ltd.; since March 2016, he has served as the chairman of Jiangsu Hengli Chemical Fiber Co., Ltd. From March 2016 to December 2022, he served as the chairman and general manager of the Company; since December 2022, he has served as the chairman of the Company.
Wang Zhiqing	Born in 1962, Chinese nationality, no overseas permanent residence, Doctor of Engineering, professor-level senior engineer. Started to work in 1983, successively served as chief engineer of Luoyang Petrochemical General Plant, deputy manager and manager of Sinopec Luoyang Branch, leader of Sinopec Guangxi Oil Refining Preparatory Team, general manager of Sinopec Jiujiang Branch, Director of Jiujiang Petrochemical Complex, chairman, general manager, and deputy secretary of the party committee of Shanghai Petrochemical Co., Ltd. Since December 2022, he has served as the general manager of the Company.
Li Feng	Born in 1979, Chinese nationality, no overseas permanent residence, master's degree, senior economist, member of the third M&A financing committee of China Association of Listed Companies. Served as project manager, office director, and deputy general manager of Jiangsu Hengli Chemical Fiber Co., Ltd.; served as deputy general manager and secretary of the board of directors of Jiangsu Hengli Chemical Fiber Co., Ltd. from August 2011 to March 2016; Since March 2016, he has served as director and deputy general manager of Jiangsu Hengli Chemical Fiber Co., Ltd.; since March 2016, he has served as director, deputy general manager and secretary of the board of directors of the Company.
Gong Tao	Born in 1980, Chinese nationality, no overseas permanent residence, master degree. He used to be a technician of Xianglu Petrochemical (Xiamen) Co., Ltd., a monitor of Zhejiang Yisheng Petrochemical Co., Ltd., and an engineer of Hanbang (Jiangyin) Petrochemical Co., Ltd.; from February 2011 to May 2015 years, he was the director and manager of Hengli Petrochemical (Dalian) Co., Ltd. ; From May 2015 to now, he has been the deputy general manager of Hengli Petrochemical (Dalian) Co., Ltd. Since March 2018, he has served as a director of the Company.

Liu Dunlei	Born in 1972, Chinese nationality, no overseas permanent residence, bachelor degree. Served as assistant to the general manager and manager of Qingdao Gaohe Co., Ltd.; successively served as FDY engineer, workshop director, and manager of Area E of the filament department of Jiangsu Hengli Chemical Fiber Co., Ltd.; Since August 2012, he has served as the general manager of Jiangsu Hengke Advanced Materials Co. Ltd.; since March 2016, he has served as the Company's deputy general manager; since March 2018, he has served as the Company's director and deputy general manager.
Liu Jun	Born in 1964, Chinese nationality, no overseas permanent residence, Ph.D. He used to be an associate professor, professor, and vice president of Nanjing Normal University, and served as a member of the party group, vice president, member of the judicial committee, and judge of Yangzhou Intermediate People's Court. He is currently a professor at the Law School of Nanjing Normal University. Since April 2022, he has served as an independent director of the Company.
Wu Yongdong	Born in 1980, Chinese nationality, no overseas permanent residence, bachelor degree, Chinese certified public accountant. Served as senior project manager of Tianjian Certified Public Accountants (Special General Partnership), credit partner of Ruihua Certified Public Accountants (Special General Partnership) Zhejiang Branch, Internal audit director and director of Hangzhou Shunwang Technology Co., Ltd., and financial director of Zhejiang Chuangke Network Co., Ltd. He is currently the financial director of Hangzhou Jierui Air Treatment Equipment Co., Ltd. Since April 2022, he has served as an independent director of the Company.
Xue Wenliang	Born in 1979, Chinese nationality, no overseas permanent residence, Ph.D., once served as an associate researcher and master tutor at the Textile College of Donghua University, and is now a professor and doctoral tutor at the Textile College of Donghua University. Since April 2022, he has served as an independent director of the Company.
Kang Yunqiu	Born in 1980, Chinese nationality, no permanent residence abroad, bachelor degree, senior economist. Served as general ledger accountant of Jiangsu Hengli Chemical Fiber Co., Ltd., financial manager of Jiangsu Boyada Textile Co., Ltd., financial director of Suzhou Wujiang Tongli Lake Tourist Resort Co., Ltd. He is currently the assistant to the chief financial officer of Hengli Group Co., Ltd., and the director of Suzhou Wujiang Tongli Lake Tourist Resort Co., Ltd. Since April 2022, he has served as the chairman of the Company's board of supervisors.
Shen Guohua	Born in 1978, Chinese nationality, no overseas permanent residence, college degree. Previously served as deputy manager of the general ledger accountant and finance department of Jiangsu Hengli Chemical Fiber Co., Ltd.; from December 2017 to August 2021, he served as the manager of the Company's audit department. Since August 2021, he has served as the Company's audit director. Since April 2022, he has served as a supervisor of the Company.
Tang Fangming	Born in 1980, Chinese nationality, no overseas permanent residence, bachelor degree, senior engineer, successively worked as a technician, engineer, and director of the enterprise management department of Jiangsu Hengli Chemical Fiber Co., Ltd.; he is currently the assistant to the general manager of Jiangsu Hengli Chemical Fiber Co., Ltd. Since April 2022, he has served as the employee supervisor of the Company.
Liu Qianhan	Born in 1977, Chinese nationality, no overseas permanent residence, master degree. Served as business representative, deputy sales manager and sales manager of Jiangsu Hengli Chemical Fiber Co., Ltd.; Deputy General Manager of Jiangsu Hengli Chemical Fiber Co., Ltd. from September 2010 to now; current Deputy General Manager of the Company.
Liu Xuefen	Born in 1972, Chinese nationality, no overseas permanent residence, college degree. Worked as cashier and accountant of Wujiang Silk Sample Factory; teller, loan officer and accounting supervisor of Shengze Branch of China Construction Bank; from April 2004 to April 2012, manager of the audit department of Jiangsu Hengli Chemical Fiber Co., Ltd; Since April 2012, he has served as the financial director of Hengli

	Petrochemical (Dalian) Co., Ltd.; from May 2016 to March 2018, he has served as the Company's supervisor; he is currently the Company's deputy general manager and financial director.
Liu Jian (retired)	Born in 1966, Chinese nationality, no overseas permanent residence, bachelor degree. Served as a technician, assistant, engineer, deputy director and director of the workshop of Sinopec Yizheng Chemical Fiber Co., Ltd. Polyester No. 3 Factory; from November 2002 to July 2011, he was the manager of the polyester department and assistant to the general manager of Jiangsu Hengli Chemical Fiber Co., Ltd.; Since August 2011, he has been the general manager of Kanghui New Material Technology Co., Ltd.; from August 2016 to April 2022, he has been the deputy general manager of the Company.
Li Li (retired)	Born in 1955, Chinese nationality, no overseas permanent residence, Ph. D., lawyer. He used to be a lecturer and associate professor at the Law School of Nanjing Normal University. He is currently a professor at Nanjing Normal University. Served as an independent director of the Company from March 2016 to April 2022.
Fu Yuanlue (retired)	Born in 1953, Chinese nationality, no overseas permanent residence, Ph.D. He used to be a lecturer and associate professor in the Accounting Department of Xiamen University. He is currently a professor in the Department of Accounting, School of Management, Xiamen University. Served as an independent director of the Company from March 2016 to April 2022.
Cheng Longdi (retired)	Born in 1959, Chinese nationality, no overseas permanent residence, Ph.D. Worked as an engineer at the Textile Science Research Institute of the Ministry of Textile Industry. He is currently a professor at Donghua University. Served as an independent director of the Company from March 2016 to April 2022.
Wang Weiming (retired)	Born in 1979, Chinese nationality, no overseas permanent residence, bachelor degree, member of the Communist Party of China, accountant. Served as foreign trade accountant of Jiangsu Hengli Chemical Fiber Co., Ltd. and financial manager of Jiangsu Boyada Textile Co., Ltd. Since November 2008, he has been the financial manager of Jiangsu Deshun Textile Co., Ltd. From March 2016 to April 2022, he served as the chairman of the Company's supervisory board.
Mo Youjian (retired)	Born in 1984, Chinese nationality, no overseas permanent residence, college degree, member of the Communist Party of China. Served as Assistant Engineer of Texturing Department and Secretary of Youth League Branch of Jiangsu Hengli Chemical Fiber Co., Ltd.; Secretary of Youth League Committee of Jiangsu Hengli Chemical Fiber Co., Ltd. since October 2009; From March 2016 to April 2022, he served as the employee representative supervisor of the Company.
Xu Yinfei (retired)	Born in 1986, Chinese nationality, no overseas permanent residence, bachelor degree. Served as foreign trade salesperson of Jiangsu Hengli Chemical Fiber Co., Ltd., deputy office director of Hengli Petrochemical (Dalian) Co., Ltd.; assistant to general manager of Hengli Petrochemical (Dalian) Co., Ltd. since December 2016. From March 2018 to April 2022, he served as the supervisor of the Company.

#### Other note

1. The total pre-tax remuneration received by directors, supervisors, and senior management during the reporting period only includes their remuneration during their tenure.
2. Kang Yunqiu and Tang Fangming's changes in shareholdings during the reporting period occurred before they were listed as supervisor candidates. After assuming the role of supervisors, they did not buy or sell any company stocks.
3. During the company's 2021 annual shareholders' meeting, the resolutions on "Election of Non-Independent Directors of the 9th Board

of Directors, "Election of Independent Directors of the 9th Board of Directors, " and "Election of Supervisor Candidates of the 9th Supervisory Board" were approved. Fan Hongwei, Li Feng, Liu Dunlei, Gong Tao, Liu Jun, Xue Wenliang, and Wu Yongdong were elected as directors, while Kang Yunqiu and Shen Guohua were elected as supervisors. Tang Fangming was elected as the staff representative supervisor by the Company's Staff Representative Assembly.

