Company code: 600618 900908 Short name of the Company: SCAC Chlor-Alkali B share

# Shanghai Chlor-Alkali Chemical Co., Ltd. 2016 Annual Report

#### **Important Notice**

- I. The Board of Directors, the Supervisory Committee, Directors, Supervisors and senior executives of the Company ensure that the content of this Annual Report is true, accurate and integrative, not having any false statement, misleading representation or significant omission, and will take joint and several legal responsibilities for the Report.
- II. All the Directors of the Company attended the Board meeting.
- III. BDO China Shu Lun Pan Certified Public Accountants LLP (special ordinary partnership) issued an auditor's report with standard and unqualified opinion for the Company.
- IV. Mr. Huang Dailie, the principal of the Company, Mr. Zhang Weimin, the principal in charge of accounting of the Company, and Mr. Lai Yonghua, the head of accounting department (accounting officer) declare to guarantee the truth, accuracy and integrity of the financial report carried in this Annual Report.
- V. The profit distribution preplan or the common reserves capitalizing preplan during the reporting period reviewed by the board of directors

According to the 2016 annual financial audit report issued by BDO China Shu Lun Pan Certified Public Accountants LLP engaged by the Company, in 2016 the net profit of the parent company was RMB -320,466,343.92 Yuan and the undistributed profit at beginning of the year was RMB -614,936,506.51 Yuan, and the profit available for distribution at end of the year was RMB -935,402,850.43 Yuan. Therefore, the Company had no capability of cash dividend or common reserves capitalization.

#### VI. Risk disclaimer of forward-looking statements

√Applicable □Not applicable

The future plan or other forward looking statement included in this Report shall not constitute the Company's substantial commitment to the investors, and we remind the investors to notice to the investment risks.

# VII. Is there any non-operational fund occupation by the controlling shareholder or the related parties?

No

VIII. Does the Company provide the outward guarantees in breach of the stipulated decision-making process?

No

#### IX. Notice on important risks

√Applicable □Not applicable

The company has described the related potential risks in this report. Please refer to the contents concerning the risk factors that the Company may face in the future development in Section IV Discussion and Analysis of the Business.

#### X. Other

□Applicable √Not applicable

#### 2016 Annual Report

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### Section I Paraphrase

### I. Paraphrase

In this Report, except otherwise indicated, these words and expressions shall have the meanings as follows:

CSRC means   China Securities Regulatory Commission   SSRB   means   China Securities Regulatory Commission   SSRB   means   Shanghai Regulatory Bureau of China Securities Regulatory Commission   The Company, Company, or Chlor-Alkali Chemical Co., Ltd.  Sodium hydroxide   means   Molecular formula: NaOH; a strong soluble alkali. Sodium hydroxide is easy to be solved into water, has strong alkalinity, and can supply Na+ ion. These properties make it used widely in the industries such as soap-making, textile industry, printing and dyeing, blanching, papermaking, petroleum refining, metallurgy and other chemical industries.  Chlorine   means   Molecular formula: Cl2. As an important chemical raw material, chlorine gas is widely used in the industries such as papermaking, printing and dyeing, pigment, bleaching powder, textile industry, chemical fiber, grease petroleum, rubber, plastic, pharmacy, disinfection, agricultural pesticide, metallurgy and electronic industry.  EDC   means   Ethylene dichloride. Achromatic or yellowish transparent liquid with specific gravity of about 1.26 and odor similar to chloroform, insoluble in water, dissolve in ethyl alcohol and ethyl ether. Mainly used as the solvent for wax, fat and rubber, and also used in producing vinyl chloride and polycarbonate.  EPVC, paste resin   means   Paste resin. The Company's production for paste resin mainly apper, toy and bottle cap.  TPVC   means   Special resin. The special resin produced by the Company is mainly the customer specially-used material, the medical resin with high polymeric level such as plasma bag, infusion tube and the seal with high elasticity and the resin specially used for primary coating in automobiles.  CPVC   means   Shanghai BASF Polyurethane Co., Ltd	Paraphrase for generally-used expres	agiona	
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SLIC means Shanghai Lianheng Isocyanate Co., Ltd			
<u> </u>	SLIC	means	· ·
	SBPC	means	

### Section II Company Profile and Main Financial indexes

### I. Company information

Chinese name of the Company	上海氯碱化工股份有限公司
Short form	氯碱化工
English name of the Company	SHANGHAI CHLOR—ALKALI CHEMICAL CO., LTD.
Abbreviation	SCAC
Legal representative of the Company	Mr. Huang Dailie

#### **II.** Contact information

	Secretary of the Board of Directors	Securities representative
Name	Dong Yan	Chen Lihua
Contact address	No. 4747 Longwu Rd., Shanghai	No. 4747 Longwu Rd., Shanghai
Tel.	021-23533113	021-64342640
Fax	021-64340817	021-64340817
E-mail	dy@scacc.com	chenlihua@scacc.com

#### III. Basic information

Registered address of the Company	No. 4747 and 4800 Longwu Rd., Shanghai
Zip code of registered address	200241
Business address of the Company	No. 4747 Longwu Rd., Shanghai
Zip code of business address of the Company	200241
Website	www.scacc.com
E-mail	dshmss@scacc.com

#### IV. Information disclosure and filing site

Newspapers for information disclosure selected	China Securities News, Shanghai Securities News,
by the Company	Securities Post and Hong Kong Commercial Daily
Website appointed by China Securities	www.sse.com.cn
Regulatory Commission for carrying annual	
report	
Site for filing annual report	No. 4747 Longwu Rd., Shanghai

### V. The Company's share

The Company's share							
Type of share	Type of share Stock exchange for listing Share name Share code of share						
A-share	Shanghai Stock Exchange	Chlor-Alkali Chemical	600618				
B-share	Shanghai Stock Exchange	Chlor-Alkali B Share	900908				

#### VI. Other relevant information

	Name	BDO China Shu Lun Pan Certified Public
Dublic accounting firms		Accountants LLP
Public accounting firm	Business address	4th Floor, New Huangpu Financial Plaza,
engaged by the Company (domestic)		No.61, East Nanjing Rd., Shanghai, China
(domestic)	Name of the accountant	Gu Xuefeng, Chen Luying
	for signing	

#### VII. Main accounting data and financial indexes of the last 3 years

#### (I) Main accounting data

Unit: Yuan Currency: RMB

			Cint. Tuun	Currency. Idvib
Main accounting data	2016	2015	Increase or decrease than same period of last year (%)	2014
Operating income	6,754,397,061.69	6,170,874,223.67	9.46	7,015,409,267.56
Net profit attributable to shareholders of the listed Company	-328,091,761.80	95,615,030.34	-443.14	-592,502,499.95
Net profit attributable to shareholders of the Company, after non-recurring profit and loss	-72,743,416.16	-31,416,638.28	N.A.	-262,177,332.00
Net cash flow from operating activities	488,856,761.24	305,852,432.45	59.83	-29,059,999.83
	At the end of 2016	At the end of 2015	Increase or decrease (%)	At the end of 2014
Net assets attributable to shareholders of the listed Company	1,941,720,787.56	2,261,545,045.54	-14.14	2,164,655,507.39
Total assets	4,489,616,046.06	4,847,854,403.79	-7.39	5,754,717,626.22

#### (II) Main financial indexes

Main financial indexes	2016	2015	Increase or decrease than same period of last year (%)	2014
Basic earnings per share (RMB/share)	-0.2837	0.0827	-443.05	-0.5124
Diluted earnings per share (RMB/share)	-0.2837	0.0827	-443.05	-0.5124
Basic earnings per share after non-recurring profit and loss (RMB/share)	-0.0629	-0.0272	N.A	-0.2267
Return on net assets, weighted average (%)	-15.6113	4.313	Decrease by 19.92 percentage points	-24.4467
Return on net assets, weighted average, after recurrent profit and loss (%)	-3.4613	-1.4171	Decrease by 2.04 percentage points	-10.8175

Notes to the main accounting data and financial indexes of the last 3 years before the end of the reporting period

□Applicable √Not applicable

#### VIII. Difference in accounting data under domestic and overseas accounting standards

- (I) The difference between net profit and net assets attributable to shareholders of the Company between the international accounting standard and Chinese accounting standards
- □Applicable √Not applicable
- (II) The difference of net profit and net assets attributable to shareholders of the listed Company in the financial report synchronously disclosed according to the international accounting standards and Chinese accounting standards
- □Applicable √Not applicable
- (III) Explanation for differences between the international and Chinese accounting standards:
- □Applicable √Not applicable

#### IX. Main financial data by quarters in 2016

Unit: Yuan Currency: RMB

	1 <sup>st</sup> quarter	2 <sup>nd</sup> quarter	3 <sup>rd</sup> quarter	4 <sup>th</sup> quarter
	(JanMarch)	(AprJun.)	(July-Sept.)	(OctDec.)
Operating income	1,121,594,645.40	1,996,947,639.96	1,902,126,376.36	1,733,728,399.97
Net profit attributable				
to shareholders of the	9,426,009.05	2,908,167.36	-58,655,607.08	-281,770,331.13
listed Company				
Net profit attributable				
to shareholders of the				
listed Company after	21,263,550.76	24,316,965.61	4,060,482.46	-122,384,414.99
deducting	21,203,330.70	24,310,703.01	4,000,402.40	-122,304,414.77
non-recurring profit				
and loss				
Net cash flow from	108,726,920.00	94,418,777.05	57,693,400.75	228,017,663.44
operating activities	100,720,720.00	74,410,777.03	37,073,400.73	220,017,003.44

Note on differences between the data of the quarters and that of the period report disclosed  $\Box$ Applicable  $\sqrt{Not}$  applicable

#### X. Items of non-recurring profit and loss and amounts

√Applicable □Not applicable

Unit: Yuan Currency: RMB Items of non-recurring profit Note (if Amount of 2016 Amount of 2015 Amount of 2014 and loss applicable) 297,935.96 Profit or loss from disposal of 257,772,690.18 1,111,822.13 non-current assets Government subsidy 22,590,620.20 The rest 30% of 41,118,941.72 5,732,560.40 attributable to profit and loss the government of current period, except such subsidy for government subsidy closely industrial related to the Company's restructuring of normal business operation, Wujing Base, meeting the regulation of totally **RMB** 15,000,000.00 national policy and enjoyed constantly in certain quota or Yuan quantity according to a certain standard Profit and loss on the changes 13,928,846.49 Yield from sale of in fair value of the Zhongyida's held-for-trading financial shares assets and liabilities and the investment yield from the disposal of the held-for-trading financial assets and liabilities and available-for-sale financial assets except the valid hedging business related to the normal operation business of the company Other non-operating revenue 2,120,604.54 3,081,055.74 6,572,403.12 and expenditure other than

above items				
Other profit or loss items meeting the definition of non-recurring profit and loss	-297,607,371.13	Compensation for personnel placement and related loss on work stoppage caused by adjustment of the industrial structure in Wujing Base	-174,731,937.80	-343,652,815.90
Impact of minority interests	3,119,749.28		-199,632.57	50,515.48
Impact of income tax	201,269.02		-9,448.67	-139,653.18
Total	-255,348,345.64		127,031,668.60	-330,325,167.95

#### XI. Items measured by fair value

√Applicable □Not applicable

			Unit: Y	uan Currency: RMB
Item	Beginning	Closing balance	Change in	Impact on the profit
Item	balance	Closing balance	current period	of current period
Salable financial	50,765,875.23	70,138,258.46	19,372,383.23	344,311.88
assets				
Total	50,765,875.23	70,138,258.46	19,372,383.23	344,311.88

#### XII. Others

 $\Box$ Applicable  $\sqrt{\text{Not applicable}}$ 

### **Section III** Summary on the Company's Business

# I. Main business, operating mode and industrial status of the Company during the reporting period

- II. (1) Main business: The Company mainly produces and sells sodium hydroxide, chlorine, chlorine products, polyvinyl chloride plastics resin and the products. Now the Company's annual production capacity for sodium hydroxide is 720,000 tons, for ethylene dichloride, 720,000 tons, for liquid chlorine, 600,000 tons, and for paste and special resin, 80,000 tons.
- (2) Operating mode: The Company makes close cooperation with the international chemical magnate to establish an integrated operation mode with completed devices and pipe-line transportation in the shanghai chemical industrial park. The integrated industrial industry chain model is an interchange and sharing integrated industry chain which mainly takes the ethylene product from SECCO as the flagship product, the chlor-alkali product from the Company as the foundation, the refined chemical product such as isocyanate, polyisocyanate and polycarbonate from BASF SE, Covestro and American HUNTSMAN as the intermediate, and the refined chemical product such as the paint and the adhesive as the end-product. The structure of the specific industry chain is described as follows: the Company provides the chlorine and the sodium hydroxide as the raw materials to MDI/TDI/PC units in the park area, digest the byproduct hydrochloric acid gas and produce the dichloroethane with the ethylene as the raw material and the secondary chlorine. Therefore, the Company built 720000t sodium hydroxide unit and 720000t dichloroethane units in the shanghai chemical industrial park as the supporting facilities, all of the chlorine liquid produced is basically supplied to the downstream of the shanghai chemical industrial park. The chlorine pipeline and sodium hydroxide pipeline partition wall supply mode is adopted in the shanghai chemical industrial park to guarantee the stability and safety of the supply and zero the logistics cost. The integrated operation mode has enhanced the Company's capability of long-term stable existing and development and has also provided guarantee for the downstream customers to obtain stable and reliable chlor-alkali products in long period, realizing mutual benefit and win-win. The long-term contract on 10-year's

supply of chlorine by the downstream enterprises in the shanghai chemical industrial park to the Company became due in 2016 and the Company initiated the negotiation of the renew of the contract such as SLIC/SBPC Contract I, II and III and Covestro Contract I and II in time. Both parties of a new round of 10-year's supply and marketing contract upheld the idea of cooperation and win-win and took the growth, relevance and interaction of the industry chain into full consideration. Therefore, the profit advantages of the integrated mode of the Company continued in the shanghai chemical industrial park.

IV. (3) Description of industrial status: in 2016, the sodium hydroxide market turned round. Pushed forward by the rise of the demand in the downstream and the shortage of the output in the main sodium hydroxide production area, the operating factor of the enterprise rose and the price increased. In 2016, the output of the sodium hydroxide in China reached up to 39,450,000t, with a net increment of 720000t compared with the 2015 (a new increase of 2030000t and a cutting of outdated production capacity of 1310000t). There are totally 158 sodium hydroxide producers in china, with a decrease of 5 producers compared with the last year. Although the output of sodium hydroxide increased to a certain extent every year, the outdated production capacity was relatively large, so the overall production capacity was stable. Due to the average increase in consumption, the average industrial operating factor rose from 78% in 2015 to 83% in 2016 and the industrial concentration ratio increased. Affected by the factors such as the supply-side reform for cutting industrial overcapacity, the operating factor of PVC industry kept the trend of stable rise and the price increased. In 2016, the output of PVC was 23,260,000t, with a net reduction of 220,000t compared with the end of 2015 (a new increase of 890,000t and a cutting of outdated production capacity of 1,110,000t). At present, there are 75 PVC producers, with a net reduction of 6 producers compared with the end of the last year. The output of PVC had been in negative growth for 3 years. Since the overall consumption stably grew, the industrial average operating factor rose from 69% in 2015 to 72% in 2016 and the industrial concentration ratio rose.

# V. Explanation for significant changes in prime assets of the Company during the reporting period

□Applicable √Not applicable

#### VI. Analysis on the core competitive power in the reporting period

√Applicable □Not applicable

#### 1. Signed a new-round 10-years supply and marketing contracts

Through 10 years'running in the shanghai chemical industrial park by the Company, the integrated operating mode has fully demonstrated the merits of the cooperative win-win pricing mechanism. When the Company signs the long-term contract with the downstream enterprises, the pricing is based on the cost plus the reasonable profit and adjusts the changes in the price and cost of the main cost factors including electricity, salt, steam, water, labor force and industrial products. When the price of the raw material or energy rises, for example, the electricity price rises, the contract price can be adjusted according to the price formula to make efforts to eliminate the cost rise factors; with the chlorine bringing along the sodium hydroxide, in sale of the chlorine, the sodium hydroxide is also sold as per a certain ratio at the same time. The chlorine pipeline and sodium hydroxide pipeline partition wall supply mode is adopted in the shanghai chemical industrial park to guarantee the stability and safety of the supply and zero the logistics cost. It establishes the risk compensation mechanism for the execution of the contracts. In the signing of long-term contracts, various factors were fully considered, for

example, when the actual amount purchased of the customer is less than the amount carried in the contract, the Company will be compensated in accordance with the stipulations of the contract, thus, the risks from the execution of the contract are greatly reduced. At the same time, based on the equity of the contract, when the commodity quantity supplied by the Company to the downstream enterprises is lower than the quantity specified by the contract, the Company will also compensate the downstream enterprises to guarantee the stable supply between and by both parties. The integrated operation mode has enhanced the Company's capability of long-term stable existing and development and has also provided guarantee for the downstream customers to obtain stable and reliable chlor-alkali products in long period, realizing mutual benefit and win-win. The long-term contract on 10-year's supply of chlorine by the downstream enterprises in the shanghai chemical industrial park to the Company expired in 2016 and the Company initiated the negotiation of the renew of the contract such as SLIC/SBPC Contract I, II and III and SECCO Contract I and II in time. Both parties upheld the idea of cooperation and win-win and took the growth, relevance and interaction of the industry chain into full consideration. On Dec. 4, 2016, the company signed the Contract on Supply of Chlorine/Sodium Hydroxide with Covestro Polymer (China) Co., Ltd (the proposal of this contract was reviewed and approved by the 6th meeting of the 9th board of directors and was announced on Dec. 5, 2016) and had reached an agreement on the main clauses of the supply contract with SLIC/SBPC and it was expected that the contract would be signed in the first half year of 2017. Therefore, the Company's profitability predominance due to the integrated operating mode in the shanghai chemical industrial park can continue to exist.

