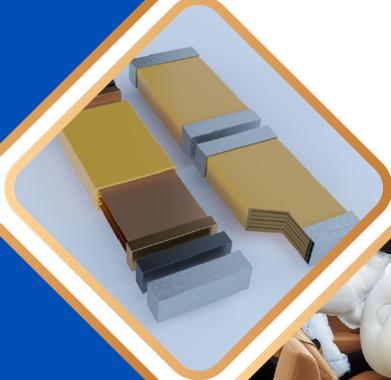




恒力石化

HENGLI PETROCHEMICAL

Stock Code: 600346

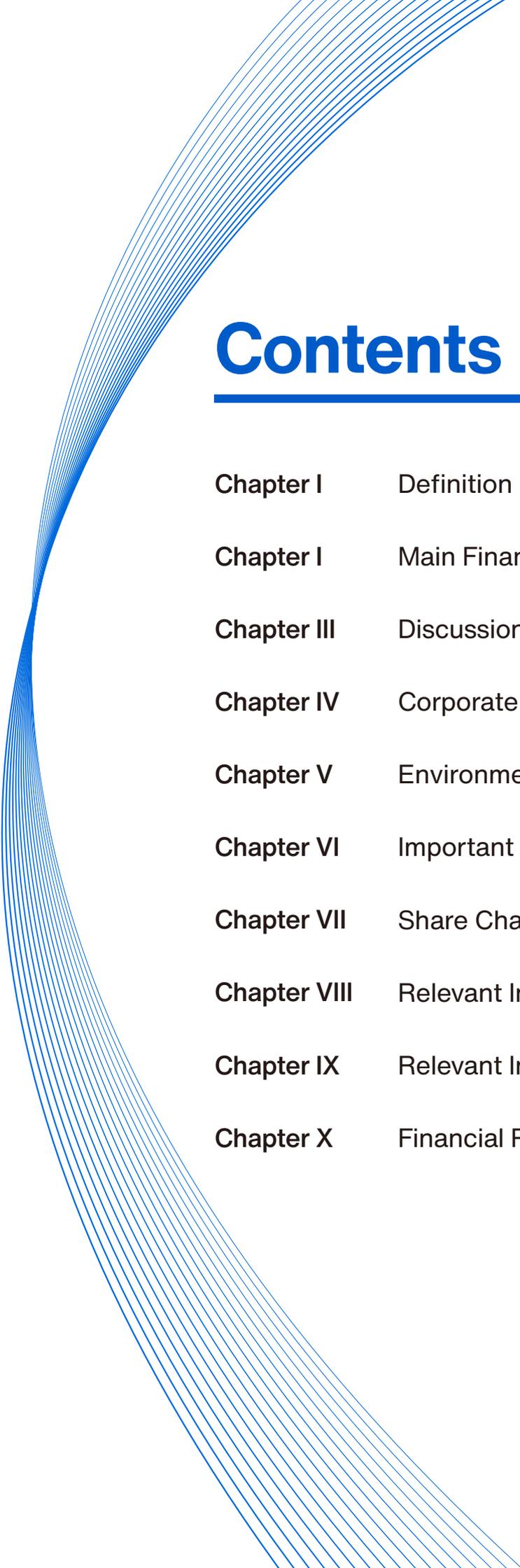


Hengli Petrochemical Co., Ltd.

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# Semi annual report for 2021

Focus on innovative nature  
build a better life



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## I. Definition

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

Definition of Frequently-Used Terms		
<b>Reporting Period</b>	Refers to	From 1 January 2021 to 30 June 2021
<b>Company, the Company, or Hengli Petrochemical</b>	Refers to	Hengli Petrochemical Co., Ltd.
<b>CSRC</b>	Refers to	China Securities Regulatory Commission
<b>SSE</b>	Refers to	Shanghai Stock Exchange
<b>Hengli Group</b>	Refers to	Hengli Group Co., Ltd., controlling shareholder of the listed company
<b>Hailaide</b>	Refers to	Hailaide International Investment Ltd., person acting-in- concert with controlling shareholder of the listed company
<b>Tak Shing Li</b>	Refers to	Tak Shing Li International Holdings Ltd., person acting-in- concert with controlling shareholder of the listed company
<b>Hegao Investment</b>	Refers to	Jiangsu Hegao Investment Co., Ltd., person acting-in-concert with controlling shareholder of the listed company
<b>Hengneng Investment</b>	Refers to	Hengneng Investment (Dalian) Co., Ltd., person acting-in- concert with controlling shareholder of the listed company
<b>Hengfeng Investment</b>	Refers to	Hengfeng Investment (Dalian) Co., Ltd., person acting-in- concert with controlling shareholder of the listed company
<b>Hengli Chemical Fiber</b>	Refers to	Jiangsu Hengli Chemical Fiber Co., Ltd., subsidiary to the listed company
<b>Susheng Thermal Power</b>	Refers to	JSuzhou Susheng Thermal Power Co., Ltd., subsidiary to the Hengli Chemical Fiber, sub-sub-sidiary to the listed company
<b>Hengke Advanced Materials</b>	Refers to	Jiangsu Hengke Advanced Materials Co. Ltd, subsidiary to the Hengli Chemical Fiber, sub-sub-sidiary to the listed company
<b>Deli Chemical Fiber</b>	Refers to	Jiangsu Hengke Advanced Materials Co. Ltd, subsidiary to the Hengli Chemical Fiber, sub-sub-sidiary to the listed company
<b>Kanghui New Material</b>	Refers to	Formerly known as Yingkou Kanghui Petrochemical Co., Ltd., subsidiary to the listed company, now renamed as Kanghui New Material Technology Co., Ltd.
<b>Hengli Petrochemical Chemical</b>	Refers to	Hengli Petrochemical (Dalian) Chemical Co., Ltd., subsidiary to the listed company

<b>Hengli Investment</b>	Refers to	Hengli Investment (Dalian) Co., Ltd., subsidiary to the listed company
<b>Hengli Petrochemical (Dalian)</b>	Refers to	Hengli Petrochemical (Dalian) Co., Ltd., subsidiary to the Hengli Investment, sub-subsidiary to the listed company
<b>Hengli Petrochemical (Huizhou)</b>	Refers to	Hengli Petrochemical (Huizhou) Co., Ltd., subsidiary to the Hengli Investment, sub-subsidiary to the listed company
<b>Hengli Petrochemical Refining</b>	Refers to	Hengli Petrochemical (Dalian) Refining Co., Ltd., subsidiary to the listed company
<b>Crude Oil</b>	Refers 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.
<b>Aromatic Hydrocarbon</b>	Refers 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.
<b>Ethylene</b>	Refers 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.
<b>Polyethylene</b>	Refers to	A thermoplastic resin produced by polymerization of ethylene. Polyethylene is odorless and non-toxic and feels like wax, has excellent low-temperature resistance, good chemical stability, and resistance to erosion of most acid and alkali.
<b>Polypropylene (PP)</b>	Refers to	A semi-crystalline synthetic resin material, with strong acid and alkali resistance, excellent electrical insulation capacity, harder character, and higher melting point than PE.
<b>Styrene</b>	Refers to	An organic compound which is usually a colorless but aromatic liquid, mainly used in the production of plastic, resin, and rubber.
<b>Butadiene</b>	Refers to	An organic compound which is a colorless gas with a distinctive odor is the main raw material in the production of synthetic rubber.
<b>Paraxylene (PX)</b>	Refers to	A kind of aromatic hydrocarbon, which is a colorless and transparent liquid, and is a raw material in the production of purified terephthalic acid (PTA), used for manufacturing plastic, polyester fiber, and film.
<b>Purified Terephthalic Acid (PTA)</b>	Refers to	A white crystal or powder at room temperature, non-toxic and flammable, which will burn as soon as catching fire if mixing with air to a certain degree.
<b>Ethylene Glycol (MEG or EG)</b>	Refers to	A colorless, odorless, sweet, viscous liquid, mainly used in the production of polyester fiber, antifreeze, unsaturated polyester resin, lubricant, plasticizer, non-ionic surfactant, and explosive.
<b>Acetic Acid</b>	Refers to	An organic compound which is a colorless liquid with a pungent odor and is the raw material for the production of rayon, filmstrip, aspirin, etc.
<b>Polyester, Polyester Chip or PET</b>	Refers to	Polyethylene Terephthalate, or Polyester or PET, is a fiber-forming polymer made from PTA and MEG through interesterification or esterification and condensation polymerization. Fiber-grade polyester chips are used for producing polyester staple fibers and polyester filament yarn, while film-grade chips are used for producing all categories of film products.
<b>PBAT</b>	Refers to	Poly (butylene adipate-co-terephthalate), or PBAT, is a petrochemical-based biodegradable plastic with sound biodegradability and is an active material in biodegradable plastic research with broad market application.

<b>PBS</b>	Refers to	Polybutanediol succinate, or PBS, is polymerized from succinate acid and Butane-1,4-diol (BDO), with sound thermal performance and mechanical processing performance. It is a typical fully biodegradable material easy to be decomposed and metabolized by a variety of natural microorganisms or enzymes in animals and plants and finally decomposed into carbon dioxide and water.
<b>Polyester Fiber</b>	Refers to	A synthetic fiber made of polyester formed by polycondensation of organic diacid and dihydric alcohol by spinning. The industrialized massively produced polyester fiber is made from PET and is known as dacron in China. It is the top major variety of synthetic fiber at present.
<b>Polybutylene Terephthalate (PBT)</b>	Refers to	It is a condensation polymer of para toluic acid and Butane-1,4-diol, which can be prepared by the methods of transesterification or direct esterification through polycondensation. PBT and PET together are known as thermoplastic polyesters.
<b>Biaxially-Oriented Polyethylene Terephthalate (BOPET)</b>	Refers to	BOPET has the characteristics of high strength, good rigidity, transparency, high gloss, etc., with excellent wear resistance, folding resistance, pinhole resistance and tear resistance, minimal thermal shrinkage, and sound antistatic property.
<b>Denier (D)</b>	Refers to	9,000-meter fiber weighs 1 gram and is called 1 denier (D).
<b>Polyester Filament Yarn (PFY)</b>	Refers to	Balls wound by filament yarn of more than 1 km in length.
<b>PFY for Civil Use, Textile Yarn</b>	Refers to	PFY used for clothing and household textile.
<b>PFY for Industrial Use, Industrial Yarn</b>	Refers to	Polyester macrofiber in large denier with strong strength and high modulus for industrial use.
<b>Differential Fiber</b>	Refers to	A new fiber variety that is differentiated from normal varieties with evident breakthroughs on techniques or performance, or with certain special properties, mainly used for improving wearability, through chemical modification or physical deformation.
<b>POY</b>	Refers to	Pre-oriented yarn, or partially oriented yarn (POY), is partially drawn PFY obtained by high-speed spinning with orientation between the unoriented yarn and the full drawn yarn.
<b>DTY</b>	Refers to	Draw textured yarn (DTY) is made of POY through drawing and false twist texturing, usually with certain elasticity and contractibility.
<b>FDY</b>	Refers to	Full Drawn Yarn (FDY), is a synthetic fiber filament further prepared by the spinning and drawing process. The fiber has been fully drawn and can be directly used for textile processing.

## II. Main Accounting Data and Financial Indicators of the Company

Unit: 10,000 yuan Currency: CNY

Main Accounting Data	The Current Reporting Period (Jan.-Jun.)	The Same Period of the Previous Year	Increase/Decrease over the Same Period of the Previous Year (%)
Operating Income	10,457,447.80	6,735,793.52	55.25
Net Profits Attributable to Shareholders of the Listed Company	864,220.71	551,686.00	56.65
Net Profits Attributable to Shareholders of the Listed Company after Deducting Non-recurring Gains and Losses	826,613.64	549,468.83	50.44
Net Cash Flow from Operating Activities	1,618,009.23	1,819,232.26	-11.06
	The End of Current Reporting Period	The End of Previous Year	Increase/Decrease at the End of Current Reporting Period Compared to the End of Previous Year (%)
Net Assets Attributable to Shareholders of the Listed Company	5,013,805.06	4,690,507.69	6.89
Total Assets	20,094,587.59	19,102,872.66	5.19

Main Financial Indicators	The Current Reporting Period (Jan.-Jun.)	The Same Period of the Previous Year	Increase/Decrease over the Same Period of the Previous Year (%)
Basic EPS (Yuan/Share)	1.23	0.79	55.70
Diluted EPS (Yuan/Share)	1.23	0.79	55.70
Basic EPS after Deducting Non-Recurring Gains and Losses (Yuan/Share)	1.18	0.78	51.28
ROEWA (%)	17.17	14.26	Up 2.91 Percentage Points
ROEWA after Deducting Non-Recurring Gains and Losses (%)	16.43	14.20	Up 2.23 Percentage Points

### Notes on Main Accounting Data and Financial Indicators of the Company

The increase in operating income during the reporting period is mainly attributed to the fact that the 1.5 million-tonne ethylene project and the 2\*2.5 million-tonne PTA project of the Hengli Petrochemical Chemical reached the target output in the middle and latter half of the year 2020. The increase in net profits and EPS during the reporting period is mainly attributed to the 1.5 million-tonne ethylene project and the upward trend of the industry cycle.

## Items and Amount of Non-recurring Gains and Losses

Unit: 1 yuan Currency: CNY

Non-recurring Gains and Losses Items	Amount	Note (If Applicable)
Profit and loss of disposal of non-current assets	4,523,942.28	
Government subsidies included in the profit and loss of the current period, excluding those that are closely relevant to the normal business operation of the Company, and continuously enjoyed by the Company in accordance with national policies and regulations by a certain standard quota or quantity	255,116,975.93	
Profit and loss of fair value changes incurred from trading financial assets, derivative financial assets, trading financial liabilities and derivative financial liabilities of the Company, and income on investment incurred from the disposal of trading financial assets, derivative financial assets, trading financial liabilities, and derivative financial liabilities, and other debt investment, in addition to effective hedging business relevant to normal business operation of the Company	90,319,689.28	
Other non-operating incomes and expense apart from the above-mentioned	8,775,715.26	
Others that conform to the definition of non-recurring gains and losses items	2,671,926.82	
Amount subject to minority stockholder's interest	45,084,433.90	
Amount subject to income tax	-30,421,940.82	
Total	376,070,742.65	

## III. Discussion and Analysis from the Management

### Notes on Industrial Background and Main Business of the Company during the Reporting Period

#### 1. Industrial Background of the Company

##### (1) Petrochemical

The Company has a petrochemical and production capacity of 20 million tonnes per year, mainly producing 4.5 million-tonne PX, 1.8 million-tonne EG and 400,000-tonne acetic acid for downstream use of the Company. In addition, it produces 960,000-tonne purified petroleum benzene, 850,000-tonne PP, 720,000-tonne styrene, 400,000-tonne high-density PE, 140,000-tonne butadiene, and other high-end chemical products with a shortage in supply and high additional value in China. As small-scale refineries with higher production costs and outmoded equipment are phased out gradually, centralization of the refining industry and competitiveness of newly-built large-scale refineries will be dramatically enhanced. With prominent advantages in terms of policy support, process techniques, and industrial collaboration, etc., the Company, compared with other petrochemical businesses, has obvious characteristics of large petrochemical scale, a high proportion of chemical products, complete supporting facilities, and low energy consumption, thus gaining strong market competitiveness.

##### (2) PTA

PTA is the direct upstream raw material of PET. China is the largest producer and consumer of PTA in the world. Currently, the Company has a PTA production capacity of 11.6 million tonnes per year and has 2 PTA production lines with a total capacity of 5 million tonnes under construction. The Compa-

#### 2. Basic Information of Main Business of the Company

The main business of the Company covers refining, petrochemical, and production, R&D and sales of PX, acetic acid, PTA, EG, Polyester Chip, PFY for civil use, PFY for industrial use, functional films, engineering plastics, PBS /PBAT bio-degradable advanced materials that relating to the whole industry chain of advanced polyester materials, including downstream, midstream and upstream business. It is the first listed company of advanced chemical materials in the industry with integration of the whole industry chain of "crude oil - aromatic hydrocarbon, alkene - PTA, EG - new polyester materials".

The Company has a production capacity of 4.5 million

tonnes of PX and 400,000 tonnes of acetic acid annually in the upstream, and 11.6 million tonnes of PTA and 1.8 million tonnes of fiber-grade EG in the midstream. Its PTA and EG products are partially for private use, and the rest are for market sales. In the downstream, it has extensive varieties of advanced chemical material products with complete specifications, targeting the middle and high-end market, including PFY for civil use, PFY for industrial use, BOPET, PBT, PBS/PBAT, and other polyester and advanced chemical material products, applied in textile, pharmaceutical, automobile, environment and new energy, electronics, PV, optical instrument and other industries with large scale, differentiation and high additional value and civil areas concerning basic necessities of life with massive demands.

##### (3) Advanced Materials

One of the main businesses of the Company is R&D, production, and sales of products related to advanced polyester materials. Its main products cover PFY for civil use, PFY for industrial use, functional films, engineering plastics, PBAT/PBS, and other polyester and advanced chemical material products. The production capacity of PFY for civil use ranks top five in China, while that of PFY for industrial use ranking second place across the country, making the Company one of the manufacturers of PFY for both civil and industrial use with the largest scale and the most advanced techniques in China. In addition, the Company has an annual output of 266,000 tonnes of functional films, 240,000 tonnes of engineering plastics and 33,000 tonnes of degradable plastics. Meanwhile, 3 production lines of functional films (120,000 tonnes/year) and 4 production lines for modified engineering plastics/PBS (30,000 tonnes/year) are under construction in Yingkou, which are expected to be put into operation successively in the second half of 2021. Projects of 450,000-tonne degradable plastics in Changxing Island of Dalian, and 470,000-tonne high-end functional polyester films, 100,000-tonne special functional films, 150,000-tonne modified PBT, and 80,000-tonne modified PBAT in Fen Lake of Suzhou are under construction.

As the world-class petrochemical and ethylene projects

concerning key production capacity and all categories of scarce chemical raw materials in the upstream have been fully put under operation, and the competitive advantages of the PTA business in the midstream keep expanding and cementing, the Company is accelerating its pace to sustain,

deepen and optimize the “major chemical” platform support and raw material support for high-end advanced material and fine chemical engineering business in the downstream, to continuously extend the value and industrial chain of advanced materials.