During the first meeting of the 9th Board of Directors, the relevant resolutions were approved, appointing Fan Hongwei as the General Manager, Li Feng as the Deputy General Manager and Board Secretary, Liu Xuefen as the Deputy General Manager and Chief Financial Officer, and Liu Dunlei and Liu Qianhan as Deputy General Managers.

After Fan Hongwei applied to resign as the General Manager, the company held the 6th meeting of the 9th Board of Directors on December 29, 2022, and approved the resolution on "Appointment of General Manager, " agreeing to appoint Wang Zhiqing as the General Manager.

For detailed information, please refer to the announcements published by the company on April 7, 2022, April 28, 2022, and December 30, 2022, respectively, in designated information disclosure media, including the "Announcement of Hengli Petrochemical on the Election of Staff Representative Supervisor" (Announcement No.: 2022-047), "Announcement of Resolutions of Hengli Petrochemical's 2021 Annual Shareholders' Meeting" (Announcement No.: 2022-054), "Announcement of Resolutions of the 1st Meeting of the 9th Board of Directors of Hengli Petrochemical" (Announcement No.: 2022-055), and "Announcement of Hengli Petrochemical on the Change of General Manager" (Announcement No.: 2022-092).

**(II) Positions of current and resigned directors, supervisors and senior executives during the reporting period****(III) Remuneration of Directors, Supervisors and Senior Management**

Decision-making procedures for the remuneration of directors, supervisors and senior executives	The compensation plan for the company's directors and the salary distribution plan for senior executives proposed by the Remuneration and Appraisal Committee, and reported to the Board of Directors for approval
Basis for Determination of Remuneration of Directors, Supervisors and Senior Management	According to the company's overall operating conditions and the annual salary level of previous years, it is determined by comparing the director and executive salary levels of similar listed companies and Others companies in the same industry
Actual Payment of Remuneration to Directors, Supervisors and Senior Management	The payment has been completed according to the results of the performance appraisal. For details, please refer to the "Statement of Shareholding Changes and Remuneration of Directors, Supervisors and Senior Management"
Total remuneration actually received by all directors, supervisors and senior management at the end of the reporting period	8.0495 million yuan

**(IV) Changes in Directors, Supervisors and Senior Management of the Company**

Name	Position held	Changes	Reason for change
Fan Hongwei	General manager	resign	Company work arrangement
Wang Zhiqing	General manager	hire	Company work arrangement
Liu Jun	Independent Director	election	General Election of the Board of Directors
Xue Wenliang	Independent Director	election	General Election of the Board of Directors
Wu Yongdong	Independent Director	election	General Election of the Board of Directors
Kang Yunqiu	Chairman of the Supervisory Board	election	General Election of the Board of Supervisors
Shen Guohua	Supervisor	election	General Election of the Board of Supervisors
Tang Fangming	Employee Supervisor	election	General Election of the Board of Supervisors
Li Li	Independent Director	resign	Served as independent director of the company for 6 years
Fu Yuanlue	Independent	resign	Served as

	Director		independent director of the company for 6 years
Cheng Longdi	Independent Director	resign	Served as independent director of the company for 6 years
Wang Weiming	Chairman of the Supervisory Board	resign	General Election of the Board of Supervisors
Xu Yinfei	Supervisor	resign	General Election of the Board of Supervisors
Mo Youjian	Employee Supervisor	resign	General Election of the Board of Supervisors
Liu Jian	Deputy General Manager	resign	Company work arrangement

#### IV. Relevant information on board meetings held during the reporting period

Meeting session	Date of Meeting	Meeting resolutions
Announcement of Resolutions of the Sixth Meeting of the Ninth Board of Directors	2022-12-29	"Proposal on the Appointment of the General Manager of the Company"
Announcement on Resolutions of the Fifth Meeting of the Ninth Board of Directors	2022-10-28	"2022 Third Quarter Report"
Announcement on Resolutions of the Fourth Meeting of the Ninth Board of Directors	2022-08-15	"2022 Semi-Annual Report" Full Text and Abstract
Announcement on Resolutions of the Third Meeting of the Ninth Board of Directors	2022-06-02	"Proposal on Purchasing Assets and Related Transactions"
Announcement on Resolutions of the Second Meeting of the Ninth Board of Directors	2022-04-29	1. "First Quarter Report 2022" 2. "Proposal on Revising the Corporate Governance System"
Announcement on Resolutions of the First Meeting of the Ninth Board of Directors	2022-04-27	1. "Proposal on the Election of the Chairman of the Company" 2. "Proposal on Election of Members of Special Committees of the Ninth Board of Directors" 3. "Proposal on the Appointment of the General Manager of the Company"



		<p>4. "Proposal on the Appointment of the Company Secretary to the Board of Directors"</p> <p>5. "Proposal on the Appointment of the Company's Deputy General Manager and Chief Financial Officer"</p> <p>6. "Proposal on the Appointment of the Company's Securities Affairs Representative"</p>
Announcement on Resolutions of the Twenty-eighth Meeting of the Eighth Board of Directors	2022-04-06	<p>1. "2021 General Manager Work Report"</p> <p>2. "2021 Annual Work Report of the Board of Directors"</p> <p>3. "2021 Annual Report" and its summary</p> <p>4. "2021 Annual Financial Final Account Report"</p> <p>5. "Profit Distribution Plan for 2021"</p> <p>6. "Company's 2021 Internal Control Evaluation Report"</p> <p>7. "Proposal on the Remuneration of Directors and Senior Management of the Company in 2021"</p> <p>8. "Proposal on the Estimated Status of Routine Related Transactions in 2022"</p> <p>9. "Proposal on Launching Foreign Exchange Derivatives Trading Business in 2022"</p> <p>10. "Proposal on Launching Futures Hedging Business in 2022"</p> <p>11. "Proposal on Entrusted Financial Management Investment Plan for 2022"</p> <p>12. "Proposal on the 2022 Guarantee Plan"</p> <p>13. "Proposal on Applying for Comprehensive Credit Lines from Banks and Other Financial Institutions in 2022"</p> <p>14. "Proposal on Renewing the Engagement of Accounting Firms"</p> <p>15. "Proposal on Election of Non-Independent Director Candidates for the Ninth Board of Directors"</p> <p>16. "Proposal on Election of Independent Director Candidates for the Ninth Board of Directors"</p> <p>17. "Proposal on the Remuneration Plan for Directors of the Ninth Board of Directors of the Company"</p> <p>18. "Proposal on Amending Articles of Association and Charter Annex"</p> <p>19. "Proposal on Amending the &lt;Working System of Independent Directors of the Company&gt;"</p> <p>20. "Proposal on Amending the System of Related Transactions"</p> <p>21. "Proposal on Convening the Company's 2021 Annual General Meeting of Shareholders"</p>
Announcement on Resolutions of the Twenty-Seventh Meeting of the Eighth Board of Directors	2022-03-09	<p>1. "Proposal on the Fourth Phase Repurchase Report of Shares Repurchased by Centralized Bidding Transactions"</p> <p>2. "Proposal on authorizing the company's management to handle matters related to this Share repurchase"</p>
Announcement on Resolutions of the Twenty-sixth Meeting of the Eighth Board of Directors	2022-03-03	<p>1. "Hengli Petrochemical Co., Ltd. Phase Six Employee Stock Ownership Plan (Draft) " and its summary</p> <p>2. "Hengli Petrochemical Co., Ltd. Sixth Phase Employee Stock Ownership Plan Management Measures"</p> <p>3. "Proposal on Proposing to the General Meeting of Shareholders to Authorize the Board of Directors to Handle Matters Related to the Employee Stock Ownership Plan"</p> <p>4. "Proposal on Changing the Purpose of Share Repurchase in 2020"</p>

		5. "Proposal on Convening the Third Extraordinary General Meeting of Shareholders in 2022"
Announcement on Resolutions of the Twenty-fifth Meeting of the Eighth Board of Directors	2022-01-26	1. "Proposal on Investment and Construction of 16010, 000 tons/year High Performance Resin and New Material Project" 2. "Proposal on Investing in the Construction of a High-performance polyester project with an annual output of 2.6 million tons" 3. "Proposal on Convening the Second Extraordinary General Meeting of Shareholders in 2022"

## V. Performance of duties by directors

### (I) Participation of Directors in the Board of Directors and General Meetings of Shareholders

Director's name	Whether independent director	Participation in the board of directors						Participation in the general meeting of shareholders
		Number of board meetings this year	In-person attendance	Participation by means of communication	Entrusted attendance	Number of absences	Did not attend two meetings in person in a row	Attendance at general meetings of shareholders
Fan Hongwei	No	10	10	0	0	0	No	4
Li Feng	No	10	10	0	0	0	No	4
Gong Tao	No	10	10	9	0	0	No	2
Liu Dunlei	No	10	10	8	0	0	No	1
Liu Jun	Yes	6	6	5	0	0	No	0
Xue Wenliang	Yes	6	6	5	0	0	No	0
Wu Yongdong	Yes	6	6	5	0	0	No	0
Li Li (resigned)	Yes	4	4	3	0	0	No	0
Fu Yuanlu (resigned)	Yes	4	4	3	0	0	No	0
Cheng Longdi	Yes	4	4	3	0	0	No	1

(resigned )								
----------------	--	--	--	--	--	--	--	--

Number of board meetings held during the year	10
Including: Number of on-site meetings	0
Number of meetings held by means of communication	2
Number of meetings held on site combined with communication	8