# 2. New R&D outcome of chlorine preparation technology, accelerating the industrialization

In 2016, the advanced chlorine preparation process independently researched and developed by the state-level technical center of the Company, namely hydrogen chloride to chlorine through catalysis and oxidation passed the review of the experts from the industry and the university; meanwhile, the Company optimized and perfected the feasibility study report on the process package of hydrogen chloride to chlorine through catalysis and oxidation and the industrialized project, laid a solid foundation of the industrialization of the hydrogen chloride to chlorine through oxidation and accelerated the building of the circular economy industry chain in the shanghai chemical industrial park.

#### 3. Reserving a batch of new technology R&D outcomes

The Company independently researched and developed the chlorinated PVC by water phase process and accomplished the research and application development of low-cost chlorinated PVC resin and the formula for chlorinated PVC granular material for the particular customers in 2016, as a result, it seriated and customized the chlorinated PVC resin products.

#### 4. Having a powerful marketing platform

As the enterprise exporting sodium hydroxide earliest in China, the Company owns a powerful international marketing platform and import base for raw salt and this means it is of distinct advance predominance. With respect to domestic trade, the Company is at the middle and down stream of the Yangtze River, the most developed region in China, with the best consumption and logistics. In 2016, the Company established the trading company to build an integrated supply and marketing platform and achieve the "supply and marketing linkage, product linkage and the linkage of the primary business and the trade". The establishment of the trading company is the need for achieving the industrial upgrading, transformation of growth mode and secondary innovation and upgrading of the profit mode of the company.

### **Section IV Discussion and Analysis of the Business**

#### I. Discussion and Analysis on the Management

In the first year of the 13th five-year plan, the chlor-alkali industry entered the critical period of industrial restructuring and growth mode transformation. A series of changes had taken place in the industrial operation characteristics: the industrial scale expanded continuously, but the speed of growth slowed down; the industrial concentration ratio rose and the industrial layout became reasonable gradually; the market pattern changed continuously and the trading mode was diversified; the production process was continuously optimized and the energy-saving and environmental protection level was continuously improved. Viewed from the operating environment of the Company, the domestic overall economic growth speed slowed down, the traditional manufacturing industry stepped into the recession cycle, especially, the manufacturing industry of bulk commodity with severe competition entered into the period of cold winter. Although the chlor-alkali product market in the second half year of 2016 turned a little better, the overall situation in the whole year was still severe, the price of ethylene and EDC decreased greatly compared with the annual budget. Confronted with the market fluctuation and actual difficulties, the Company encompassed the strategic target of "innovation, upgrading and transformation" proposed in the 13th five-year plan, persisted in the working requirements of "adjustment and cost cutting for survival and transformation and development for the future", focused on cost cutting and benefit increase, settlement and reemployment and going global strategy and preliminarily achieved the established operation objectives.

# (I) Pushing forward the arrangement and implementation of the strategy of the Company in an all-round way

- 1. Accomplishing the strategic adjustment of Wujing Zone in an all-round way. According to the relevant policy against the industrial layout and industrial restructuring issued by Shanghai Municipal Government as well as the strategic planning of the Company for clustering and upgrading, the Company had implemented the adjustment of Wujing Zone since 2013, shut down the production units in Wujing Zone in order step by step and actively and stably pushed forward the reduction and reemployment of the employees in the Company. In 2016, the adjustment of Wujing Zone entered the into the closing phase, the Company shut down all of the CPVC units and the related utilities in Wujing Base and stably reduced 696 employees according to the specific proposal, indicating the strategic adjustment in Wujing Zone had accomplished in an all-round way. The success of in strategic adjustment in Wujing Zone as scheduled was an important step for the strategic development of the Company and was of milestone significance for the transformation and development of the Company.
- 2. Accelerating the cluster and development of the shanghai chemical industrial park. The company further transferred the production and operation center of gravity to Caojing Chemical Zone in an all-round way strengthen the industrial layout in the shanghai chemical industrial park and lay a solid foundation for the great-leap-forward development based on the shanghai chemical industrial park in the future. (1) Quickening the progress of the projects in the

chemical zone. Firstly, the Company independently researched and developed the chlorine hydride to chlorine through oxidation, formally launched the preparation of the feasibility study report on this project and accelerated the industrialization progress of the project of 100000t/a chlorine hydride to chloride through oxidation. Secondly, the chlorinated polyvinyl chloride project would be settled in Tianyuan Chemical Plant in the chemical zone. It was originally planned to be settled in the land for the former paste resin unit on Plot D4 in Shanghai Chemical Zone. In 2016, 3rd board meeting of 9th board of directors reviewed and approved Proposal for Alteration of the Contents Concerning 40000t/a High Performance Perchlorinated Polyvinyl Chloride Project and decided to invest in and build this project in Tianyuan Chemical Plant to further optimize the investment in this project. Now the project is being optimized continuously. (2) Strengthening the position of the important chloride supplier in the chemical zone. The Company scientifically studied and judged the demand for chloride of the downstream enterprises in the chemical zone in the coming years, did well in balance and assessment of the chloride resource in advance, dealt with the challenges from the supply of the chloride resource in time and satisfied the demand at the downstream to the utmost extent. In view that the long-term contract on supply of chloride from the downstream enterprises in the chemical zone to the Company was due in 2016, it launched the negotiation of the renew of the contracts such as SLIC/SBPC Contract I, II and III and Covestro Contract I and II. It regarded "business negotiation of major contracts" as the key management project, strengthened the negotiation with the partners and fully accelerated the negotiation process. Through many rounds of negotiation and communication between both parties, the Company signed the contract on supply of chloride/sodium hydroxide with Covestro Polymer (China) Co., Ltd on Dec. 4, 2016 (the proposal for the contract was reviewed and approved by the 6th board meeting of the 9th board of directors and was announced on Dec. 5, 2016) and it was expected the supply contract with SLIC/SBPC would be signed in the first half year of 2017. 3. Accelerating the step of "going global". In 2016, the Company took a material step in the "going global" strategy and the 5th board meeting of the 9th board of directors of the Company reviewed and approved the proposal for Investment in Inner Mongolia Junzheng Tianyuan Chemical Co., Ltd on Oct. 28, 2016. According to the proposal, Inner Mongolia Junzheng Tianyuan Chemical Co., Ltd would be jointly invested and incorporated as per the stock ratio of Chlor-Alkali Company 40% and Junzheng Energy 60% and the joint venture would plan and build the project of 200000t/a EPVC with seed emulsion process. This project would be implemented by phases and the project (phase I) planned to put 100000t into production. This joint venture accomplished the industrial and commercial registration on Jan. 10, 2017 and it was expected that it would be put into production at the end of 2017. The cooperation between Chlor-Alkali Company and Junzheng Energy could make use of the advantages in local rich resources and rely on the existing production and living facilities of Junzheng Energy to achieve the resources complementarities and upstream and downstream linkage as well as combine the advantages in technology and brand with the ones in resources and cost, as a result, it could effectively reduce the production cost and raise the product competitiveness. This project conformed to the development planning of "trying for the industrial transfer to other appropriate regions in China, relying on the more advantageous policy environment, more complete supporting facilities and cheaper cost input, strengthening the market competitiveness of the products and building the industrial zone with scale effects and competitiveness advantages" and would become an important step towards the implementation of the "going global" strategy.

#### (II) Optimizing the operation and management of the Company in an all-round way

1. Enhancing HSE management and ensuring safety. The Company adhered to the principle of "building the defense line firmly, holding the bottom line and consolidating the line", advocated the safety culture of "self awareness, sensitivity and working efficiently" and enhanced continuously HSE management level to provide powerful guarantee for its adjustment and development. With propaganda and implementation of the new Production Safety Law and Environmental Protection Law as the main thread, persisting in the principle that "CPC committees and governments are held accountable, officials take responsibility for workplace safety in performing their duties, and those who fail to uphold safety standards are held accountable", strengthening the consciousness of "bottom line", "red line" and

"high voltage line" for safety and environmental protection and ensuring the intrinsic safety of HSE. (1) Defining the safety responsibility. Carrying out the activity of "my area in the charge of me and my work in the charge of me" and continuously improving the safety consciousness and the sense of responsibility of the employees. Implementing HSE responsibility system and signing the HSE responsibility agreement and the letter of commitment in layers, with the contract signing ratio of 100%. In the context of institutional adjustment and reduction in workforce, adjusting HSE working organ in time, establishing Safety Committee of Caojing Zone and guaranteeing the implementation of HSE responsibility. (2) Strengthening safety assessment. Assessing each department and each employee every month. Preparing Detailed Rules for Assessment of Comprehensive Bonus of HSE for Employees in the Company and including the implementation of the production safety responsibility into the comprehensive management and assessment system for the employees in the company for uniform assessment. Revising Detailed Rules for Assessment of Contractors, aiming at the problems in the management of the contractor in the overhaul, studying the assessment, rewards and punishment scheme for the contractors and preparing Standard of Chlor-Alkali Company for Safety Assessment of Construction by the Contractor. (3) Implementing and urging the rectification and improvement. Aiming at some individual minor accident, formulating and launching the measures for rectification and improvement in time, strengthening the management of the key equipment and the major hazard sources, putting the management into place, contracting the management to the specific person, improving the routine patrol quality and guaranteeing the safety facilities in good condition. Amending the scheme for dumping of the chloride liquid storage tank, guaranteeing the dumping in the abnormal condition in the controllable safety state, strengthening the emergency drilling, upgrading the emergency drilling of the leakage of the chloride liquid to the height at the group level and keep the information unblocked among the related persons.

- 2. Flexibly adjusting the sales system. (1) Integrating the marketing system, establishing the trade company and building the efficient business platform. The establishment of the trade company was required for the industrial upgrading and the secondary innovation and upgrading of the profit mode of the Company. Through the modern marketing system more closely to the market, on one hand, it could achieve the proper linkage of the purchase and sale of the self-operating products, do well in the management of two cores including purchase and sale and improve the market competitiveness of the products; on the other hand, it would make full use of the new mechanism, motivate the spirit of struggle to expand the market so as to transform the growth mode and cultivate the new profit increase point. (2) Aiming at the market trend and optimizing the sale of the products. Firstly, optimizing the sale of EDC and acid absorbent. Viewed from the profit of the chloride per t, the loss of the acid absorbent product was less than the one of EDC product. In 2016, the Company greatly increased the sales volume of acid absorbent and optimized the sales radius as well, and expanded the market of East China all out. Compared with the annual budget, the sales volume of the acid absorbent increased 120000t and the loss was reduced by RMB 19,720,000.00 Yuan in the whole year. Secondly, optimizing the sales structure of the sodium hydroxide. In 2016, the benefit of 32% alkali was better than the one of 50% alkali sold at home and abroad. According to the benefit optimization principle, the Company dynamically adjusted the variety structure of the sodium hydroxide and the regional structure, produced and sold more 32% alkali, increased the sales proportion in Shanghai all out, as a result, the sales proportion of 32% alkali in Shanghai in 2016 increased remarkably, with an increase of 7% on year-on-year basis. (3) Active communication to raise the execution rate of the contracts by the downstream enterprises. In 2016, based on the active communication with the downstream enterprises, the Company closely followed up the execution of the contracts with the downstream enterprises and raised the execution rate of the contract as much as possible to increase the profit of the Company. The quantity of chloride received by the downstream enterprises in 2016 was 599,600t, reaching a record high, with an increase of 23,000t on year-on-year basis.
- 3. Scientifically strengthening operation and management. (1) Deeply excavating the potential, reducing the cost and increasing the benefit. The Company strictly implemented the budget, optimized the capital structure and the sales structure, resulting in the reduction in three charges by 23% on year-on-year basis. Meanwhile, with respect to the production, the Company strictly controlled the materials and energy consumption, enhanced the management,

reduced the production fluctuation and optimized the use structure of the raw materials, as a result, the manufacturing expense fell down on year-on-year basis. (2) Adopting the flat management mode. The production system further adopted the flat management mode, simplified the management layers, quickened the rate of the information flow, improved the decision-making efficiency, implemented the refined production and achieved the remarkable improvement of the cost and operation profit with the minimum input. The main purpose of the refined production was to make the quickest response with the best quality, the lowest cost and the highest efficiency. With respect to the organizational structure, it reduced the non-direct production layer, adopted the flat production system and quickly responded to the market. The production management department was shifted to the economic operation department, Tianyuan Chemical Plant and Huasheng Chemical Plant were cancelled, sodium hydroxide unit, oxidative chlorination unit, resin unit and utilities were established and PVC plant was cancelled. Economic operation department, HSE department and arm safeguard department directly managed them, in this way, they uniformly implemented the production and operation function together with the four units.

#### II. Main operating status in the reporting period

In the reporting period, the Company realized the operating income of RMB 6,754,397,100Yuan, increasing by RMB 583,522,800Yuan or 9.46% year on year, the gross profit of RMB -334,813,600 Yuan, decreasing by RMB 444,375,500 Yuan year on year, and the net profit attributable to shareholders of the listed Company of RMB -328,091,800 Yuan, decreasing by RMB 423,706,800 Yuan year on year.

# (I) Analysis of the main business Analysis of Changes in Relevant Items in Income Statement and Cash Flow Statement

Unit: Yuan Currency: RMB

		Onit. Tua	ii Currency, Kivib
Item	Current period	Amount in the same	Change ratio (%)
	amount	period of last year	Change ratio (70)
Operating income	6,754,397,061.69	6,170,874,223.67	9.46
Operating cost	6,128,517,218.57	5,559,439,778.97	10.24
Selling cost	184,329,793.95	199,911,085.12	-7.79
Management expenses	480,214,277.58	402,196,032.57	19.40
Financial expenses	74,994,167.59	140,436,053.89	-46.60
Net cash flow from operating activities	488,856,761.24	305,852,432.45	59.83
Net cash flow from investment	-32,240,748.36	462,369,445.87	-106.97
activities			
Net cash flow from financing activities	-266,227,416.76	-930,062,240.97	Not applicable
R&D expenditure	22,218,163.42	36,893,630.81	-39.78

#### 1. Analysis on revenue and cost

√Applicable □Not applicable

#### (1). Main business divided by sector, product and area

Unit: Yuan Currency: RMB

	Main business by sector						
Sector	Operating income	Operating cost	Gross profit rate (%)	Increase or decrease of operating income than previous year (%)	Increase or decrease of operating cost than previous year (%)	Increase or decrease of gross profit rate than previous yea (%)	
Industry	3,825,805,128.74	3,478,929,132.02	9.07	-7.84	-2.18	Decrease by 5.26 percentage points	
Constructio n	52,384,954.98	50,855,935.65	2.92	57.02	71.53	Decrease by 8.21 percentage points	

Trade	2,834,742,551.50	2,557,264,284.04	9.79	46.13	32.35	Increase by 9.39
income						percentage points
Total	6,712,932,635.22	6,087,049,451.71	9.32	9.61	10.30	Decrease by 0.58
						percentage points
		Main bus	iness by pro	duct		
Product	Operating income	Operating cost	Gross profit rate (%)	Increase or decrease of operating income than previous year (%)	Increase or decrease of operating cost than previous year (%)	Increase or decrease of gross profit rate than previous yea (%)
PVC	538,275,093.61	557,330,514.67	-3.54	8.76	-3.11	Increase by 12.69 percentage points
Sodium hydroxide	1,377,470,326.87	917,255,823.14	33.41	7.38	-2.50	Increase by 6.74 percentage points
Chlorine products	2,144,285,877.31	2,005,608,343.01	6.47	-0.14	5.79	Decrease by 5.24 percentage points
Others	2,652,901,337.43	2,606,854,770.89	1.74	20.62	23.75	Decrease by 2.48 percentage points
Total	6,712,932,635.22	6,087,049,451.71	9.32	9.61	10.30	Decrease by 0.58 percentage points
	<u>'</u>	Main bi	usiness by a	rea	•	
Area	Operating income	Operating cost	Gross profit rate (%)	Increase or decrease of operating income than previous year (%)	Increase or decrease of operating cost than previous year (%)	Increase or decrease of gross profit rate than previous yea (%)
China	6,436,295,912.76	5,829,905,849.66	9.42	10.56	11.94	Decrease by 1.11 percentage points
Other countries	276,636,722.46	257,143,602.05		-8.75	-17.11	Increase by 9.37 percentage points
Total	6,712,932,635.22	6,087,049,451.71	9.32	9.61	10.30	Decrease by 0.58 percentage points

Explanation for the main business by industries, products and regions  $\sqrt{\text{Applicable}}$   $\square \text{Not applicable}$ 

- 1) The Company established the "double-core driven" business development mode and realized the shift from "production and manufacture" to "manufacture+ service trade". The service trade has rapidly developed in the past two years, kept relatively high share in the market, quickened the transformation of the trade mode and gradually built itself a trade company with relatively strong competitiveness in purchase of the raw materials and sale of the product;
- 2) The Company, based on the platform of Shanghai Chemical Products Trading Market and the platform of the trade company, expanded the business in the primary products and the raw materials, further expanded the industry chain of the service trade, made use of the information and advantages in the purchase of the existing primary raw materials including ethylene and vinyl chloride and intensified the market development of the varieties such as polyethylene to gradually prompt the Company to shift to the service trade of the varieties in the related industry chain from the main single raw materials (ethylene and vinyl chloride) so as to further strengthen the discourse right of the Company in the primary products and the raw materials market. In this stage, the expansion range of polyethylene business mainly depends on the users in Zhejiang, Jiangsu, Shandong and so on.
- 3) Continuously making full use of the opportunity of the established ethylene tank project, actively expanding ethylene trade market and seeking for the trade partners in many ways. During this reporting period, the ethylene trade business mainly concentrates on the main consumption region of the ethylene, including Shanghai, Jiangsu and Zhejiang, therefore, the trade business of the ethylene mainly depends on the users in Zhejiang, Jiangsu and Shanghai. Considering the safety factors such as the capital, the ethylene customers of Shanghai Chlor-Alkali are selected according to the standard of stable channel, capital safety and a certain consumption;
- 4) Selection of settlement and trade mode: in this stage, this Company mainly concentrates on the expansion of the market and the business varieties and guarantees the safety of the capital, as a result, as to the trade mode, it firstly selects the downstream customers and determines the sales intent according

to the quantity and the price, then purchases the products from the upstream suppliers at a proper price, so the form of settlement mainly adopts the payment before delivery.