## Analysis of Core Competitiveness During Reporting Period

### 1. Leading Strategic Advantage in the Whole Industry Chain Development

The Company is the earliest and fastest leading enterprise in the industry to engage in the whole industrial chain strategic development of polyester advanced materials in China. It is actively promoting collaborated and balanced development of all business segments, vigorously expands high-end production capacity in both upstream and downstream, commits itself to creating a world-class development pattern for a listed platform with collaboration and integration of the whole industrial chain covering “crude oil - aromatic hydrocarbon, alkene - PTA, EG - polyester - PFY for civil use, PFY for industrial use, films, plastics”. The Hengli 20 million tonnes/year petrochemical integration project and the 1.5 million tonnes/year ethylene project are under full production, which marks a strategic breakthrough of the Company on key links in the petrochemical and production chain of aromatic hydrocarbon and alkene, making the Company takes the lead in the industry to actualize integration of the whole industry chain of “crude oil - aromatic hydrocarbon, alkene - PTA, EG - new polyester materials”. In addition, with new projects of PTA, advanced chemical materials, PBS/P-BAT bio-degradable advanced materials, etc., successively being inaugurated and under operation, the Company is gradually upgrading and optimizing its industrial layout, consolidating and expanding its industrial strengths in all links, promoting the quantitative transition of its business scope and qualitative transition of its business structure, to foster strategic superiority of the Company in industrial collaboration and integration, production capacity structure and quality, equipment scale and costs, accumulation of process techniques, speed of project operation and development of the listed platform, in the environment of high-quality competition of the whole industrial chain.

### 2. Comprehensive Operation Superiority in Scale + Techniques + Support

The Company keeps introducing world-class production equipment and mature technique packages for self-learning, absorption and application, and continuously engages in technology and technique innovation and upgrade. It has

been equipped with the high-quality and efficient production capacity structure and public engineering supporting facilities featuring “equipment upsizing, capacity scaling-up, structural integration, technique advancement, greenness and environmental-friendliness, and complete support” in the whole industrial chain of advanced polyester material covering the upstream, midstream and downstream. Its processing scale and technical level which are second to none in the industry in terms of individual unit installation, total production capacity and process techniques, giving the Company scale advantages and operation efficiency in unit investment costs, material and energy consumption conservation, unit processing costs, product delivery circle, product quality and diversification, etc., and ensuring stable and preeminent quality performance. In addition, with the most complete supporting capacity in the industry, including power, energy, port, wharf, tank field, warehouse and logistics, the Company enjoys remarkable superiority in comprehensive operation covering comprehensive cost saving, service quality and performance, operation efficiency, etc. In the industrial park, oil refining, chemical engineering and coal-based chemical processing are complementary to, and mutually reliant on each other, with a balance of high efficiency and cost control. The petrochemical business of the Company is equipped with the largest-scale coal-hydrogen production facility across the country, generating low-cost pure hydrogen, methanol, acetic acid, syngas and other coal-based chemical products, which, together with the Company’s advantages in storage and logistics of raw materials and products, dramatically improves the operational flexibility and comprehensive cost advantage of the project.

### 3. Superiority in Market Competition Driven by Advanced R&D

The Company follows the development path laying equal stress on market differentiation, technology advancement, large-scale equipment, and business integration, upholds the innovation mechanism based on market-technology interconnectivity, creates internationalized R&D teams, sets up high-level platforms for scientific and technological R&D and that for innovation of new products, has the ability

to make quick response to the latest change of market demand, and has stable mid-to-high-level client resources. Four business entities under the Company, i.e., Hengli Chemical Fiber, Deli Chemical Fiber, Hengke Advanced Materials, and Kanghui New Material, are all national high and new tech businesses. Thanks to fine management and upgrading techniques in the production, the Company has independently developed a series of differentiated and functional products based on research, held patents of a large number of products, and won widespread market recognition. It enjoys superiority over peers in quality and stability of products, as the only company in China with the capacity for mass production of 7D FDY products, the company covering more than 65% of the total output of MLCC release liners in China, and the first company in China, as well as the second in the world, with the capacity for on-site production of 12-nanometer silicon-coated release laminated protective films for lithium batteries. The absolute technological superiority and technical experience in the fields of functional films and PFY for civil use have put the Company in an invincible position in an industrial competition that is difficult to replicate in the short run.

#### 4. The Advantages of Smart, Lean and Efficient Management

We are committed to promoting the idea of “deep integration of the Internet, big data, Artificial Intelligence (AI) and the real economy”, by developing advanced manufacturing capacity and regenerating internal driving force. In achieving this goal, we take the “intelligent interconnection” as a key starting point for industrial upgrading and transformation, through “replacing humans with machines”, “replacing

machines with automatic machines”, “replacing one machine with a complete set of machines” and “replacing digitalization with intelligentization”, thus facilitating the gradual transition from “strength in human resources” to “strength in technology” in our development pattern. By means of the integrated application of intelligent manufacturing, the Internet, the Internet of things, and other technologies, we are constantly promoting the level of intelligent manufacturing throughout the entire process. Product traceability and full-process control are realized through a self-developed product detection system, automatic bar code system, intelligent warehouse management system, and sales system, together with the seamless integration with the ERP system, thus promoting the integration of key links such as corporate control, R&D, manufacturing, business management, and financial connection, facilitating the transition from “manufacturing” to “smart manufacturing”, and transforming from single business management to highly-coordinated operation of the industrial chain.

#### 5. Continuously-accumulated Talent Management Advantages

We have formed a multi-disciplinary and multi-profession scientific and technological team, including refining, petrochemical, polymer materials, chemical fiber engineering, textile engineering, electrical engineering, etc. Besides, our scientific research and development capabilities are ahead of our domestic counterparts. While introducing external talents, we also attach great importance to the cultivation of our internal talents at the same time, by providing our employees with a smooth career development channel. In addition, we have also established a complete internal training system and trained a large number of key personnel, covering various aspects, including R&D, production, sales, management, etc.

### Discussion and Analysis of Our Business Performance

In the first half of 2021, “The global epidemic still continues to evolve and the external environment becomes more complex and severe.” Under the context of globally normalized epidemic prevention and control, the world economy is slowly bottoming out and recovering amid the repeated twists and turns of the epidemic, the intensification of conflicts among major powers, and the restructuring of international supply and demand. With the continuation of various stimulus policies, the world economy has witnessed a shortage economy in which a certain degree of demand grows faster than the supply recovery. However, the ongoing evolution of the current overseas epidemic situation has undoubtedly increased the uncertainty of the global economic growth, which may also make it difficult for countries to withdraw from targeted policies such as mone-

tary easing and economic stimulus in the short term. At the same time, the global gap in vaccine supply is intensifying the divergence between regulatory effectiveness and economic development. Globally, major developed economies and some emerging countries and regions are working hard to accelerate the pace of COVID-19 vaccine R&D and vaccination coverage, in an aim to win the tough fight against virus mutations. Looking forward to the second half of the year, from the perspective of the international environment, it is expected that the production and consumption demand in major global markets will still remain in the status of gradual recovery and improvement under the accelerated popularization of vaccines and the stalemate situation of the epidemic control. Coupled with the impetus of the acceleration of global material consumption demand stimulation and

the repeated reflux of overseas trade orders, enterprises in the industry are facing interference factors, including the repeated external epidemic and complex trade environment. However, based on the expectation and foundation for the overall improvement of global consumer demand and efficient and stable domestic production capacity supply, the enterprises in the industry are expected to maintain a sound momentum of business development in the second half of the year.

Domestically, in 2020 and the first half of 2021, the targeted and efficient approach in epidemic prevention and control adopted by China has minimized the negative impact of the epidemic on the macroeconomy both at home and abroad, thus the quality and level of domestic economic growth have always maintained at the forefront among the world's major economies. The steady growth of household consumption and the policy of "filling in the gaps in foreign demands" continue to play a prominent role as the "ballast" and "lubricant" of the economic growth. After realizing dynamic and effective epidemic control in China, domestic consumption has stabilized rapidly and turned for the better, and the policy of "tapping the potential of the domestic market" continues to be implemented, all of which has become the leading factor and driving force in boosting the domestic cycle and offsetting the external fluctuations. Based on and promoted by the huge growth of domestic consumption and the upgrading of consumption structure, and with the accelerated upgrading of China's economic structure toward a new economy, new driving forces, new manufacturing, and green, low-carbon, energy-efficient, and environment-friendly production and consumption, the high-end manufacturing and high-tech integration of the industrial chain composed of the scientific and technological innovative industrial entities including the new energy, 5G, photoelectric chips, integrated circuits, biotechnology, industrial Internet and artificial intelligence will usher in strong growth in terms of consumption resilience and innovation vitality. "New consumption" and "cutting-edge technology" are interacting with each other and moving towards further development with great momentum in obvious trends, which will also outline the strategic direction for the future of the industry in terms of advanced production capacity layout and application scenario extension based on advanced materials.

Looking back at the industry, against the backdrop of globally normalized epidemic prevention, businesses are not only faced with unexpected risks and challenges, but are also taking initiatives to turn risks into opportunities, and has achieved stable operation and smooth production and marketing based on a stable and efficient supply of industrial chain products and market stability and flexibility. In the first half of this year, from the perspective of the overall internal and external environment, the industry has benefited from the increase of the international crude oil price and terminal

consumption recovery driven by steady domestic economic growth. With the recovery of external demands and repeated reflux of international orders due to vulnerable supply capacity resulted from the epidemic, the prices and price differentials of main chemical products produced by upstream refining, coal-gasification, and ethylene plants, such as PX, pure benzene, acetic acid, polypropylene, ethylene glycol, styrene, polyethylene, butadiene, etc., have generally maintained and kept fluctuating within a strong range, thus leading to stable profitability. Similar to upstream enterprises, downstream new chemical material products also benefited from the increase of raw material costs and terminal demands recovery, the profitability of polyester yarn for civil use and polyester yarn for industrial use is rapidly returning to normal, and functional thin films, engineering plastics, biodegradable materials, and other under-supply materials have maintained higher prices and greater profitability. In the face of the turbulent external environment, the integrated operation of industrial chain with high value-added and diverse products and combined supply of products will be better prepared against an oil price decline and will show stronger profitability resilience when oil prices rise and demands restore, which will stabilize and boost business profitability to the maximum extent.

In addition to the impacts brought by the above-mentioned factors, including crude oil and raw materials costs and evolving traditional stock demands, it should be highly noticed that the demand and structure of advanced material chemical products, serving as an important pole of advanced materials, will benefit from and be boosted by new consumption and cutting-edge technology at an exponential speed after entering the "14th Five-Year Plan" period. And it is expected to develop and create more high value-added advanced-material consumption and technology products with large capacity within a foreseeable time based on local chemical advanced-material supply system, such as new biodegradable materials in the field of green consumption, semiconductor and optical film, and functional membrane in the field of consumer electronics, lithium separator, battery-grade DMC and PVDF materials in the field of new energy power battery, EVA and POE film in the field of photovoltaic module, PBT, ABS, PC engineering plastics in the field of new energy vehicle lightweight and charging pile. The new market and new demands in the advanced material industry can achieve rapid growth with the explosively growing demand of "new consumption" and "new manufacturing" in the downstream. The potentially visible blue ocean market will also become the strategic commanding heights for leading enterprises in the industry in future development, especially the high-end advanced material chemical import substitution market which has been hampered by many bottlenecks. At the same time, the "carbon peak and carbon neutrality" goal has also become important guidance and priority direction for enterprise business development. This

goal includes not only accelerating the structural changes adapted to the residents' consumer demand for low-carbon and environmental protection, but also involves meeting the material needs of the national industrial green transformation and upgrading, as well as the optimization and adjustment of the operation of the industry itself under the "double-carbon" mode. These will promote the industry enterprises to actively transform from "energy + chemical industry" to "platform-based + advanced materials", and from "scale economy-led" to a "green cycle-driven" business operation model.

It can be said that advanced materials, as the "foundation" of the manufacturing industry development, are of major strategic significance for promoting technological innovation, breaking through the "bottleneck" technology and supply chain blockade, maintaining the independent controllability of the industrial chain, and supporting high-quality development. Looking forward to the "14th Five-Year Plan", the global advanced chemical material consumption industry, especially this industry in China has enjoyed a extremely broad market and development potential. On the one hand, unlike other material industries, the core demand and ultimate driving force of advanced chemical material links are seeking a more rigid and engaging residential terminal consumption field. During the "13th Five-Year Plan" period, the supply-side reform of the petrochemical industry in China has achieved significant results, the systematic optimization of the supply structure and the significant downward shift of the cost curve have greatly promoted the improvement of the quality and its category as well as the efficiency and cost of the range economy. Facing the "new consumption" area, the continuous upgrading of the supply structure and the continuous improvement of the additional consumption is implemented to drive the expansion of the social demand value and the total capacity. In this way, it has become the theme of new supply and demand trends adapting to high technology, high added value, low carbon environmental protection, and individualized customization, and promote the market research and development of modification and application in advanced chemical materials for new consumption scenes in the future. On the other hand, as the global industrial sectors in new energy, semiconductors, 5G, intelligentization, and other new technologies and new manufacturing production scenarios accelerate their transfer to China or take China as the core market for further development, the development momentum and scale capacity of the high-end fine chemicals and advanced chemical materials market for industrial manufacturing are also expected to continue to increase and expand along with the acceleration of the implementation of "carbon peak and carbon neutrality", industrial upgrading, infrastructure transformation and changes in the consumption structure. In this sense, driven by scientific and technological innovation and technological R&D, the industrial application

market of differentiated, functional, and high-end advanced chemical materials will make a great difference.

Back to the enterprise level, during the 13th Five-Year Plan period, the main logic and driving force of our development were to base on the expansion and strengthening of downstream polyester advanced materials for a vertical and integrated breakthrough "from the bottom to the up" to break the monopoly and "bottleneck" of overseas production capacity on upstream raw materials like aromatics and olefins, and upgrade to a platform of "major chemical" with refining, chemical and coal as industrial carriers and to the upstream fields of strategic scarcity. Eventually, we have realized the comprehensive improvement in key production capacity of the industry, process equipment, equipment intelligence, and the integrated cooperation of industry. Entering the new period of the "14th Five-Year Plan", with the upstream breakthrough, the leading enterprises have greater operating content, development space and growth possibility under the operation mode which allows in-depth coordination and complementary operation between the platform of "major chemical" and the extension of advanced materials throughout the whole industry chain. Meanwhile, faced with the exponential growth and huge gap in the demand for advanced chemical materials caused by the rapid development of "new consumption" and "Key&Core Technology" in the future, we should make full use of the continuous empowerment of the "major chemical" platform upstream and the accumulated development of advanced materials downstream for the "top - bottom" development of the new markets of downstream chemical materials, which will become the historical mission and core driving force for the development of industrial enterprises in the next five or even ten years, and is expected to promote leading enterprises' chemical-materials-based building of industrial chain and the improvement of scarce production capacity, so as to serve the country in upgrading advanced manufacturing and consumption, to achieve an explosive breakthrough and a "secondary growth curve" of long-term development under the effect of core technology, manufacturing technology and large-scale overwhelmingness.

"The advanced materials industry is not only a strategic and basic industry but also a key area of high-tech competition. We must work hard to catch up." Undergoing profound changes unseen in a century, "scientific and technological self-reliance and self-improvement" has become the subject of the times, calling for great breakthroughs and great development of sci-tech innovative enterprises. Hengli Petrochemical is a private advanced materials enterprise that has fought and honed all the way from downstream despite the fierce market competition. Beginning with the downstream polyester advanced materials industry, Hengli climbed vertically along the petrochemical industry chain and broke through the upstream development bottleneck one after another to acquire a systematic industrial pattern of both

“major chemical” platform and “advanced materials extension”. When dealing with the reform and upgrading of consumption structure and industrial system, Hengli also has a more unique and comprehensive advantage of platform integration and industry-driven ability. After strategically completing the key production capacity in the last round of “major chemical” platform, the listed company took advantage of the further optimization and consolidation of the production capacity in the midstream and downstream. Now, entering the new development period of the “14th Five-Year Plan”, with questions like how to rely on the advantages of the upstream platform to deeply tap the potential of advanced materials, how to further expand the leading advantage of the competitiveness in the whole industry chain, how to further enhance the benefits of large-scale integration and the added value of product technology, as well as how to further deepen and broaden the strong moat built by technology, cost, management, efficiency and innovation, the strategic choice of “improving the upstream while strengthening the downstream” has become inevitable.

On the one hand, by expanding and improving the industrial layout in the midstream and upstream, we will further use the industrial support and basic role played by the high-end chemical raw materials to actively “complement and strengthen the chain” with “R&D innovation”, while constantly guarantee the platform function and operation efficiency of the “major chemical” industry upstream to reserve space and pave a path for the continuous expansion of various advanced materials business downstream in the future. On

the other hand, through refinement and strengthening the downstream, we focus on specific technological R&D lines with more unique skills, leading products, and professional fields, so as to achieve efficient penetration and deep connection from raw materials to processes, and to the market. Aiming at the new application direction and new market of polyester and polyester-like products downstream of aromatics, as well as fine chemicals and special advanced materials downstream of olefins, so as to consolidate the advantages of the traditional market. At the same time, we should focus on the key advanced materials and fields that have breakthroughs due to the development and upgrading of “new consumption” and “Key&Core Technology”, and “look for opportunities and driving forces for development from green development”. We will actively embrace and help our country in its goal of peaking carbon dioxide emissions and achieving carbon neutrality and adhere to the path of “participating in the industries we understand, developing the industries we are familiar with, and keeping growing strong, bigger, and better in the professional field.” Through active measures including external introduction, joint R&D, joint venture and cooperation, and internal innovation, we will continue to develop advanced materials business growth points with advantages of scale and leading levels, so as to ensure that every project and industry developed by Hengli should become a global benchmark and the best of the industry, and ensure that we will not lag behind in the next decade or more. with our continuous pace towards an enterprise with the world-class platform of advanced chemical materials R&D and manufacturing.

## During the reporting period, the key tasks of listed companies are as follows:

First, continuously strengthening the support and development function of the upstream “major chemical” platform with “refining + ethylene + coalification” as the carrier to make full use of the advantages of systematic coupling and complete raw material resources produced by the integration of oil, coal, and chemical, while speeding up the construction of advanced materials supporting projects for Hengli, as well as the planning and improvement of the deep processing and radiation capacity of advanced materials in the C2-C4 olefin industry chain.