## VI. Special committees under the board of directors

### (1). Membership of special committees under the board of directors

Special committee	Members
Audit Committee	Wu Yongdong, Liu Jun, Li Feng
Nominating Committee	Liu Jun, Xue Wenliang, Liu Dunlei
Remuneration and Appraisal Committee	Xue Wenliang, Wu Yongdong, Gong Tao
Strategy Committee	Fan Hongwei, Xue Wenliang, Li Feng

### (2). During the reporting period, the Audit Committee held 6 meetings

Date of meeting	Meeting content	Material comments and suggestions	Other performance of duties
March 20, 2022	The second annual audit communication meeting was held to express opinions on matters such as the preliminary audit opinion to be issued by the accountant for the annual audit on the company's financial accounting statements.	Nil	Nil
April 6, 2022	Reviewed the "Company's 2021 Financial Accounting Statement", "Summary Report of the Audit Committee of the Board of Directors on the 2021 Audit Work", "Proposal on Reappointment of an Accounting Firm", "2021 Annual Report and Its Summary", "Proposal on the Estimated Situation of Routine Related Party Transactions in 2022"	Nil	Nil
April 29, 2022	Review the "2022 First Quarterly Report" and issue a written review opinion	Nil	Nil
August 15, 2022	Review the "2022 Semi-Annual Report" and issue a written review opinion	Nil	Nil
October 28, 2022	Review the "2022 Third Quarterly Report" and issue a written review opinion	Nil	Nil
December 6, 2022	Held the first annual review communication meeting for the 2022 annual report	Nil	Nil

### (3). During the reporting period, the Nomination Committee held 3 meetings

Date of meeting	Meeting content	Material comments and suggestions	Other performance of duties
April 6, 2022	Review the qualifications of director candidates for the ninth board of directors of the company	Nil	Nil
April 27, 2022	Review the qualifications of candidates for senior management personnel to be hired by the company	Nil	Nil

December 29, 2022	Review the qualifications of the company's general manager candidates	Nil	Nil
-------------------	---	-----	-----

**(4). During the reporting period, the Remuneration and Appraisal Committee held 1 meeting**

Date of meeting	Meeting content	Material comments and suggestions	Other performance of duties
April 5, 2022	Reviewed the "Proposal on the Company's 2021 Directors and Senior Managers' Remuneration" and the "Proposal on the Company's Ninth Board of Directors' Remuneration Plan"	Nil	Nil

**(5). During the reporting period, the Strategy and Investment Committee held 1 meeting**

Date of meeting	Meeting content	Material comments and suggestions	Other performance of duties
January 25, 2022	Reviewed the "Proposal on Investment and Construction of 1.6 million tons/year High-performance Resin and New Materials Project", "Proposal on Investment and Construction of High-performance polyester project with an annual output of 2.6 million tons"	Nil	Nil

**VII. Explanation of the Board of Supervisors' discovery of risks in the company**

The Supervisory Committee had no objection to the supervisory matters during the reporting period.

**VIII. Employees of the parent company and major subsidiaries at the end of the reporting period**

**(I) Employees**

The number of employees employed by the parent company	31
The number of employees in the main subsidiary	28, 075
Total Number of Employees	38, 550
Number of retired employees whose parent company and main subsidiaries need to bear the expenses	359
Professional composition	
Professional composition category	Headcount
Production staff	27, 883
Sales staff	776
Technical staff	6, 158
Financial officer	358
Administrative staff	1, 465
Service staff	485
Others	1, 425
Total	38, 550
Education level	
Education level category	Headcount
Postgraduate and above	289

Undergraduate	5, 857
College	10, 136
Secondary school and below	22, 268
Total	38, 550

## (II) Remuneration policy

The company has established a legal, standardized, and effective salary and job grading system, taking into account the internal and external labor market conditions, regional and industry differences, and the value of employee positions. The principles guiding the system are "competitiveness externally, fairness internally, and protection of employee development space." The grading and salary determination are based on factors such as responsibilities, capabilities, and performance contributions. Each subsidiary company refines and implements specific compensation plans, promotion channels, and assessment indicators that are suitable for its own development, based on its business scope, industry, and regional factors.

The company's compensation and benefits primarily include basic salary, position-based salary, seniority-based salary, piecework wages, bonuses, overtime pay, night shift allowances, management allowances, skill allowances, etc. The company also provides social insurance and housing fund contributions for employees, offers free entry medical examinations, free work meals, holiday allowances, birthday cakes, etc. Annual salary increases are determined based on market benchmarks and the company's salary range, while annual bonuses are distributed based on company performance and individual achievements. The fair, reasonable, and competitive compensation system aims to attract and retain outstanding talents, provide employees with a sense of belonging and identity, motivate their sense of responsibility and enthusiasm, and promote the mutual enhancement of company and employee value.

## IX. Profit distribution or capital reserve conversion plan

### (I) Formulation, implementation or adjustment of cash dividend policy

During the reporting period, there was no adjustment to the company's cash dividend policy. The company strictly follows the relevant provisions of the "Articles of Association" and "Shareholder Return Plan for the Next Five Years (2020-2024)".

### (II) Special Notes on Cash Dividend Policy

Does it comply with the provisions of the company's bylaws or requirements set by the shareholders' meeting resolutions?	YES
Are the dividend standards and ratios clear and explicit?	YES
Are the relevant decision-making procedures and mechanisms complete?	YES
Have the independent directors fulfilled their duties and played their expected roles?	YES
Do minority shareholders have sufficient opportunities to express their opinions and demands, and have their legal rights and interests been adequately protected?	YES

### (III) If the company has made profits during the reporting period and the parent company has distributable profits, but no proposed cash dividend distribution plan has been put forward, the company should provide detailed disclosure of the reasons as well as the purpose and utilization plan of the undistributed profits

Profit during the reporting period and the parent company's profit available for shareholders to	Purpose and utilization plan of undistributed profits
--	---

distribute is positive, but the reason for not proposing a cash profit distribution plan	
During the current year, the company repurchased shares through a centralized bidding process with a total amount of 2 billion yuan. According to the relevant provisions of the "Shanghai Stock Exchange Listed Company Self-discipline Supervision Guidelines No. 7 - Repurchase of Shares," the above-mentioned amount is treated as equivalent to cash dividends and accounts for over 80% of the net profit. This is in line with the requirements stated in the company's Articles of Association and the company's "Shareholder Return Plan for the Next Five Years (2020-2024)." Considering the significant investment plans and substantial cash expenditures currently undertaken by the company, the board of directors has made a prudent decision. It is proposed not to distribute cash dividends, bonus shares, or carry out capital reserve capitalization, and the undistributed profits will be carried forward to the following year.	The main purpose of the funds is to support the company's ongoing projects, including a 1.6 million tons/year high-performance resin and new materials project, a 300, 000 tons/year adipic acid project for Hengli Chemical's new materials, an 800, 000 tons/year functional film and functional plastics project for Jiangsu Kanghui New Materials, a 600, 000 tons/year BDO and related project, and a lithium battery separator project.

#### (IV) Profit distribution and conversion of capital reserve into share capital during the reporting period

Unit: hundred million yuan Currency: RMB

Bonus shares for every 10 shares (shares)	0
Dividend per 10 shares (yuan) (tax included)	0
Number of conversions per 10 shares (shares)	0
Cash dividend amount (tax included)	0
Net profit attributable to ordinary shareholders of listed companies in the annual consolidated statement of dividends	23.18
Ratio of net profit attributable to ordinary shareholders of listed companies in the consolidated statements (%)	0
Repurchase of shares in cash is included in the amount of cash dividends	20.00
Total dividend amount (tax included)	20.00
The ratio of the total dividend amount to the net profit attributable to ordinary shareholders of the listed company in the consolidated statement (%)	86

#### X. The status and impact of the company's equity incentive plan, employee stock ownership plan or other employee incentives

##### (I) Relevant incentives have been disclosed in temporary announcements and there is no progress or change in subsequent implementation

Event	Index
The company's fourth employee stock ownership plan was sold and terminated	For details, please refer to the "Hengli Petrochemical Announcement on the Completion and Termination of the Stock Sale and Termination of the Fourth Phase Employee Stock Ownership Plan" disclosed by the company on the website of the Shanghai Stock Exchange on January 18, 2022 (Announcement No.: 2022-006)

The company's sixth employee stock ownership plan was launched	For details, please refer to the "Hengli Petrochemical Phase Six Employee Stock Ownership Plan (Draft) " and other relevant announcements disclosed by the company on the website of the Shanghai Stock Exchange on March 4, 2022
Part of the lock-up period of the company's fifth employee stock ownership plan expires	For details, please refer to the "Hengli Petrochemical Indicative Announcement Regarding the Expiration of the Partial Share Lock-up Period of the Fifth Employee Stock Ownership Plan" disclosed by the company on the website of the Shanghai Stock Exchange on March 10, 2022 (announcement number: 2022-026)
The company's sixth employee stock ownership plan completed the stock purchase	For details, please refer to the "Hengli Petrochemical Announcement on the Completion of Stock Purchase under the Sixth Employee Stock Ownership Plan" disclosed by the company on the website of the Shanghai Stock Exchange on May 12, 2022 (Announcement No.: 2022-065)
Proposed to change the asset management organization of the third and fifth employee stock ownership plans	For details, please refer to the "Announcement of Hengli Petrochemical on Changing the Asset Management Organization of the Third and Fifth Employee Stock Ownership Plans" disclosed by the company on the website of the Shanghai Stock Exchange on February 18, 2023 (Announcement No.: 2023-003)

**(II) The establishment and implementation of the evaluation mechanism for senior management personnel and the incentive mechanism during the reporting period**

The company has established a senior management performance evaluation and incentive mechanism, with a compensation and assessment committee under the board of directors. This committee is responsible for studying and formulating the standards and procedures for evaluating senior management personnel and reviewing their compensation policies and plans. The company continuously improves its long-term incentive policies based on actual circumstances, aiming to motivate senior management to fulfill their responsibilities diligently and responsibly.