#### (2). Analysis on production and sale

√Applicable □Not applicable

Main products	Output ('0000 tons)	Sales volume ('0000 tons)	Stock balance ('0000 tons)	Increase or decrease of output than previous year (%)	Increase or decrease of sales volume than previous year (%)	Increase or decrease of stock balance than previous year (%)
PVC product	6.875	7.215	0.217	-10.12	-5.98	-65.69
Sodium hydroxide product	101.358	67.981	0.928	47.36	2.61	-39.07
Chlorine product	140.622	144.667	3.727	-1.60	10.04	-54.20

In 2016, the basic chemical industry turned round, the price of the products rose, the market sale was good and the stock size of the products decreased.

#### (3). Cost analysis

Unit: Yuan

		Rv	sector			mit: Yuan
Sector	Items of cost structure	Amount in current period	Ratio in total cost (%)	Amount in the same period of last year	Ratio in total (%)	Change ratio (%)
Industry	Direct material	2,903,828,396.6	47.71	2,860,008,053.66	51.83	1.53
	Direct labor	77,872,144.56	1.28	96,854,436.74	1.76	-19.60
	Power	199,367,318.61	3.28	244,563,736.73	4.43	-18.48
	Manufacture cost	297,861,272.25	4.89	355,203,896.99	6.44	-16.14
	Total	3,478,929,132.02	57.15	3,556,630,124.12	64.45	-2.18
Construction	Direct material	1,832,355.52	0.03	2,220,503.52	0.04	-17.48
	Direct labor	1,745,672.28	0.03	3,688,472.71	0.07	-52.67
	Manufacture cost	47,277,907.85	0.78	23,738,840.58	0.43	99.16
	Total	50,855,935.65	0.84	29,647,816.81	0.54	71.53
Trade income	Purchase cost	2,557,264,384.04	42.01	1,932,174,066.11	35.01	32.35
		By p	roduct			
Product	Items of cost structure	Amount in current period	Ratio in total cost (%)	Amount in the same period of last year	Ratio in total (%)	Change ratio (%)
PVC	Direct material	387,186,822.81	6.36	382,641,803.88	6.93	1.19
	Direct labor	16,674,223.52	0.27	17,460,930.59	0.32	-4.51
	Power	82,209,949.13	1.35	95,674,768.66	1.73	-14.07
	Manufacture cost	71,259,519.21	1.17	79,451,927.95	1.44	-10.31
	Total	557,330,514.67	9.16	575,229,431.08	10.42	-3.11
Sodium	Direct	760,390,751.28	12.49	729,098,699.59	13.21	4.29
hydroxide	material	15.710.100.77	0.27	47.07.470.10	0.00	# C C
	Direct labor	16,548,439.55	0.27	15,627,153.42	0.28	5.90
	Power	69,768,678.75	1.15	94,463,749.19	1.71	-26.14
	Manufacture cost	70,547,953.56	1.16	101,539,246.32	1.84	-30.52
	Total	917,255,823.14	15.07	940,728,848.52	17.05	-2.50
Chlorine product	Direct material	1,792,188,346.51	29.44	1,690,759,223.40	30.64	6.00

Direct labor	35,580,679.00	0.58	32,201,251.85	0.58	10.49
Power	50,674,330.48	0.83	43,801,478.39	0.79	15.69
Manufacture	127,164,987.02	2.09	129,158,563.36	2.34	-1.54
cost					
Total	2,005,608,343.01	32.95	1,895,920,517.00	34.36	5.79

Explanation for other situation of cost analysis

□Applicable √Not applicable

#### (4). Main customers and main suppliers

√Applicable □Not applicable

The amount of sales of the first five customers was RMB 2,378,062,500.00 Yuan, accounting for 35.19% of the annual total sales, in which the amount of sales of the related parties of the first five customers was RMB 0.00 Yuan, accounting for 0% of the annual total sales.

Unit: Yuan Currency: RMB

No.	Customer	Amount of sales	Percent in annual total sales (%)
1	Covestro	702,663,341.07	10.40
2	Shanghai Daokuan Trade Co., Ltd	513,655,222.22	7.60
3	SLIC	473,681,459.22	7.01
4	BASF	350,184,633.60	5.18
	Qingdao Shengtaifeng International		
5	Trade Co., Ltd	337,877,863.25	5.00
	Total	2,378,062,519.36	35.19

The amount of procurement of the first five suppliers was RMB 3,271,360,400.00 Yuan, accounting for 59.79% of the annual total amount of procurement, in which the one of the related parties of the first five suppliers was RMB 0.00 Yuan, accounting for 0% of the annual total amount of procurement.

Unit: Yuan Currency: RMB

		1 0	- 1 1 1
		Amount of	Percent in annual total amount
No.	Supplier	procurement	of procurement (%)
	State Grid Shanghai Municipal		
1	Electric Power Company	1,102,666,883.85	20.16
	Shanghai SECCO Petrochemical		
2	Company Limited	864,644,799.54	15.80
	Shandong Zhongxin Industry Trade		
3	Co., Ltd	746,228,292.31	13.64
	Qingdao Free Trade Zone		
4	Zhongyan Trade Co., Ltd	322,971,615.38	5.90
5	Mitsubishi Corporation	234,848,784.08	4.29
	Total	3,271,360,375.16	59.79

#### Other explanations

- 1. Covestro is an important downstream customer of the chemical zone and the Company supplies the chemical products such as sodium hydroxide and chloride liquid to it.
- 2. State Grid Shanghai Municipal Electric Power Company is the main electric power supplier for the Company to produce the main product sodium hydroxide.
- 3. Shanghai SECCO Petrochemical Company Limited is the supplier of the main raw materials for the Company to produce the main product dichloroethane.
- 4. Shandong Zhongxin Industry Trade Co., Ltd is the supplier of polyethylene for the Company to expand the market and carry out the main trade business.

#### 2. Expenses

√Applicable □Not applicable

Unit: Yuan Currency: RMB

Item	2016	2015	Year-on-year increase/decrease (%)
Selling cost	184,329,793.95	199,911,085.12	-7.79
Management expenses	480,214,277.58	402,196,032.57	19.40
Financial expenses	74,994,167.59	140,436,053.89	-46.60
Income tax expense	1,713,353.49	4,672,427.26	-63.33

Analysis of the reason for changes in the expenses:

- 1) The management expenses increased by 19.4% year on year, mainly caused by significant increase of employee's dismissal benefit than previous year.
- 2) The financial expenses decreased by 46.6% year on year, mainly caused by the reduction in interest expenditure due to the optimization of loan portfolio and reduction in loan scale in this period.

#### 3. R&D investment

#### Details of R&D investment

√Applicable □Not applicable

Unit: Yuan

Expense investment in R&D in current period	17,060,292.79
Capitalized investment in R&D in current period	5,157,870.63
Total of investment in R&D	22,218,163.42
Ratio of total investment in R&D in the operating income (%)	0.33
Number of R&D personnel in the Company	210
Ratio of R&D personnel in total employees of the Company (%)	28.85
Ratio of capitalized investment in R&D (%)	23.21

#### **Notes**

√Applicable □Not applicable

In 2016, the Company still continued to focus on the advanced chlorine making process and new material technique to make R&D. The main projects included "the improvement on chlorine making with hydrogen chloride catalytic oxidation", "inner quality tracking and process improvement of chlorinated polyvinyl chloride resin" and "the development and application of the power-saving technology for electrolyzer". For the project of "the improvement on chlorine making with hydrogen chloride catalytic oxidation", the Company, based on the completed process package for the industrialized unit with the annual capacity of 100,000 tons, completed the optimization of the first generation of catalyst, determined the technical indexes of the catalyst and magnified the process parameter of preparation, established the enterprise standard of catalyst; the evaluation unit for the single column run of Huasheng Chemical Plant was established and the preparations for the startup was made; the research on the process of the offgas absorption liquid was made and 100000t/a industrialized process package was further perfected. For the project of "inner quality tracking and process improvement of the chlorinated polyvinyl chloride resin", the Company conducted quality tracing for chlorinated polyvinyl chloride resin. Comprehensively considering the static thermal stability and dynamic rheological property as the quality indexes, it analyzed the fluctuation of chlorination process and the fluctuation among the batches to adjust the chloride flow and the process. Based on the follow-up and improvement of this project, the static temperature time and the quality product rate of CPVC resin were risen to above 80%; based on the continuous follow-up, the batches with the quality defects were retained in the Company and did not come into the market. In this year, good feedback was get from the customers on CPVC, without any quality complaint. With the stable quality, the sales

volume rose step by step and the balance of production and marketing was achieved. As to the project of "development and application of electrolyte tank energy-saving technology", the electrolyte tank reconstruction plan was accomplished in 2016. The operation of the unit in the condition of operation current density of  $5.0~\rm KA/m^2$ , soda concentration of 32% and tank temperature of  $90~\rm C$  got a very good effect. In the evaluation, the voltage of the single tank was lower than  $2.98\rm V$ , the power consumption of the sodium hydroxide per ton was reduced by  $140\rm KWH/sodium$  hydroxide per ton, the power consumption of  $360000\rm t/a$  unit could be reduced by  $50,000,000\rm kWh$  or so, as a result, based on RMB  $0.6~\rm Vuan/KWH$ , it could save the electricity cost of RMB  $30,000,000.00~\rm Vuan$ , the electric energy saved in each year was converted into about  $16000\rm t$  standard coal, equivalent to reduction of the emission of  $40000\rm t~\rm CO_2$  per year.

#### 4. Cash flow

√Applicable □Not applicable

		Unit: Yuan	Currency: RMB
Item	2016	2015	Difference
Net cash flow from operating activities	488,856,761.24	305,852,432.45	183,004,328.79
Net cash flow from investment activities	-32,240,748.36	462,369,445.87	-494,610,194.23
Net cash flow from financing activities	-266,227,416.76	-930,062,240.97	663,834,824.21
Net increase of cash and cash equivalents	193,630,445.62	-162,165,661.15	355,796,106.77

#### Notes:

- 1) The increase in net cash flow from operating activities was mainly caused by the great drop of the stock in trade in this period, resulting in the increase in the net cash flow from the operating activities on year-on-year basis;
- 2) The decrease in cash flow from investing activities is mainly caused by the decrease in the cash inflow due to no equity transfer and sale of buildings in current period.
- 3) The decrease in net cash flow from financing activities is mainly because the loan returned was smaller than the outflow of funds in current period.

#### (II) Note on significant changes in the profit caused by non-main business

 $\sqrt{\text{Applicable}}$   $\square \text{Not applicable}$ 

The main reasons for the loss of the Company during the reporting period: 1. Provision for impairment. The provision for impairment of the fixed assets in this period was totally RMB 203,833,414.81 Yuan, among which: (1) the amount of provision for impairment of paste resin unit in this year was RMB 142,123,801.94 Yuan. The reason for the provision: A. The Company planned to build the 40000t/a CPVC project, but the original site, namely Plot D4 in the chemical zone was located at No. 168 Yinhe Road Shanghai Chemical Zone and was adjusted in the planning since the chemical zone carried out the overall planning of the plot at the north of Central River in the park. Now it is approved for the record according to Opinion for Record of Shanghai Municipal Enterprise Investment Project by Shanghai Chemical Zone Management Committee (Project record No.: HHGB [2014] 26). Shanghai Municipal Bureau of Planning, Land and Resources issued the approval for Releasing Decision about Notice on Requirements on Planning and Design of Construction Project of 40000t/a PVC Project by Water Phase Process (HGTZHXF [2016] No. 9) and the site of this project was reselected at Plot B3 of the chemical zone (the location of paste resin unit) (the alteration of the site selection of this project was announced in the resolutions of the 3<sup>rd</sup> board meeting of the 9<sup>th</sup> board of directors). After the new site of this project was determined, the Company launched the previous work such as application of the project for record, environmental impact evaluation, safety evaluation and energy evaluation. B. The Company signed a joint venture agreement with Ordos Junzheng Energy Chemical Co., Ltd on Dec. 15, 2016 (the investment was announced in the resolutions of the 5<sup>th</sup> board meeting of the 9<sup>th</sup> board of directors) to jointly invest in Mengxi Industry Zone, Ordos City, Inner Mongolia, China to establish Inner Mongolia Junzheng Tianyuan Chemical Co., Ltd to produce EPVC products based on the local geological advantages and 100000t/a EPVC unit technology of the company. In addition, the Company signed the contract on technical license with Inner Mongolia Junzheng Tianyuan Chemical Co., Ltd, which stipulated that Inner Mongolia Junzheng Tianyuan Chemical Co., Ltd used EPVC technology in the

manner of exclusive license, as a result, the production and development of the original paste resin unit of the company was restricted. Based on the above-mentioned reasons, considering the high energy consumption cost and the strict requirements on the environmental protection in Shanghai City, the management of the Company decided to carry out the depreciation test of the paste resin unit. By Dec. 31, 2016, the Company, according to Data of Research Report on Paste Resin Industry in 2017, in combination with the actual conditions of the Company, based on the net amount of the new cash flow of the Company in the coming five years, provided RMB 142,123,801.94 Yuan as the provision for impairment for the paste resin unit.

- (2) The amount of provision for the impairment in Wujing Zone in this year was RMB 49,675,281.43 Yuan. The adjustment of the industrial structure of the Company in Wujing Zone entered into the final stage (the shutdown in Wujing Zone was announced in the resolutions of the 5<sup>th</sup> board meeting of the 9<sup>th</sup> board of directors), the overall production of the Company was entirely transferred to Shanghai Chemical Zone, Wujing Zone was cleaned up in an all-round way and the production of the last production unit was terminated in this period, so the provision for impairment of this unit and the auxiliary facilities in this year was RMB 49,675,281.43 Yuan.
- (3)The amount of provision for impairment of F2 electrolyte tank in this year was RMB 11,481,274.95 Yuan, the reasons for provision: with the cleaning-up of Wujing Zone of the Company in an all-round way, the electrolyte tank in the former F2 unit was confronted with the cleaning-up, as a result, according to the assessed value of the electrolyte tank confirmed by the Company by Dec. 31, 2016, the amount of provision for impairment, totally RMB 11,481,274.95 Yuan was made.
- 2. Employee termination benefits expenditures. Due to the implementation of permanent parking scheme in Wujing Base and current arrangement of adjustment progress, a large number of employees terminated labor contract with the company in batches, and the actually diversion expense incurred was RMB 125,000,000Yuan, the termination benefits withheld was RMB 131,000,000Yuan, and the personnel diversion cost incurred in current period was totally RMB 256,000,000Yuam.