### 1. The current development of the upstream “major chemical” platform:

since 2010, through forward-looking plans and high standards, we have worked hard for ten years to increase our strength. In Dalian Changxing Island Petrochemical Industrial Park, one of the top seven petrochemical industrial parks in China, we have concentrated and efficiently built four major

capacity clusters: refining and chemical integration project at a capacity of 20 million tonnes/year, modern coal chemical plant at a capacity of 5 million tonnes/year, world's largest single ethylene project at a capacity of 1.5 million tonnes/year, and 5 sets of industry's largest single PTA plant with a total capacity of 11.6 million tonnes/year. In this way, we have successfully broken through the “bottleneck” in business links and raw material supply in the upstream and formed a strategic support platform of “major chemical” with a combination of “world-class chemical refineries + modern coal chemical plants” and integration of oil, coal, and chemical. Meanwhile, as the listed companies have 100% wholly-owned shares in both Hengli Refining and Hengli Chemical, our refining and chemical integration project is the only self-built private wholly-owned project in the industry. Owning 100% of the equity and production capacity guarantees that the profits of our refining, ethylene, and coal chemical businesses and the output of important chemical raw materials can all be owned by listed companies and

shareholders. This effectively ensures the profitability of listed companies and the ability to control the upstream “major chemical” development platform.

At present, the business plate of listed companies in the midstream and upstream has been built with a processing capacity of 20 million tonnes of crude oil and 5 million tonnes of raw coal. The main production is: in the aromatics process, an annual output of 4.5 million tonnes of PX, 1.2 million tonnes of pure benzene, and 16.6 million tonnes of PTA (of which 5 million tonnes come from the Huizhou base which is under construction); in the olefin process, annual production of 1.8 million tonnes of fiber-grade ethylene glycol, 850,000 tonnes of polypropylene, 720,000 tonnes of styrene, 400,000 tonnes of high-density polyethylene and 140,000 tonnes of butadiene; and in the coal chemical process, an annual output of 750,000 tonnes of methanol, 400,000 tonnes of acetic acid, 300,000 tonnes of pure hydrogen and 126,000 tonnes of liquid nitrogen. We have reserved and transported high-end chemicals that are high value-added and domestically scarce, as well as midstream and upstream raw materials and additional gases to the

advanced materials industry chains downstream. At the same time, we were fully equipped with the industry’s top 520MW high-power self-provided power plant (providing a large amount of low-cost electricity and steam for self-use), self-provided crude oil terminal (2 terminals at a handling capacity of 300,000 tonnes), the country’s largest refinery self-provided crude oil tank area (storage capacity of 6 million-tonne crude oil), and other utilities including finished raw material terminal and tank area storage, which greatly reduces the production and operation costs. The refining and chemical plant, coal chemical plant, ethylene plant, and PTA plant in Changxing Island base are all connected through the pipeline, which saves a lot of intermediate costs and transportation costs, forming a business strategic layout of the world-class petrochemical industry development platform, and a combination of matching integrated capacity and top-equipped utility. This also lays a solid foundation of raw materials and industrial supporting conditions for us to further develop the advanced chemical materials business downstream of aromatics and olefins with scale advantages and market potential.



## 2. Speeding up the construction of Hengli Chemical’s advanced materials supporting projects:

we have started the construction of the advanced materials supporting project of Hengli Chemical in Dalian Changxing Island with a total investment of 2.31 billion yuan. Reducing the investment cost through sharing the utilities in the refining and chemical park, we used pure benzene, hydrogen, nitrogen, and carbon dioxide produced by our refining, ethylene, and coal chemical plants as the main raw materials to produce products like adipic acid and food-grade carbon

dioxide. The core product of this project is the annual production capacity of 300,000 tonnes of adipic acid, which will further smooth out and improve our whole industry chain of degradable advanced materials of “crude oil - PTA, adipic acid - PBAT”. Adipic acid is also an important raw material for the production of nylon 66. We will also purify the carbon dioxide exhaust gas of concentration higher than 95% emitted by low-temperature methanol washing equipment to 99.99% food grade. This not only recovers carbon dioxide, an industrial waste gas but also increases our benefits. This advanced material supporting project makes full use of the raw material resources provided by the upstream to further add and optimize the raw material supply structure of the

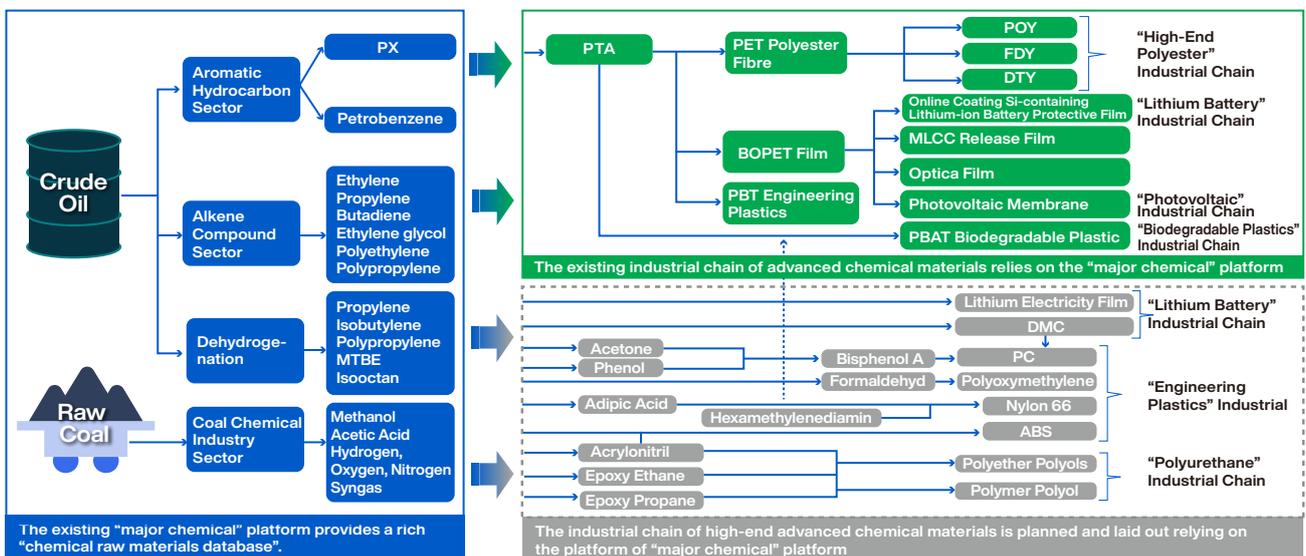
“major chemical” platform, enhancing our products’ output value and added value. The project also further improves our whole industry chain business system. This project marks a substantial and important step for listed companies towards refining and chemical industry, fine chemicals downstream of olefins, and deep processing of advanced materials industry.

### 3. Improving the C2 - C4 deep processing chain:

in addition to the PX, benzene, and part of polypropylene produced from improved processes and hybrid dehydrogenation facility, the company’s production of the main upper stream raw materials and production output were from the 1.5 million-tonne ethylene pipeline. The ethylene processing cluster includes a 1.5 million tonnes/year steam cracker, a 400,000 tonnes/year high-density polyethylene (HDPE) plant, 2 200,000 tonnes/year polypropylene (PP) plants, a 720,000 tonnes/year styrene monomer (SM) plant, 2 900,000 tonnes/year ethylene glycol (EG) plants, a 140,000 tonnes/year butadiene extraction unit, a 350,000 tonnes/year pyrolysis gasoline hydrogenation unit and a 170,000 tonnes/year C4 hydrogenation plant. These facilities were built with equipment from the world’s top three suppliers, with some of the industry’s best unit investment costs and processing and operating costs. The steam cracker plant uses the pipeline from Technip S&W, the EG plant adopted technology from SD, the HDPE uses the Lyondell Basel (Germany) process, and Badger provides the SM facility technology. The technology providers are either global leaders or newcomers with significant catch-up potential. Over 98% of raw materials related to the ethylene unit were supplied by the upstream refining and chemical plant, full use of the diversified high-quality ethylene provided by the refinery through dry gaseous ethane cracking, LPG cracking, and precision naphtha cracking. The designed yield of diene is 48% and diene 60%. These yields are the highest

in the current domestic storage facilities, resulting from Hengli fully taking advantage of its integrated large-scale one-stop chemical processing production process.

Hengli’s ethylene downstream is currently dominated by bulk chemical raw material products, such as polypropylene, polyethylene, ethylene glycol, styrene monomer, and butadiene, providing the potential and the industrial basis for more diverse downstream chemicals production and the advancements of advanced chemical materials and products. The newly-built Hengli Advanced Materials Project with an annual output of 300,000 tonnes of adipic acid is another practical deployment to build the “major chemical” platform. Moving forward, Hengli will continue to rely on its existing raw material processing assets, outsourced resources, and equipment optimization potentials while emphasizing our advanced material businesses which have shown scaling advantages and leadership positions in the industry. Our target will be the key advanced materials focusing on developing and upgrading “new consumption” and “cutting-edge technology”. The plan is to permeate the high-growth and high-potential advanced material verticals such as the degradable advanced materials, lithium-ion batteries, photovoltaics, and new engineering plastics. We will continue to upgrade our systems and carry out the technical transformation, process optimization, and advanced processing equipment construction to improve our C2 - C4 ethylene line, including downstream polystyrene (PS) production capacity of SM, acrylonitrile production capacity downstream of PP, ABS capacity through styrene monomer and butadiene, downstream battery-grade dimethyl carbonate (DMC), phenol, acetone, and bisphenol A production capacity of propylene, ethylene oxide, methanol and benzene, and further downstream polycarbonate (PC) capacity, as well as the capacity of polyether polyol (EO/PO polyether) production. The “major chemical” platform will continuously invigorate and support the downstream advanced material industry chain through these strategies.



Second, Hengli continues to expand, deepen and refine its downstream advanced chemical material business with the support of the upstream “major chemical” platform and Hengli’s “innovative R&D Gene”, which provides the group with the necessary speed and efficiency. At the same time, we continue to improve the R&D wing of the company’s downstream sectors and carried out horizontal expansions into new technologies, new processes, and new products leveraging existing similar productions. For Hengli, the current downstream advanced material sector is mainly distributed in high R&D businesses such as differentiated polyester fibers, functional polymer thins, engineering plastics, and PBS/PBAT biodegradable advanced materials. With its upstream platform and downstream stock, Hengli targets the ever-growing demands in the advanced consumption and technological material markets, showing great potential for scaled production and high-end differentiation. Hengli is bringing its existing rapid and efficient processes and product development models into the advanced material vertices to permeate these markets. To this end, we have already established three major materials research institutes: the Fiber Research Institute, Petrochemical Research Institute, and Advanced Materials Research Institute, dedicated to the R&D and the business expansion of our advanced chemical materials products.

## 1. The differential polyester fiber sector:

Our subsidiary companies Hengli Chemical Fiber, Deli Chemical Fiber, and Hengke Advanced Materials, are the main producers of our polyester fiber business (home-use PET fiber and industrial PET fiber). These subsidiaries are national high-tech companies with solid technical support, rich talent pools, and market reserves. The Hengke is currently building a phase II textile yarn project with a 1.35 million tonne capacity. A 600,000 tonne PET Resin facility was added to the project in the second half of last year, and its downstream fiber spinning facility was completed in the first half of this year, increasing 250,000 tonnes of DTY capacity and 350,000 tonnes of POY capacity.



At the same time, the Hengke started construction on the new Jiangsu Xuanda Green Multifunctional Advanced Textile Materials Project (Hengke Phase III) with a capacity of 1.5 million tonnes. Located in Nantong, Jiangsu, the project accrued a total investment of 9 billion yuan. Main project capacity includes 150,000 tonnes of new elastic fibers, 150,000 tonnes of environment-friendly fiber, 300,000 tonnes of cationic POY, 300,000 tonnes of full-dull POY, and 600,000 tonnes of differential fiber (300,000 tonnes/year POY, 300,000 tonnes/year FDY). After completed, the project will bring more advanced technology and added value to our home-use business arsenal, further enhancing our listed subsidiary’s presence. In addition, the new production capacity of 1.2 million tonnes of textile yarns in Deli Phase II and 1.4 million tonnes of industrial yarns in the Suzhou headquarters are also in their planning phase and will start construction pending government approval and other related preparatory conditions.

In polyester yarn for civil use and for industrial use, Hengli is currently the only Chinese producer that can mass-produce FDY products of 7D or below. In the R&D of microfiber, the company has been at the forefront of the industry. During this reporting period, Deli Chemical Fiber began mass production of ultrafine 0.2 denier (D) monofilament with the specification of 15D/72f, ranking it one of the finest mass-produced ultrafine fibers in China. The high-density fabric ultrafine fiber 5D/6f independently developed by the Hengke Advanced Materials has China’s smallest total linear density suited for the IT industry, such as mobile circuit boards and electromagnetic waves shielding fabrics. Hengli Chemical Fiber’s 200,000 tonnes/year industrial fiber project demonstrates that Hengli’s research transformed into major high-tech production. The project has been put into full production, for the first time, allowing specialized downstream industry, such as oil and gas exploration and offshore engineering, to use domestically produced fibers, effectively breaking the industry technology monopoly and the “choke-hold” of key technologies in high-performance industrial yarn



## 2. The functional polyester films and engineering plastics sectors:

The company's wholly-owned subsidiary, Kanghui New Material, is the main producer of differentiated and high-performance polyester films with environment-friendly nature and new plastic materials of the group and a national high-tech enterprise. Through nearly a decade's research and rapid development, Kanghui has improved its industrial competitiveness in mid-to-high-end functional polyester films and advanced plastic materials and is now ranked among China's first-class level. At present, Kanghui has an annual production capacity of 240,000 tonnes in PBT engineering plastics at its Yingkou Base, making it the largest PBT manufacturer in China. Its PBT is mainly used for auto parts, polymer alloys, optical cable protective sleeves, electronic appliances, and other industrial applications. It has a capacity of 266,000 tonnes of BOPET functional polyester films, and it is committed to fulfilling functions such as electronic and electrical film substrates, environment-friendly new energy substrates, and precision inline coating products. Kanghui plans to launch three film production lines into operation by the end of this year, which will increase its capacity to 385,000 tonnes. Kanghui has the largest domestic PBAT annual production capacity of 33,000 tonnes by single set, devel-

oped using independent IP, and was put into operation at the end of last year, reaching full production early this year. The PBAT production is recyclable, easily recoverable, non-toxic, and highly stable, and is suitable for the application to fill the supply gap in domestically produced degradable food-grade products.

Kanghui's presence covers the industrial chain and employs a highly professional R&D team, aiding the company to overcome various technical challenges. From the perspective of market segmentation, Kanghui has become the largest domestic manufacturer of mid-to-high-end MLCC release base film, with a domestic market share of over 65%. It has broken foreign monopoly and filled the gap in the market. Its products have been exported to Japan, South Korea, and other high-end overseas markets. Kanghui's high-smooth MLCC release base film has been mass-produced, and the ultra-smooth MLCC release base film process has been finalized. Kanghui has also received certification from Japanese and South Korean authorities, and small batch production has begun. The ultra-smooth MLCC release base film has passed the technical verification of Japanese and South Korean authorities and will reach mass production quickly. Additionally, Kanghui is the only company in China and the second in the world achieving inline production of the 12 $\mu$ m silicon-coated release laminated aluminum film for lithium batteries.



In addition to the Yingkou base, Kanghui New Materials is speeding up its overall design and construction of the Fenhu base and Kunshan base in Suzhou, Jiangsu Province. Once the above two bases are fully put into production, it is equivalent to the capacity of two upgraded Kanghui. The company will also become the world's largest production base for functional polyester films, functional plastics, and biodegradable advanced materials. In response to the rapid growth of domestic environment-friendly consumption and advanced manufacturing market for functional polyester films, Kanghui and the German Brückner Group lately signed a contract to together build 24 of the most advanced functional polymer thin film production lines with an annual output of more than 800,000 tonnes in the Fenhu and Kunshan bases respectively; Kanghui also signed contracts with Barmag Huitong and SUMEC Juyou to build plants capable of producing 900,000 tonnes of biodegradable plastics, which will be constructed in the Changxing Island and Yingkou bases; and Kanghui invested greatly in the R&D of PBT/PET/PBAT plastics modification, and began to build four pilot modification production lines to strengthen further the R&D capabilities of material modification based on the masterbatch, base film, and Steel Sections.

At present, Hengli has launched a 450,000-tonne PBS biodegradable plastic project of Kanghui Dalian New Material following previous overall corporation production capacity plans. The project is built on Changxing Island, Dalian. With a total investment of 1.798 billion yuan, the project features 450,000 tonnes of PBS/PBAT degradable advanced material capacity. The project will expand the capacity and scale of the company's biodegradable advanced material sector and increase the market share of biodegradable plastics. In addition, under the "carbon peak and carbon neutrality" goal, new energy materials will be an important part of the extended industrial chain. The company is exploring the demand-depth of the alternative energy sector for advanced chemical materials. It has already rapidly deployed the Lithium-ion battery separator film business based on the strategic support of its chemical platform and years of accumulation in the downstream high-end membrane market. The company is currently preparing to construct new Lithium-ion battery separator films, including separator films equipment purchase negotiations and core talent recruitment. The goal is to proceed with the highly efficient "Hengli speed".

The company also started constructing the Jiangsu Kanghui New Material Project with an annual output of 800,000 tonnes of functional polyester thin films and functional engineering plastics. The construction site Fenhu of Jiangsu is in the Yangtze River Delta Eco-Green Integrated Development Demonstration Zone. The total investment is 11.12 billion yuan. The construction includes 470,000

tonnes of high-end functional polyester film, 100,000 tonnes of special available polyester films, 150,000 tonnes of modified PBT, and 80,000 tonnes of modified PBAT.

For the 470,000 tonnes of high-end functional polyester film, thickness specifications span 2um to 350um, and is suited for general use in electronic and electrical equipment (125,000 tonnes), products include electrical insulation film, release film, inline silicone coated release film, capacitor film, electronic tape Film and switch film; optical materials (76,000 tonnes), including products of film for X-ray, OCA release base film, AB adhesive main film, reflective film, diffusion film, brightness enhancement film, hardened film, explosion-proof film, polarizing film, flat-panel display protective film, and optical adhesive/sticker/hot melt adhesive protective film.; information technology (76,000 tonnes), including products of electronic shelf label film, ceramic capacitor film, ITO film, high integrated circuit board photosensitive dry film, and antistatic film.; new decoration (82,000 tonnes), including products of bronzing transfer film, laser film, reflective film, gold wire drawing film, steel film, matte film, and colored film.; new energy vehicles (41,000 tonnes), including products of lithium battery protective film, glass window film, and anti-fog film.; packaging materials (70,000 tonnes), including products of aluminized film, aluminized reinforced film, printed packaging film, reinforced film, transparent vapor deposition film, twist wrap film, heat shrinkable film, card protection film, medicine coating film, and TTR film.