**XI. Construction and implementation of internal control system during the reporting period**

During the reporting period, the company strictly adhered to various laws and regulations, such as the "Company Law, " "Basic Norms for Enterprise Internal Control, " "Listing Rules of the Shanghai Stock Exchange, " and "Self-regulatory Guidelines for Listed Companies of the Shanghai Stock Exchange - Standard Operations." The company also followed internal control system standards to operate and manage risks effectively. The company established a robust internal control management system, taking into account industry characteristics and actual business operations. The internal control system was continuously optimized and improved to ensure the lawful and compliant operation and management of the company, asset security, and the accuracy and integrity of financial reporting and related information. These measures aimed to enhance operational efficiency, actual results, and protect the interests of the company and all shareholders.

**XII. Management and control over subsidiaries during the reporting period**

In compliance with the requirements of the "Company Law, " the company has established and continuously improved a modern corporate system. Through the shareholders' meeting, the board of directors, and the supervisory board, effective management of subsidiary companies has been implemented. The company has developed a comprehensive management system that covers its major business areas, achieving

institutionalization of management practices. The management system has also been disseminated to the subsidiary companies, which have formulated their own management systems based on it.

### **XIII. Explanation on the relevant situation of the internal control audit report**

According to the "Basic Norms for Enterprise Internal Control" and its supporting guidelines, as well as other internal control regulatory requirements, the company, in conjunction with its internal control system and evaluation methods, conducted an assessment of the effectiveness of internal controls as of the benchmark date for the internal control evaluation report. The company prepared the "2022 Annual Internal Control Evaluation Report" in accordance with the format, content, and requirements specified by the China Securities Regulatory Commission (CSRC) and the Shanghai Stock Exchange (SSE).

The company engaged an external auditing firm, Zhong Hui Certified Public Accountants LLP (Special General Partnership), to perform an internal control audit. The audit firm issued a standard unqualified opinion in the internal control audit report.

Whether to disclose the internal control audit report: Yes

Type of internal control audit report opinion: standard unqualified opinion

### **XIV. The rectification of problems in the self-examination of the special action of listed company governance**

During the reporting period, there were no significant differences between the company's corporate governance status and the relevant regulations of the China Securities Regulatory Commission (CSRC) regarding the governance of listed companies. The company will continue to enhance its corporate governance level and improve its governance framework in accordance with legal regulations and regulatory requirements. This ongoing effort aims to continuously enhance the quality of the listed company.



## Chapter 5 Environmental and Social Responsibility

### I. Environmental information

Whether to establish relevant mechanisms for environmental protection	Yes
Investment in environmental protection funds during the reporting period (unit: ten thousand yuan)	24, 776.30

### (I) Explanation on the environmental protection status of companies and their major subsidiaries that belong to the key pollutant discharge units announced by the environmental protection department

#### 1. Sewage Information

The Company pays great heed to environmental protection, and strictly acts upon the Environmental Protection Law of the People's Republic of China, the Law of the People's Republic of China on Promoting Clean Production, and the Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Wastes and other relevant laws and regulations. The key pollutant discharging companies and their subsidiaries mainly include Hengli Chemical Fiber, Susheng Thermal Power, Deli Chemical Fiber, Hengke Advanced Materials, Kanghui New Material, Hengli Petrochemical (Dalian), Hengli Petrochemical Refining and Hengli Petrochemical Chemical.

During the reporting period, each pollutant discharging subsidiary carried out self-monitoring of their environmental impact and engaged professional third parties to test various pollutant factors. The test results showed that the emission concentrations of various pollutants were in compliance with national and local pollutant discharge standards and other relevant standards. The total discharge of pollutants is under the required limit as outlined by operation permits. (Due to the switch between old and new pollutant discharge licenses, there were some changes in the approved total annual pollutant discharge amount and discharge calculation methods of some key pollutant discharge subsidiaries.)

The specific pollutant discharge is as follows:

1. Hengli Chemical Fiber

Type of pollutant	Main Pollutants and Characteristic Pollutants	Emission method	Number of discharge reports	The distribution of discharge reports	Emission Concentration	Total emissions (tons/year)	Approved total emissions (tons/year)	Pollutant Emission Standards Executed	Excessive emission situation
Waste water	Wastewater volume	In direct emissions	1	In the factory area	/	51038	/	GB31572-2015 Synthetic Resin Industrial Pollutant Discharge Standard, Wujiang Shengze Water Treatment Development Co., Ltd. Takeover Standard	Nil
	Chemical oxygen demand				16.67mg/L	0.8492	8.623		
	Ammonia nitrogen				0.70mg/L	0.0417	0.675		
	Total Phosphorus				0.06mg/L	0.003	0.0684		
	Total nitrogen				7.95mg/L	0.5861	5.748		
Exhaust gases	Sulfur dioxide	Direct emissions	3	In the factory area	9.137mg/m <sup>3</sup>	16.04	152.25	GB13271-2014 Boiler Air Pollutant Emission Standard	Nil
	Nitrogen oxides				54.317mg/m <sup>3</sup>	97.517	201.13		
	Particles				2.340mg/m <sup>3</sup>	4.2	30.16		
	VOCs	Direct emissions	2	In the factory area	0.608mg/m <sup>3</sup>	0.7417	1.9008	DB32/4041-2021 Comprehensive Discharge Standard of Air Pollutants in Jiangsu Province	

## 2. Susheng Thermal Power

Type of pollutant	Main Pollutants and Characteristic Pollutants	Emission method	Number of discharge reports	The distribution of discharge reports	Emission Concentration	Total emissions (tons/year)	Approved total emissions (tons/year)	Pollutant Emission Standards Executed	Excessive emission situation
Wastewater	Wastewater volume	Indirect emissions	1	In the factory area		10733	11000	31962-2015, comprehensive sewage discharge standard GB8978-1996	Nil
Exhaust gas	Sulfur dioxide	Direct emissions	3		5.71 mg/m <sup>3</sup>	26.056	434.337	Air Pollutant Emission Standards for Coal-fired Power Plants DB32/4148—2021	
	Nitrogen oxides				30.91 mg/m <sup>3</sup>	134.136	868.674		
	Particles				1.64 mg/m <sup>3</sup>	7.185	172.424		
	VOCs		2		/	/	DB32/4041-2021 Comprehensive Discharge Standard of Air Pollutants in Jiangsu Province		

## 3. Deli Chemical Fiber

Type of pollutant	Main Pollutants and Characteristic Pollutants	Emission method	Number of discharge reports	The distribution of discharge reports	Emission Concentration	Total emissions (tons/year)	Approved total emissions (tons/year)	Pollutant Emission Standards Executed	Excessive emission situation
Wastewater	Wastewater volume	Indirect	1	In the factory	/	82592.114	105160	GB31572-2015 Synthetic Resin Industrial Pollutant Discharge Standard	Nil
	Chemical oxygen demand				24.528 mg/L	2.025862	42.06		

er	Ammonia nitrogen	ct emissions		or y area	0.352mg/L	0.029141	0.601	
E x h a u s t g a s	Sulfur dioxide	D i r e c t e m i s s i o n s	3		6.476 mg/m <sup>3</sup>	1.17683	39.20	GB13271-2014 Boiler Air Pollutant Emission Standard GB16297-1996 comprehensive discharge standard of air pollutants
	Nitrogen oxides				104.78mg/m <sub>3</sub>	19.99731	33.75	
	Particles				2.316 mg/m <sup>3</sup>	0.42264	6.75	
	VOCs	2	/		/	/	GB37822-2019 Volatile Organic Compound Fugitive Emission Control Standard	

## 4. Kanghui New Material

Type of pollutant	Main Pollutants and Characteristic Pollutants	Emission method	Number of discharge reports	The distribution of discharge reports	Emission Concentration	Total emissions (tons/year)	Approved total emissions (tons/year)	Pollutant Emission Standards Executed	Excessive emission situation
Wastewater	Wastewater volume	Continuous emission	1	Fence on the south side of the factory area	/	425950	659400	/	Nil
	Chemical oxygen demand				12.8223mg/L	8.471	28.808	Standards in Table 2 of DB21-1627-2008 Liaoning Provincial Comprehensive Wastewater Discharge Standard	
	Ammonia nitrogen				0.337 mg/L	0.309	2.9109	Standards in Table 2 of DB21-1627-2008 Liaoning Provincial Comprehensive Wastewater Discharge Standard	
Exhaust gas	Sulfur dioxide	1	Factory central chimney	3.16 mg/m <sup>3</sup>	3.14	20.23	GB31572-2015 Synthetic Resin Industrial Pollutant Discharge Standard		
	Nitrogen oxides			28.05 mg/m <sup>3</sup>	27.278	89.71	GB31572-2015 Synthetic Resin Industrial Pollutant Discharge Standard		
	Particles			2.55 mg/m <sup>3</sup>	27.448	50.59168	GB13271-2014 Boiler Air Pollutant Emission Standard		