#### (III) Analysis on assets and liabilities

√Applicable □Not applicable

#### 1. Status of Assets and Liabilities

Unit: Yuan

						Onit. I dan
	· · · ·	Ratio in		Ratio in	~	
Item	Closing balance	total	Closing balance	total	Change	Remark
10111	of current period	assets	of previous period	assets	ratio (%)	Roman
		(%)		(%)		
Monetary	433,999,695.91	9.67	240,425,945.13	4.96	80.51	Capital recovery
fund						in current period is
						better
Notes	448,822,006.32	10.00	336,221,352.79	6.94	33.49	Increase in notes
receivable						receivable of the
						new subsidiary
						New Materials
						Trading Company
Advance	50,056,591.51	1.11	136,446,799.31	2.81	-63.31	Decrease in
payments						advance project
						payments and
						dynamic payment
						in current period
Other	762,159.00	0.02	3,561,716.78	0.07	-78.60	Collection of
receivables						imprest fund
Inventory	159,466,728.86	3.55	384,885,265.71	7.94	-58.57	Falling inventories
						of EDC product
Project	97,570,414.69	2.17	305,408,986.91	6.30	-68.05	Carrying forward
under						the fixed assets
construction						after the
						completion of
						project
Engineering	37,478.63	0.00	1,381,336.82	0.03	-97.29	Special materials

material						requisition
Developmen t expenditure	17,364,046.98	0.39	30,247,277.15	0.62	-42.59	Carrying forward intangible assets and fixed assets after the completion of project
Long-term fees to be apportioned	15,196,164.92	0.34	23,460,981.73	0.48	-35.23	Increase in amortization of current period
Short-term loans	1,256,000,000.0	27.98	620,000,000.00	12.79	102.58	Optimized the loan structure and increased short-term loans and reduced long-term payables
Employees' salary payable	131,471,648.00	2.93	780,802.00	0.02	16,738.0 3	Increase in dismissal benefit appropriated in this period
Tax payable	80,270,216.68	1.79	14,824,741.55	0.31	441.46	Increase in unpaid VAT of current period
Other payables	88,814,552.29	1.98	441,394,365.43	9.10	-79.88	Return the loan of RMB 350,000,000 Yuan for Huayi Group
Long-term payables	170,000,000.00	3.79	645,000,000.00	13.30	-73.64	Return the loan of RMB 475,000,000 Yuan for Huayi Group

#### 2. Restriction of main assets by the end of report period

√Applicable □Not applicable

Unit: Yuan Currency: RMB

Item	Final book value	Reason of restriction
Fixed assets	5,008,538.28	Mortgage
Intangible assets	1,314,847.65	Mortgage
Total	6,323,385.93	

#### 3. Other information

□Applicable √Not applicable

#### (IV) Analysis on operational information of the industry

√Applicable □Not applicable

In the first year of "the 13<sup>th</sup> five-year plan", the chlor-alkali industry entered the key period of structure adjustment and pattern transformation. The industry operation characteristics experienced a series of changes: continuous expansion of industry size with slower growth; enhanced industrial concentration degree and gradually reasonable industrial layout; changing market pattern and diversified trade mode; continuous optimization of production process and constant improvement of energy conservation and environmental protection level. In recent years, affected by the pulling effect of

national economy growth and investment, as the basic material, there are many new expansion projects constructed and put into operation every year in chlor-alkali industry. However, along with the intensifying market competition of the industry, although the production capacity of chlor-alkali industry is increasing, the backward and old production units will be gradually eliminated from the market, which is the new characteristic of chlor-alkali production capacity growth.

#### Business information analysis of chemical industry

#### 1 Basic information of the industry

#### (1). Industry policy and changes

 $\sqrt{\text{Applicable}}$   $\square \text{Not applicable}$ 

Targeted policy during "the 13<sup>th</sup> five-year plan" of the state:

- ①Establish and improve the market access and exit mechanism to optimize the industrial layout
- 2)Optimize material and technical route to promote the adjustment of product structure
- ③Utilize independent innovation and technical progress to promote the transformation and upgrading of chlor-alkali industry
- (4)Strengthen ecological environmental protection construction to promote the green development of the industry
- ⑤Further deepen the circular economy development mode
- **©**Strengthen the coordinated development of productive service industry
- 7 Strengthen the information construction to promote the manufacturing level of transitional industries
- ®Implement responsible care for the industry, and enhance the health, security and environmental system management.

#### (2). Basic information of main industry segments and industry status of the Company

√Applicable □Not applicable

The caustic soda production capacity of our country reached 39,450,000t in 2016, with a net increase of 720,000t (new increase of 2,030,000t and exit of 1,310,000t) compared with that at the end of 2015. There were totally 158 caustic soda production enterprises in China, decreased by 5 enterprises compared with last year. There is certain increment in caustic soda every year, but the exit production capacity is large, and the overall production capacity is stable; due to the average increase in consumption, the average operating rate of the industry increases from 74% in 2013 to 83% in current period, and the number of production enterprises reduces from 176 in 2013 to 158 in current period, and the industrial concentration ratio has been improved. PVC production capacity in 2016 was 23,260,000t, decreased by 220,000t (new increase of 890,000t and exit of 1,110,000t) compared with that at the end of 2015. At present, there are 75 PVC production enterprise, decreased by 6 compared with that at the end of last year. Although the PVC production capacity is negative growth for three consecutive years, the average operating rate of the industry increases from 62% in 2013 to 72% in current period, and the number of production enterprises reduces from 93 in 2013 to 75 in current period, and the industrial concentration ratio has been improved.

The Company is mainly engaged in the manufacturing and sales of caustic soda, chlorine and chlorine products as well as polyvinyl chloride plastic resin and products. As the main products of the Company, the production capacity of caustic soda reaches 720,000t, dichloroethane reaches 720,000t, liquid chlorine reaches 600,000t and paste and special resin reaches 80,000t. Currently, the production capacity of special resin unit of the Company is 20,000t/a, and the Company is one of the largest special resin suppliers in east China. The Company has obvious advantages in the fields of professional R&D and product technology, and is thus an influential enterprise in the industry.

#### 2 Product and production

#### (1). Main operating mode

√Applicable □Not applicable

The Company has integrated the marketing resources, actively pursued the transformation of marketing mode, focused on the overall stable operation of the chemical industrial area, firstly ensured the stable supply of chlorine resources in chemical industrial area, optimized the regional structure and built differentiated marketing mode.

Caustic soda: internal and external integration operating mode, in combination of the production operation conditions and domestic and foreign instant market situation, reasonable distribution of internal and external sales proportion based on the principle of benefit priority, optimizing domestic regional structure and improving the profitability of products;

PVC: relying on the special resin base, the Company actively implements differentiated marketing strategy and adhere to the development of domestic high-end resin market to satisfy the customers' differentiated service requirements, and has maintained the dominant status in domestic high-end resin market:

Chlorine products: firstly putting MDI, TDI and similar production enterprises into operation as the support in the downstream of chemical industrial area, with the rest mainly solvent market and PVC market, to effectively reduce the product stock and sales cost.

#### Main conditions of operation mode adjustment in report period

□Applicable √Not applicable

#### (2). Main products

√Applicable □Not applicable

Product	Industry segment	Main upstream raw materials	Main downstream application field	Main price affecting factors
Caustic	Chlor-alkali	Industrial salt	Dye printing, paper	Market supply and
soda			making	demand
PVC	Chlor-alkali	Vinyl chloride	Leatheret, wall	Market supply and
			paper, tools	demand
Chlorine	Chlor-alkali	Industrial salt,	Solvent, PVC	Market supply and
products		ethylene		demand

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

√Applicable □Not applicable

The R&D and development of Company continued to adhere to the main line of advanced chlorine production process and polymer new material technology in 2016. The main research projects include "hydrogen chloride catalytic oxidation to chlorine process technology development", "dichloroethane oxychlorination to tetrachlorethylene amplification technology research", "development and application research on customized CPVC resin", "solution-method vinyl polymer technology exploration and mPOE product development" etc.

"Hydrogen chloride catalytic oxidation to chlorine process technology development" project has completed the optimization of first generation catalyst in multi-channel small testing apparatus and drafted the first generation of catalyst standards, and the catalyst has been used stably for over 6000h; in the meanwhile, constructed the single tube test device in chemical area and put into operation, established the analytical method for components of offgas absorption liquid; on the basis of process package of completed 100,000t/a industrial unit, cooperated with domestic and foreign specialized companies to improve the process package and improved the FSR of industrialized projects.

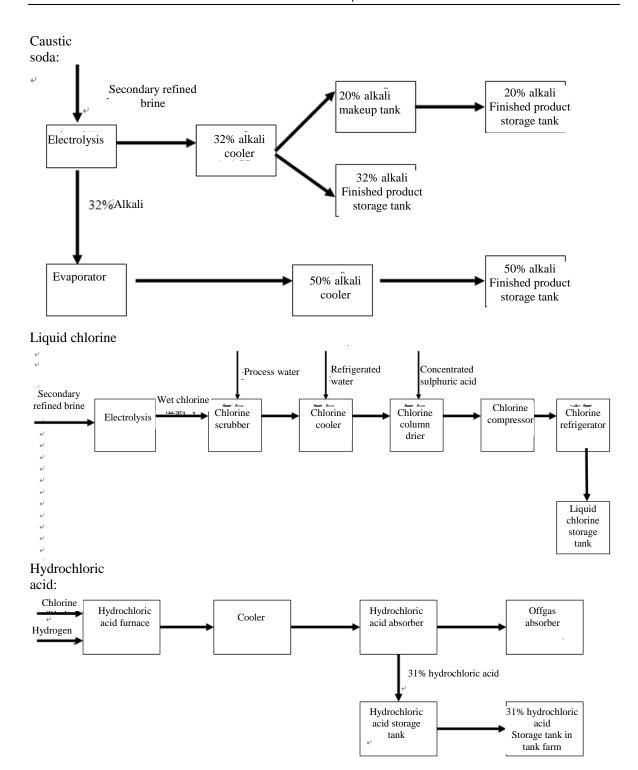
As for the "dichloroethane oxychlorination to tetrachlorethylene amplification technology research" project, on the basis of preliminary exploration of process conditions, raw material ratio and analytical method, carried out amplification process research through industry-university-research mode, and established oxidative chlorination test amplification unit in colleges and universities, which has entered experimental stage.

As for "development and application research on customized CPVC resin" project, carried out quality tracing and assessment of CPVC resin and optimized the production process and technology to improve the quality of CPVC resin; in the meanwhile, carried out the research on low-cost and high-performance CPVC mixture formulation, reduced the formulation cost of tubs and pipes through matching adjustment of auxiliary stabilizer system, lubrication system and filling system; developed high-flow and creep-resistant special aggregate used for all vanadium redox flow battery for specific customers, which is in specimen evaluation stage.

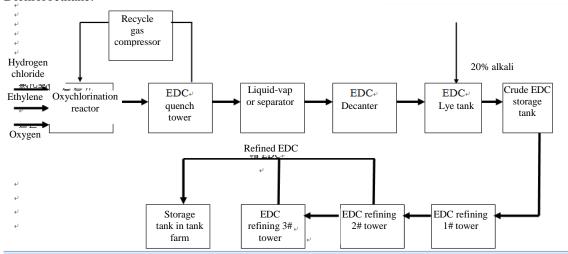
"Solution-method vinyl polymer technology exploration and mPOE product development" is the prospective project for exploiting POE new material market, through the implementation of the project, the Company masters the rules of ethylene solution polymerization process, prepares POE product in conformity with technical indicators, determines the tentative metallocene catalyst and opens up the refining process of POE product.

#### (4). Production process and flow

√Applicable □Not applicable

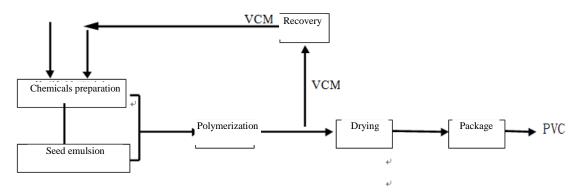


#### Dichloroethane:



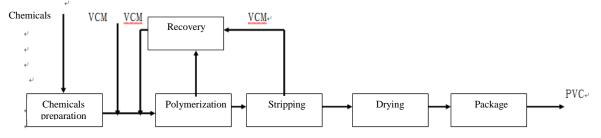
Emulsion method PVC paste resin:

#### Chemicals



### Suspension method PVC special

#### resin:



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

√Applicable □Not applicable

Main plant area or project	Designed capacity	Capacity utilization (%)
Caustic soda	720,000t	98.98
Dichloroethane	720,000t	56.67
Liquid chlorine	600,000t	100.10
Paste PVC	60,000t	83.37
Special PVC	20,000t	92.24

#### Increase or decrease in production capacity

□Applicable √Not applicable

#### Adjustment of production line and capacity structure optimization

□Applicable √Not applicable

#### Abnormal shutdown

□Applicable √Not applicable

#### 3 Raw materials purchase

#### (1). Basic information about main raw materials

√Applicable □Not applicable

Raw material	Purchase mode	Amount	Price	Influence of price fluctuation on
Naw material	i urchase mode	purchased	changes	operating cost
Ethylene	Long-term contract	1,190,000t	Rise	The influence of purchase price is in direct proportion to operating cost, the higher the purchase cost, the higher the operating shall be and vice versa.
Salt	Combination of long-term and short-term contract, and combination of import and domestic purchase	1,090,000t	Drop	The influence of purchase price is in direct proportion to operating cost, the higher the purchase cost, the higher the operating shall be and vice versa.
Vinyl chloride	Combination of long-term and short-term contract, and combination of import and domestic purchase	68,900t	Rise	The influence of purchase price is in direct proportion to operating cost, the higher the purchase cost, the higher the operating shall be and vice versa.

# (2). Countermeasures for price fluctuation risk of raw materials Basic information about holding derivatives and other financial products

□Applicable √Not applicable

#### Main information about the adoption of periodic reserves and other means

□Applicable √Not applicable

#### 4 Particulars about product sales

#### (1). Sales model

√Applicable □Not applicable

The sales territories of caustic soda and EDC and other main products of the Company include Shanghai, Jiangsu, Zhejiang and south regions, adopting the mode combining direct selling and distribution.

### (2). Basic information about main business of the Company divided by industry segments

√Applicable □Not applicable

Unit: Yuan Currency: RMB							
					Increase	Increase	
				Increase or	or	or	
			Gross	decrease in	decrease	decrease	
Industry segment	Operating	Onoroting aget		operating	in	in gross	
	income	Operating cost	profit (%)	income over	operating	profit	
			(%)	previous	cost over	over	
				year (%)	previous	previous	
					year (%)	year (%)	
Industry	3,825,805,128.74	3,478,929,132.02	9.07	-7.84	-2.18	-5.26	
Constructio	52,384,954.98	50,855,935.65	2.92	57.02	71.53	-8.21	
n industry	32,364,934.96	30,833,933.03	2.92	37.02	/1.33	-0.21	
Trade	2,834,742,551.50	2,557,264,384.04	9.79	46.13	32.35	9.39	
		0= /0=					

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#### Pricing strategy and price changes of main products

√Applicable □Not applicable

Pricing policy: the market price of product shall be adjusted timely according to real-time market conditions, the changes of raw materials price and supply-demand relations.

Caustic soda: the caustic sola supplied to the downstream of chemical industrial area is contract pricing, and the price is relatively stable, the overall price of products sold on market was stable in the first half year and caustic soda was persistent overheating since August in the second half of year, mainly because that some chlor-alkali enterprises were forced to limit production or even stop production due to environmental protection reasons; the maximum downstream alumina market of caustic soda turned better and the caustic soda demand was strong.

PVC: after nearly 5 years' silence on the market, PVC eventually showed new condition in 2016. The price began to rise in the middle of June, reached the peak in November and then became stable. The main reason was that the reform effect of supply side of industrial capacity transfer gradually appeared, furthermore, the limited production of calcium carbide for environmental reasons and better export promoted PVC quotation to be better.

Chlorine product: the chlorine product supplied to the downstream of chemical industrial area belonged to contract price and the price was relatively stable, but the price of chlorine product sold on the market changed significantly, in excessive supply status for a long term, and the price dropped greatly compared with 2015.

## (3). Basic information about main business of the Company divided by sales channel $\sqrt{\text{Applicable}}$ $\square \text{Not applicable}$

Unit: 10,000Yuan Unit: RMB

Sales channel	Operating income	Year-on-year increase or decrease in operating income (%)	
China	6,436,295,912.76	10.56	
Other countries	276,636,722.46	-8.75	

#### **Description of accounting policy**

□Applicable √Not applicable

# (4). Basic information about joint product, byproduct, semi-finished product, waste material and waste-heat utilization product

√Applicable □Not applicable

VApplicable □Not ap	phicable		1	r =
Other output products	Production in report period	Pricing method	Main target customers	Proportion of sales of main target customer (%)
Recycled material	1634.48	Market price	Shanghai Sitaiji	30
of Tianyuan Plant			Plastic Cement Co.,	
			Ltd	
Sulfuric acid used	11385.82	Market price	Shanghai Chengtang	100
for fertilizer			Industrial Co., Ltd	
Solvent ethylene	3927.16	Market price	Wuxi Yangshi	29
dichloride			Chemical Co., Ltd	
Sodium	17371.81	Market price	Shanghai Yuanyuan	39
monophosphate for			Chemical Co., Ltd	
wastewater				
treatment				
Lye for	48.98	Market price	Shanghai Lingtuo	100
neutralization			Chemical Co., Ltd	

#### Situation description

□Applicable √Not applicable

#### 5 Environmental Protection and Security

(1). Basic information about major safety production accidents of the Company in report period  $\Box$ Applicable  $\sqrt{Not}$  applicable

### (2). Basic information about environmental input of the Company during report period $\sqrt{\text{Applicable}}$ $\square \text{Not applicable}$

Unit: 10<sup>4</sup>Yuan Currency: RMB

Investment in environmental protection	Proportion of invested fund in operating income (%)
3,892.28	0.58

#### Basic information about major environmental violations in report period

 $\Box$ Applicable  $\sqrt{Not applicable}$ 

#### (3). Other information

 $\Box$ Applicable  $\sqrt{\text{Not applicable}}$ 

#### (V) Analysis on investment status

#### 1. General analysis on the equity investments in outside entities

√Applicable □Not applicable

1. General analysis on the equity investments in outside entities

			Unit: $10^4$ Yuan	Currency: RMB
Item	Closing balance	Beginning balance	Increment or decrement	Year-on-year increase or decrease (%)
Long-term equity				
investment	36,521.56	28,885.54	7,636.02	26.44
Available-for-sale financial				
assets	45,320.96	42,407.82	2,913.14	6.87
Including: measured at fair				
value	7,013.83	5,076.59	1,937.24	38.16
Measured at cost	38,307.13	37,331.23	975.90	2.61

Analysis on the reason for change in equity:

- 1) Long-term equity investment increased by 26.44% year on year, mainly due to the investment income in Huntsman confirmed in current period.
- 2) The Available-for-sale financial assets measured at fair value increased by 38.16% year on year, mainly because that the Bank of Shanghai which was measured at cost was transferred to measured at fair value in current period

#### (1) Significant equity investment

 $\sqrt{\text{Applicable}}$   $\square \text{Not applicable}$ 

- 1. The Company deliberated and passed the proposal on Investment in Inner Mongolia Junzheng Tianyuan Chemical Co., Ltd. on the 5<sup>th</sup> board meeting of the 9<sup>th</sup> Board of Directors on Oct. 28, 2016, and jointly set up Inner Mongolia Junzheng Tianyuan Chemical Co., Ltd. according to the proportion of shares, i.e. 40% for chlor-alkali company and 60% for Junzheng energy; joint venture corporation planned and constructed 200,000t/a seed emulsion polymerization paste resin project. The project has been implemented in phases, and the production capacity of phase I is intended to be 100,000t. The joint venture corporation completed business registration on Jan. 10, 2017, the fund of 4,000,000Yuan for Phase I was fully invested on Jan. 24, 2017, and Phase I is predicated to be put into operation at the end of 2017.
- 2. The Company participated in capital increase and expansion MDI project of Shanghai Huntsman Polyurethane Co., Ltd. and Shanghai Lianheng Isocyanate Co., Ltd in 2014. The contributions are as follows: participation in the project of Shanghai Huntsman Polyurethane Co., Ltd. with the total

contributions of 36,571,851.75Yuan in 2014 and the contributions of 16,244,815.25Yuan in 2017, totally 52,816,667Yuan by now. Participated in the expansion project of Shanghai Lianheng Isocyanate Co., Ltd, with the total contributions of 39,135,000Yuan in 2014, 40,466,400Yuan in 2015 and 18,316,800Yuan in 2016, totally 97,918,200Yuan by now.