The 100,000-tonne special functional polyester films use offline coating technology to modify the surface of the base film to introduce special functions. The products mainly include functional polyester film, temperature-resistant lithium battery separator film, and photovoltaic backsheet film. The 150,000-tonne modified PBT is mainly used in the automobile manufacturing field, including carburetor components, distributors, ignitor coil frames, insulating covers, bumpers, instrument panels, and clutch pedals; electronic and electrical field, including connectors, transformer frames, household appliances, and energy-saving lamps; industrial machinery field, including transmission gears, mechanical parts, shaft sleeves, motor end covers, and outdoor fitness equipment. The 80,000 tonnes of modified PBAT is made from self-produced PBAT resin, natural starch, and calcium carbonate through proprietary starch plasticization technology, inorganic powder dispersion treatment, and customized blending and melting twin-screw extrusion line modification. It is mainly used in biodegradable plastic bags, biodegradable glue, biodegradable melt-blown materials, 3D printing consumables, cigarette pack materials, foam materials, biodegradable agricultural films, and other fields.

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

## 1. Main Business Analysis

### Changes of Accounts from Financial Statements

Unit: 10,000 yuan Currency: CNY

Account Item	Amount for the reporting period	Amount for the same period of the previous year	Flux (%)
Revenue	10,457,447.80	6,735,793.52	55.25
Cost of sales	8,860,615.70	5,425,672.64	63.31
Selling expenses	11,215.58	54,258.71	-79.33
Administrative expenses	92,987.70	87,069.26	6.80
Financial expenses	285,675.24	282,004.12	1.30
R&D expenses	42,300.52	37,909.88	11.58
Net cash flow from operating activities	1,618,009.23	1,819,232.26	--11.06
Net cash flow from investing activities	-573,639.45	-2,048,216.71	N/A
Net cash flow from financing activities	-870,173.24	639,647.14	-236.04

#### Explanation of the reasons for changes in revenue:

revenue increase was primarily due to target output reached by the 1.5 million-tonne ethylene project and 2\*2.5 million-tonne PTA project of Hengli Petrochemical in the middle and the second half of 2020

#### Explanation of the reasons for changes in cost of sales:

the increase was primarily due to the comparable increase in revenue

#### Explanation of the reasons for changes in selling expenses:

the change was primarily due to the accounting transfer of transportation expenses into cost of sales

#### Explanation of the reasons for changes in administrative expenses:

no big changes compared with the same period of last year

#### Explanation of the reasons for changes in financial expenses:

the change was primarily due to increase in interest expenses

#### Explanation of the reasons for changes in R&D expenses:

the change was primarily due to the Company's increasing investments in R&D

#### Explanation of the reasons for changes in net cash flow from operating activities:

value-added tax, consumption tax and corporate income tax all increased during the reporting period due to increase in revenue; other cash paid relating to operating activities also increased

#### Explanation of the reasons for changes in net cash flow from investing activities:

cash paid to acquire long-term assets decreased significantly during the reporting period

#### Explanation of the reasons for changes in net cash flow from financing activities:

cash repayment of debts increased significantly during the reporting period

## 2. Assets and Liabilities Analysis

### Asset and Liabilities

Unit: yuan

Account Item	Amount at the end of the reporting period	Percentage of amount at the end of the reporting period in total assets in the reporting period (%)	Amount at the end of the same period of the previous year	Percentage of percentage of Amount at the end of the same period of last year in total assets in the same period of last year (%)	Flux (%)	Explanations
Accounts receivable	416,922,134.69	0.21	1,363,602,415.10	0.71	-69.42	Primarily due to decreasing accounts receivable balance from customers with high credit rating by the end of the reporting period
Inventories	26,547,232,372.12	13.21	19,691,123,430.81	10.31	34.82	Primarily due to increasing raw materials and finished goods at the end of the reporting period to address increasing sales during the reporting period
Construction in progress	6,145,331,822.15	3.06	4,195,710,084.65	2.20	46.47	Primarily due to the new auxiliary building project of Hengli Refining
Right-of-use asset	728,965,845.32	0.36				According to the newly implemented lease accounting standards, the new account of right-of-use asset is used to recognize the original price of the right-of-use assets held by the lessee
Contract liabilities	8,695,979,681.75	4.33	5,401,458,679.01	2.83	60.99	Primarily due to increase in revenues received in advance
Lease liabilities	89,789,811.14	0.04		0.00		According to the newly implemented lease accounting standards, the new account of lease liabilities is used to recognize the amount of lease payments outstanding from the lessee
Margin receivable	377,707,343.81	0.19		0.00		Primarily due to the new futures brokerage business during the reporting period
Trading financial assets	685,929,126.58	0.34	1,650,130,008.46	0.86	-58.43	Primarily due to decreases in bank wealth management products and structural deposits held by the end of the reporting period

Settlement guarantee fund receivable	10,050,136.79	0.01		0.00		Primarily due to new futures related business during the reporting period
Advance payment	3,591,094,480.71	1.79	1,994,374,678.13	1.04	80.06	Primarily due to increases in advance payment for material purchases by the end of the reporting period
Other receivables	1,287,875,315.02	0.64	803,130,210.03	0.42	60.36	Primarily due to increases in futures margin by the end of the reporting period
Goodwill	79,830,909.39	0.04		0.00		Due to goodwill by premiums paid to acquire Hengli Futures
Deferred income tax assets	178,101,446.15	0.09	109,496,755.14	0.06	62.65	Primarily due to increases in deductible temporary differences by the end of the reporting period
Margin payable	519,032,545.13	0.26		0.00		Due to the new futures brokerage business during the reporting period
Trading financial liabilities	329,312,832.40	0.16	88,999,293.44	0.05	270.02	Primarily due to increases in losses from crude oil futures contracts held by the end of the reporting period
Notes payable	11,376,562,617.86	5.66	7,805,074,070.85	4.09	45.76	Primarily due to increases in letters of credit issued by the end of the reporting period
Other payables	8,176,832,270.88	4.07	416,688,235.50	0.22	1,862.34	Hengli Group issued exchangeable corporate bonds; the Company borrowed funds raised from the issuance from Hengli Group to repay interest-bearing debts; this was in line with the use purpose of the funds raised
Other current liabilities	1,112,797,638.72	0.55	719,118,891.93	0.38	54.74	Primarily due to increases in pending output tax by the end of the reporting period
Long-term payable	4,000,000.00	0.00	123,322,260.33	0.06	-96.76	According to the newly implemented lease accounting standards, outstanding lease payments from the lessee are recognized in the lease liabilities account
Deferred income tax liabilities	2,356,307.17	0.00	9,240,902.12	0.00	-74.50	Primarily due to decreases in taxable temporary differences by the end of the reporting period
Other comprehensive income	-174,801,353.83	-0.09	-100,823,962.53	-0.05	N/A	Primarily due to cash flow hedging reserve after the settlement of the hedging business in the beginning of the reporting period
Special reserve	50,131,635.93	0.02	77,581,307.23	0.04	-35.38	Primarily due to increases in costs of safety production during the reporting period

### Asset size

Of which: overseas asset 1,111,627.66 (Unit: 10,000 yuan Currency: RMB), accounting for 5.53% of the total assets.

### 3. Assets with restrictions by the end of the reporting period

Item	Closing Book Value (yuan)	Reasons for Restrictions
Cash and cash equivalent	5,812,604,555.57	The Company pledged cash and cash equivalent in order to obtain line of credit from financial institutions
Cash and cash equivalent	186,380,794.90	The Company pledged cash and cash equivalent in order to develop futures business
Cash and cash equivalent	19,938,262.80	The Company pledged cash and cash equivalent in order to invest in derivative financial instruments
Accounts receivable financing	706,815,436.22	The Company pledged notes receivable in order to obtain line of credit from financial institutions
Fixed assets	93,427,684,296.261	The Company mortgaged fixed assets in order to obtain line of credit from financial institutions
Right-of-use assets	666,726,906.13	Fixed assets obtained by the Company through lease
Intangible assets	3,544,743,915.42	The Company mortgaged intangible assets in order to obtain line of credit from financial institutions
Construction in process	224,866,998.61	The Company mortgaged construction in process in order to obtain line of credit from financial institutions

### 4. Investment Status Analysis

#### General Analysis on Foreign Equity Investment

##### (1) Significant Non-equity Investment

During the reporting period, major projects invested by the Company are as follows:

1.The 1.5 million-tonne per year green multifunctional textile advanced materials project of Jiangsu Xuanda Polymer Materials Co., Ltd.

Total investment reached 9,000 million yuan. The project is located in the Hengli Textile Advanced Materials Industrial Park in the New Binjiang Area (Wujie County), Tongzhou District, Nantong City with a construction period of 2 years. According to the feasibility study report, the project is expected to realize annual revenue of approximately 18,618.87 million yuan with an annual net profit of approximately 1,300.27 million yuan after it reaches the target output.

2.The PBS biodegradable plastics project with 450,000-tonne annual output of Kanghui Dalian New Material Technology Co., Ltd.

Total investment reached 1,798.21 million yuan. The project is located in the western Industrial Zone of Dalian Changxing Island Economic and Technological Development Zone with a construction period of 1 year. According to the feasibility study report, the project is expected to realize annual revenue of approximately 10,058.18 million yuan with an annual net profit of approximately 2,016.4 million yuan after it reaches the target output.

3.The functional polyester film and functional plastics project with 800,000-tonne annual output of Jiangsu Kanghui New Material Technology Co., Ltd.

Total investment reached 11,124.52 million yuan. The project is located in the factories of Jiangsu Kangkui New Materials Technology Co., Ltd. in the demonstration zone of green and integrated ecological development of the

Yangtze River Delta with a construction period of 32 months. According to the feasibility study report, the project is expected to realize annual revenue of approximately 14,505.1 million yuan with an annual net profit of approximately 2,906.32 million yuan after it reaches the target output.

4.The advanced material supporting chemical project of Hengli Petrochemical (Dalian) Chemical Co., Ltd. Total investment reached 2,130.92 million yuan. The project is the industrial park of Hengli Petrochemical (Dalian) in Dalian Changxing Island with a construction period of 3 years. According to the feasibility study report, the project is expected to realize annual revenue of approximately 3,517.8674 million yuan with an annual net profit of approximately 1,261.1812 million yuan after it reaches the target output.

(2) Financial Assets Measured at Fair Value \_\_\_\_\_

Unit: yuan

Item	Beginning balance	Ending balance
Derivative financial assets	361,733,852.02	598,703,897.92
Derivative financial liabilities	88,999,293.44	329,312,832.40
Bank wealth management products and structural deposits	1,288,396,156.44	87,225,228.66
Accounts receivable financing	4,082,386,076.60	2,209,137,772.55

(3) Analysis of Major Holding and Participating Companies \_\_\_\_\_

Unit: 100 million yuan

Closing Book Value (yuan)	Closing Book Value (yuan)	Closing Book Value (yuan)	Closing Book Value (yuan)	Closing Book Value (yuan)	Closing Book Value (yuan)	Closing Book Value (yuan)
Hengli Petrochemical (Dalian) Refining Co., Ltd.	100	Manufacturing	175.96	1,192.10	322.35	52.42
Hengli Petrochemical (Dalian) Co., Ltd.	99.83	Manufacturing	58.9	58.9	123.78	-2.87
Hengli Petrochemical (Dalian) Chemical Co., Ltd.	100	Manufacturing	41.7	41.7	69.84	14.81
Jiangsu Hengli Chemical Fiber Co., Ltd.	99.99	Manufacturing	22.08	22.08	58.71	11.01
Kanghui New Material Technology Co., Ltd.	100	Manufacturing	8.31	8.31	25.08	7.34

Note: Hengli Petrochemical (Dalian) Refining Co., Ltd. includes its subsidiaries of Shenzhen Shengang Trading Co., Ltd., Hengli Petrochemical International Pte. Ltd., Hengli Oilchem Pte. Ltd., Hengli Refining Products Sales (Dalian) Co., Ltd., Hengli Aviation Oil Co., Ltd., Hengli Shipping International Pte. Ltd., Hengli Offshore Oil Petrochemical Co., Ltd., Hengli Energy (Jiangsu) Co., Ltd., Hengli Energy (Suzhou) Co., Ltd., Hengli Oilchem (Suzhou) Co., Ltd., Hengli Logistics (Dalian) Co., Ltd., Hengli Energy (Hainan) Co., Ltd., Hengli Oilchem (Hainan) Co., Ltd., Nanjing subsidiary of Hengli Oilchem (Hainan) Co., Ltd.

Hengli Petrochemical (Dalian) Co., Ltd. includes its subsidiaries of Hengli Shipping (Dalian) Co., Ltd., Hengli Petrochemical Co., Limited and Shenzhen Ganghui Trading Co., Ltd.

Hengli Petrochemical (Dalian) Chemical Co., Ltd. includes its subsidiary of Hengli Petrochemical (Dalian) Advanced Materials Technology Co., Ltd.

Jiangsu Hengli Chemical Fiber Co., Ltd. includes its subsidiaries of Jiangsu Hengke Advanced Materials Co. Ltd., Nantong Teng'an Logistics Co., Ltd., Jiangsu Xuanda Polymer Materials Co., Ltd., Jiangsu Deli Chemical Fiber Co., Ltd., Suqian Deya Advanced Materials Co., Ltd., Hengli Futures Co., Ltd., Suzhou Susheng Thermal Power Co., Ltd., Suzhou Deya Textile Co., Ltd., Suzhou Binglin Trading Co., Ltd., Sichuan Hengli Advanced Materials Co., Ltd. and Hengli Advanced Materials (Suqian) Co., Ltd.

Kanghui New Material Technology Co., Ltd. includes its subsidiaries of Lijin (Suzhou) Trading Co., Ltd., Suqian Kangkui New Material Co., Ltd., Jiangsu Kanghui New Material Technology Co., Ltd. Kangkui Kunshan New Material Technology Co., Ltd. and Kangkui Dalian New Material Technology Co., Ltd.

## 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 occur.

### 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 and procurement management and price adjustment of downstream product market cannot effectively reduce or absorb the impact of price fluctuations of raw materials, the Company's operation, production and business performance could be adversely impacted.

### 3. Foreign exchange risk

If the RMB continues to fluctuate substantially, it would cause great uncertainties to the Company's exchange gain or loss, export product prices dominated 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 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 by relevant laws and 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 business activities. Therefore, there is a certain level of environmental protection and safety production risk.

## IV. Corporate Governance

### Preplans of profit distribution or transfer from capital reserve

#### Preplans of profit distribution and transfer from capital reserve to common shares for the reporting period

Distribution/transfer?	No
Number of bonus shares per 10 common shares (share)	
Number of dividends (yuan) (tax included) per 10 common shares	
Number of shares converted by capital reserve per 10 common shares (share)	
Explanations for the preplans of profit distribution or transfer from capital reserve to common shares	

### The Company's equity incentive plan, employee stock ownership plan or other employee incentive initiatives and their impacts

#### Relevant equity incentive matters have been disclosed in interim announcements and there has been no progress or changes in the subsequent implementation

Overview	Indexing
Draft of the Company's fifth phase of the employee stock ownership plan—Revised	Please refer to The Fifth Phase of the Employee Stock Ownership Plan of Hengli Petrochemical (Draft) (Revised) and other relevant announcements of the Company disclosed on the website of the Shanghai Stock Exchange on March 2, 2021
Stock purchase completion under the Company's fifth phase of the employee stock ownership plan	Please refer to the Announcement of Hengli Petrochemical on the Completion of Stock Purchase under the Fifth Phase of the Employee Stock Ownership Plan (Announcement No. 2021-012) disclosed on the website of the Shanghai Stock Exchange on March 16, 2021

## V. Environmental and Social Responsibility

### Preplans of profit distribution or transfer from capital reserve

Hengli pays great heed to environmental protection and strictly adheres to 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 enterprises and their subsidiaries mainly include Hengli Chemical Fiber, Susheng Thermal Power, Deli Chemical Fibre, Hengke Advanced Materials, Kanghui New Material, Hengli Petrochemical (Dalian), Hengli Refining and Chemical, and Hengli Petrochemical.

During the reporting period, each pollutant discharging subsidiary carried out self-monitoring of their environmental impact and hired professional third parties to test various pollutant factors. The test results showed that the concentration of various pollutants complied 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.

The specific pollutant discharge is as follows:

#### 1. Hengli Chemical Fiber

Hengli Chemical Fiber commissioned Jiangsu Guoce Testing Technology Co., Ltd., Suzhou Huanyou Testing Co., Ltd., and Suzhou Shengze Environmental Monitoring Co., Ltd. to test various pollutants. The test results showed that the emission concentrations of various pollutants were in line with the national and local pollutant discharge standards or other relevant standards. The total discharge of pollutants is under the required limit as outlined by operation permits.

<b>Exceeding</b>	<b>Wastewater</b>	No excessive emission				
	<b>Exhaust gas</b>	No excessive emission				
	<b>Noise</b>	No excessive emission				
<b>Total emission</b>	<b>The total amount of wastewater (Tonnes/year)</b>					
		<b>Wastewater</b>	<b>COD</b>	<b>Ammonia</b>	<b>Total phosphorus</b>	<b>Total nitrogen</b>
	<b>Amount of discharge during the reporting period</b>	34073	0.79492	0.00900	0.01363	0.36799
	<b>Approved amount of discharge (year)</b>	/	8.623	0.675	0.0684	5.748
	<b>Total amount of exhaust gas (tonnes/year)</b>					
		<b>Sulfur dioxide?</b>	<b>Nitrogen oxides?</b>	<b>PM</b>	<b>VOCs</b>	
	<b>Amount of discharge during the reporting period</b>	7.55646	64.97321	8.98913	0.04004	
	<b>Approved amount of discharge (year)</b>	152.25	201.13	30.16	1.9008	

## 2. Susheng Thermal Power

During the reporting period, Susheng Thermal Power installed the boiler exhaust gas online self-monitoring equipment in accordance with the governmental environmental management regulations and technical specifications and adopted a combination manual-automatic monitoring approach. Suzhou Zhenghe Chemical Environmental Protection Co., Ltd. outsourced the continuous emission monitoring equipment and system for maintenance and operation. The plant boundary noise and fugitive exhaust gas emission monitoring, the manual quarterly monitoring of flue gas, and the daily monitoring of industrial and desulfurization wastewater are outsourced to Suzhou Shengze Environmental Monitoring Co., Ltd. Suzhou Shengze tested various pollutant factors, and the test results showed that the emission concentration of various pollutants met the national and local pollutant emission standards or other related standards. The total discharge of pollutants is under the required limit as outlined by operation permits.