## 5. Hengke Advanced Materials

Type of pollutant	Main Pollutants and Characteristic Pollutants	Emission method	Number of discharge ports	The distribution of discharge ports	Emission Concentration	Total emissions (tons/year)	Approved total emissions (tons/year)	Pollutant Emission Standards Executed	Excessive emission situation
Waste water	Wastewater volume	Indirect emissions	1	In the factory area	/	940744	/	Sewage discharged into urban sewer water quality standard GB/T 31962-2015, textile dyeing and finishing industry water pollutant discharge standard GB 4287-2012GB 4287-2012, comprehensive sewage discharge standard GB8978-1996, petrochemical industry pollutant discharge standard GB 31571-2015, Synthetic Resin Industrial Pollutant Discharge Standard GB 31572-2015	Nil
	Chemical oxygen demand				20.66 mg/L	15.2	281.95		
	Ammonia nitrogen				1.17 mg/L	0.97	6.05		
	Total Phosphorus				0.15 mg/L	0.074	0.92		
	Total nitrogen				14.1 mg/L	5.22	6.05		
Exhaust gas	Sulfur dioxide	Direct emissions	1		2.04 mg/m <sup>3</sup>	5	279.51	"Emission Standards of Air Pollutants for Boilers" (DB32/438	
	Nitrogen oxides				18.4 mg/m <sup>3</sup>	8.82	349.39		
	Particles				3.59 mg/m <sup>3</sup>	4.44	52.41		

							5—2022), Emission Standards for Industrial Pollutants of Synthetic Resin GB 31572- 2015, "Emission Standards for Air Pollutants for Boilers" (DB32/438 5—2022), Comprehe nsive Emission Standards for Air Pollutants DB32/4041 —2021 Petrochemi cal Industry Pollutant Discharge Standard GB 31571 2015, Odor Pollutant Discharge Standard GB14554- 93	
	VOCs		1		2.52 mg/m <sup>3</sup>	0.66	28.86	DB32/4041 -2021 Comprehe nsive Discharge Standard of Air Pollutants in Jiangsu Province

6. Hengli Petrochemical Refining

Type of pollutant	Main Pollutants and Characteristic Pollutants	Emission method	Number of discharge reports	The distribution of discharge reports	Emission Concentration	Total emissions (tons/year)	Approved total emissions (tons/year)	Pollutant Emission Standards Executed	Excessive emission situation
Wastewater	Wastewater volume	Continuous emission	1	DW001 discharge port	/	2107548.58	/	/	Nil
	Chemical oxygen demand		1		18.65mg/L	39.306	249.23	DB21/1627-2008 Comprehensive Wastewater Discharge Standard	
	Ammonia nitrogen		1		0.187mg/L	0.394	19.86	GB31570-2015 Pollutant Discharge Standard for Petroleum Refining Industry	
	Total Phosphorus		1		0.223mg/L	0.47	/	GB31570-2015 Pollutant Discharge Standard for Petroleum Refining Industry	
	Total nitrogen		1		8.061mg/L	16.988	70.90	DB21/1627-2008 Comprehensive Wastewater Discharge Standard	
Exhaust gas	Sulfur dioxide	Organized emissions	16	-	11.214mg/m <sup>3</sup>	1043.104	2121.7	GB31570-2015 Pollutant Discharge Standard for Petroleum Refining Industry	
	Nitrogen oxides		15		30.255mg/m <sup>3</sup>	2004.638	5064.92	GB31570-2015 Pollutant Discharge Standard for Petroleum Refining Industry	



	Smoke dust		15		0.669mg/m <sup>3</sup>	96.494	965.78	GB31570-2015 Pollutant Discharge Standard for Petroleum Refining Industry
	Non-methane total hydrocarbons		/		/	3224.911	3274.58	/

7. Hengli Petrochemical Chemical

Type of pollutant	Main Pollutants and Characteristic Pollutants	Emission method	Number of discharge ports	The distribution of discharge ports	Emission Concentration	Total emissions (tons/year)	Approved total emissions (tons/year)	Pollutant Emission Standards Executed	Excessive emission situation
Wastewater	Wastewater volume	Continuous emission	1	DW001 discharge port	/	1701882	/	/	Nil
	Chemical oxygen demand		1		15.766mg/L	26.016	204.3	DB21/1627-2008 "Comprehensive Wastewater Discharge Standard"	
	Ammonia nitrogen		1		0.037mg/L	0.061	32.7	GB31571-2015 "Petrochemical Industry Pollutant Discharge Standard"	
	Total Phosphorus		1		0.116mg/L	0.197	/	DB21/1627-2008 "Comprehensive Wastewater Discharge Standard"	
	Total nitrogen		1		7.488mg/L	12.743	61.3	DB21/1627-2008 "Comprehensive Wastewater Discharge Standard"	
Exhaust gas	Sulfur dioxide	Organized emissions	4	/	4.068mg/m <sup>3</sup>	37.603	116.5	GB31571-2015 "Petrochemical Industry Pollutant Discharge Standard"	
	Nitrogen oxides		4		43.916mg/m <sup>3</sup>	423.495	974.4	GB31571-2015 "Petrochemical Industry Pollutant Discharge Standard"	
	Smoke dust		4		1.999mg/m <sup>3</sup>	7.292	149	GB31571-2015 "Petrochemical Industry Pollutant Discharge Standard"	
	Non-methane		4		9.474mg/m <sup>3</sup>	239.511	745.6	/	

	total hydrocarbo ns								
--	---------------------------	--	--	--	--	--	--	--	--

## 8. Hengli Petrochemical (Dalian)

Type of pollutant	Main Pollutants and Characteristic Pollutants	Emission method	Number of discharge reports	The distribution of discharge reports	Emission Concentration	Total emissions (tons/year)	Approved total emissions (tons/year)	Pollutant Emission Standards Executed	Excessive emission situation
Wastewater	Wastewater volume	Continuous emission	1	DW001 discharge port	/	11233566.06	/	/	Nil
	Chemical oxygen demand		1		27.021mg/L	303.542	559	DB21/1627-2008 "Comprehensive Wastewater Discharge Standard"	
	Ammonia nitrogen		1		0.048mg/L	0.539	111.8	DB21/1627-2008 "Comprehensive Wastewater Discharge Standard"	
	Total Phosphorus		1		0.18mg/L	2.3273	/	DB21/1627-2008 "Comprehensive Wastewater Discharge Standard"	
	Total nitrogen		1		8.048mg/L	90.408	239.81	DB21/1627-2008 "Comprehensive Wastewater Discharge Standard"	
Exhaust gases	Sulfur dioxide	Organized emissions	2	/	15.193mg/m <sup>3</sup>	198.177	477.44	GB31571-2015 "Petrochemical Industry Pollutant Discharge Standard"	
	Nitrogen oxides		2		26.470mg/m <sup>3</sup>	345.05	682.06	GB31571-2015 "Petrochemical Industry Pollutant Discharge Standard"	
	Smoke dust		2		0.891mg/m <sup>3</sup>	11.611	319.52	GB31571-2015 "Petrochemical Industry Pollutant Discharge Standard"	
	Non-methane total hydrocarbo		/		6.593mg/m <sup>3</sup>	76.843	914.05	/	

	ns							
--	----	--	--	--	--	--	--	--

## 2. Construction and operation of pollution prevention and control facilities

During the reporting period, the above companies who discharged pollutants all built their pollutant control facilities following the requirements for environmental impact assessment of the construction project. Currently, the facilities are under normal operation. The companies carry out daily maintenance of the facilities to ensure their efficient and stable operations of keeping emissions within the standards.

## 3. Environmental Impact Assessment of Construction Projects and Other Environmental Protection Administrative Licensing

During the reporting period, the company's construction and renovation projects have been accompanied by the preparation of environmental impact assessment reports by relevant construction units. These reports have received approval from the corresponding ecological and environmental departments, granting permission for construction. Various pollution prevention and control facilities (including those for air, water, noise, and solid waste classification and disposal) and environmental management during the construction period have been implemented in accordance with the approved content of the environmental impact assessment report. The company strictly adheres to the "design, construction, and production simultaneously" system for environmental protection.

## 4. Emergency plan for environmental emergencies

Company	Emergency plan	Filing party	Filing number
Hengli Chemical Fiber	《Jiangsu Hengli Chemical Fiber Co., Ltd. Emergency plan for environmental emergencies》	Suzhou Wujiang Ecological Environment Bureau	320509-2022-042-M
Deli Chemical Fiber	《Jiangsu Deli Chemical Fiber Co., Ltd. Emergency plan for environmental emergencies》	Suqian Sucheng Ecological Environment Bureau	321302-2021-006-L
Susheng Thermal Power	《Suzhou Susheng Thermal Power Co., Ltd. Emergency plan for environmental emergencies》	Suzhou Wujiang Ecological Environment Bureau	320509-2020-043-M
Kanghui New Material	《Kanghui New Material Technology Co., Ltd. Emergency plan for environmental emergencies》	Environmental Protection Bureau of Administrative Committee of Xianrendao Economic Development Zone	210881-2021-037-M
Hengke Advanced Materials	《Jiangsu Hengke Advanced Materials Co., Ltd. Contingency plans for environmental emergencies》	Nantong Tongzhou Ecological Environment Bureau	320682-2020-057-M
Hengli Petrochemical Refining	《Hengli Petrochemical (Dalian) Refining Co., Ltd. Emergency plan for	Dalian Wafangdian (Changxing Island Economic Zone)	210281-2021-052-H

	environmental emergencies 》	Ecological Environment Branch	
Hengli Petrochemical (Dalian)	《Hengli Petrochemical (Dalian) Co., Ltd. Emergency plan for environmental emergencies 》	Dalian Wafangdian (Changxing Island Economic Zone) Ecological Environment Branch	210281-2022-068-H
Hengli Petrochemical Chemical	《Hengli Petrochemical (Dalian) Chemical Co., Ltd. Emergency plan for environmental emergencies 》	Dalian Wafangdian (Changxing Island Economic Zone) Ecological Environment Branch	210281-2022-069-H

Note: 《 Jiangsu Hengke Advanced Materials Co. Ltd. Risk Contingency Plan for Environmental Emergencies 》 is in the process of updating.