#### (2) Significant non-equity investment

√Applicable □Not applicable

40,000t/a high-performance chlorinated polyvinyl chloride project got the EIA approval issued by Shanghai Environmental Protection Bureau on Feb. 28, 2017.

#### (3) Financial assets measured at fair value

√Applicable □Not applicable

Stock code	Stock Name	Initial investment cost	Ending book value	Profit or loss in reporting period	Change in owner's equity in the reporting period	Accounting subject	Sourc e of share
600623	Huayi Group share	690,000.00	1,921,920.00	15,015.00	-590,947.50	Available-for-sal e financial assets	Legal person share
600636	3F	360,000.00	7,482,736.80		-1,117,551.60	Available-for-sal e financial assets	Legal person share
600688	Shanghai Petrochemical	900,000.00	2,898,000.00		-13,500.00	Available-for-sal e financial assets	Legal person share
600610	ZYD	1,272,952.6 1	16,234,320.0 0	45,000.00	-11,648,154.4 6	Available-for-sal e financial assets	Legal person share
000166	Shenwan Hongyuan	1,250,000.0 0	14,850,000.0 0	264,000.0 0	10,200,300.00	Available-for-sal e financial assets	Legal person share
600637	Oriental Pearl	86,967.00	2,026,331.10	20,296.88	-951,636.40	Available-for-sal e financial assets	Legal person share
600082	Haitai Development	20,000.00	297,200.00		9,000.00	Available-for-sal e financial assets	Legal person share
601229	Bank of Shanghai	7,307,758.8 5	24,427,750.5 6		12,839,993.78	Available-for-sal e financial assets	Legal person share
	Total	11,887,678. 46	70,138,258.4 6	344,311.8 8	8,727,503.82	/	/

#### (VI) Sales of important assets and equities

□Applicable √Not applicable

#### (VII) Analysis on main controlled companies and participated companies

√Applicable □Not applicable

1) Operating performance of main controlled companies

Unit: 10<sup>4</sup>Yuan Currency: RMB

	1			
		Registered	Assets	Net profit
Company name	Business nature	capital	volume	
Shanghai Chlor-Alkali New				
Materials Trading Co., Ltd.	Trade	5,000	21,032.45	60.86
Shanghai Jinyuan Tap Water Co.,	Tap water	900	1,429.48	85.50

Ltd.					
		of			
	petrochemical				
	devices a	nd			
Shanghai Chlor-Alkali machinery	engineering				
Co., Ltd.	construction		3,000	2,743.33	-1,345.17
Shanghai Ruisheng Enterprise Co.					
Ltd.	Trade		500	6,837.85	340.03
	Production	of			
	CPVC tubing a	nd			
Shanghai Luwei Plastics Co., Ltd.	pipe fittings		5,000	1,480.03	-1,905.73

<sup>2)</sup> Influence of the net profit of the controlled subsidiary or the income of the participated subsidiary on the Company's net profit

Unit: 10<sup>4</sup>Yuan Currency: RMB

	ı	1	1	Omt. 10		itelicy. Rivid
						Investment
	Business	Main products	Main	Main		income
Company name	nature	or service	business	business	Net profit	contributed by
	1100010	01 001 /100	income	profit		the participated
						company
Shanghai						
Chlor-Alkali		Chemical raw				
New Materials		materials and				10.01
Trading Co., Ltd.	Trade	product sales	25,295.30	1,611.35	60.86	60.86
Shanghai						
Ruisheng		Chemical raw				
Enterprise Co.		materials and				
Ltd.	Trade	product sales	249,549.75	948.94	340.03	340.03
Shanghai						
Chlor-Alkali						
Machinery Co.,		Machine				
Ltd.	Industry	manufacturing	9,546.30	1,037.27	-1,345.17	-1,120.93
Shanghai						
Jinyuan Tap						
Water Co., Ltd.	Industry	Tap water	810.03	411.77	85.50	66.50
		Production of				
	Chemical	CPVC tubing				
Shanghai Luwei	production	and pipe				
Plastics Co., Ltd.	and sale	fittings	271.46	-122.69	-1,905.73	-1,334.01
Shanghai						
Huntsman	Chemical					
Polyurethane	production	MDI refining				
Co., Ltd.	and sale	and polymer	307,342.25	47,305.05	32,451.87	9,735.56

Notes:

The data of Shanghai Huntsman Polyurethane Co., Ltd. in 2016 is the list of relevant data in DSB (S) Z (17) No. P00165 Audit Report issued by Deloitte Touche Tohmatsu CPA Ltd. (special general partnership) for Shanghai Huntsman Polyurethane Co., Ltd.

### (VIII) Particular about structured entity controlled by the Company

□Applicable √Not applicable

#### III. Discussion and analysis on the Company's future development

#### (I) Industrial pattern and trend

√Applicable □Not applicable

In the first year of the 13<sup>th</sup> five-year plan, the chlor-alkali industry entered the critical period of industrial restructuring and growth mode transformation. A series of changes had taken place in the industrial operation characteristics: the industrial scale expanded continuously, but the speed of growth slowed down; the industrial concentration ratio rose and the industrial layout became reasonable gradually; the market pattern changed continuously and the trading mode was diversified; the production process was continuously optimized and the energy-saving and environmental protection level was continuously improved. There are still many contradictions and urgent problems in the industry, for example, overcapacity problem still exists, product homogenized competition is intense, the competitiveness of high-end product is poor, the technological innovation capacity should be further enhanced, "zombie enterprises" drags down the industrial development, which should be overall solved during the "13<sup>th</sup> Five-year Plan".

During the "13<sup>th</sup> five-year plan", along with the steady progress in new urbanization, the demand of caustic soda on end product market will maintain rapid growth. The urbanization rate of China will exceed 60% in 2020, and the new urbanization and consumption upgrading will greatly pull the construction investment in infrastructure and supporting facilities and promote the demand increase in building materials, household appliances, clothing and articles for daily use, and then will pull the continuous increase in the demand of caustic soda product. China's annual export volume of caustic soda was about 2,000,000t, basically covering the 64 countries of "the belt and road". China has always been the net exporter of caustic soda, the main export flow direction is basically in line with the countries covered by "the belt and road". Along with the development of economic construction of the countries belong to "the belt and road", the demand on caustic soda will further increase, so the export volume of domestic caustic soda towards the countries of "the belt and road" will continue to be high. In the coming years, the demand on caustic soda products of Europe, India, Australia and Southeast Asia will continue to grow, therefore, the main future export regions of caustic soda will still be these countries, and the export volume will keep increasing at the same time.

#### (II) Development strategy of the Company

√Applicable □Not applicable

Strategic thinking of the Company: based on the main battlefield, determined to go out, developing new business.

Based on the main battlefield —— take the main battlefield of chemical industrial zone as the support to optimize the operation capacity of units in service, raise the intrinsic safety degree of units through technological innovation and management innovation to create high-end products and improve the added value of products, so as to consolidate the main battlefield position of chemical industrial zone and lay the foundation for innovative development of the Company.

Determined to go out—— implement the strategy of "going out from the chlor-alkali industry, going out from Shanghai and going out from China", to deepen the cooperation with well-known companies both at home and abroad and to explore the optimum allocation of production factors and the best combination of market, take advantage of corporate brand, management and other intangible assets to improve the core competitiveness of the Company.

Developing new business—— take "innovation, upgrading and transformation" as the main line to change the single structure of main products and to promote the Company to transfer to the technology-based enterprise in advanced material field, with chlor-alkali products as the base, with new materials and high value-added chemicals as the main body and with strong profitability. strengthen the opportunity research on field segments of special PVC resin and related downstream products of MDI/TDI.

#### (III) Operating plan

√Applicable □Not applicable

Faced with the situation of coexistence between chances and challenges and between pressure and power, the Company will take advantage of the situation to adapt to the new status of the economic development, promote the optimization of economic structure, promote the steady growth of business performance, boost the reform into depth, make steady progress, accelerate the transformation of development, and strive to achieve more efficient and more sustainable development of higher quality.

- 1. Adhere to the green development as the premise to ensure safety and environmental protection controlled in all aspects. The Company will reshape the HSE management system to ensure system running effectively, strengthen the safety management measures and safety to enhance the intrinsic safety with great efforts, implement the responsibility, strengthen the examination with strict reward and penalty to enhance the HSE execution force, and improve the environmental management system to achieve green chemical industry and social caring with responsibility of caring.
- 2. Strive to remove the loss and get profit and ensure all the measures for reducing cost and enhancing efficiency implemented. The Company will stabilize the daily production and operation to ensure the high load operation of the profitable devices, optimize the sales structure to reduce procurement cost and seek to maximize the benefits, reduce the cost of public utilities costs to strengthen the efforts for implementing energy-saving and emission reducing projects and control strictly the three expenses and manufacturing cost to reduce the cost and improve the efficiency.
- 3. Speed up the industrialization of the key projects to lay a solid foundation for follow-up development. On the basis of completion of feasibility study report, the environmental impact assessment of 100,000t hydrogen chloride oxidation to chlorine project has been started; strengthen the technical upgrading of existing resin products, collect various PVC resins for analysis and evaluation, select 2 to 3 varieties according to different production characteristics and process for future development, furthermore, make improvement for the production process, line and technology for existing PVC products to improve the stability of PVC resin products.
- 4. Deepen the management to improve operation efficiency. Due to the sharp decrease in the staff of the Company, the organizational structure, business process, internal control system should be further organized and improved. The Company will optimize the organizational structure and personnel structure, establish reasonable incentive mechanism, to deepen the management and improve the efficiency.
- 5. Continue to explore the research on go out strategy to ensure the sustainable development. From the aspects of perfecting the existing industrial chain in Shanghai chemical industrial area, extending the existing product chain and looking for chemical new material product with high added value and technical content, in combination with the actual situation of the Company, Strengthen the opportunity research on field segments of special PVC resin and related downstream products of MDI/TDI.

#### (IV) Possible risks

√Applicable □Not applicable

- 1) Risk of microeconomic fluctuation. The downward economic pressure will not decrease in 2017 and the economic situation is still grim.
- 2) Policy risk and industrial risk. Under the background of deepening the structural reform of supply side and cutting excessive industrial capacity of the state, there will be greater uncertainty on chlor-alkali products and its downstream products market in 2017.
- 3) Raw material risk. Impacted by cold chain transportation, the Company's main raw material ethylene is of the unique commercial attributes, high fluctuations in price, and being easy to rise and difficult to fall. This will deviate from the production cost and bring risk to the control of the production cost of the Company's product ethylene dichloride. The electricity needed for sodium hydroxide is made as part of the raw material, but it is difficult to get policy favor for the price of the electricity for electrolysis under the guidance of existing location economy.

#### 2. Countermeasures

- 1) Except for the five points in business plan, the Company shall strengthen the pace of transformation of scientific research innovation into productivity, and accelerate the process of industrialization of new technology chlorine hydride catalytic oxidation to chlorine and the amplification technology research on dichloroethane oxychlorination to perchlorethylene.
- 2) Continue to explore the research on go-global strategy to look for resource and location advantages. Aim at the regions with cost advantages to create new production base, and extend the production chain of the company, so as to realize the transformation and upgrading.

3) take advantage of supply-marketing integrated platform of trade company to realize the "supply and marketing linkage, products linkage and main trade linkage" for comprehensive improvement of the marketing level.

#### (V) Other

□Applicable √Not applicable

IV. Note on the status and causes not disclosed as per criteria due to not being applicable to the provisions of the criteria or special causes

□Applicable √Not applicable

### **Section V Major Events**

- I. Proposal on profit distribution of ordinary shares or transfer of capital reserves
- (I) The formulation, implementation or adjustment of the cash dividend policy

√Applicable □Not applicable

- 1. In 2012, the Company, according to relevant regulations of China Securities Regulatory Commission, Shanghai Securities Regulatory Bureau and Shanghai Stock Exchange, made amendment on relevant provisions related to profit distribution in the *Articles of Association*, further improved relevant decision-making process and mechanism, clarified the profit distribution form, the actual conditions and proportion of the cash dividend, the use principle of undistributed profit and other specific policies.
  - 2. The cash dividend policy has not been adjusted in reporting period.
- (II) The Company's profit distribution plan for ordinary shares or proposal and the plan for capital reserves transferred to share capital or proposal in recent 3 years (including the reporting period)

Unit: Yuan Currency: RMB

The year for dividend distribution	Bonus share for every 10 shares held	Issued dividend for every 10 shares held (RMB) (tax included)	Shares increased for every 10 shares held	Total amount of cash dividend issued (tax included)	Net profit attributable to shareholders of the listed Company in the consolidated statements in the year for dividend distribution	Ratio in the net profit attributable to shareholders of the listed Company in the consolidated statements (%)
2016	0	0	0	0	-328,091,761.80	0
2015	0	0		0	95,615,030.34	0
2014	0	0	0	0	-592,502,499.95	0

#### (III) Repurchase offer of shares in cash and included in cash dividends

□Applicable √Not applicable

(IV) If the profit is positive in the reporting period and the profit distributable to common shareholders by the parent company is positive but the Company does not lodge the proposal for profit distribution in cash for ordinary shares, the Company shall disclose in detail the reasons and the purpose and use plan of the undistributed profit

□Applicable √Not applicable

#### II. Fulfillment of commitments

(I) Commitments of the actual controller, shareholders, related parties, purchaser and the Company made to other related parties in the reporting period or left to the reporting period

Applicable √Not applicable

(II) If there is earnings forecast for assets or project of the Company and the assets and project are still in forecasted earnings period during the reporting period, the Company shall explain whether the assets or project have reached the original earnings forecast and give the reasons

□Reached □Failing to reach √Not applicable

#### III. Fund occupation and the liquidation in the reporting period

□Applicable √Not applicable

IV. Note of the Company on the "non-standard auditor's report" of the public accounting firm  $\Box$ Applicable  $\sqrt{Not}$  applicable

- V. The analysis and explanation of the Company on the cause and influence of the changes in the accounting policy and accounting estimate or correction of significant accounting errors
- (I) Analysis and explanation of the Company on the cause and influence of the changes in the accounting policy and accounting estimate

√Applicable □Not applicable

Follow the *Provisions on Accounting Treatment Value-added Tax* 

The Ministry of Finance published the *Provisions on Accounting Treatment Value-added Tax* (CK [2016] No. 22) Dec. 3, 2016 and the Provisions are applicable to the related transaction after May 1,

2016. The influences of the implementation of the provisions are as follows:

Contents and Reasons for the Changes of  Accounting Policies  (1) Adjust the item "business tax and surcharges" in income statement to item "taxes and	Approval Procedures Approved by the decision of the	Name and Amount of the  Affected Items  Taxes and surcharges
(2) Reclassify the housing property tax, land use tax, vehicle and vessel usage tax and stamp duty arising from the business activities of the enterprise since May 1, 2016 in the item "administrative expenses" to the item "taxes and surcharges", and the taxes incurred before May 5, 2016 shall not be adjusted. The comparative data shall not be adjusted.	Approved by the decision of the Board of Directors	The amount of taxes and surcharges of this year is increased by RMB 6,835,416.74Yuan after adjustment, and the amount of administrative expenses of this year is decreased by RMB 6,663,499.58 Yuan after adjustment. The amount of sales expenses of this year is decreased by RMB

Contents and Reasons for the Changes of Accounting Policies	Approval Procedures	Name and Amount of the Affected Items 171,917.16 Yuan after adjustment.
(3) Reclassify the value-added tax of income (or gains) which has been recognized without fulfillment of VAT obligations and should be recognized as output VAT from the item "tax payable" to the item "other current liabilities". The comparative data shall not be adjusted.	Approved by the decision of the Board of Directors	The adjusted increment in ending balance of other current liabilities is RMB 0 Yuan, the adjusted increment in other non-current liabilities is RMB 0 Yuan, and the adjusted decrement in ending balance of tax payable is RMB 0Yuan.
(4) Reclassify the credit balance of the classification items of "VAT payable", "unpaid VAT", "pending deduct VAT on purchase", "input VAT to be recognized" and "VAT retained" under the item "taxes payable" to the item "other current assets" (or "other non-current assets"). The comparative data shall not be adjusted.	Approved by the decision of the Board of Directors	The adjusted increment in ending balance of other current assets is RMB 0 Yuan, the adjusted increment in other non-current assets is RMB 0 Yuan, and the adjusted increment in ending balance of tax payable is RMB 0Yuan.