<b>Exceeding</b>	<b>Wastewater</b>	No excessive emission					
	<b>Exhaust gas</b>	No excessive emission					
	<b>Noise</b>	No excessive emission					
<b>Total emission</b>	<b>Total amount of wastewater (tonnes/year)</b>						
		<b>Wastewater</b>	<b>COD</b>	<b>Ammonia</b>	<b>Total phosphorus</b>	<b>Suspended solids</b>	
	<b>Amount of discharge during the reporting period</b>	17661	/	/	/	/	
	<b>Approved amount of discharge (year)</b>	98550	/	/	/	/	
	<b>Total amount of exhaust gas (tonnes/year)</b>						
		<b>Sulfur dioxide</b>	<b>Nitrogen oxides</b>	<b>Smoke</b>	<b>Acetaldehyde</b>	<b>Ethylene glycol</b>	<b>Non-methane total hydrocarbons</b>
	<b>Amount of discharge during the reporting period</b>	52.28211	116.67720	7.36915	/	/	/
	<b>Approved amount of discharge (year)</b>	434.337	868.674	173.735	/	/	/

### 3. Deli Chemical Fiber

During the reporting period, Deli commissioned Jiangsu Hengyu Environmental Protection Technology Co., Ltd. to test various pollutant factors. The test results showed that the emission concentrations of various pollutants were in line with national and local pollutant emission standards or other related standards. The total discharge of pollutants are under the required limit as outlined by operation permits.

<b>Excessive emission</b>	<b>Wastewater</b>	No excessive emission		
	<b>Exhaust gas</b>	No excessive emission		
	<b>Noise</b>	No excessive emission		
<b>Total emission</b>	<b>Total amount of wastewater (tonnes/year)</b>			
		<b>COD</b>	<b>Ammonia</b>	<b>Total phosphorus</b>
	<b>Amount of discharge during the reporting period</b>	1.3638	0.0451	0.0258
	<b>Approved amount of discharge (year)</b>	45.46	0.502	0.094
	<b>Total amount of exhaust gas (tonnes/year)</b>			
		<b>Sulfur dioxide</b>	<b>Nitrogen oxides</b>	<b>Smoke</b>
	<b>Amount of discharge during the reporting period</b>	1.4731	11.54	0.165
	<b>Approved amount of discharge (year)</b>	39.2	33.75	6.75

## 4. Kanghui New Material

During the reporting period, Kanghui commissioned Dalian Boyuan Testing and Evaluation Center Co., Ltd. to test various pollutant factors. The test results showed that the emission concentration of various pollutants met the national and local pollutant emission standards or other related standards. The total discharge of pollutants met the requirements of the total discharge permit.

<b>Excessive emission</b>	<b>Wastewater</b>	No excessive emission		
	<b>Exhaust gas</b>	No excessive emission		
	<b>Noise</b>	No excessive emission		
<b>Total emission</b>	<b>Total amount of wastewater (tonnes/year)</b>			
		<b>Wastewater</b>	<b>COD</b>	<b>Ammonia</b>
	<b>Amount of discharge during the reporting period</b>	224768.33	6.332	0.07
	<b>Approved amount of discharge (year)</b>	961800	23.21	2.318
	<b>Total amount of exhaust gas (Tonnes/year)</b>			
		<b>Sulfur dioxide</b>	<b>Nitrogen oxides</b>	<b>Smoke</b>
	<b>Amount of discharge during the reporting period</b>	6.187	18.191	2.307
	<b>Approved amount of discharge (year)</b>	20.23	89.71	50.591

## 5. Hengke Advanced Materials

Hengke commissioned Suzhou Huace Testing Technology Co., Ltd. to test various pollutant factors during the reporting period. The test results showed that the concentration of various pollutants was in compliance with the national and local pollutant discharge standards or other related standards. The total discharge of pollutants is under the required limit as outlined by operation permits.

<b>Excessive emission</b>	<b>Wastewater</b>	No excessive emission			
	<b>Exhaust gas</b>	No excessive emission			
	<b>Noise</b>	No excessive emission			
<b>Total emission</b>	<b>Total amount of wastewater (tonnes/year)</b>				
		<b>Wastewater</b>	<b>COD</b>	<b>Ammonia</b>	<b>Total phosphorus</b>
	<b>Amount of discharge during the reporting period</b>	345205	8.17087	0.11225	0.08125
	<b>Approved amount of discharge (year)</b>	/	381.95	6.05	0.92
	<b>Total amount of exhaust gas (Tonnes/year)</b>				
		<b>Sulfur dioxide</b>	<b>Nitrogen oxides</b>	<b>Smoke</b>	<b>Non-methane total hydrocarbons</b>
	<b>Amount of discharge during the reporting period</b>	2.80313	18.43627	0.08718	5.64
	<b>Approved amount of discharge (year)</b>	297.2	423.2	63.14	28.86

## 6. Hengli Petrochemical (Dalian)

Hengli Petrochemical (Dalian) tested various pollutant factors. The test results showed that the emission concentrations of various pollutants were in compliance with national and local pollutant emission standards or other related standards. The total discharge of pollutants is under the required limit as outlined by operation permits.

<b>Excessive emission</b>	<b>Wastewater</b>	No excessive emission			
	<b>Exhaust gas</b>	No excessive emission			
	<b>Noise</b>	No excessive emission			
<b>Total emission</b>	<b>Total amount of wastewater (tonnes/year)</b>				
		<b>Wastewater</b>	<b>COD</b>	<b>Ammonia</b>	<b>Total phosphorus</b>
	<b>Amount of discharge during the reporting period</b>	/	151.52	0.87	/
	<b>Approved amount of discharge (year)</b>	/	559	111.8	240.05
	<b>Total amount of exhaust gas (tonnes/year)</b>				
		<b>Sulfur dioxide</b>	<b>Nitrogen oxides</b>	<b>Smoke</b>	<b>Non-methane total hydrocarbons</b>
	<b>Amount of discharge during the reporting period</b>	120.80	121.61	4.47	176.09
	<b>Approved amount of discharge (year)</b>	598	821.77	248.54	155.7562

## 7. Hengli Petrochemical Refining

During the reporting period, Hengli Petrochemical Refining conducted tests on various pollutant factors, and the test results showed that the emission concentrations of various pollutants complied with national and local pollutant emission standards or other related standards. The total discharge of pollutants is under the required limit as outlined by operation permits.

<b>Excessive emission</b>	<b>Wastewater</b>	No excessive emission			
	<b>Exhaust gas</b>	No excessive emission			
	<b>Noise</b>	No excessive emission			
<b>Total emission</b>	<b>Total amount of wastewater (tonnes/year)</b>				
		<b>Wastewater</b>	<b>COD</b>	<b>Ammonia</b>	<b>Total phosphorus</b>
	<b>Amount of discharge during the reporting period</b>	1063911	21.94	0.141	7.80
	<b>Approved amount of discharge (year)</b>	12620000	249.23	19.86	70.90
	<b>Total amount of exhaust gas (tonnes/year)</b>				
		<b>Sulfur dioxide</b>	<b>Nitrogen oxides</b>	<b>Smoke</b>	<b>Non-methane total hydrocarbons</b>
	<b>Amount of discharge during the reporting period</b>	605.56	1562.62	43.27	1250.45
	<b>Approved amount of discharge (year)</b>	2121.70	5064.92	965.78	3158.33

## 8. Hengli Petrochemical Chemical

During the reporting period, Hengli Petrochemical Chemical conducted tests on various pollutant factors, and the test results showed that the emission concentrations of various pollutants complied with national and local pollutant emission standards or other related standards. The total discharge of pollutants is under the required limit as outlined by operation permits.

<b>Excessive emission</b>	<b>Wastewater</b>	No excessive emission			
	<b>Exhaust gas</b>	No excessive emission			
	<b>Noise</b>	No excessive emission			
<b>Total emission</b>	<b>Total amount of wastewater (tonnes/year)</b>				
		<b>Wastewater</b>	<b>COD</b>	<b>Ammonia</b>	<b>Total phosphorus</b>
	<b>Amount of discharge during the reporting period</b>	1184773.4	22.3	0.292	9.746
	<b>Approved amount of discharge (year)</b>	4086000	204.3	32.7	61.3
	<b>Total amount of exhaust gas (tonnes/year)</b>				
		<b>Sulfur dioxide</b>	<b>Nitrogen oxides</b>	<b>Smoke</b>	<b>Non-methane total hydrocarbons</b>
	<b>Amount of discharge during the reporting period</b>	18.5759	212.0794	4.345	84.511
	<b>Approved amount of discharge (year)</b>	116.5	974.4	149	736.088

## Construction and operation of pollution prevention facilities

During the reporting period, the above companies who discharged pollutants all built their pollutant control facilities following the environmental impact assessment requirements 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.

## The environmental impact assessment of construction projects and other administrative permits on environmental protection

During the reporting period, for the company's construction projects, environmental impact assessment reports (forms) or approval forms have been prepared by qualified bodies and have received the approval of the corresponding environmental protection authorities. The project incorporates environmental protection into the project "design, construction and production simultaneously". The completed projects and supporting facilities have all passed final inspections from the environmental protection organs, and the projects under production have obtained their relevant administrative permits.

## Emergency plan for environmental incidents

Item	Item	Item	Ending balance
Hengli Chemical Fiber	The Environmental Incident Emergency Plan of Jiangsu Hengli Chemical Fiber Co., Ltd.	Wujiang Bureau of Environmental Protection	320509-2019-038-M
Deli Chemical Fiber	The Environmental Incident Emergency Plan	Suqian Bureau of Environmental Protection Sucheng Branch	321302-2021-006-L
Susheng Thermal Power	The Environmental Incident Emergency Plan of Suzhou Susheng Thermal Power Co., Ltd.	Wujiang Bureau of Environmental Protection	320509-2020-043-M
Kanghui New Material	The Environmental Incident Emergency Plan of Yingkou Kanghui Petrochemical Co., Ltd.	Xianrendao Bureau of Environmental Protection, Yingkou	210881-2020-003-M
Hengke Advanced Materials	The Environmental Incident Emergency Plan of Jiangsu Hengke Advanced Materials Co. Ltd	Tongzhou Bureau of Environmental Protection	320682-2020-057-M
Hengli Petrochemical Refining	The Environmental Incident Emergency Plan of Hengli Petrochemical (Dalian) Refining Co., Ltd.	Wafangdian (Changxing Island Economic Zone) Branch Bureau of Environmental Protection, Dalian	210281-2021-050-H
Hengli Petrochemical (Dalian)	The Environmental Incident Emergency Plan of Hengli Petrochemical (Dalian) Co., Ltd.	Wafangdian (Changxing Island Economic Zone) Branch Bureau of Environmental Protection, Dalian	210263-2020-001-H
Hengli Petrochemical Chemical	The Environmental Incident Emergency Plan of Hengli Petrochemical (Dalian) Chemical Co., Ltd.	Wafangdian (Changxing Island Economic Zone) Branch Bureau of Environmental Protection, Dalian	210263-2019-011-H

## The environmental self-monitoring plan

The company's key pollutant discharging subsidiaries have formulated their environmental monitoring plan in accordance with relevant national standards and environmental management system requirements. They have applied for the pollutant discharge permit and filed with the environmental regulative organ of their jurisdiction. The company's environmental monitoring station regularly tested various pollutants at the sewage outlets of each plant. If a company were unable

to conduct tests, it would commission third-party agencies with environmental monitoring qualifications to conduct discharge tests of the special pollutants such as wastewater and exhaust gas. The companies appoint special personnel to check and summarize pollutant indicators every day, analyzed the data, and submitted feedback to relevant departments for reference during technical parameters adjustment, all to ensure emission compliance.

## Measures and effects taken to reduce carbon emission during the reporting period

Our company actively responded to the national policy of "carbon peak and carbon neutrality". We integrated the upstream, midstream and downstream industries development in the park and leveraged the resource integration and scale advantages. The contribution of carbon emission reduction brought by the company's refining and chemical integration industrial chain model mainly came from the following five aspects:

### **Reduced carbon emission from the chemical process and fossil fuel combustion through increased yield of products.**

In the refining and chemical integration project, upstream products can be used as feed for downstream processing. This integration greatly raised the product utilization rate at each link and avoided the carbon emission caused by direct or indirect waste through discharge or combustion (such as fuel combustion) previously accrued due to the inability to use on-site directly or the high costs of transportation for export. Our 20 million tonnes/year refining and chemical integration project adopt a full-range hydrogenation process. For the first time in China, a company has used the ebullated-bed hydrocracking process to hydrocrack diesel, wax oil, and residual oil to maximize light and heavy naphtha feed production. This can meet the raw materials demand of the downstream 1.5 million tonnes/year ethylene plant and the 4.5 million tonnes/year aromatic plant. At the same time, propane and isobutane are dehydrogenated to produce high

value-added propylene and alkylated oil. The C1 - C8 components are used separately to truly realize molecular oil refining and molecular chemical engineering. The C2 components, hydrogen, and fuel gas produced during the process can be flexibly used in other processes.

(1) High value-added recovery of C2 components in the refining and chemical dry gas

The dry gas component of the refining and chemical sector emission is about 3.6 to 3.8% hydrogen, 39 to 42% C2, 31 to 32% C3 and C4, and 6.5 to 8% C5. Before ethylene production, these components and their high economic value are not fully utilized, mostly being used as fuel. After the company's ethylene project is put into operation, the dry gas from the refining and chemical plants has supplied 1.229 million tonnes per year to the recovery unit of the ethylene plant. The dry gas in the refinery is pressurized to 3.1MPaG to remove CO<sub>2</sub> and water and cryogenically separate methane and hydrogen. C2, C3/C4, and C5+ are sent to the pyrolyzer as feed. Thus, the annual recovery and utilization of C2 are about 541,000 tonnes, C3 and C4 453,000 tonnes, C5 60,000 tonnes, and the remaining gas after separation returned to the pipeline as fuel is 17.1 million tonnes. The net value of ethylene feed gas is 1.06 million tonnes of feedstock effectively utilized annually, accounting for about 27.8% of the ethylene plant cracking feedstock. The recycled of C2 components avoids burning emissions as fuel, and the carbon emission reduction amounts to 1.59 million tonnes/year.

(2) Our refining and chemical project takes atmospheric and vacuum-ebullated bed residual oil hydrocracking as the mainline to realize the whole hydrogenation process. The amount of hydrogen used is quite high. Under full-load production capacity, the amount of pure hydrogen used in aromatics is over 760,000 tonnes/year, of which 510,000 tonnes is supplied by the refining and chemical sector itself, and the remaining is supplied by coal-to-hydrogen and ethylene. After the ethylene plant is put into operation, it produces 51,000 tonnes/year of hydrogen, of which the ethylene production itself uses 44,000 tonnes, and 47,000 tonnes is supplied to the refining and chemical sector. If there is no support for the integration project, this excess will become stagnant and unused. Through the consumption and use of the refining and chemical plants, the annual energy consumption is saved by 51,700 tonnes of standard oil. The hydrogen production-saved from coal that initially supplies hydrogen can reduce the supply of hydrogen and produce more methanol and acetic acid. Assume 51,000 tonnes of surplus hydrogen per year, and assuming a 11tCO<sub>2</sub>/tH<sub>2</sub> emission rate, the emission saved by the use of surplus hydrogen reached 560,000 tonnes/year.

(3) All fuel gas in the industrial park is recycled and used

In the Hengli (Dalian Changxing Island) Industrial Park, the by-product methane and hydrogen from the ethylene plant and the biogas from the PTA plant have been fully recycled, which not only reduces greenhouse gas emissions but also increases corporate benefits. The ethylene plant's annual by-product of methane and hydrogen is about 72,000 tonnes, and the by-product of biogas by the PTA plant is about 33,000 tonnes. Transmitted through the fuel gas pipeline in the industrial park, they are now used as feed for refining and chemical use, which saves the amount of natural gas purchased by Hengli Refining and Chemical and also reduces the emission of greenhouse gases through inevitable leakage during combustion. The annual energy consumption for recycling is equivalent to 95,100 tonnes of standard oil. According to a rough calculation of the carbon emission intensity of the equivalent amount of natural gas, the carbon emission reduction brought by the recycling and reuse of fuel gas is 120,000 tonnes/year.

## **Due to the closer connected production stages and the optimization of logistic links, carbon emission in reheating and transportation is reduced.**

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The Hengli refining and chemical integration model means that the upstream and downstream processes are geographically closer together. This integration directly supplies heated feeds between devices in different sections and reduce the energy consumption due to removing the need for reheating; additionally, aromatic, ethylene, PX, acetic acid, methanol, and other bulk chemical products or feeds can be produced and used within the facilities transported through pipelines in the park. This can greatly save logistics, warehousing, and loss costs while avoiding carbon emission from long-distance transportation of outsourced raw feed.

(1) Direct supply of thermal materials between plants of different sectors

Hengli (Dalian Changxing Island) Industrial Park fully designed a mutual supply of materials between upstream and downstream sectors and plants and reduces storage area operations, to realize direct heat supply of materials, reduce the energy loss caused by material cooling and heating and save energy consumption. By adjusting the production conditions and optimizing the operations between upstream and downstream materials in a timely manner, the refining and chemical integration project has realized the flow of materials between different sectors and different plants with less transfer to tanks and more direct supply to save energy.

In the refining and chemical supply reforming of aromatics, a light hydrocarbon recovery unit is installed in the refining and chemical plant to collectively recover lightweight components from atmospheric equipment and hydrogenation equipment to produce naphtha. Hydrogenated naphtha with kerosene, isomerized dewaxed naphtha of lubricating oil, and hydrocracked naphtha of ebullated bed residue are used as feedstock for the pre-hydrogenation of the aromatics unit. Refined naphtha and diesel hydrocracking heavy naphtha, wax oil hydrocracking heavy naphtha is used as reaction feed of catalytic reforming of the aromatics unit. In 2020, the annual directly fed into the three sets

of reformers for refining and chemical hot materials was nearly 9 million tonnes. The direct supply of hot feed materials with significant energy-saving effects accounted for about 92% of the total feed volume of the aromatics reforming equipment, and the annual energy consumption was 5,800 tonnes of standard oil, reducing CO<sub>2</sub> emission by about 17,000 tonnes.