## 5. Environmental Self-Monitoring Program

The company's key pollutant-emitting subsidiaries under its jurisdiction have developed environmental monitoring plans in accordance with relevant national self-monitoring standards and environmental management system requirements. These plans are submitted to the local environmental regulatory authorities for record-keeping while applying for pollutant discharge permits. The company regularly organizes its environmental monitoring station to conduct tests on various pollutants emitted from each workshop's discharge outlets. For projects where the company lacks testing capabilities, it entrusts third-party institutions with environmental monitoring qualifications to conduct emission testing for specific pollutants, such as wastewater and exhaust gases. The company assigns dedicated personnel to inspect and aggregate data on various pollutant indicators. Additionally, data analysis is performed to provide timely feedback to relevant departments as a basis for adjusting process parameters and ensuring compliance with emission standards. This systematic approach ensures that the company achieves standardized emissions.

### (II) Measures and effects taken to reduce its carbon emissions during the reporting period

Whether to take carbon reduction measures	Yes
Reduction of carbon dioxide equivalent emissions (unit: tons)	Not applicable
Types of carbon reduction measures (such as using clean energy to generate electricity, using carbon reduction technologies in the production process, developing and producing new products that help reduce carbon emissions, etc.)	Use carbon reduction technology in the production process, clean energy power generation, research and development of new products that help reduce carbon

#### Specific note

Please refer to the relevant cases in the "5.3 Resource Conservation" section of the company's "2022 Annual Corporate Social Responsibility Report," which was disclosed on the SSE website ([www.sse.com.cn](http://www.sse.com.cn)) on April 28, 2023.

## II. Social Responsibility Work Situation

### (I) Whether to disclose social responsibility report, sustainable development report or ESG report separately

The company has prepared and disclosed its separate Annual Corporate Social Responsibility Report for the year 2022. For specific details, please refer to the "2022 Annual Corporate Social Responsibility Report" disclosed by the company on April 28, 2023, on the SSE website ([www.sse.com.cn](http://www.sse.com.cn)).

### (II) Specific situation of social responsibility work

External donation, public welfare projects	Quantity/Content	Detail
Total investment (ten thousand yuan)	40	Kanghui New Material donated 200, 000 yuan each to the Bayuquan District Charity Federation of Yingkou City and the Gaizhou New Crown Epidemic Headquarters.
Including: capital (ten thousand yuan)	40	
Material discount (ten thousand yuan)	0	
Number of people benefited (person)		

## III. Consolidate and expand the achievements of poverty alleviation and rural revitalization

Poverty Alleviation and Rural Revitalization Projects	Quantity/Content	Details
Total investment (ten thousand yuan)	53.90	
Including: capital (ten thousand yuan)	52.40	Hengli Petrochemical Refining donated 100, 000 yuan to Liaoning Petrochemical Vocational and Technical College; Hengli Futures donated 424, 000 yuan to rural revitalization and poverty alleviation.
Material discount (ten thousand yuan)	1.50	Hengli Futures is a financial institution in response to the call of the Dalian Futures Industry Association to carry out the "New Semester, New School Bags, and Warm Food Plan" for elementary schools in Dalian for 15, 000 yuan.
Number of people benefited (person)		
Forms of assistance (such as industrial poverty alleviation, employment poverty alleviation, education poverty alleviation, etc.)	Rural revitalization, education and poverty alleviation	

## Chapter 6 Important events

### I. Appointment and Dismissal of Accounting Firms

Unit: ten thousand yuan Currency: RMB

	Currently employed
Domestic accounting firm name	Zhonghui Certified Public Accountants (Special General Partnership)
Domestic accounting firm remuneration	379
Audit period for domestic accounting firms	4
The name of the certified public accountant of the domestic accounting firm	Han Jian, Fang Sai
Consecutive years of audit services of CPAs of domestic accounting firms	Han Jian (4 years), Fang Sai (1 year)

	Name	Remuneration
Internal control audit accounting firm	Zhonghui Certified Public Accountants (Special General Partnership)	60

### II. Major litigation and arbitration matters

No major litigation and arbitration matters during the reporting period.

### III. Significant related party transactions

#### (I) Related party transactions related to daily operations

##### 1. Matters that have been disclosed in the temporary announcement and have no progress or change in subsequent implementation

Matter	Index
Estimated daily related party transactions in 2022	Please refer to the announcement titled "Hengli Petrochemical Announcement on the Expected Situation of Routine Related Party Transactions for the Year 2022" (Announcement No.: 2022-038) disclosed on the SSE website on April 7, 2022 for more details.

**(II) Related party transactions in asset or equity acquisition and sale****1. Matters that have been disclosed in the temporary announcement and have no progress or change in subsequent implementation**

Matter	Index
Subsidiary companies Jiangsu Xuanda Polymer Materials Co., Ltd. has acquired assets from Nantong Guangzhen Textile Intelligent Technology Co., Ltd., including a building, ongoing construction projects, engineering materials, and the rights to use three industrial land plots located in Wujie Town, Tongzhou District, Nantong City.	Please refer to the announcement titled "Hengli Petrochemical Announcement on Subsidiary's Purchase of Assets and Related Party Transactions" (Announcement No.: 2022-002), disclosed on the SSE website on January 1, 2022.
The company has purchased assets related to an apartment and parking spaces located in Building B of Victoria Plaza in the Donggang Business District of Dalian City, held by Hengli Real Estate (Dalian) Co., Ltd	Please refer to the announcement titled "Hengli Petrochemical Announcement on Purchase of Assets and Related Party Transactions" (Announcement No.: 2022-071), disclosed on the SSE website on June 3, 2022.

**(III) Guarantee**

Unit: hundred million yuan Currency: RMB

The company's external guarantees (excluding guarantees for subsidiaries)														
Guarantor	Guarantor's relationship with the listed company	The party being guaranteed	Guarantee amount	Guarantee date (signing date of the agreement)	Guarantee start date	Guarantee expiry date	Guarantee type	Collateral (if any)	Whether the guarantee has been fulfilled	Whether the guarantee is overdue	Guarantee overdue amount	Counter guarantee	Whether to guarantee for related parties	Relationship with related party
Nil														
Total amount of guarantees incurred during the reporting period (excluding guarantees to subsidiaries)											-			
Total balance of guarantees at the end of the reporting period (A) (excluding guarantees to subsidiaries)											-			
Guarantees provided by the company and subsidiaries to its subsidiaries														
Total amount of guarantees for subsidiaries during the reporting period												2, 778.29		



Total balance of guarantees to subsidiaries at the end of the reporting period (B)	1, 748.38
Total company guarantees (including guarantees to subsidiaries)	
Total Guarantee (A+B)	1, 748.38
The ratio of the total guarantee amount to the company's net assets (%)	330.38
Including:	
Amount of guarantee provided for shareholders, actual controllers and their related parties (C)	0
Amount of debt guarantee provided directly or indirectly for guaranteed objects whose asset-liability ratio exceeds 70% (D)	1.00
The amount of the part where the total guarantee exceeds 50% of the net assets (E)	1, 385.81
The total amount of the above three guarantees (C+D+E)	1, 386.81
Explanation on possible joint and several liability for unexpired guarantees	
Guarantee information	During the reporting period, the company's guarantees were mutual guarantees between the company and its subsidiaries (sub-subsidiaries).

**(IV) Entrusting others to manage cash assets****1. Entrusted financial management****(1) Overall situation of entrusted financial management**

Unit: ten thousand yuan Currency: RMB

Type	Source of fund	Amount	Outstanding balance	Overdue uncollected amount
Bank financial management	Self-owned funds	19,511.00	6,500.00	
Brokerage products	Self-owned funds	34,985.30	1,934.90	
Others	Self-owned funds	8,000.00	3,300.00	

**(2) Individual entrusted financial management**

Unit: ten thousand yuan Currency: RMB

Trustee	Entrusted financial management type	Entrusted financial management amount	Entrusted financial management start date	Entrusted financial management maturity date	Sources of funds	Capital investment	Remuneration determination method	Annualized rate of return	Expected income (if any)	Actual gain or loss	Actual recovery	Whether it has gone through legal procedures	Is there any entrusted financial plan in the future	Amount of provision for impairment (if any)
Rural Commercial Bank	Bank wealth management products	1,000.00	2022/1/29	2022/2/7	Self-owned funds			2.65%		0.65	Collected	Yes		
Rural Commercial Bank	Bank wealth management products	2,600.00	2022/3/31	2022/4/1	Self-owned funds			2.66%		0.19	Collected	Yes		
Bank of China	Bank wealth management products	3,700.00	2022/6/9	2022/6/17	Self-owned funds			2.64%		2.14	Collected	Yes		
Postal Savings Bank	Bank wealth management products	1,120.00	2022/6/12	2022/6/17	Self-owned funds			1.32%		0.20	Collected	Yes		

Industrial Bank	Bank wealth management products	1,400.00	2022/7/26	2022/9/9	Self-owned funds			3.15%		5.43	Collected	Yes		
Zhesha ng Bank	Bank wealth management products	5,500.00	2022/12/13	2023/1/4	Self-owned funds				2.30%	0.00	Uncollected	Yes		
Bank of Ningbo	Structured deposits	2,000.00	2021/12/17	2022/12/14	Self-owned funds			3.19%		63.27	Collected	Yes		
Bank of Jiangsu	Structured deposits	10,000.00	2022/2/16	2022/8/16	Self-owned funds			3.45%		171.23	Collected	Yes		
Bank of Nanjing	Structured deposits	1,000.00	2022/3/16	2023/3/15	Self-owned funds				3.00%	0.00	Uncollected	Yes		
Guolian Securities	Treasury bond reverse repurchase	15,115.60	2022/12/21	2022/12/22	Self-owned funds			1.79%		0.74	Collected	Yes		
Guolian Securities	Treasury bond reverse repurchase	6,000.00	2022/12/22	2022/12/26	Self-owned funds			2.20%		1.45	Collected	Yes		

Guolian Securities	Treasury bond reverse repurchase	7,000.00	2022/12/26	2022/12/27	Self-owned funds			4.19%		0.80	Collected	Yes		
Guolian Securities	Treasury bond reverse repurchase	8,521.00	2022/12/23	2022/12/30	Self-owned funds			5.17%		8.45	Collected	Yes		
Lianchu Securities	Income certificate	6,000.00	2022/2/8	2022/12/26	Self-owned funds			3.80%		200.35	Collected	Yes		
Guolian Securities	Quote repurchase	4,004.30	2022/10/10	2022/10/11	Self-owned funds			1.50%		0.16	Collected	Yes		
Guolian Securities	Quote repurchase	4,004.40	2022/10/11	2022/10/12	Self-owned funds			1.50%		0.16	Collected	Yes		

## Chapter 7 Share Changes and Shareholders

### I. Changes in Shares

During the reporting period, the total number of shares and share capital structure of the company remained unchanged.