# (II) Analysis and explanation of the Company on the cause and influence of the correction of significant accounting errors

□Applicable √Not applicable

#### (III) Communication with former CPA firm

□Applicable √Not applicable

#### (IV) Other information

□Applicable √Not applicable

#### VI. Engagement and dismissal of the public accounting firm

Unit: 10<sup>4</sup> Yuan Currency: RMB

	entero ruan currency: runz
	Now engage
Name of the domestic public accounting firm	BDO China Shu Lun Pan Certified Public
	Accountants LLP
Reward of the domestic public accounting firm	88
Audit term of years of the domestic public	6

	Name	Reward
Public accounting firm for audit of	BDO China Shu Lun Pan Certified	35.2
internal control	Public Accountants LLP	

Note on the engagement and dismissal of the public accounting firm  $\Box$ Applicable  $\sqrt{Not}$  applicable

Note on reengagement of public accounting firm in audit period 

□Applicable √Not applicable

#### VII. Risk of suspension of listing

## (I) Cause for suspension of listing

□Applicable √Not applicable

## (II) Countermeasures to be taken by the Company

□Applicable √Not applicable

## VIII. Faced with the termination of listing and causes

□Applicable √Not applicable

## IX. Events related to bankruptcy and reorganization

□Applicable √Not applicable

#### X. Significant lawsuits and arbitrations

□Existence of significant lawsuits and arbitrations in the year

√No significant lawsuits and arbitrations in this year

## XI. Penalties to the listed Company, Directors, Supervisors, senior executives, controlling shareholder, actual controller and purchaser and the corrections

 $\Box$ Applicable  $\sqrt{\text{Not applicable}}$ 

## XII. Credit conditions of the Company and its controlling shareholder and actual controller in reporting period

□Applicable √Not applicable

## XIII. The Company's equity incentive plan, employee stock ownership plan and other incentives to the employees and the influences

## (I) Disclosure of related incentive matter in provisional announcement without subsequent progress or change

□Applicable √Not applicable

#### (II) Incentive matters not disclosed in provisional announcement or with subsequent progress

Equity incentive

□Applicable √Not applicable

Other information

□Applicable √Not applicable

Information about employee stock ownership plan

Other incentive measures 

□Applicable √Not applicable

## XIV. Significant related transactions

### (I) Related transactions associated with routine operations

## ${\bf 1.} \quad \text{Events already disclosed in the provisional announcement and having no subsequent progress or change}$

√Applicable □Not applicable

Summary of events	Query Index					
The 28 <sup>th</sup> meeting of the 8 <sup>th</sup> Board of Directors on Mar. 25,	Reviewed and passed on the 28 <sup>th</sup> meeting of the					
2016 and 2015 Annual Shareholders' Meeting of Apr. 25,	8 <sup>th</sup> Board of Directors and 2015 Annual					
2016 reviewed and passed the <i>Proposal on Daily Related</i>	Shareholders' Meeting					
Transactions of the Company. The related transaction of	www.sse.com.cn					
the Company and related parties are normal business						
activities and largely support the day-to-day operations						
and development, conforming to the principle public,						
justice and fairness.						

## 2. Events already disclosed in the provisional announcement and having subsequent progress or change

□Applicable √Not applicable

## 3. Events not disclosed by provisional announcements

	-			Unit:	10 <sup>4</sup> Yuan Cur	rency: RMB
Related transaction party	Relationship	Type of related transaction	Content of related transaction	Pricing principle for related transaction	Amount of related transaction	Ratio in total amount of transaction of the same kind (%)
Shanghai Huayi Energy Chemical Co., Ltd.	Controlled subsidiary of parent company	Purchase goods	Material purchase	Settled through negotiated price	92.13	0.02
Shanghai Huayi Tianyuan Chemical Logistics Co., Ltd.	Controlled subsidiary of parent company	Purchase goods	Material purchase	Settled through negotiated price	84.24	0.02
Shanghai Chlor-Alkali Creation Co., Ltd.	Wholly-owne	Purchase goods	Material purchase	Settled through negotiated price	140.30	0.03
Shanghai Huayi Group Equipment Engineering Co., Ltd.	Wholly-owne d subsidiary of parent company		Material purchase	Settled through negotiated price	44.17	0.01
Shanghai Chemical Supply and Marketing Co., Ltd.	Wholly-owne d subsidiary of parent company	Purchase goods	Material purchase	Settled through negotiated price	10.21	0.00
Shanghai Chemical Supply and Marketing Co., Ltd.		Purchase goods	Material purchase	Settled through negotiated	86.25	0.02