In the aromatics unit, benzene and p-xylene are directly supplied to storage tanks as products. PX and benzene products are changed from entering the daily inspection tank to PX direct supplying the PTA raw material storage tank and benzene directly supplying the benzene finished product storage tank. Due to less intermediate transmission, the daily electricity saving is 7,500kWh. According to China's power system's current carbon emission intensity (596g CO<sub>2</sub>/kWh), this change equals an annual CO<sub>2</sub> emission reduction of about 20,000 tonnes.

#### (2) Reducing long-distance transportation of raw materials

The carbon emission reduction brought about by decreased long-distance transportation mainly comes from "PX - PTA" in the "crude oil - PX - PTA - PET" production chain. Integration greatly changes the source of PX, the raw material for PTA production. Before integration, PX was mainly imported from abroad, while after integration, PX can be directly produced in the park. In 2018, China's external dependence on PX was as high as 61%; in 2019, with a large increase of domestic PX production capacity to 14.65 million tonnes, the external dependence dropped significantly to 51%. Most of China's new PX capacity was in large-scale refining and chemical integration projects, and almost all of their PX output was directly used for PTA production downstream of the park. The opening of the "PX - PTA" chain in the large-scale refining and chemical integration projects has hugely cut down the outsourcing of PX, and carbon emission caused by long-distance transportation has also been avoided.

China mainly imported PX from South Korea and Japan. In 2019, China imported 6.04 million tonnes of PX from South Korea, accounting for 40% of total imports; and 2.1 million tonnes from Japan, accounting for 14%. South Korea's largest PX production capacity comes from SK Chemicals in Ulsan and Incheon;

Japan's comes from ENEOS Corporation who has distributed production capacity in Mizushima, Oita, Chiba, Kashima, Kawasaki, Natsu, and other places. Take the Hengli Dalian Changxing Island Project as an example. Assume the 4.5 million tonnes/year PX feed is imported from Japan and South Korea instead of produced from the upstream plant of the integration project. According to the above percentages, calculated based on the distance of South Korea's main port to the Dalian Port of about 500km and Japan about 1,000km, the average transportation distance of 4.5 million tonnes of PX per year can reach as long as 630km. Milagewise, one-way transportation is equivalent to 30,000 km traveled for a 100,000-tonne container ship. Assume a 30g CO<sub>2</sub> emission per tonne per kilometer of the cargo ship; the transportation carbon emission reduction due to the connection of processes is 90,000 tonnes/year. Considering the actual import, the transportation distance is actually longer than the above calculation based on the distance from Korea and Japan alone, and the contribution to carbon emission reduction is thus actually larger.

### **Reduction of carbon emission due to energy cascade utilization.**

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The Hengli Refining and Chemicals Project has created conditions for the cascaded utilization of energy within the park. The project's refining, chemical, and coal hydrogen production processes have been combined to achieve a mutual supply of materials and energy pairs. The cascaded utilization of different energy grades saved significant overall energy consumption and reduced carbon emission caused by energy utilization. The deep thermal coupling between the oil refining and chemical production facilities circumvents the waste from upstream cooling and downstream reheating; additionally, the low-temperature heat source after production in the park can also be used for other purposes besides the production of main products (power generation, desalination, etc.). This can further increase economic benefits without additional carbon emissions.

The carbon emission reduction of the Hengli Refining & Chemicals Project due to the cascaded utilization of

energy is demonstrated in four aspects. First, the Hengli Industrial Park recovers low-parameter steam from two aromatics production lines in waste heat power generation. The amount of power generation from waste heat is 120,000 kWh, saving 36.7t/h of standard coal and 308,000 tonnes of standard coal every year. In low-temperature warm water waste heat recovery, the park has 21,000t/h waste heat in the form of 95 °C water. The water is now gathered and used for heating, seawater desalination, lithium bromide refrigerator, and boiler deaeration, saving 75t/h and 630,000 t/y of standard coal.

Petrochemical production is a heavy water consumer. The Hengli Changxing Island Industrial Park takes its coastal advantage and achieves the goal of producing freshwater as a coastal factory without additional fresh water consumption by making full use of cascaded energy. In high-temperature condensate waste heat recovery, 100t/h of high-temperature condensate water is produced, which is used to heat the make-up water of the deaerator from 25 °C to 35 °C in the thermal power plant, saving 64.4t/h and 540,000t/y of standard coal. In addition, the integrated model helps optimize the configuration of a self-contained thermal power plant. The thermal power plant boiler fully recovers the heat of flue gas through the waste heat utilization system, increases the inlet air temperature of the furnace, reduces the exhaust gas temperature from 140 °C to 90 °C, raises the boiler efficiency 3 percentage points to 94%, and saves about 128,400 tonnes of standard coal annually. The thermal power plant adopts 7 heating methods of different pressure grades, and the backpressure unit is efficiently used. The coal consumption for power generation is only 160g/kWh, which is 96.18g/kWh lower than the 266.18g/kWh indicator for one million thermal power units. The annual power generation is about 5 billion kWh, saving 281,200 tonnes of standard coal annually. Assuming a standard coal CO<sub>2</sub> emission coefficient of 0.67t/tce (recommended by the Energy Research Institute of National Development and Reform Commission), the above measures help reduce carbon emission by 1.26 million tonnes per year.

## The scenario of large-scale application of decarbonization technology due to high-concentration carbon emission.

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Hengli Petrochemical and Hengli Petrochemical Chemical produce a large amount of high-concentration CO<sub>2</sub> during production. Once captured in the park, it can be used as a raw material to produce chemical products. This allows production to use self-produced CO<sub>2</sub>, as well as reduce carbon emission. Chemical production is an organic conversion process with hydrogen and carbon as the basic elements, in which hydrogen and CO<sub>2</sub> are used as raw materials for synthesis reaction, and many major products in the chemical industry's value chain can be produced. The high concentration of CO<sub>2</sub> in the park creates a huge array of application scenarios for the future use of green hydrogen and CO<sub>2</sub> to produce methanol and its downstream chemical products. Even if CO<sub>2</sub> is not used as raw material, the integrated park creates favorable conditions of shared infrastructure for carbon capture, transportation, and storage, thereby greatly reducing costs and the difficulty of implementation.

At present, there have been domestic and foreign examples of chemical production using green hydrogen and CO<sub>2</sub>. Fossil fuel is gradually decreasing in raw materials, and the CO<sub>2</sub> generated in the original production process is fixed into the product to reduce emission. For example, the Iceland-based company Carbon Recycling International (CRI) currently produces 4,000 tonnes of zero-carbon methanol per year with the technology and plans to expand its capacity to 40,000 tonnes. The carbon dioxide feed comes from a geothermal power plant, and the 5MW power of the water electrolysis equipment used to produce hydrogen also comes from geothermal energy. Japan's Mitsui Chemicals has also built a pilot plant to synthesize methanol from hydrogen and carbon dioxide and has conducted a feasibility study for industrial production. The refining and chemical integration industrial park is an ideal application scenario for coupling the disruptive technology of green hydrogen because its CO<sub>2</sub> acquisition cost is low, and the products that can be obtained in large quantities with this technology path are also needed as raw materials in the refining and chemical integration value chain.

## **The carbon emission reduction from the circular economy by breaking the boundaries of what is possible for auxiliary facilities.**

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The sewage treatment plant is a representative auxiliary facility in the park. Compared with the traditional model of separate treatment of sewage for each link, the recycling technology in the integrated embedded sewage treatment plant can function with greater resource recycling and carbon emission reduction. In the traditional model, the designer focuses only on wastewater and collects and treats the wastewater. However, when the boundary of sewage treatment is considered in its entirety and enlarged to the scope of the whole park scale, waste and the overall material can be balanced, some waste residues, waste gas or refining, and chemical by-products are possible to be reused in the sewage treatment process.

Hengli's new philosophy of "embedded sewage treat-

ment plant" has changed traditional sewage plants' passive reception and closed treatment model, fully integrated sewage treatment and petrochemical processes into a whole, and established a modeling example of the "embedded sewage treatment plant". We have combined the sewage treatment design into the design of the whole plant and implemented it with the main process design simultaneously. Hengli Petrochemical Refining has more than 40 petroleum and chemical production facilities, which discharge various wastewater, waste gas, and waste residues. In the project, to realize this philosophy, we have carefully reviewed more than 40 individual petrochemical plants and found 6 embedded points, which can achieve the goal of using "waste" to control "waste" and becoming mutual resources between each other. Through the review and analysis of the whole process and optimization of resource allocation, the sewage treatment plant is regarded as the core of the entire plant's waste treatment in order to realize circular economy and green production.

## VI. Important Items

### Delivery of Commitments

Commitments made by the actual controller, shareholders, related parties, purchasers, the Company and other relevant parties during or that continue through the reporting period

Unit: 100 million yuan Currency: CNY

Background	Type of Commitments	Committed by	Content of Commitments	Time and Duration	Whether there is a time limit for delivery	Whether the commitments are delivered in a strict and timely manner	Reasons in case of failed delivery	Action plans in case of failed timely delivery
Commitments related to material asset reorganization	Trading restrictions of shares	Fan Hongwei, Hengneng Investment, Hengfeng Investment	Shares of listed companies acquired through material asset reorganization shall not be transferred within 36 months from the date of listing	From February 2018 to February 2021	Yes	Yes		

## Material guarantees performed or yet to be completed during the reporting period

Situation of External Guarantee (excluding guarantee for subsidiaries)															
The guarantor	Relationship between the guarantor and the listed company	The warantee	Amount guaranteed	Date of guarantee (date of agreement)	Com-mencement date	Maturity date	Type of guarantee	Principal debt status	Object of guarantee (if any)	Whether the guarantee has been performed	Whether the guarantee is overdue	Overdue amount of guarantee	Counter guarantee situation	Whether the guarantee is performed for related parties	Related Relationship
Nil															
<b>Total amount guaranteed during the reporting period (excluding guarantee for subsidiaries)</b>							0								
<b>Total guarantee balance by the end of the reporting period (A) (excluding guarantee for subsidiaries)</b>							0								
<b>Guarantee for subsidiaries</b>															
<b>Total amount guaranteed for subsidiaries during the reporting period</b>							2,111.18								
<b>Total guarantee balance for subsidiaries by the end of the reporting period (B)</b>							1,439.10								
<b>Total amount guaranteed (including guarantee for subsidiaries)</b>															
<b>Total amount guaranteed (A+B)</b>							1,439.10								
<b>Percentage of the total amount guaranteed in the Company's net assets (%)</b>							286.36								

<b>of which:</b>	
<b>Amount guaranteed for shareholders, the actual controller and related parties (C)</b>	0
<b>Amount of debt guarantee directly or indirectly for warrantees whose asset-liability ratio exceeds 70% (D)</b>	0.98
<b>Amount of guarantee in excess of 50% of net assets (E)</b>	1,121.35
<b>Total amount of the aforementioned three guarantees (C+D+E)</b>	1,122.33
<b>Explanation of unexpired guarantees that could bear joint and several liabilities for satisfaction</b>	
<b>Explanation of guarantee status</b>	During the reporting period, external guarantees of the Company performed were all for the Company and its subsidiaries (sub-subsidiaries)

## Share Changes and Shareholders

### Changes in shareholdings

Unit: share

	Before the change		Increase/decrease from the change					After the change	
	Number of shares	Percentage (%)	New issue of shares	Bonus shares	Shares converted from capital reserve	Others	Sub-total	Number of shares	Percentage (%)
<b>I. Shares with trading restrictions</b>	2,407,164,177	34.20				-2,407,164,177	-2,407,164,177	0	0
1. State-owned shares									
2. State-owned legal person shares									
<b>3. Shares held by other domestic entities</b>	2,407,164,177	34.20				-2,407,164,177	-2,407,164,177	0	0
<b>Including: Shares held by domestic non state-owned legal person</b>	1,521,058,208	21.61				-1,521,058,208	-1,521,058,208		
<b>Shares held by domestic natural persons</b>	886,105,969	12.59				-886,105,969	-886,105,969	0	0
4. Shares held by other foreign entities									
<b>Including: Shares held by overseas legal person</b>									

<b>Shares held by overseas natural persons</b>									
<b>II. Circulating shares without trading restrictions</b>		65.80				2,407,164,177	2,407,164,177	7,039,099,786	100.00
<b>1. RMB ordinary shares</b>	4,631,935,609	65.80				2,407,164,177	2,407,164,177	7,039,099,786	100.00
<b>2. Domestic listed foreign shares</b>									
<b>3. Overseas listed foreign shares</b>									
<b>4. Others</b>									
<b>III. Total number of shares</b>	7,039,099,786	100.00				0	0	7,039,099,786	100.00

On February 8, 2021, the listing and circulating of 2,407,164,177 shares were restricted due to the Company's material asset reorganization.

## Changes in shares with trading restrictions

Unit: Share

Name of shareholder	Number of shares with trading restrictions at the beginning of the reporting period	Number of shares released from trading restrictions during the reporting period	Increase in shares subject to trading restrictions during the reporting period	Number of shares subject to trading restrictions at the end of the reporting period	Reasons for restrictions	Date of shares released from trading restrictions
Fan Hongwei	886,105,969	886,105,969	0	0	Material asset reorganization	February 8, 2021
Hengneng Investment	1,498,478,926	1,498,478,926	0	0	Material asset reorganization	February 8, 2021
Hengfeng Investment	22,579,282	22,579,282	0	0	Material asset reorganization	February 8, 2021
Total	2,407,164,177	2,407,164,177	0	0	/	/

## Total number of shareholders:

Total number of common shareholders as of the end of the reporting period (shareholder)	128,295
Total number of preferred shareholders with restored voting rights as of the end of the reporting period (shareholder)	0

**Shareholdings of the top 10 shareholders and top 10 floating shareholders (or shareholders holding shares without trading restrictions) as of the end of the reporting period**

Unit: Share

Shareholdings of the top 10 shareholders							
Name of shareholder (full name)	Increase/decrease during the reporting period	Number of shares as of the end of the reporting period	Percentage (%)	Number of shares held with trading restriction	Pledged, marked or frozen		Nature of shareholder
					Status of shares	Quantity	
Hengli Group Co., Ltd.	-562,000,000	1,538,612,342	21.86	0	Pledged	656,580,000	Domestic non-state-owned legal person
Hengneng Investment (Dalian) Co., Ltd.	0	1,498,478,926	21.29	0	Nil		Domestic non-state-owned legal person
Fan Hongwei	0	886,105,969	12.59	0	Nil		Domestic natural person
Tak Shing Li International Holdings Limited	0	732,711,668	10.41	0	Nil		Overseas legal person
Hengli Group – Southwest Securities – 21 Hengli E1 special guarantee and trust property account	562,000,000	562,000,000	7.98	0	Nil		Other
HKSCC (Nominees) Limited	-15,084,092	147,154,164	2.09	0	Nil		Other
Jiangsu Hegao Investment Co., Ltd.	0	61,952,065	0.88	0	Nil		Domestic non-state-owned legal person

<b>Hailaide International Investment Limited</b>	0	52,246,838	0.74	0	Nil		Overseas legal person
<b>Special securities account for agreed repurchase type securities trading of Guotai Junan Securities Company Limited</b>	-1,330,000	43,970,000	0.62	0	Nil		Other
<b>Tibet Trust Corporation Limited – Tibet Trust – the fourth phase of the employee stock ownership pooled capital trust plan of Hengli Petrochemical</b>	-12,815,100	37,378,100	0.53	0	Nil		Other

**Shareholding of the top 10 shareholders of shares without trading restrictions**

Name of shareholder	Number of circulating shares without trading restrictions	Class and quantity of shares	
		Class	Quantity
Hengli Group Co., Ltd.	1,538,612,342	RMB common stock	1,538,612,342
Hengneng Investment (Dalian) Co., Ltd.	1,498,478,926	RMB common stock	1,498,478,926
Fan Hongwei	886,105,969	RMB common stock	886,105,969

Tak Shing Li International Holdings Limited	732,711,668	RMB common stock	732,711,668
Hengli Group – Southwest Securities – 21 Hengli E1 special guarantee and trust property account	562,000,000	RMB common stock	562,000,000
HKSCC (Nominees) Limited	147,154,164	RMB common stock	147,154,164
Jiangsu Hegao Investment Co., Ltd.	61,952,065	RMB common stock	61,952,065
Hailaide International Investment Limited	52,246,838	RMB common stock	52,246,838
Special securities account for agreed repurchase type securities trading of Guotai Junan Securities Company Limited	43,970,000	RMB common stock	43,970,000
Tibet Trust Corporation Limited – Tibet Trust – the fourth phase of the employee stock ownership pooled capital trust plan of Hengli Petrochemical	37,378,100	RMB common stock	37,378,100
Explanations of buyback special securities accounts of the top 10 shareholders	The top 10 shareholders do not have a buyback special securities account.		
Explanations of voting rights proxy, entrustment and abstention of the aforesaid shareholders	Hengli Group assigned 562,000,000 share capital of company shares to the “Hengli Group – Southwest Securities – 21 Hengli E1 special guarantee and trust property account” due to the issuance of exchangeable corporate bonds. The special account is held in the name Southwest Securities Co., Ltd. Southwest Securities will deal with matters according to Hengli Group’s opinions without harming the interests of the holders of the exchangeable corporate bonds when exercising the voting right.		
Explanations of related relationship or concerted action among the aforesaid shareholders	Hengli Group, Hengneng Investment, Fan Hongwei, Tak Shing Li, Hegao Investment and Hailaide are persons acting in concert among each other; the Company has no information on whether there is related relationship among other shareholders.		
Explanations of preferred shareholders with restored voting rights and the number of shares held	Nil		

## VII. Relevant Information of Bonds

### Basic information of corporate bonds

Unit: 100 million yuan Currency: CNY

<b>Name of bond</b>	Public issuance of corporate bonds of 2019 by Hengli Petrochemical Co., Ltd. (first tranche)
<b>Short name</b>	19 Hengli 01
<b>Code</b>	155749.SH
<b>Date of issuance</b>	From September 25, 2019 to September 27, 2019
<b>Value date</b>	September 27, 2019
<b>Maturity date</b>	September 27, 2022
<b>Bond balance</b>	10
<b>Interest rate (%)</b>	6.30
<b>Principal and interest payment</b>	Interests will be paid once a year and the principal is repaid in a lump sum when the bond is due. The last installment of interest will be paid together with the repayment of the principal.
<b>Trading venue</b>	Shanghai Stock Exchange
<b>Suitability arrangement of investors (if any)</b>	155749.SH
<b>Trading mechanism</b>	155749.SH
<b>Whether there is risk of termination of listing</b>	No

## Key accounting data and financial indicators

Unit: yuan Currency: CNY

Key indicators	By the end of the reporting period	By the end of the previous year	Flux (%)	Reasons for changes
Current ratio	0.65	0.61	6.56	
Quick ratio	0.33	0.35	-5.71	
Debt-to-assets ratio (%)	74.99	75.38	-0.52	
	The reporting period (January to June)	Same period of last year	Flux (%)	Reasons for changes
Net profit excluding extraordinary profit and loss	8,266,136,381.56	5,494,688,252.54	50.44	
Total debt-to-EBIT-DA ratio	0.1213	0.0905	34.02	
Interest coverage ratio	4.91	3.48	40.98	
Cash flow interest coverage ratio	6.64	6.94	-4.30	
EBITDA-to-interest coverage ratio	6.53	4.62	41.33	
Loan repayment rate (%)	100%	100%	0.00	
Interest coverage rate (%)	100%	100%	0.00	

## VIII. Financial Report

### Consolidated Balance Sheet

June 30, 2021

Prepared by: Hengli Petrochemical Co., Ltd.