### II. Securities Issuance and Listing

#### (I) Securities issuance as of the reporting period

Unit: share Currency: RMB

Types of stocks and their derivative securities	Issuance date	Issue price (or interest rate)	Issue quantity	Listing date	The number of transactions approved for listing	Transaction end date
Bonds (including corporate bonds, corporate bonds, and non-financial corporate bond financing instruments)						
Short-term bond	2022-05-31	3.03%	1.00 billion yuan	2022-06-02		2023-06-01
Short-term bond	2022-07-22	3.18%	1.00 billion yuan	2022-07-26		2023-07-25

Explanation on securities issuance as of the reporting period (for bonds with different interest rates during the duration, please explain separately) :

On November 10, 2021, and November 26, 2021, the company convened the 23rd meeting of the eighth Board of Directors and the second extraordinary general meeting of shareholders in 2021. The meetings reviewed and approved the Proposal on Registering and Issuing Short-Term Financing Bonds, agreeing that the company would apply to the China Interbank Market Dealers Association to register and issue short-term financing bonds with an amount not exceeding RMB 3 billion (including 3 billion yuan).

On March 11, 2022, the company received the Acceptance of Registration Notice (Zhong Shi Xie Zhu [2022] CP14) from the Dealers Association, stating that the Dealers Association accepted the registration of the company's short-term financing bonds with a registered amount of 3 billion yuan. The registered quota is valid for a period of 2 years from the date of the notice.

On May 31, 2022, the company issued the first tranche of short-term financing bonds for the year 2022 in the national interbank market. The bonds have a maturity of 1 year, with a total issuance amount of 1 billion yuan and an issuance interest rate of 3.03%.

On July 22, 2022, the company issued the second tranche of short-term financing bonds for the year 2022 in the national interbank market. The bonds have a maturity of 1 year, with a total issuance amount of 1 billion yuan and an issuance interest rate of 3.18%.

### III. Shareholders and actual controllers

#### (I) Total number of shareholders

Total number of ordinary shareholders as of the end of the reporting period (accounts)	114, 006
The total number of ordinary shareholders at the end of the previous month before the annual report disclosure date (accounts)	113, 210
Total number of preferred shareholders with voting rights restored as of the end of the reporting period (accounts)	0
The total number of preference shareholders whose voting rights have been restored at the end of the previous month before the annual report disclosure date (accounts)	0

**(II) Table of shareholdings of the top ten shareholders and top ten tradable shareholders (or shareholders not subject to sales restrictions) as of the end of the reporting period**

Unit: share

Shareholdings of the top ten shareholders							
Shareholder's name (Full name)	Changes during the reporting period	Number of shares held at the end of the period	Ratio (%)	Number of restricted shares held	Pledge, Mark or Freeze Situation		Shareholder nature
					Share status	Quantity	
Hengneng Investment (Dalian) Co., Ltd.	0	1, 498, 478, 926	21.29	0	None	0	Domestic non-state-owned legal person
Hengli Group Co., Ltd.	-155, 000, 000	1, 243, 172, 342	17.66	0	Pledged	279, 000, 000	Domestic non-state-owned legal person
Hengli Group - Southwest Securities—21 Hengli E1 Guarantee and Trust Property Account	155, 000, 000	857, 440, 000	12.18	0	None	0	Other
Fan Hongwei	-94, 611, 800	791, 494, 169	11.24	0	None	0	Domestic natural person
Tak Shing Li International Holdings Ltd.	0	732, 711, 668	10.41	0	None	0	Foreign legal person
Hong Kong Securities Clearing Company Limited	-1, 413, 344	117, 237, 227	1.67	0	Unknown	0	Other
Xuanyuan Private Equity Fund Investment Management (Guangdong) Co., Ltd. - Xuanyuan Yuanbao No. 16 Private Securities Investment Fund	83, 666, 983	83, 666, 983	1.19	0	None	0	Other
Xuanyuan Private Equity Fund Investment Management (Guangdong) Co., Ltd. - Xuanyuan Yuanbao No. 15 Private Securities Investment Fund	75, 124, 294	75, 124, 294	1.07	0	None	0	Other
Dalian State-owned Assets Investment and Operation Group Co., Ltd.	59, 170, 000	68, 898, 123	0.98	0	Pledged	15, 000, 000	State-owned legal entity



Xuanyuan Private Equity Fund Investment Management (Guangdong) Co., Ltd. - Xuanyuan Yuanbao No. 17 Private Equity Securities Investment Fund	67, 163, 623	67, 163, 623	0.95	0	None	0	Other
Shareholdings of the top ten shareholders not subject to sales restrictions							
Shareholder's name	Number of unrestricted tradable shares held			Share type and quantity			
				Type	Quantity		
Hengneng Investment (Dalian) Co., Ltd.	1, 498, 478, 926			Renminbi ordinary shares	1, 498, 478, 926		
Hengli Group Co., Ltd.	1, 243, 172, 342			Renminbi ordinary shares	1, 243, 172, 342		
Hengli Group—Southwest Securities—21 Hengli E1 Guarantee and Trust Property Account	857, 440, 000			Renminbi ordinary shares	857, 440, 000		
Fan Hongwei	791, 494, 169			Renminbi ordinary shares	791, 494, 169		
Tak Shing Li International Holdings Ltd.	732, 711, 668			Renminbi ordinary shares	732, 711, 668		
Hong Kong Securities Clearing Company Limited	117, 237, 227			Renminbi ordinary shares	117, 237, 227		
Xuanyuan Private Equity Fund Investment Management (Guangdong) Co., Ltd. - Xuanyuan Yuanbao No. 16 Private Securities Investment Fund	83, 666, 983			Renminbi ordinary shares	83, 666, 983		
Xuanyuan Private Equity Fund Investment Management (Guangdong) Co., Ltd. - Xuanyuan Yuanbao No. 15 Private Securities Investment Fund	75, 124, 294			Renminbi ordinary shares	75, 124, 294		
Dalian State-owned Assets Investment and Operation Group Co., Ltd.	68, 898, 123			Renminbi ordinary shares	68, 898, 123		
Xuanyuan Private Equity Fund Investment Management (Guangdong) Co., Ltd. - Xuanyuan Yuanbao No. 17 Private Equity Securities Investment Fund	67, 163, 623			Renminbi ordinary shares	67, 163, 623		
Explanation of the repurchase accounts among the top ten shareholders	As of the end of the reporting period, none of the top ten shareholders had a corporate repurchase account.						

Explanation on proxy voting rights, proxy voting rights and waiver of voting rights of the above-mentioned shareholders	When Hengli Group, the controlling shareholder of the company, conducted a non-public issuance of exchangeable corporate bonds, it established a guarantee and trust account through the trustee, using a portion of Hengli Petrochemical's legally owned A-share stocks as collateral and trust property. The account is held in the name of Southwest Securities Co., Ltd. and is registered as the securities holder in the company's shareholder register under the name "Hengli Group-Southwest Securities-21 Hengli E1 Guarantee and Trust Property Account." When exercising voting rights, Southwest Securities Co., Ltd. will act in accordance with the opinions of Hengli Group, while ensuring the interests of the holders of the exchangeable bonds are not compromised.
Explanation on the related relationship or concerted action of the above-mentioned shareholders	Hengli Group, Hengneng Investment, Fan Hongwei and Dechengli are parties acting in concert with each other; the relationship between other shareholders is unknown.
Explanation on preferred stockholders with restored voting rights and the number of shares held	During the reporting period, the company had no preferred shareholders.

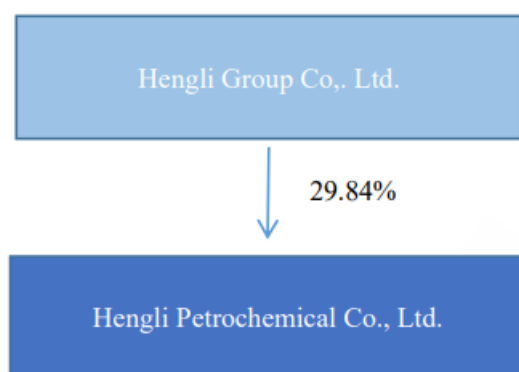
#### IV. Controlling Shareholders and Actual Controllers

##### (I) Controlling Shareholders

###### 1 Legal person

Name	Hengli Group Co., Ltd.
The person in charge or legal representative of the entity	Chen Jianhua
Date of establishment	January 16, 2002
Main operating business	Production and sales of needle textiles and paper packaging materials (excluding printing) ; sales of chemical fiber raw materials, plastics, mechanical and electrical equipment, instruments, ash residue, purified terephthalic acid (PTA), and monoethylene glycol (MEG) ; industrial investment; research and development of new textile raw materials products; self-operated and agency import and export of various commodities and technologies; limited branch operations include thermal power generation and steam production and supply. (Business activities in projects that require approval by law can only be conducted after obtaining approvals from relevant departments).
Shareholdings of other domestic and foreign listed companies controlled and participated in during the reporting period	Hengli Group is the controlling shareholder of the listed company Guangdong Songfa Ceramics Co., Ltd. (stock code: 603268) and the listed company Suzhou Wujiang Tongli Lake Tourist Resort Co., Ltd. (stock code: 834199).
Other information	Nil

###### 2 Block diagram of the property rights and control relationship between the company and the controlling shareholder



Note :

When calculating the shareholding ratio of the controlling shareholder Hengli Group, the number of shares held indirectly through the "Hengli Group-Southwest Securities-21 Hengli E1 Guarantee and Trust Property Account" is included.