Shanghai Huayi Information Technology Co., Ltd. Telephant & Swan Battery Co., Ltd. Telephant & Swantery Co., Ltd. Telephant & Swantery Co., Ltd. Telephant & Swantery Co., Ltd. Telephant & Settled Battery Co., Ltd. Telephant & Settl		company			price		
Information Technology Co., Ltd. Shanghai White Elephant & Swan Battery Co., Ltd. Huayi Group (Hong Kong) Co., Ltd. Shanghai Tiantan Auxiliaries Co., Ltd Shanghai Chemical Industry Inspection Co, Ltd. Shanghai Huayi Transport Co., Ltd. Shanghai New Controlled Transport Co., Ltd. Shanghai Wholly-owne Chlor-Alkali Creation Chor-Alkali Creation Chor-Alkali Creation Chor-Alkali Creation Chemical Chor-Alkali Creation Chemical Chor-Alkali Creation Chor-Alkali Creation Chemical Chor-Alkali Creation Chemical Chor-Alkali Creation Chemical Chor-Alkali Creation Chor, Ltd. Shanghai Huayi Chemical Chor-Alkali Creation Chor-Alkali Creation Chor-Alkali Creation Chemical Chor-Alkali Creation Chemical Chor-Alkali Creation Chor-Alk	Shanghai Huavi		Purchase	Material	*	147.01	0.04
Technology Co., Ltd. company Shanghai White Elephant & Swan Battery Co., Ltd. company Huayi Group (Hong Kong) Co., Ltd. company Shanghai Tiantan Auxiliaries Co., Ltd. company Shanghai Huayi Controlled Shanghai New Tianyuan Chemical Iransport Co., Ltd. company Shanghai New Tianyuan Chemical Iransport Co., Ltd. company Shanghai New Tianyuan Chemical Iransport Co., Ltd. company Shanghai Huayi Technology Co., Ltd. d. subsidiary of parent company Shanghai Huayi Tennyuan Chemical Iransport Co., Ltd. company Shanghai Chemical Iransport Co., Ltd. d. subsidiary of parent company Shanghai Huayi Tennyuan Chemical Iransport Co., Ltd. company Shanghai Chemical Iransport Co., Ltd. d. subsidiary of parent company Shanghai Huayi Tennyuan Chemical Iransport Co., Ltd. company Shanghai Chemical Iransport Co., Ltd. d. subsidiary of parent company Shanghai Chemical Iransport Co., Ltd. d. subsidiary of parent company Shanghai Chemical Iransport Co., Ltd. d. subsidiary of parent company Shanghai Chemical Iransport Co., Ltd. d. subsidiary of parent company Shanghai Chemical Iransport Co., Ltd. d. subsidiary of parent company Shanghai Chemical Iransport Co., Ltd. d. subsidiary of parent company Shanghai Chemical Iransport Co., Ltd. d. subsidiary of parent company Shanghai Huayi Transport Co., Ltd. d. subsidiary of parent company Shanghai Huayi Shanghai Pacific Controlled Service service service through negotiated price Shanghai Huayi Shanghai Huayi Shanghai Pacific Controlled subsidiary of parent company Shanghai Huayi S							
Company   Controlled   Elephant & Swan   Battery Co., Ltd.   parent   company   Purchase   Material   purchase   through   negotiated   price   megotiated   price		_	8	1			
Shanghai White Elephant & Swan Battery Co., Ltd. subsidiary of parent company Huayi Group (Hong Kong) Co., Ltd.  Shanghai Tiantan Controlled subsidiary of parent company  Shanghai Chemical Industry Inspection & Detection Co., Ltd.  Shanghai Huayi Shanghai New Controlled subsidiary of parent company  Shanghai Huayi Tianyuan Chemical Iransport Co., Ltd.  Shanghai Wholly-owne Receive Stetled subsidiary of parent company  Shanghai New Controlled subsidiary of parent company  Shanghai New Controlled service se		-					
Elephant & Swan Battery Co., Ltd. company	Shanghai White		Purchase	Material	1	0.49	0.00
Battery Co., Ltd. parent company Huayi Group (Hong Kong) Co., Ltd. d subsidiary of parent company Shanghai Tiantan Auxiliaries Co., Ltd subsidiary of parent company Shanghai Chemical Idustry Inspection & d subsidiary of parent company Shanghai Huayi Controlled subsidiary of parent company Shanghai New Citanghai New Citanghai Transport Co., Ltd. Shanghai Wholly-owne Chlor-Alkali Creation Co., Ltd. Company Shanghai Huayi Controlled subsidiary of parent company Shanghai Huayi Controlled Shanghai Huayi Controlled Shanghai Huayi Controlled Shanghai Huayi Company Shanghai Huayi Controlled Shanghai Huayi Controlled Shanghai Huayi Company Shanghai Huayi Controlled Shanghai Huayi Controlled Shanghai Huayi Company Shanghai Huayi Controlled Shanghai Huayi Controlled Shanghai Huayi Company Shanghai Huayi Controlled Shanghai Huayi Controlled Shanghai Huayi Company Shanghai Huayi Controlled Shanghai Huayi Company Shanghai Huayi Controlled Shanghai Huayi Controlled Shanghai Pacific Company Shanghai Huayi Controlled Shanghai Huayi Controlled Shanghai Pacific Company Shanghai Pacific Controlled Shanghai Pacific Company Shanghai Huayi Controlled Shanghai Pacific Controlled Shanghai Pacific Controlled Subsidiary of Parent Company Shanghai Huayi Controlled Shanghai Pacific Controlled Subsidiary of Parent Company Shanghai Huayi Controlled Subsidiary of Parent Compan				purchase			
Company   Huayi Group (Hong Kong) Co., Ltd.   Purchase da subsidiary of parent company   Purchase da subsidiary of parent da subsidiary of parent company   Purchase da subsidiary of parent da subsidiary of parent company   Purchase da subsidiary of parent da subsidiary of parent company   Purchase da subsidiary of parent da subsidiary of parent company   Purchase da subsidiary of parent da subsidiary of parent company   Purchase da subsidiary of parent da subsidiary of parent company   Purchase da subsidiary of parent da subsidiary of parent company   Purchase da subsidiary of parent da subsidiary of parent company   Purchase da subsidiary of parent da subsidiary of parent company   Purchase da subsidiary of parent da subsidiary of parent company   Purchase da subsidiary of parent da subsidiary of parent company   Purchase da subsidiary of parent da subsidiary of parent company   Purchase da subsidiary of parent da subsidiary of parent company   Purchase da subsidiary of parent da subsidiary of parent da subsidiary of parent company   Purchase da subsidiary of parent da subsidiary of parent da subsidiary of parent company   Purchase da subsidiary of parent da subsidiary of parent company   Purchase da subsidiary of parent da subsidiary of parent company   Purchase da subsidiary of parent da subsidiary of parent company   Purchase da s		_					
Huayi Group (Hong Kong) Co., Ltd.   d subsidiary of parent company   Shanghai Tiantan   Controlled subsidiary of parent company   Shanghai Chemical Transport Co., Ltd.   Controlled Transport Co., Ltd.   Shanghai Huayi Co., Ltd.   Co		*					
Rong) Co., Ltd.   d subsidiary of parent company   Controlled service service   Controlled service service   Controlled subsidiary of parent company   Controlled service   Controlled subsidiary of parent company   Controlled subsidiary of parent company   Controlled service   Controlled subsidiary of parent company   Controlled Sell goods   Controlled subsidiary of parent company   Controlled Sell goods	Huayi Group (Hong		Purchase	Material		12,285.10	3.06
Shanghai Tiantan   Controlled   Subsidiary of parent company   Shanghai Chemical   Industry Inspection & Detection Co., Ltd.   Controlled subsidiary of parent company   Shanghai Huayi   Controlled Tianyuan Chemical Transport Co., Ltd.   Company   Shanghai Huayi   Controlled Subsidiary of parent company   Shanghai Pacific Chemica Equipment Engineering Co., Ltd.   Controlled Subsidiary of parent company   Shanghai Huayi   Controlled Sell goods   Product Settled through   Controlled Subsidiary of Subsidi		•	goods	purchase	through	ĺ	
Shanghai Tiantan Auxiliaries Co., Ltd   Subsidiary of parent company   Shanghai Chemical Industry Inspection & Detection Co., Ltd.   Stanghai Huayi Tianyuan Chemical Company   Shanghai New Tianyuan Chemical Transport Co., Ltd.   Shanghai Wholly-owne Receive Service   Settled Service Service   Settle							
Shanghai Tiantan Auxiliaries Co., Ltd  Shanghai Chemical Industry Inspection & Detection Co., Ltd.  Shanghai Huayi Tianyuan Chemical Transport Co., Ltd.  Shanghai Chorrolled Subsidiary of parent company  Shanghai New Tianyuan Chemical Transport Co., Ltd.  Shanghai Chorrolled Subsidiary of parent company  Shanghai Transport Co., Ltd.  Shanghai Chemical Tompany  Shanghai Chemical Transport Co., Ltd.  Shanghai Chorrolled Subsidiary of parent company  Shanghai Chemical Tompany  Shanghai Chemical Transport Co., Ltd.  Shanghai Chorrolled Subsidiary of parent company  Shanghai Chorrolled Subsidiary of parent company  Shanghai Chemical Tompany  Shanghai Chemical Transport Co., Ltd.  Shanghai Chorrolled Subsidiary of parent company  Shanghai Chemical Transport Co., Ltd.  Shanghai Chorrolled Subsidiary of parent company  Shanghai Huayi Controlled Subsidiary of service Service Service Service Service Settled Service Service Service Settled Service		company			price		
Auxiliaries Co., Ltd. subsidiary of parent company  Shanghai Chemical Industry Inspection & Detection Co., Ltd. company  Shanghai Huayi Tianyuan Chemical Logistics Co., Ltd. company  Shanghai New Transport Co., Ltd. company  Shanghai Wholly-owne Receive service parent company  Shanghai New Controlled Stubsidiary of parent company  Shanghai New Controlled Shanghai Chemical Transport Co., Ltd. company  Shanghai Chemical Company  Shanghai Chemical Transport Co., Ltd. company  Shanghai Chemical Company  Shanghai Chemical Company  Shanghai Chemical Controlled Subsidiary of parent company  Shanghai Huayi Controlled Subsidiary of parent company  Shanghai Huayi Controlled subsidiary of parent company  Shanghai Huayi Controlled subsidiary of parent company  Shanghai Pacific Controlled subsidiary of parent company  Shanghai Pacific Controlled subsidiary of parent company  Shanghai Pacific Controlled subsidiary of parent company  Shanghai Huayi Controlled subsidiary of parent co	Shanghai Tiantan		Purchase	Material	Settled	608.89	0.15
Shanghai Chemical Industry Inspection & Wholly-owne Detection Co., Ltd. Detection Dete		subsidiary of	goods	purchase	through		
Shanghai Chemical Industry Inspection & dusbidiary of Detection Co., Ltd.  Detection Co., Ltd.  Shanghai Huayi Tianyuan Chemical Logistics Co., Ltd.  Shanghai New Controlled subsidiary of parent company  Shanghai New Tianyuan Chemical Transport Co., Ltd.  Tensport Co., Ltd.  Shanghai Undustry Inspection & Settled subsidiary of parent company  Shanghai New Tianyuan Chemical Transport Co., Ltd.  Shanghai Chemical Subsidiary of parent company  Shanghai Chemical Transport Co., Ltd.  Shanghai Huayi Shanghai Huayi Fingineering Co., Ltd.  Shanghai Huayi Tianyuan Chemical Subsidiary of parent company  Shanghai Huayi Fingineering Co., Ltd.  Shanghai Huayi Shanghai Huayi Fingineering Co., Ltd.  Shanghai Pacific Chemica Equipment Engineering Co., Ltd.  Shanghai Huayi Shanghai Pacific Chemica Equipment Engineering Co., Ltd.  Shanghai Huayi Shanghai Huayi Controlled Subsidiary of parent company  Shanghai Huayi Shanghai Pacific Chemica Equipment Engineering Co., Ltd.  Shanghai Huayi Shanghai Huayi Shanghai Pacific Chemica Equipment Company  Shanghai Huayi Shanghai Huayi Shanghai Pacific Controlled Subsidiary of parent company  Shanghai Huayi Shanghai Huayi Shanghai Pacific Controlled Subsidiary of parent company  Shanghai Huayi Shanghai Huayi Shanghai Huayi Shanghai Pacific Controlled Subsidiary of parent company  Shanghai Huayi Shangha		parent			negotiated		
Shanghai Chemical Industry Inspection & dusbidiary of Detection Co., Ltd.  Detection Co., Ltd.  Shanghai Huayi Tianyuan Chemical Logistics Co., Ltd.  Shanghai New Controlled subsidiary of parent company  Shanghai New Tianyuan Chemical Transport Co., Ltd.  Tensport Co., Ltd.  Shanghai Undustry Inspection & Settled subsidiary of parent company  Shanghai New Tianyuan Chemical Transport Co., Ltd.  Shanghai Chemical Subsidiary of parent company  Shanghai Chemical Transport Co., Ltd.  Shanghai Huayi Shanghai Huayi Fingineering Co., Ltd.  Shanghai Huayi Tianyuan Chemical Subsidiary of parent company  Shanghai Huayi Fingineering Co., Ltd.  Shanghai Huayi Shanghai Huayi Fingineering Co., Ltd.  Shanghai Pacific Chemica Equipment Engineering Co., Ltd.  Shanghai Huayi Shanghai Pacific Chemica Equipment Engineering Co., Ltd.  Shanghai Huayi Shanghai Huayi Controlled Subsidiary of parent company  Shanghai Huayi Shanghai Pacific Chemica Equipment Engineering Co., Ltd.  Shanghai Huayi Shanghai Huayi Shanghai Pacific Chemica Equipment Company  Shanghai Huayi Shanghai Huayi Shanghai Pacific Controlled Subsidiary of parent company  Shanghai Huayi Shanghai Huayi Shanghai Pacific Controlled Subsidiary of parent company  Shanghai Huayi Shanghai Huayi Shanghai Huayi Shanghai Pacific Controlled Subsidiary of parent company  Shanghai Huayi Shangha		-					
Industry Inspection & Detection Co., Ltd.  Detection Co., Ltd.  Detection Co., Ltd.  Defection Co., Ltd.  Defection Co., Ltd.  Controlled Shanghai Huayi  Controlled Subsidiary of parent company  Shanghai New Controlled Subsidiary of parent company  Shanghai New Controlled Subsidiary of parent company  Shanghai New Controlled Subsidiary of parent company  Shanghai Huayi Controlled subsidiary of parent company  Shanghai Pacific Controlled subsidiary of parent company  Shanghai Huayi Controlled subsidiary of parent company  Sell goods Product Settled 475.70 00 00 00 00 00 00 00 00 00 00 00 00 0	Shanghai Chemical		Receive	Receive		288.42	0.07
Detection Co., Ltd. parent company  Shanghai Huayi Controlled subsidiary of parent company  Shanghai New Controlled subsidiary of parent company  Shanghai Wholly-owne Collor-Alkali Creation Co., Ltd. parent company  Shanghai Huayi Controlled subsidiary of parent company  Shanghai Huayi Controlled subsidiary of parent company  Shanghai Huayi Controlled subsidiary of parent company  Shanghai Huayi Controlled Receive service se	_		service	service	through		
Shanghai Huayi Controlled subsidiary of parent company Shanghai New Controlled subsidiary of parent company Shanghai New Controlled subsidiary of parent company Shanghai New Controlled subsidiary of parent company Shanghai Wholly-owne Chlor-Alkali Creation Co., Ltd. Shanghai Huayi Engineering Co., Ltd. Shanghai Huayi Shanghai Huayi Controlled subsidiary of parent company Shanghai Pacific Chemica Equipment Company Shanghai Huayi Controlled subsidiary of parent company Shanghai Pacific Chemica Equipment company Shanghai Huayi Controlled service Service Settled 341.32 Settled service service Settled service Settled service service Settled service service Settled service Settled service service service Settled service service service service service Settled service		_					
Shanghai Huayi Tianyuan Chemical Logistics Co., Ltd. Shanghai New Controlled Subsidiary of parent company  Shanghai New Transport Co., Ltd. Shanghai Chlor-Alkali Creation Co., Ltd. Shanghai Huayi Engineering Co., Ltd. Shanghai Huayi Shanghai Huayi Controlled Shanghai Huayi Engineering Co., Ltd. Shanghai Pacific Chemica Equipment Engineering Co., Ltd. Shanghai Pacific Chemica Equipment Engineering Co., Ltd. Shanghai Huayi Shanghai Pacific Chemica Equipment Engineering Co., Ltd. Chemica Equipment Engineering Co., Ltd. Shanghai Huayi Controlled Subsidiary of parent company Shanghai Pacific Chemica Equipment Engineering Co., Ltd. Shanghai Huayi Controlled Subsidiary of parent company Shanghai Pacific Chemica Equipment Engineering Co., Ltd. Shanghai Huayi Controlled Subsidiary of parent company Service Settled Settled Strice Settled Strice Settled Strice Settled Strice Stric	,	-					
Tianyuan Chemical Logistics Co., Ltd.  Shanghai New Controlled Subsidiary of parent company  Shanghai New Transport Co., Ltd.  Shanghai Chlor-Alkali Creation Co., Ltd.  Shanghai Huayi Information Technology Co., Ltd.  Shanghai Pacific Chemica Equipment company  Shanghai Pacific Chemica Equipment company  Shanghai Pacific Chemica Equipment Engineering Co., Ltd.  Subsidiary of parent company  Service Serv	Shanghai Huayi		Receive	Receive	Settled	2,474.87	0.62
Logistics Co., Ltd. parent company  Shanghai New Controlled subsidiary of parent company  Shanghai New Tianyuan Chemical Transport Co., Ltd. parent company  Shanghai Wholly-owne Chlor-Alkali Creation Co., Ltd. parent company  Shanghai Huayi Engineering Co., Ltd. d subsidiary of parent company  Shanghai Huayi Engineering Co., Ltd. d subsidiary of parent company  Shanghai Huayi Controlled Shanghai Pacific Chemica Equipment Engineering Co., Ltd. parent company  Shanghai Huayi Controlled Shanghai Pacific Controlled Shanghai Pacific Company  Shanghai Pacific Controlled Shanghai Huayi Controlled Shanghai Pacific Controlled Shanghai Pacific Controlled Shanghai Pacific Controlled Shanghai Pacific Controlled Shanghai Huayi Controlled Shanghai Pacific Controlled Service		subsidiary of	service	service		,	
Company   Controlled   Receive   Settled   S		_					
Shanghai New Tianyuan Chemical Transport Co., Ltd.  Shanghai Chemical Transport Co., Ltd.  Shanghai Chlor-Alkali Creation Co., Ltd.  Shanghai Huayi Engineering Co., Ltd.  Shanghai Huayi Shanghai Huayi Controlled Shanghai Huayi Shanghai Huayi Controlled Information Technology Co., Ltd.  Shanghai Pacific Chemica Equipment Engineering Co., Ltd.  Shanghai Huayi Controlled Shanghai Pacific Chemica Equipment Engineering Co., Ltd.  Shanghai Huayi Controlled Subsidiary of Shanghai Pacific Chemica Equipment Engineering Co., Ltd.  Shanghai Huayi Controlled Subsidiary of Shanghai Pacific Chemica Equipment Engineering Co., Ltd.  Shanghai Huayi Controlled Subsidiary of Shanghai Pacific Chemica Equipment Engineering Co., Ltd.  Shanghai Huayi Controlled Subsidiary of Sell goods Sell goods Sell goods Settled Se		-					
Tianyuan Chemical Transport Co., Ltd.  Shanghai Chlor-Alkali Creation Co., Ltd.  Shanghai Huayi Engineering Co., Ltd.  Shanghai Huayi Controlled Shanghai Huayi Chemica Equipment Engineering Co., Ltd.  Shanghai Pacific Chemica Equipment Engineering Co., Ltd.  Shanghai Huayi Shanghai Huayi Controlled Subsidiary of parent company  Shanghai Huayi Controlled Subsidiary of parent company  Shanghai Huayi Controlled Subsidiary of parent company  Shanghai Pacific Chemica Equipment Engineering Co., Ltd.  Shanghai Huayi Controlled Subsidiary of parent company  Shanghai Pacific Chemica Equipment Engineering Co., Ltd.  Shanghai Huayi Controlled Subsidiary of parent company  Service Service Settled	Shanghai New		Receive	Receive		524.80	0.13
Transport Co., Ltd. parent company  Shanghai Wholly-owne Chlor-Alkali Creation Co., Ltd. parent company  Shanghai Huayi Engineering Co., Ltd. Wholly-owne Company  Shanghai Huayi Controlled Subsidiary of parent company  Shanghai Huayi Controlled Shanghai Pacific Chemica Equipment Engineering Co., Ltd. Chemica Equipment Engineering Co., Ltd. Shanghai Huayi Controlled Shanghai Huayi Controlled Shanghai Pacific Chemica Equipment Engineering Co., Ltd. Chemica Equipment Engineering Co., Ltd. Shanghai Huayi Controlled Subsidiary of parent company  Shanghai Huayi Controlled Subsidiary of parent company  Shanghai Huayi Controlled Subsidiary of parent company  Shanghai Huayi Controlled Service Service Settled Service S		subsidiary of	service	service	through		
Shanghai Wholly-owne Co., Ltd. Parent Company Price Service Settled Service Se	Transport Co., Ltd.	_					
Shanghai		-					
Chlor-Alkali Creation d subsidiary of parent company  Shanghai Huayi Engineering Co., Ltd.  Shanghai Huayi Controlled Information Technology Co., Ltd.  Shanghai Pacific Company  Shanghai Pacific Controlled Service  Shanghai Pacific Controlled Subsidiary of Engineering Co., Ltd.  Shanghai Huayi Controlled Service  Shanghai Pacific Controlled Subsidiary of Company  Shanghai Pacific Controlled Service  Shanghai Pacific Controlled Service  Shanghai Pacific Controlled Service  Shanghai Huayi Subsidiary of Engineering Co., Ltd.  Shanghai Huayi Controlled Service  Service Settled Settled Settled Settled Service  Service Settled Settled Settled Service  Service Settled Settled Settled Service Service Service Settled Service	Shanghai		Receive	Receive	Settled	341.32	0.08
Shanghai Huayi Engineering Co., Ltd.  Shanghai Huayi Engineering Co., Ltd.  Shanghai Huayi Shanghai Huayi Information Technology Co., Ltd.  Shanghai Pacific Chemica Equipment Engineering Co., Ltd.  Shanghai Huayi Controlled subsidiary of parent company Shanghai Pacific Chemica Equipment Engineering Co., Ltd.  Shanghai Huayi Controlled subsidiary of parent company Shanghai Huayi Engineering Co., Ltd.  Shanghai Huayi Engineering Co., Ltd.  Service			service	service	through		
Shanghai Huayi Engineering Co., Ltd.  Shanghai Huayi Engineering Co., Ltd.  Shanghai Huayi Shanghai Huayi Shanghai Huayi Controlled Information Technology Co., Ltd.  Shanghai Pacific Chemica Equipment Engineering Co., Ltd.  Shanghai Huayi Shanghai Huayi Shanghai Pacific Chemica Equipment Engineering Co., Ltd.  Shanghai Huayi Engineering Co., Ltd.  Shanghai Huayi Sell goods Sell goods Sell goods Settled Set	Co., Ltd.	parent			negotiated		
Engineering Co., Ltd. d subsidiary of parent company  Shanghai Huayi Controlled Information Technology Co., Ltd. parent company  Shanghai Pacific Chemica Equipment Engineering Co., Ltd. parent company  Shanghai Huayi Controlled Service Service Information Subsidiary of parent company  Shanghai Pacific Controlled Service Service Information Subsidiary of Service Service Information Service Service Information Information Service Information Service Information Inform		company			price		
Engineering Co., Ltd. d subsidiary of parent company  Shanghai Huayi Controlled subsidiary of parent company  Shanghai Pacific Controlled Shanghai Pacific Chemica Equipment Engineering Co., Ltd. parent company  Shanghai Huayi Controlled Service Service Settled service Settled price service Settled service Settled service Settled subsidiary of service Service Settled service Settled service Settled service Settled service Service Settled service Servi	Shanghai Huayi	Wholly-owne	Receive	Receive	Settled	846.86	0.21
Shanghai Huayi Controlled subsidiary of Technology Co., Ltd.  Shanghai Pacific Controlled Chemica Equipment Engineering Co., Ltd.  Shanghai Huayi Controlled Shanghai Huayi Controlled Shanghai Huayi Controlled Shanghai Huayi Controlled Subsidiary of Shanghai Huayi Controlled Service Service Settled Service Service Settled Service Service Service Service Service Service Service Settled Service Ser		d subsidiary of	service	service	through		
Shanghai Huayi Controlled Information subsidiary of Technology Co., Ltd. parent company  Shanghai Pacific Controlled Service Settled Service Service Service Settled Service S		parent			negotiated		
Information Subsidiary of Parent Company Shanghai Pacific Chemica Equipment Engineering Co., Ltd. Parent Company Shanghai Huayi Controlled Subsidiary of Energy Chemical Subsidiary of Service Service Service Settled Service Shanghai Huayi Controlled Sell goods Service Settled Se		company			-		
Technology Co., Ltd. parent company  Shanghai Pacific Controlled Subsidiary of Engineering Co., Ltd. parent company  Shanghai Huayi Controlled Sell goods Product Settled 475.70  Energy Chemical Subsidiary of Sell goods Product Sale through Sell goods Product Sale Settled 475.70	Shanghai Huayi	Controlled	Receive	Receive	Settled	302.17	0.08
company  Shanghai Pacific Controlled Receive Receive Settled Chemica Equipment Subsidiary of Engineering Co., Ltd.  Shanghai Huayi Controlled Energy Chemical Subsidiary of Subsidiary of Sell goods Product Sale through  Company  Sell goods Product Settled 475.70  Sell goods Product Sale Settled 475.70	Information	subsidiary of	service	service	through		
Shanghai Pacific Controlled Receive Receive Settled 11.11 00 Chemica Equipment subsidiary of Engineering Co., Ltd. parent company  Shanghai Huayi Controlled Sell goods Product Settled through negotiated price  Settled 11.11 00 Chemica Equipment subsidiary of Settled price Settled 475.70 00 Energy Chemical subsidiary of Sell goods Product Settled through	Technology Co., Ltd.	_					
Shanghai Pacific Controlled Subsidiary of Engineering Co., Ltd.  Shanghai Huayi Controlled Sell goods Energy Chemical Subsidiary of Shanghai Huayi Shanghai Shangh		company			price		
Engineering Co., Ltd. parent negotiated price  Shanghai Huayi Controlled Sell goods Product Settled 475.70 through	Shanghai Pacific		Receive	Receive	Settled	11.11	0.00
company price  Shanghai Huayi Controlled Sell goods Product Settled 475.70 0  Energy Chemical subsidiary of sale through	Chemica Equipment	subsidiary of	service	service	through		
company price  Shanghai Huayi Controlled Sell goods Product Settled 475.70 0  Energy Chemical subsidiary of sale through							
Shanghai Huayi Controlled Sell goods Product Settled 475.70 0 Energy Chemical subsidiary of sale through		company			price		
	Shanghai Huayi		Sell goods	Product	Settled	475.70	0.11
	Energy Chemical	subsidiary of		sale	through		
Co., Ltd.   parent   negotiated		parent			negotiated		
company price		company			price		
	Shanghai 3F New		Sell goods	Product	Settled	39.09	0.00
Materials Co., Ltd. subsidiary of sale through				sale			
parent negotiated		_					
company		-					
	Shanghai Huayi		Sell goods	Product		293.68	0.07
Tianyuan Chemical subsidiary of sale through							
Logistics Co., Ltd. parent negotiated	_	1					

				mmi o o		
Shanghai	company Wholly-owne	Sell goods	Product	price Settled	119.84	0.03
Chlor-Alkali Creation			sale	through	119.04	0.03
Co., Ltd.	•		Sale	negotiated		
Co., Ltd.	parent			price		
Chanahai Tianyyan	company	Call acada	Product		990.50	0.21
Shanghai Tianyuan	Wholly-owne	Sell goods		Settled	880.50	0.21
Group Shengde	d subsidiary of		sale	through		
Plastics Co., Ltd.	parent			negotiated		
G1 1 1 D 1 D1	company	G 11 1	<b>—</b>	price	25.5	0.01
Shanghai Resin Plant	Wholly-owne	Sell goods	Product	Settled	37.76	0.01
Co., Ltd.	d subsidiary of		sale	through		
	parent			negotiated		
	company			price		
Shanghai Huayi	Controlled	Sell goods	Product	Settled	225.66	0.05
Acrylic Acid Co.,	subsidiary of		sale	through		
Ltd.	parent			negotiated		
	company			price		
Shanghai Chemical	Wholly-owne	Sell goods	Product	Settled	124.29	0.03
Supply and	d subsidiary of		sale	through		
Marketing Co., Ltd.	parent			negotiated		
	company			price		
Shanghai Sanaisi	Wholly-owne	Sell goods	Product	Settled	0.55	0.00
Reagent Co., Ltd.	d subsidiary of		sale	through		
	parent			negotiated		
	company			price		
Shanghai Yiping	Controlled	Sell goods	Product	Settled	191.59	0.05
Pigment Co., Ltd.	subsidiary of	8	sale	through		
8	parent			negotiated		
	company			price		
Yixing Huayi	Controlled	Sell goods	Product	Settled	644.31	0.15
Colourating Science	subsidiary of	ben goods	sale	through	011.31	0.15
and Technology Co.,	parent		Suic	negotiated		
Ltd.	company			price		
Shanghai Tiantan	Controlled	Sell goods	Product	Settled	71.44	0.02
Auxiliaries Co., Ltd	subsidiary of	Sell goods	sale	through	/1.44	0.02
Auxiliaries Co., Liu	_		Saic	negotiated		
	parent					
Chamahai Huayi	Controlled	Provide	Provide	price	0.87	0.00
Shanghai Huayi				Settled	0.87	0.00
Tianyuan Chemical	subsidiary of	service	service	through		
Logistics Co., Ltd.	parent			negotiated		
C1 1 ' II '	company	D :1	D :1	price	502.75	0.14
Shanghai Huayi	Wholly-owne	Provide	Provide	Settled	583.75	0.14
Engineering Co., Ltd.	d subsidiary of	service	service	through		
	parent			negotiated		
	company			price		
Shanghai Huayi	-	Provide	Provide	Settled	46.20	0.01
Polymer Co., Ltd.	d subsidiary of	service	service	through		
	parent			negotiated		
	company			price		
Shanghai Pacific	Controlled	Provide	Provide	Settled	5.19	0.00
Chemica Equipment	subsidiary of	service	service	through		
Engineering Co., Ltd.	parent			negotiated		
	company			price		
Shanghai Coking	Controlled	Provide	Provide	Settled	13.16	0.00
Storage and	subsidiary of	service	service	through		
Transportation Port	parent			negotiated		
	1.4				I	

company			price		
Total	/	22,041.92	5.42		
oig sale return					
				The transaction the Company related parties the Company operating account of purchase of and sale of progular busines as well as the for payment of custody busines from stripping recurring assection of company controlled shapetween partial enterprises,	ons between y and the is needed by any's routine ctivities for raw material oducts of the ess activities, expenditures f service and ess produced ag the non ets and non. These are plements for cooperations exchange of ween the and the areholder and al subordinate and such
				continued in fu	iture.
	Total pig sale return	Total big sale return	Total  pig sale return	Total / pig sale return	Total / 22,041.92  big sale return  ed transactions  The transaction the Companielated parties the Companielated parties the Companielated of pregular busines as well as the for payment of custody busing from stripping recurring assection core business necessary supprofessional and mutual merits bet Companyicontrolled shad between partial enterprises, related transactions  // 22,041.92  The transactions  The transactions