Unit: yuan Currency: CNY

Item	Notes	June 30, 2021	December 31, 2020
<b>Current assets :</b>			
Cash and bank balances		19,048,515,671.43	15,671,338,845.58
Currency margin receivable		377,707,343.81	
Provision of settlement fund			
Funds lent			
Trading financial assets		685,929,126.58	1,650,130,008.46
Settlement guarantee fund receivable		10,050,136.79	
Derivative financial assets			
Notes receivables		3,242,862.85	4,334,402.76
Accounts receivables		416,922,134.69	1,363,602,415.10
Receivable financing		2,209,137,772.55	4,082,386,076.60
Prepayments		3,591,094,480.71	1,994,374,678.13
Insurance premiums receivable			
Cession premi u ms receivable			
Provision of cession receivable			
Other receivables		1,287,875,315.02	803,130,210.03
Including : Interest receivables			
Dividend receivables			
Recoursable financial assets acquired			
Inventories		26,547,232,372.12	19,691,123,430.81
Contract assets			
Assets held for sale			
Non - current assets due within one year			
Other current assets		5,962,724,839.36	6,844,803,825.48
<b>Total current assets</b>		<b>60,140,432,055.91</b>	<b>52,105,223,892.95</b>
<b>Non - current assets</b>			
Loans and payments on behalf			
Debts investment			
Other debts investment			
Long - term receivables			
Long - term equity investments			
Other equity instruments investment		199,800,000.00	199,800,000.00
Other noncurrent financial assets			
Investment properties		31,735,166.21	32,573,461.39
<b>Fixed assets</b>		<b>120,509,211,988.31</b>	<b>121,850,294,763.69</b>
Construction in progress		6,145,331,822.15	4,195,710,084.65
Productive biological assets			
Oil and gas assets			
Usage right assets		728,965,845.32	
Intangible assets		7,394,787,235. 12	7,188,503,385.13
Development expenditure			
Goodwill		79,830,909.39	
Long - term deferred expenses		2,741,922,227.32	3,085,329,048.29
Deferred tax assets		178,101,446.15	109,496,755.14

<b>Other non -current assets</b>		2,795,757,245.96	2,261,795,258.47
<b>Total non -current assets</b>		140,805,443,885.93	138,923,502,756.76
<b>Total assets</b>		200,945,875,941.84	191,028,726,649.71
<b>Current liabilities :</b>			
<b>Short -term loans</b>		41,817,234,796.04	49,879,420,683.06
<b>Currency margin payable</b>		519,032,545.13	
<b>Borrowing from the C entral Bank</b>			
<b>Deposit funds</b>			
<b>Trading financial liabilities</b>		329,312,832.40	88,999,293.44
<b>Derivative financial liabilities</b>			
<b>Notes payable</b>		11,376,562,617.86	7,805,074,070.85
<b>Accounts pay able</b>		14,847,169,984.62	15,004,707,112.76
<b>Receipts in advance</b>			
<b>Contract liabilities</b>		8,695,979,681.75	5,401,458,679.01
<b>Financial assets sold for repurchase</b>			
<b>Customer bank deposits and due to banks and other financial institutions</b>			
<b>Funds received as agent of stock exchange</b>			
<b>Funds received as stock under writer</b>			
<b>Employee compensation payable</b>		302,782,680.79	364,407,376.56
<b>Taxes payable</b>		1,723,409,756.12	2,290,700,960.19
<b>Other payables</b>		8,176,832,270.88	416,688,235.50
<b>Including: Interest pay able</b>			
<b>Dividend payable</b>		3,932,100.00	3,977,100.00
<b>Handlin g charges and commission payable</b>			
<b>Reinsured accounts payable</b>			
<b>Liabilities held for sale</b>			
<b>Non -current liabilities maturing within one year</b>		3,250,724,313.29	3,828,963,320.81
<b>Other current liabilities</b>		1,112,797,638.72	719,118,891.93
<b>Total current liabilities</b>		92,151,839,117.60	85,799,538,624.11
<b>Non -current liabilities:</b>			
<b>Reserves for insurance contract</b>			
<b>Long -term loans</b>		54,279,526,154.51	53,883,057,081.22
<b>Bonds payable</b>		1,046,840,475.90	1,013,970,663.36
<b>Including: Preference shares</b>			
<b>Per petual bonds</b>			
<b>Lease liabilities</b>		89,789,811.14	-
<b>Long -term payables</b>		4,000,000.00	123,322,260.33
<b>Long -term employee compensation payable</b>			
<b>Provisions</b>			
<b>Deferred income</b>		3,116,983,109.17	3,175,206,156.76
<b>Deferred tax liabilities</b>		2,356,307.17	9,24 0,902.12
<b>Other non -current liabilities</b>			
<b>Total non -current liabilities</b>		58,539,495,857.89	58,204,797,063.79
<b>Total liabilities</b>		150,691,334,975.49	144,004,335,687.90

<b>Owner's equity ( or shareholder's rights and interests) :</b>			
<b>Paid-in capital ( or Share capital)</b>		7,039,099,786.00	7,039,099,786.00
<b>Other equity instruments</b>			
<b>Including: Preference shares</b>			
<b>Perpetual bonds</b>			
<b>Capital reserve</b>		18,364,551,413.27	18,350,115,179.65
<b>Less: Treasury shares</b>		228,626,593.18	324,811,781.18
<b>Other comprehensive income</b>		-174,801,353.83	-100,823,962.53
<b>Special reserve</b>		50,131,635.93	77,581,307.23
<b>Surplus reserve</b>		743,268,339.04	743,268,339.04
<b>Ordinary risk reserve</b>			
<b>Undistributed profits</b>		24,344,427,409.50	21,120,648,008.95
<b>Total owner's equity (or shareholder's rights and interests) attributable to the parent company</b>		50,138,050,636.73	46,905,076,877.16
<b>Minority shareholders' interests and rights</b>		116,490,329.62	119,314,084.65
<b>Total owner's equity (or shareholder's rights and interests)</b>		50,254,540,966.35	47,024,390,961.81
<b>Total liabilities and owner's equity (or shareholder's rights and interests)</b>		200,945,875,941.84	191,028,726,649.71

Legal representative: Fan Hongwei

Person in charge of financial function: Liu Xuefen

Prepared by (person in charge of the accounting firm): Zheng Minxia

## Parent Company's Balance Sheet

June 30, 2021

Prepared by: Hengli Petrochemical Co., Ltd.

Unit: yuan Currency: CNY

Item	Notes	June 30, 2021	December 31, 2020
<b>Current assets :</b>			
<b>Cash and bank balances</b>		9,476,416.03	27,650,112.58
<b>Trading financial assets</b>			
<b>Derivative financial assets</b>			
<b>Notes receivables</b>			
<b>Accounts receivables</b>			
<b>Receivable financing</b>			
<b>Prepayments</b>		137,552.16	404,850,661.55
<b>Other receivables</b>		3,903,598.42	4,863,304,987.80
<b>Including : Interest receivables</b>			
<b>Dividend receivables</b>			4,829,955,000.00
<b>Inventories</b>			
<b>Contract assets</b>			
<b>Assets held for sale</b>			
<b>Non-current assets due within one year</b>			
<b>Other current assets</b>		82,343,157.18	28,175,701.13
<b>Total current assets</b>		95,860,723.79	5,323,981,463.06

<b>Non - current assets</b>			
<b>Debts investment</b>			
<b>Other debts investment</b>			
<b>Long -term receivables</b>			
<b>Long -term equity investments</b>		43,212,245,704.93	42,826,112, 800.93
<b>Other equity instruments investment</b>			
<b>Other non-current financial assets</b>			
<b>Investment properties</b>			
<b>Fixed assets</b>		1,608,525,921.78	533,919.78
<b>Construction in progress</b>			
<b>Productive biological assets</b>			
<b>Oil and gas assets</b>			
<b>Usage right assets</b>			
<b>Intangible assets</b>		1,415,094.34	
<b>Development expenditure</b>			
<b>Goodwill</b>			
<b>Long -term deferred expenses</b>			
<b>Deferred tax assets</b>			
<b>Other non-current assets</b>			955,705,232.28
<b>Total non -current assets</b>		44,822,186,721.05	43,782,351,952.99
<b>Total assets</b>		44,918,047,444.84	49,106,333,416.05
<b>Current liabilities :</b>			
<b>Short-term loans</b>			
<b>Trading financial liabilities</b>			
<b>Derivative financial liabilities</b>			
<b>Notes payable</b>			
<b>Accounts payable</b>		460,000.00	4,534,800.00
<b>Receipts in advance</b>			
<b>Contract liabilities</b>			
<b>Employee compensation payable</b>			1,465,382.00
<b>Taxes payable</b>		3,809,547.00	2,416,483.11
<b>Other payables</b>		11,904,836,797.38	10,856,341,775.75
<b>Including: Interest payable</b>			
<b>Dividend payable</b>			
<b>Liabilities held for sale</b>			
<b>Non-current liabilities maturing within one year</b>			
<b>Other current liabilities</b>			
<b>Total current liabilities</b>		11,909,106,344.38	10,864,758,440.86
<b>Non-current liabilities :</b>			
<b>Long -term loans</b>			
<b>Bonds payable</b>		1,046,840,475.90	1,013,970,663.36
<b>Including: Preference shares</b>			
<b>Perpetual bonds</b>			
<b>Lease liabilities</b>			
<b>Long -term payables</b>			
<b>Long -term employee compensations payable</b>			
<b>Provisions</b>			
<b>Deferred income</b>		14,000,000.00	

Deferred tax liabilities			
Other non-current liabilities			
<b>Total non-current liabilities</b>		1,060,840,475.90	1,013,970,663.36
<b>Total liabilities</b>		12,969,946,820.28	11,878,729,104.22
<b>Owner's equity (or shareholder's rights and interests) :</b>			
Paid-in capital (or Share capital)		7,039,099,786.00	7,039,099,786.00
Other equity instruments			
Including: Preference shares			
Perpetual bonds			
Capital reserve		23,935,956,217.92	23,794,748,212.70
Less: Treasury shares		228,626,593.18	324,811,781.18
Other comprehensive income			
Special reserve			
Surplus reserve		1,270,353,247.78	1,270,353,247.78
Undistributed profits		-68,682,033.96	5,448,214,846.53
<b>Total owner's equity (or shareholder's rights and interests)</b>		31,948,100,624.56	37,227,604,311.83
<b>Total liabilities and owner's equity (or shareholder's rights and interests)</b>		44,918,047,444.84	49,106,333,416.05

Legal representative: Fan Hongwei

Person in charge of financial function: Liu Xuefen

Prepared by (person in charge of the accounting firm): Zheng Minxia

## Consolidated Income Statement

January to June, 2021

Unit: yuan Currency: CNY

Item	Note	Half year 2021	Half year 2020
<b>I. Total operating revenue</b>		104,574,477,968.28	67,357,935,162.99
Including : Operating revenue		104,574,477,968.28	67,357,935,162.99
Interest income			
Earned insurance premium			
Fee and commission incomes			
<b>II. Total operating cost</b>		93,870,777,498.52	59,891,056,010.27
Including : Operating cost		88,606,157,035.69	54,256,726,443.98
Interest expenses			
Fee and commission expenses			
Refunded premiums			
Net amount of compensation payout			
Net amount of allotment of reserves for insurance liabilities			
Policy dividend payment			
Reinsured expenses			
Taxes and surcharges		942,830,057.89	1,021,909,803.98
Selling expenses		112,155,781.37	542,587,130.06
Administrative expenses		929,877,003.94	870,692,615.21
Research and development expenses		423,005,210.99	379,098,796.08
Financial expense		2,856,752,408.64	2,820,041,220.96
Including : Interest expenses		2,712,601,519.40	2,523,778,695.65

Interest income		58,911,453.98	62,440,582.53
Add: Other income		255,643,642.92	123,425,202.30
Investment gains (“-”for loss )		-213,968,734.97	-4,192,185.35
Including: Gains from investment in associates and joint ventures			
Income on derecognition of financial assets at amortized cost (“-”for loss )			
Foreign exchange gains (“-”for loss )			
Gains from net hedging exposure (“-”for loss )			
Gains from changes in fair value (“-”for loss )		304,288,424.25	-53,659,648.69
Credit impairment loss (“-”for loss )		-25,703,092.89	-3,402,835.21
Assets impairment loss (“-”for loss )			
Gains form disposal of assets (“-”for loss)		-39,515.06	-62,773.92
III. Operating profit (“-”for loss )		11,023,921,194.01	7,528,986,911.85
Add: Non -operating income		7,811,806.27	2,460,654.59
Less: Non -operating expenses		6,472,626.14	29,666,546.07
IV. Total profit (“-”for total loss )		11,025,260,374.14	7,501,781,020.37
Less: Income tax expenses		2,385,409,708.11	1,955,723,792.72
V. Net profit (“-”for net loss )		8,639,850,666.03	5,546,057,227.65
<b>(I) Classified by continuity of operations</b>			
1.Net profit from continuing operations (“-”for net loss )		8,639,850,666.03	5,546,057,227.65
2.Net profit from discontinued operation (“-”for net loss )			
<b>(II ) Classified by attribution to ownership</b>			
1.Net profit attributable to shareholders of the parent company (“-”for net loss )		8,642,207,124.21	5,516,860,000.15
2. Net profit attributable to minority interests (“-”for net loss )		-2,356,458.18	29,197,227.50
VI. Other comprehensive income -after tax		-74,444,688.15	13,823,417.25
(1) Other comprehensive income-after tax attributable to owners of the parent company		-73,977,391.30	13,823,110.15
1. Other comprehensive income not reclassified into profit or loss subsequently			
(1) Changes in remeasurement of defined benefit plan			
(2) Share of other comprehensive income of the equity method investments not transferred to loss or benefit			
(3) Changes in fair value of other equity instruments investment			
(4) Changes in fair value of the company's own credit risks			
2. Other comprehensive income that will be reclassified into profit or loss subsequently		-73,977,391.30	13,823,110.15
(1) Share of other comprehensive			

income of the equity method investments transferrable to profit or loss			
(2) Changes in fair value of other debts investment			
(3) Resulted amount on reclassification of financial assets in other comprehensive income			
(4) Credit impairment reserve of other debts investment			
(5) Reserve for cash flow hedging		-89,024,986.83	
(6) Translation differences arising from translation of foreign currency financial statements		15,047,595.53	13,823,110.15
(7) Other			
(II) Other comprehensive income -after tax attributable to minority interests		-467,296.85	307.10
VII. Total comprehensive income		8,565,405,977.88	5,559,880,644.90
(I) Total comprehensive income attributable to owners of the parent company		8,568,229,732.91	5,530,683,110.30
(II) Total comprehensive income attributable to minority interests		-2,823,755.03	29,197,534.60
VIII Earnings per share :			
(I) Basic earnings per share (yuan /share)		1.23	0.79
(II) Diluted earnings per share (yuan /share)		1.23	0.79

For business merger involving enterprises under common control in this period, the net profit realized by the merged enterprise before merger date was RMB 0, and the net profit of the merged in previous period was 0 yuan.