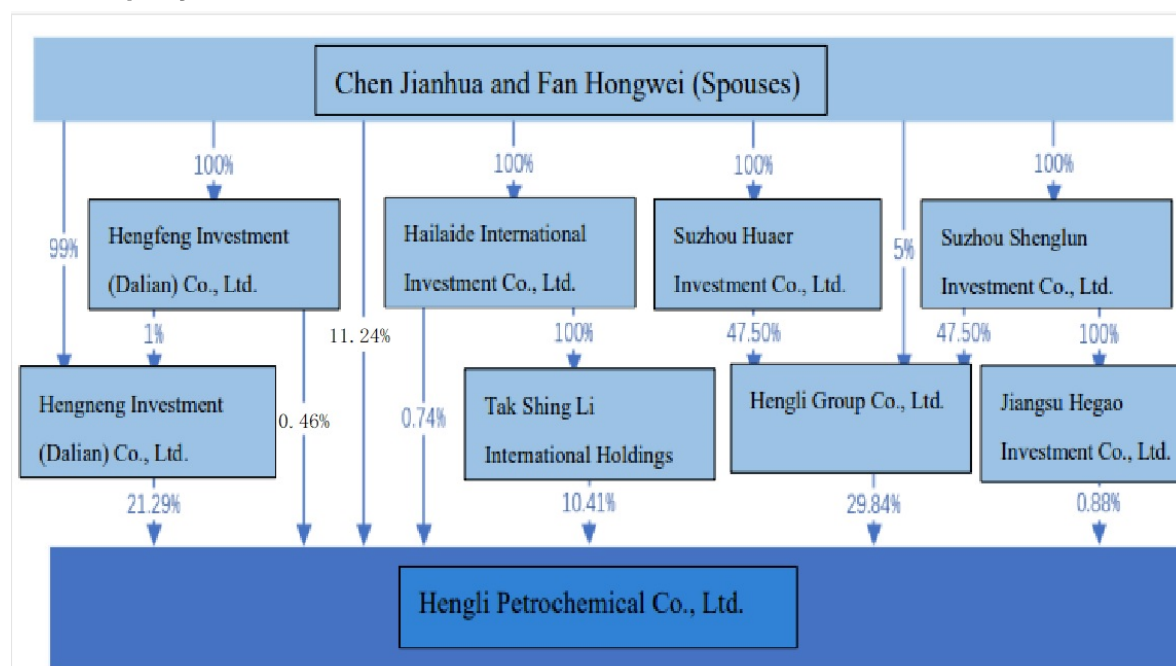
##### (II) Actual controller

###### 1 Natural person

Name	Chen Jianhua and Fan Hongwei (Spouse)
Nationality	China
Whether to obtain the right of residence in other countries or	Nil

regions	
Main occupation and position	Chen Jianhua is the chairman and general manager of Hengli Group Co., Ltd., the controlling shareholder of the listed company; Fan Hongwei is the current chairman of the listed company
Domestic and foreign listed companies that have been controlled in the past 10 years	Chen Jianhua and Fan Hongwei are the actual controllers of the listed company Guangdong Songfa Ceramics Co., Ltd. (stock code: 603268) and the listed company Suzhou Wujiang Tongli Lake Tourist Resort Co., Ltd. (stock code: 834199).

## 2 Block diagram of the property rights and control relationship between the company and the actual controller



## V. Other legal person shareholders holding more than 10% of the shares

Unit: ten thousand yuan Currency: RMB

Legal entity shareholder name	The person in charge or legal representative of the entity	Date of establishment	Organization Code	Registered capital	Main operating business or management activities, etc.
Hengneng Investment (Dalian) Co., Ltd.	Fan Hongwei	2014-03-06	912102440890861452	50,000	Project investment (excluding special approval)
Tak Shing Li International Holdings Ltd.	Fan Hongwei	2003-08-27	Registration number: 859250	500	Mainly engaged in trade and investment business
Other information	Hengneng Investment and Tak Shing Li are persons acting in concert with Hengli Group, the controlling shareholder of the company				

**VI. Specific implementation of share repurchase during the reporting period**

Unit: hundred million yuan Currency: RMB

Name of share repurchase plan	Share repurchase in the third phase
Disclosure time of share repurchase plan	November 6, 2021
The number of shares to be repurchased and the proportion of the total share capital (%)	0.41%
Proposed repurchase amount	5-10
Proposed repurchase period	Within 12 months from the date when the board of directors considers and approves the share repurchase plan (November 5, 2021)
Repurchase purpose	For Employee Stock Ownership Plans
Repurchased quantity (share)	38, 692, 489
Ratio (%) of the repurchased quantity to the underlying stocks involved in the equity incentive plan (if any)	Not applicable
The progress of the company's reduction of repurchased shares by means of centralized bidding transactions	None

Name of share repurchase plan	Share repurchase in the fourth phase
Disclosure time of share repurchase plan	March 10, 2022
The number of shares to be repurchased and the proportion of the total share capital (%)	0.47-0.71
Proposed repurchase amount	10-15
Proposed repurchase period	Within 12 months from the date when the board of directors considers and approves the share repurchase plan (March 9, 2022)
Repurchase purpose	For Employee Stock Ownership Plans
Repurchased quantity (share)	44, 991, 970
Ratio (%) of the repurchased quantity to the underlying stocks involved in the equity incentive plan (if any)	Not applicable
The progress of the company's reduction of repurchased shares by means of centralized bidding transactions	None

## Chapter 8 Information of Bonds

### I. Corporate bonds, company bonds and non-financial corporate debt financing instruments

#### (I) Debt financing instruments for non-financial enterprises in the inter-bank bond market

##### 1. Non-financial corporate debt financing instruments

Unit: hundred million yuan Currency: RMB

Bond name	Abbreviation	Code	Issuance date	Value date	Maturity date	Bond balance	Interest rate(%)	Payment of principal and interest	Trading places	Investor Suitability Arrangements (if any)	Trading Mechanism	Whether there is a risk of termination of listing transactions
2022 Phase I Short-term Financing Bonds	22 Henli Petrochemical CP001	042280254	2022-05-31	2022-06-01	2023-06-01	10	3.03	One-time repayment of principal and interest at maturity	China Interbank Market			No
2022 Phase II Short-Term Financing Bonds	22 Henli Petrochemical CP002	042280341	2022-07-22	2022-07-25	2023-07-25	10	3.18	One-time repayment of principal and interest at maturity	China Interbank Market			No

##### 2. Intermediaries providing services for bond issuance and duration business

Intermediary name	Office address	Name of Signing Accountant	Contact person	Contact number
China Merchants Bank Co., Ltd.	China Merchants Bank Building, No. 7088 Shennan Avenue, Shenzhen		Sun Ziqi, Guo Wei	0755-88026087 or 0411-39853306
Beijing Tianyuan Law Firm	Floor 10, Block B, Pacific Insurance Building, No. 28 Fengsheng Hutong,		Huang Jingya, Sun Chunyan	010-57763888

	Xicheng District, Beijing			
Zhonghui Certified Public Accountants (Special General Partnership)	Room 601, Building A, Hualian Times Building, No. 8 Xinye Road, Jiangnan District, Hangzhou	Han Jian, Fang Sai	Han Jian	0571-88879999
Oriental Jincheng International Credit Rating Co., Ltd.	Floor 12, Block C, Zhaotai International Center, No. 3 Chaowai West Street, Chaoyang District, Beijing		Guo Zhebiao	010-62299800

### 3. Use of raised funds at the end of the reporting period

Unit: hundred million yuan Currency: RMB

Bond name	Total amount of funds raised	Amount used	Unused amount	Operation of special account for raised funds (if any)	Rectification of illegal use of raised funds (if any)	Whether it is consistent with the purpose, use plan and other agreements promised in the prospectus
22 Hengli Petrochemical CP001	10	10	0			Yes
22 Hengli Petrochemical CP002	10	10	0			yes

### (II) Accounting Data and Financial Indicators of the Company in the Previous Two Years by the End of the Reporting Period

Unit: ten thousand yuan Currency: RMB

Key indicators	2022	2021	YOY changes(%)	Reason of changes
Net profit excluding extraordinary profit and loss	104, 528.51	1, 452, 069.80	-92.80	
Current ratio	0.61	0.67	-8.96	
Quick ratio	0.25	0.24	4.17	
Debt-to-assets ratio (%)	78.08	72.75	5.33	
Total debt-to-EBITDA ratio	0.09	0.22	-58.92	
Interest coverage ratio	1.36	4.93	-72.41	
Cash flow interest coverage ratio	5.94	4.73	25.58	
EBITDA-to-interest coverage ratio	3.20	6.74	-52.52	
Loan repayment rate (%)	100.00	100.00		
Interest coverage rate (%)	100.00	100.00		