Legal representative: Hongwei Fan

Person in charge of financial function: Xuefen Liu

Prepared by (person in charge of the accounting firm): Minxia Zheng

## Parent Company's Income Statement

January to June, 2021

Unit: yuan Currency: CNY

Item	Note	Half year 2021	Half year 2020
I. Operating revenue		530,229,675.19	2,135,481,201.37
Less : Operating cost		530,229,675.11	2,134,214,917.37
Taxes and surcharges		4,997,083.21	8,040.00
Selling expenses			
Administrative expenses		60,324,479.74	82,485,315.64
Research and development expenses			
Financial expense		39,827,355.22	46,094,050.07
Including : Interest expenses		37,047,554.95	46,076,428.19
Interest income		199,390.78	157,737.87
Add: Other income		1,248,904.41	608,910.87
Investment gains ("-"for loss)			570,000,000.00
Including: Gains from investment in associates and joint ventures			
Income on derecognition of financial			

assets at amortized cost (“-”for loss )			
Gains from net hedging exposure (“-”for loss )			
Gains from changes in fair value (“-”for loss )			
Credit impairment loss (“-”for loss )		229,817.95	
Assets impairment loss (“-”for loss )			16,792.01
Gains form disposal of assets (“-”for loss)			
II. Operating profit (“-”for loss )		-103,670,195.73	443,304,581.17
Add: Non -operating income			
Less: Non -operating expenses			
III. Total profit (“-”for loss )		-103,670,195.73	443,304,581.17
Less: Income tax expenses			
IV. Net profit (“-”for loss )		-103,670,195.73	443,304,581.17
(I) Net profit from continuing operations (“-”for loss )		-103,670,195.73	443,304,581.17
(II ) Net profit from discontinued operation (“-”for loss )			
V. Other comprehensive income after tax			
(I) Other comprehensive income not reclassified into profit or loss subsequently			
1. Changes in remeasurement of defined benefit plan			
2. Share of other comprehensive income of the equity method investments not transferrable to profit or loss			
3. Changes in fair value of other equity instruments investment			
4. Changes in fair value of the company's own credit risks			
(II ) Other comprehensive income that will be reclassified into profit or loss subsequently			
1. Share of other comprehensive income of the equity method investments transferrable to profit or loss			
2. Changes in fair value of other debts investment			
3. Resulted amount on reclassification of financial assets in other comprehensive income			
4. Credit impairment reserve of other debts investment			
5. Reserve for cash flow hedging			
6. Translation differences arising from translation of foreign currency financial statements			
7. Other			
VI. Total comprehensive income		-103,670,195.73	443,304,581.17
VII. Earnings per share :			

(I) Basic earnings per share(RMB/share)			
(II) Diluted earnings per share(RMB/share)			

Legal representative: Fan Hongwei

Person in charge of financial function: Liu Xuefen

Prepared by (person in charge of the accounting firm): Zheng Minxia

## Consolidated Cash Flows Statement

January to June, 2021

Unit: yuan Currency: CNY

Item	Note	Half year 2021	Half year 2020
<b>I. Cash flows from operating activities :</b>			
Cash received from sale of goods or rendering of services		121,336,796,594.74	75,044,380,622.31
Net increase of deposits from customers and other banks or financial institutions			
Net increase in borrowings from central bank			
Net increase of loans from other financial institutions			
Cash received from receiving insurance premium of original insurance contract			
Net cash received from reinsurance business			
Net increase of policy holder deposits and investment funds			
Cash received from interests, fees and commissions		6,775,715.53	
Net increase of loans from other banks			
Net increase in repurchase business capital			
Net cash received as securities trading agency			
Tax refund received		377,285,547.43	137,938,255.70
Other cash received relating to operating activities		4,680,550,279.24	5,648,618,722.34
<b>Sub -total of cash inflows in operating activities</b>		<b>126,401,408,136.94</b>	<b>80,830,937,600.35</b>
Cash paid for goods and services		97,329,857,577.48	52,771,778,399.12
Net increase of customer's loans and advances			
Net increase in deposits with central bank and other financial institutions			
Cash paid for indemnity of original insurance contract			
Net increase of loans to other banks			
Cash paid for interests, fees and commission			
Cash paid for policy dividends			
Cash paid to and on behalf of employees		1,791,442,952.25	1,448,240,876.53

Payments of all types of taxes		4,850,929,047.89	3,342,096,708.89
Other cash paid relating to operating activities		6,249,086,242.03	5,076,499,059.42
Sub -total of cash outflows in operating activities		110,221,315,819.65	62,638,615,043.96
Net cash flows from operating activities		16,180,092,317.29	18,192,322,556.39
<b>II. Cash flows from investing activities:</b>			
Cash received from disposal of investments		1,487,381,281.74	294,681,847.02
Cash received from returns on investments		-	7,948,373.71
Net cash received from disposal of fixed assets, intangible assets and other long -term assets		22,511,819.35	313,987.66
Cash received from disposal of subsidiaries and other business units			
Other cash received relating to investing activities		52,697,368.27	5,780,678,376.49
Sub -total of cash inflows in investment activities		1,562,590,469.36	6,083,622,584.88
Cash paid to acquire fixed assets, intangible assets and other long -term assets		6,131,235,998.99	21,451,791,614.04
Cash paid to investments		409,610,909.09	558,665,655.99
Net increase in pledge loans			
Cash paid to acquire subsidiaries and other business units			
Other cash paid relating to investing activities		758,138,087.78	4,555,332,452.45
Sub -total of cash outflows in investment activities		7,298,984,995.86	26,565,789,722.48
Net cash flows from investing activities		-5,736,394,526.50	-20,482,167,137.60
<b>III. Cash flows from financing activities :</b>			
Cash received from capital contribution		350,000,000.00	
Include: Cash received from investment by minority interests			
Cash received from borrowings		37,359,186,600.89	42,118,941,072.69
Cash received relating to other financing activities		9,178,551,971.75	1,616,145,339.17
Sub -total of cash inflows in financing activities		46,887,738,572.64	43,735,086,411.86
Cash repayments of amounts borrowed		45,649,179,138.01	31,314,021,139.92
Cash payments for interest expenses and distribution of dividends or profits		7,674,059,813.50	5,326,006,707.76
Include: Dividend paid to minority interests of subsidiaries			12,998.00
Other cash payments relating to financing activities		2,266,232,032.93	698,587,182.80
Sub -total of cash outflows in financing activities		55,589,470,984.44	37,338,615,030.48

Net cash flows from financing activities		-8,701,732,411.80	6,396,471,381.38
IV. Effect of foreign exchange rate changes on cash and cash equivalents		-244,791,212.05	-155,999,853.07
V. Net increase in cash and cash equivalents		1,497,174,166.94	3,950,626,947.10
Add: Opening balance of cash and cash equivalent		11,494,116,327.37	10,792,982,727.36
VI. Closing balance of cash and cash equivalent		12,991,290,494.31	14,743,609,674.46

Legal representative: Fan Hongwei

Person in charge of financial function: Liu Xuefen

Prepared by (person in charge of the accounting firm): Zheng Minxia

## Parent Company's Cash Flows Statement

January to June, 2021

Unit: yuan Currency: CNY

Item	Note	Half year 2021	Half year 2020
<b>I. Cash flows from operating activities :</b>			
Cash received from sale of goods or rendering of services		599,164,314.00	1,524,685,093.21
Tax refund received			
Other cash received relating to operating activities		999,488,574.88	767,592.14
Sub -total of cash inflows in operating activities		1,598,652,888.88	1,525,452,685.35
Cash paid for goods and services		125,702,398.24	1,945,850,251.50
Cash paid to and on behalf of employees		5,731,291.49	-2,875,501.22
Payments of all types of taxes		124,647,363.60	8,040.00
Other cash paid relating to operating activities		540,140,214.92	9,632,318.79
Sub -total of cash outflows in operating activities		796,221,268.25	1,952,615,109.07
Net cash flows from operating activities		802,431,620.63	-427,162,423.72
<b>II. Cash flows from investing activities:</b>			
Cash received from disposal of investments			
Cash received from returns on investments		4,829,955,000.00	2,811,967,000.00
Net cash received from disposal of fixed assets, intangible assets and other long -term assets			
Cash received from disposal of subsidiaries and other business units			
Other cash received relating to investing activities			29,000,000.00
Sub -total of cash inflows in investment activities		4,829,955,000.00	2,840,967,000.00
Cash paid to acquire fixed assets, intangible assets and other long -term		666,681,248.56	32,123.89

<b>assets</b>			
<b>Cash paid to investments</b>		300,000,000.00	700,000,000.00
<b>Cash paid to acquire subsidiaries and other business units</b>			
<b>Other cash paid relating to investing activities</b>			60,000,000.00
<b>Sub -total of cash outflows in investment activities</b>		966,681,248.56	760,032,123.89
<b>Net cash flows from investing activities</b>		3,863,273,751.44	2,080,934,876.11
<b>III. Cash flows from financing activities :</b>			
<b>Cash received from capital contribution</b>			
<b>Cash received from borrowings</b>			
<b>Cash received relating to other financing activities</b>		733,525,358.55	3,240,000,000.00
<b>Sub -total of cash inflows in financing activities</b>		733,525,358.55	3,240,000,000.00
<b>Cash repayments of amounts borrowed</b>			
<b>Cash payments for interest expenses and distribution of dividends or profits</b>		5,417,404,427.17	2,776,691,365.67
<b>Other cash payments relating to financing activities</b>			2,138,970,332.73
<b>Sub -total of cash outflows in financing activities</b>		5,417,404,427.17	4,915,661,698.40
<b>Net cash flows from financing activities</b>		-4,683,879,068.62	-1,675,661,698.40
<b>IV. Effect of foreign exchange rate changes on cash and cash equivalents</b>			
<b>V. Net increase in cash and cash equivalents</b>		-18,173,696.55	-21,889,246.01
<b>Add: Opening balance of cash and cash equivalent</b>		27,650,112.58	82,052,267.79
<b>VI. Closing balance of cash and cash equivalent</b>		9,476,416.03	60,163,021.78

Legal representative: Fan Hongwei

Person in charge of financial function: Liu Xuefen

Prepared by (person in charge of the accounting firm): Zheng Minxia

## Consolidated Statement of Changes in Equity

January to June, 2021

Unit: yuan Currency: CNY

Item	2021half year														
	Equity attributable to the parent company													Minority interests	Total owners' equity
	Paid-in Capital (or Share Capital)	Other equity instruments			Capital reserve	Less: Treasury shares	Other comprehensive income	Special reserve	Surplus reserve	Ordinary risk reserve	Undistributed profits	Other	Subtotal		
Preference shares		Perpetual bonds	Other												
<b>I. Balance at the end of previous year</b>	7,039,099,786.00				18,350,115,179.65	324,811,781.18	-100,823,962.53	77,581,307.23	743,268,339.04		21,120,648,008.95		46,905,076,877.16	119,314,084.65	47,024,390,961.81
<b>Add: Changes in accounting policies</b>													-5,201,038.90		-5,201,038.90
<b>Correction of errors in previous period</b>															
<b>Business merger under common control</b>															
<b>Other</b>															
<b>II. Balance in beginning period of this year</b>	7,039,099,786.00				18,350,115,179.65	324,811,781.18	-100,823,962.53	77,581,307.23	743,268,339.04		21,115,446,970.05		46,899,875,838.26	119,314,084.65	47,019,189,922.91

<b>III. Movement over the period ("-"for decrease)</b>					14,436,233.62	-96,185,188.00	-73,977,391.30	-27,449,671.30			3,228,980,439.45		3,238,174,798.47	-2,823,755.03	3,235,351,043.44
<b>(I) Total comprehensive income</b>							-73,977,391.30				8,642,207,124.21		8,568,229,732.91	-2,823,755.03	8,565,405,977.88
<b>(II) Shareholders' contributions and decrease of capital</b>					14,436,233.62	-96,185,188.00							110,621,421.62		110,621,421.62
<b>1. Ordinary shares contributed by shareholders</b>															
<b>2. Capital contribution by holders of other equity instruments</b>															
<b>3. Increase in shareholder's equity resulted from share-based payments</b>															
<b>4. Other</b>					14,436,233.62	-96,185,188.00							110,621,421.62		110,621,421.62
<b>(III) Appropriation of profits</b>											-5,413,226,684.76		-5,413,226,684.76		-5,413,226,684.76

1. Appropriation to surplus reserves															
2. allotment of ordinary risk reserves															
3. Distributions to owners (or shareholders)											-5,413,226,684.76		-5,413,226,684.76		-5,413,226,684.76
4. Other															
(IV) Transfer within equity															
1.Capital reserves converting into capital (or share capital)															
2.Surplus reserves converting into capital (or share capital)															
3.Surplus reserves covering the deficit															
4. Changes in defined benefits plan transferred to retained earnings															

comprehensive income transferred to retained earnings															
6. Other															
(V) Special reserve								-27,449,671.30					-27,449,671.30		-27,449,671.30
1. Appropriation for the period								87,541,421.06					87,541,421.06		87,541,421.06
2. Used for the period								114,991,092.36					114,991,092.36		114,991,092.36
(VI) Other															
IV. Balance at the end of the period	7,039,099,786.00				18,364,551,413.27	228,626,593.18	-174,801,353.83	50,131,635.93	743,268,339.04		24,344,427,409.50		50,138,050,636.73	116,490,329.62	50,254,540,966.35

Item	2020 half year															
	Equity attributable to the parent company														Minority interests	Total owners' equity
	Paid-in Capital (or Share Capital)	Other equity instruments			Capital reserve	Less: Treasury shares	Other comprehensive income	Special reserve	Surplus reserve	Ordinary risk reserve	Undistributed profits	Other	Subtotal			
Preference shares		Perpetual bonds	Other													
I. Balance at the end of previous year	7,039,099,786.00				18,272,358,450.99	224,841,448.45	13,773,146.41	30,392,119.18	690,326,989.68		10,511,894,102.60		36,333,003,146.41	405,784,756.03	36,738,787,902.44	

<b>Add: Changes in accounting policies</b>															
<b>Correction of errors in previous period</b>															
<b>Business merger under common control</b>															
<b>Other</b>															
<b>II. Balance in beginning period of this year</b>	7,039,099,786.00				18,272,358,450.99	224,841,448.45	13,773,146.41	30,392,119.18	690,326,989.68		10,511,894,102.60		36,333,003,146.41	405,784,756.03	36,738,787,902.44
<b>III. Movement over the period ("-"for decrease)</b>					144,312,627.95	99,970,332.73	13,823,110.15	57,375,149.24			2,710,744,692.95		2,826,285,247.56	-323,759,388.38	2,502,525,859.18
<b>(I) Total comprehensive income</b>							13,823,110.15				5,516,860,000.15		5,530,683,110.30	29,197,534.60	5,559,880,644.90
<b>(II) Shareholders' contributions and decrease of capital</b>					144,312,627.95	99,970,332.73							44,342,295.22	-352,956,922.98	-308,614,627.76
<b>1. Ordinary shares contributed by shareholders</b>															
<b>2. Capital contribution by holders of other</b>															



capital (or share capital)															
3.Surplus reserves covering the deficit															
4. Changes in defined benefits plan transferred to retained earnings															
5. Other comprehensive income transferred to retained earnings															
6. Other															
(V) Special reserve								57,375,149.24					57,375,149.24		57,375,149.24
1. Appropriation for the period								70,130,616.90					70,130,616.90		70,130,616.90
2. Used for the period								12,755,467.66					12,755,467.66		12,755,467.66
(VI) Other															
IV. Balance at the end of the period	7,039,099,786.00				18,416,671,078.94	324,811,781.18	27,596,256.56	87,767,268.42	690,326,989.68		13,222,638,795.55		39,159,288,393.97	82,025,367.65	39,241,313,761.62

## Parent Company's Statement of Changes in Equity

January to June, 2021

Unit: yuan Currency: RMB

Item	2021 half year										
	Paid-in Capital (Share Capital)	Other equity instruments			Capital reserve	Less: Treasury shares	Other comprehensive income	Special reserve	Surplus reserve	Undistributed profits	Total owners' equity
		Preference shares	Perpetual bonds	Other							
I. Balance at the end of previous year	7,039,099,786.00				23,794,748,212.70	324,811,781.18			1,270,353,247.78	5,448,214,846.53	37,227,604,311.83
Add: Changes in accounting policies											
Correction of errors in previous period											
Others											
II. Balance in beginning period of this year	7,039,099,786.00				23,794,748,212.70	324,811,781.18			1,270,353,247.78	5,448,214,846.53	37,227,604,311.83
III. Movement over the period ("-" for decrease)					141,208,005.22	-96,185,188.00				-5,516,896,880.49	-5,279,503,687.27
(I) Total comprehensive										-103,670,195.73	-103,670,195.73

income											
(II) Shareholders' contributions and decrease of capital					141,208,005.22	-96,185,188.00					237,393,193.22
1. Ordinary shares contributed by shareholders											
2. Capital contribution by holders of other equity instruments											
3. Increase in shareholder's equity resulted from share-based payments											
4. Other					141,208,005.22	-96,185,188.00					237,393,193.22
(III) Appropriation of profits										-5,413,226,684.76	-5,413,226,684.76
1. Appropriation											

to surplus reserves											
2. Distributions to owners (or shareholders)										-5,413,226,684.76	-5,413,226,684.76
3. Other											
(IV) Transfer within equity											
1.Capital reserves converting into capital (or share capital)											
2.Surplus reserves converting into capital (or share capital)											
3.Surplus reserves covering the deficit											
4. Changes in defined benefits plan transferred to retained											

earnings											
5. Other comprehensive income transferred to retained earnings											
6. Other											
(V) Special reserve											
1. Appropriation for the period											
2. Used for the period											
(VI) Other											
IV. Balance at the end of period	7,039,09 9,786.00				23,935,956,217.9 2	228,626,593.18			1,270,353,247.7 8	-68,682,033.96	31,948,100,624.5 6

Item	2020 half year										
	Paid-in Capital (Share Capital)	Other equity instruments			Capital reserve	Less: Treasury shares	Other comprehensive income	Special reserve	Surplus reserve	Undistributed profits	Total owners' equity
		Preference shares	Perpetual bonds	Other							
I. Balance at	7,039,0				23,759,278,	224,841,448.4			757,965,34	3,636,814,094.5	34,968,316,12

<b>the end of previous year</b>	99,786.00				351.37	5			2.25	5	5.72
<b>Add: Changes in accounting policies</b>											
<b>Correction of errors in previous period</b>											
<b>Others</b>											
<b>II. Balance in beginning period of this year</b>	7,039,099,786.00				23,759,278,351.37	224,841,448.45			757,965,342.25	3,636,814,094.55	34,968,316,125.72
<b>III. Movement over the period (“-” for decrease)</b>					74,570,241.00	99,970,332.73				-2,362,810,726.03	-2,388,210,817.76
<b>(I) Total comprehensive income</b>										443,304,581.17	443,304,581.17
<b>(II) Shareholders’ contributions and decrease of capital</b>					74,570,241.00	99,970,332.73					-25,400,091.73

1. Ordinary shares contributed by shareholders											
2. Capital contribution by holders of other equity instruments											
3. Increase in share-holder's equity resulted from share-based payments											
4. Other					74,570,241.00	99,970,332.73					-25,400,091.73
(III) Appropriation of profits										-2,806,115,307.20	-2,806,115,307.20
1. Appropriation to surplus reserves											
2 Distributions to owners (or shareholders)										-2,806,115,307.20	-2,806,115,307.20

<b>3. Other</b>											
<b>(IV) Transfer within equity</b>											
<b>1.Capital reserves converting into capital (or share capital)</b>											
<b>2.Surplus reserves converting into capital (or share capital)</b>											
<b>3.Surplus reserves covering the deficit</b>											
<b>4. Changes in defined benefits plan transferred to retained earnings</b>											
<b>5. Other comprehensive income</b>											

transferred to retained earnings											
6. Other											
(V) Special reserve											
1. Appropriation for the period											
2. Used for the period											
(VI) Other											
<b>IV. Balance at the end of the period</b>	7,039,099,786.00				23,833,848,592.37	324,811,781.18			757,965,342.25	1,274,003,368.52	32,580,105,307.96

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