## (II) Related transactions from acquisition and sale of assets or equity

1. Events already disclosed in the provisional announcement and having no subsequent progress or change

□Applicable √Not applicable

2. Events already disclosed in the provisional announcement and having subsequent progress or change

□Applicable √Not applicable

3. Events not disclosed by provisional announcements

□Applicable √Not applicable

4. If performance agreement involved, the performance implementation situation in reporting period should be disclosed

□Applicable √Not applicable

(III) Significant related transactions of common investment

1. Events already disclosed in the provisional announcement and having no subsequent progress or change

 $\Box$ Applicable  $\sqrt{\text{Not applicable}}$ 

2. Events already disclosed in the provisional announcement and having subsequent progress or change

□Applicable √Not applicable

3. Events not disclosed by provisional announcements

 $\Box$ Applicable  $\sqrt{\text{Not applicable}}$ 

## (IV) Related creditor's rights and debts

## 1. Events already disclosed in the provisional announcement and having no subsequent progress or change

□Applicable √Not applicable

## 2. Events already disclosed in the provisional announcement and having subsequent progress or change

□Applicable √Not applicable

## 3. Events not disclosed by provisional announcements

√Applicable □Not applicable

Unit: 10<sup>4</sup>Yuan Currency: RMB

Chemical Logistics Co., Ltd. subsidiary of parent company Shanghai Chlor-Alkali Wholly-owned subsidiary of parent company Shanghai Resin Plant Co., Ltd. wholly-owned subsidiary of parent company Shanghai Tianyuan Group Shengde Plastics Co., Ltd. subsidiary of parent company Shanghai Huayi Engineering Co., Ltd. subsidiary of parent company Shanghai Huayi Fine Chemical Co. Ltd. subsidiary of parent company Shanghai Soap Making Co., Controlled subsidiary of parent company Shanghai Fine Chemical Co., Ltd. subsidiary of parent company Shanghai Fine Chemical Co., Ltd. subsidiary of parent company Shanghai Huayi Fine Chemical Co., Ltd. subsidiary of parent company Shanghai Soap Making Co., Controlled subsidiary of parent company Shanghai Huayi Energy Controlled subsidiary of parent company Shanghai Huayi Energy Controlled subsidiary of parent company Shanghai Huayi Energy Controlled subsidiary of parent company Shanghai Fine Chemical Co., Ltd. subsidiary of parent company Shanghai Huayi Polymer Co., Undo Shanghai Tiantan Auxiliaries Co., Ltd. subsidiary of parent company Shanghai Tiantan Auxiliaries Controlled Subsidiary of parent company Shanghai Tiantan Subsidiary of parent company Shanghai Tiantan Subsidiary of parent company Shanghai Tiantan Subsidiary of parent company		1					ırrency: R		
Related party Relationship Beginning balance Shanghai Huayi Tianyuan Chemical Logistics Co., Ltd. Shanghai Chlor-Alkali Creation Co., Ltd. Shanghai Chlor-Alkali Creation Co., Ltd. Shanghai Resin Plant Co., Ltd. Shanghai Resin Plant Co., Ltd. Shanghai Tianyuan Group Shanghai Tianyuan Group Shanghai Huayi Engineering Co., Ltd. Shanghai Huayi Engineering Co., Ltd. Shanghai Huayi Fine Chemical Co., Ltd. Shanghai Huayi Fine Chemical Co., Ltd. Shanghai Huayi Fine Chemical Co., Ltd. Shanghai Huayi Engrape Controlled Shanghai Huayi Fine Chemical Co., Ltd. Shanghai Tiantan Auxiliaries Controlled Shanghai Tiantan Auxiliaries Controlled Shanghai Tiantan Auxiliaries Co., Ltd. Shanghai Yiping Pigment Co., Controlled Shanghai Yiping Pigment Co., Cont			Provide f	und to the	related				
Shanghai Huayi Tianyuan Chemical Logistics Co., Ltd.  Shanghai Huayi Tianyuan Chemical Logistics Co., Ltd.  Shanghai Chlor-Alkali Wholly-owned subsidiary of parent company  Shanghai Resin Plant Co., Ltd.  Shanghai Resin Plant Co., Ltd.  Shanghai Tianyuan Group Shengde Plastics Co., Ltd.  Shanghai Huayi Engineering Co., Ltd.  Shanghai Huayi Fine Chemical Co., Ltd.  Shanghai Huayi Fine Chemical Co., Ltd.  Shanghai Shanghai Yiping Pigment Co., Controlled Shanghai Yiping Pigment Company  Shanghai Yiping Pigment Co., Controlled Shanghai Yiping Pig				party					
Chemical Logistics Co., Ltd. subsidiary of parent company Shanghai Chlor-Alkali Wholly-owned subsidiary of parent company Shanghai Resin Plant Co., Ltd. wholly-owned subsidiary of parent company Shanghai Tianyuan Group Shengde Plastics Co., Ltd. subsidiary of parent company Shanghai Huayi Engineering Co., Ltd. subsidiary of parent company Shanghai Huayi Fine Chemical Co., Ltd. subsidiary of parent company Shanghai Soap Making Co., Chrolled subsidiary of parent company Shanghai Huayi Fine Chemical Co., Ltd. subsidiary of parent company Shanghai Soap Making Co., Chrolled subsidiary of parent company Shanghai Huayi Fine Chemical Co., Ltd. subsidiary of parent company Shanghai Huayi Fine Chemical Co., Ltd. subsidiary of parent company Shanghai Huayi Energy Controlled subsidiary of parent company Shanghai Huayi Energy Controlled Shanghai Huayi Energy Controlled Shanghai Huayi Energy Controlled Shanghai Huayi Energy Controlled Shanghai Huayi Polymer Co., Ltd. subsidiary of parent company Shanghai Tiantan Auxiliaries Co., Ltd. subsidiary of parent company Shanghai Tiantan Auxiliaries Controlled Shanghai Tiantan Auxiliaries Controlled Shanghai Tiantan Auxiliaries Controlled Shanghai Tiantan Auxiliaries Controlled Subsidiary of parent company Shanghai Tiantan Subsidiary of parent company Shanghai Tiantan Subsidiary of parent company Shanghai T	Related party	Relationship		Amount		ng	Amount		
Shanghai Chlor-Alkali	Shanghai Huayi Tianyuan	Controlled	33.57	-0.09	33.48	6.35	7.75	14.10	
Shanghai Chlor-Alkali	Chemical Logistics Co., Ltd.	subsidiary of							
Shanghai Chlor-Alkali Wholly-owned subsidiary of parent company Shanghai Resin Plant Co., Ltd. Wholly-owned subsidiary of parent company Shanghai Tianyuan Group Shengde Plastics Co., Ltd. Subsidiary of parent company Shanghai Huayi Engineering Co., Ltd. Subsidiary of parent company Shanghai Huayi Fine Chemical Co. Ltd. Subsidiary of parent company Shanghai Huayi Fine Chemical Co., Ltd. Subsidiary of parent company Shanghai Huayi Fine Chemical Co., Ltd. Subsidiary of parent company Shanghai Huayi Fine Chemical Co., Ltd. Subsidiary of parent company Shanghai Huayi Fine Chemical Co., Ltd. Subsidiary of parent company Shanghai Huayi Fine Chemical Co., Ltd. Subsidiary of parent company Shanghai Soap Making Co., Controlled subsidiary of parent company Shanghai Huayi Energy Controlled subsidiary of parent company Shanghai Fine Chemical Co., Ltd. Subsidiary of parent company Shanghai Fine Chemical Co., Ltd. Subsidiary of parent company Shanghai Fine Chemical Co., Ltd. Subsidiary of parent company Shanghai Fine Chemical Co., Ltd. Subsidiary of parent company Shanghai Fine Chemical Co., Ltd. Subsidiary of parent company Shanghai Tiantan Auxiliaries Co., Ltd. Subsidiary of parent company Shanghai Tiantan Auxiliaries Co., Ltd. Subsidiary of parent company Shanghai Tiantan Auxiliaries Co., Ltd. Subsidiary of parent company Shanghai Tiantan Auxiliaries Co., Ltd. Subsidiary of parent company Shanghai Tiantan Auxiliaries Co., Ltd. Subsidiary of parent company Shanghai Tiantan Auxiliaries Controlled Subsidiary of Shanghai Tiantan Auxiliaries Controlled Subsidiary of Shanghai Tiantan Auxiliaries Controlled Subsidiary of Shanghai Tiantan Shan		parent company							
Shanghai Resin Plant Co., Ltd.  Shanghai Resin Plant Co., Ltd.  Wholly-owned subsidiary of parent company  Shanghai Tianyuan Group Shengde Plastics Co., Ltd.  Shanghai Huayi Engineering Co., Ltd.  Shanghai Huayi Acrylic Acid Controlled subsidiary of parent company  Shanghai Huayi Fine Chemical Co., Ltd.  Shanghai Soap Making Co., Parent company  Shanghai Huayi Energy Controlled subsidiary of parent company  Shanghai Huayi Energy Controlled subsidiary of parent company  Shanghai F New Materials Controlled subsidiary of parent company  Shanghai F New Materials Controlled subsidiary of parent company  Shanghai Tiantan Auxiliaries Controlled subsidiary of parent company	Shanghai Chlor-Alkali		6.03	12.81	18.84	51.65	-39.40	12.25	
Shanghai Resin Plant Co., Ltd.   Wholly-owned subsidiary of parent company	Creation Co., Ltd.	subsidiary of							
Shanghai Resin Plant Co., Ltd. wholly-owned subsidiary of parent company  Shanghai Tianyuan Group Shengde Plastics Co., Ltd. subsidiary of parent company  Shanghai Huayi Engineering Co., Ltd. subsidiary of parent company  Shanghai Huayi Acrylic Acid Controlled subsidiary of parent company  Shanghai Huayi Fine Chemical Co., Ltd. subsidiary of parent company  Shanghai Huayi Fine Chemical Wholly-owned subsidiary of parent company  Shanghai Soap Making Co., Controlled subsidiary of parent company  Shanghai Huayi Fine Chemical Co., Ltd. subsidiary of parent company  Shanghai Huayi Energy Controlled subsidiary of parent company  Shanghai Huayi Energy Controlled subsidiary of parent company  Shanghai Fine Materials Co., Ltd. subsidiary of parent company  Shanghai Fine Materials Controlled subsidiary of parent company  Shanghai Tiantan Auxiliaries Controlled Subsidiary of parent company  Shanghai Tiantan Pignent Co., Controlled Subsidiary of parent company  Shanghai Tiantan Pignent Co., Controlled Subsidiary of parent company  Shanghai Tiantan Pignent Co., Controlled Subsidiary of parent company		parent company							
Subsidiary of parent company Shanghai Tianyuan Group Shanghai Huayi Engineering Co., Ltd.  Shanghai Huayi Acrylic Acid Co., Ltd.  Shanghai Huayi Fine Chemical Co. Ltd.  Shanghai Huayi Energy Co., Ltd.  Shanghai Huayi Fine Chemical Co., Ltd.  Shanghai Soap Making Co., parent company Shanghai Huayi Energy Controlled Subsidiary of parent company Shanghai Huayi Energy Controlled Subsidiary of parent company Shanghai Huayi Energy Controlled Subsidiary of parent company Shanghai Huayi Polymer Co., Ltd.  Shanghai Huayi Polymer Co., Ltd.  Shanghai Tiantan Auxiliaries Co., Ltd Shanghai Tiantan Auxiliaries Co., Ltd Shanghai Tiantan Auxiliaries Co., Ltd Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Shanghai Yiping Pigment Co., Controlled Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled	Shanghai Resin Plant Co., Ltd.		4.00	1.74	5.74				
Shanghai Tianyuan Group   Shanghai Tianyuan Group   Shengde Plastics Co., Ltd.   Subsidiary of parent company   Shanghai Huayi Engineering   Wholly-owned subsidiary of parent company   Shanghai Huayi Acrylic Acid Co., Ltd.   Shanghai Huayi Fine Chemical Co. Ltd.   Shanghai Soap Making Co., Edd.   Shanghai Huayi Energy   Controlled subsidiary of parent company   Shanghai Fine Chemical Co., Ltd.   Shanghai Huayi Energy   Controlled subsidiary of parent company   Shanghai Huayi Energy   Controlled subsidiary of parent company   Shanghai Fine Materials   Co., Ltd.   Shanghai Huayi Polymer Co., Ltd.   Subsidiary of parent company   Shanghai Huayi Polymer Co., Wholly-owned subsidiary of parent company   Shanghai Tiantan Auxiliaries   Controlled subsidiary of parent company   Shanghai Tiantan Polymer Co., Controlled   Controlled Subsidiary of parent company   Shanghai Tiantan Polymer Co., Controlled Subsidiary of parent company   Shanghai Tiantan Polymer Co., Controlled Subsidiary of parent company   Shanghai Tiantan Polymer Co., Controlled Subsidiary of parent company   Shanghai Tiantan Polymer Co., Controlled Subsidiary of parent company   Shanghai Tiantan Polymer Co., Controlled Subsidiary of parent company   Shanghai Tiantan Polymer Co., Controlled Subsidiary of parent company   Shanghai Tiantan Polymer Co., Controlled Subsidiary of parent company   Shanghai Tiantan Polymer Co., Controlle									
Shanghai Tianyuan Group Shengde Plastics Co., Ltd. Shanghai Huayi Engineering Co., Ltd. Shanghai Huayi Engineering Co., Ltd. Shanghai Huayi Engineering Co., Ltd. Shanghai Huayi Acrylic Acid Co., Ltd. Shanghai Huayi Fine Chemical Co., Ltd. Shanghai Huayi Fine Chemical Co. Ltd. Shanghai Soap Making Co., Controlled Shanghai Huayi Energy Controlled Shanghai Huayi Energy Controlled Shanghai Huayi Energy Controlled Shanghai F New Materials Co., Ltd. Shanghai Huayi Polymer Co., Shanghai Huayi Polymer Co., Shanghai Huayi Polymer Co., Shanghai Tiantan Auxiliaries Co., Ltd Shanghai Tiantan Auxiliaries Co., Ltd Shanghai Tiantan Auxiliaries Co., Ltd Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Subsidiary of parent Company Shanghai Yiping Pigment Co., Controlled Subsidiary of parent Company Shanghai Yiping Pigm		_							
Shanghai Huayi Engineering Co., Ltd. Shanghai Huayi Engineering Co., Ltd. Shanghai Huayi Engineering Co., Ltd. Shanghai Huayi Acrylic Acid Co., Ltd. Shanghai Huayi Acrylic Acid Co., Ltd. Shanghai Huayi Fine Chemical Co., Ltd. Shanghai Huayi Fine Chemical Co. Ltd. Shanghai Soap Making Co., Controlled Shanghai Huayi Energy Controlled Shanghai Huayi Energy Controlled Shanghai Huayi Energy Controlled Shanghai Huayi Energy Controlled Shanghai Flow Materials Co., Ltd. Shanghai Flow Materials Co., Ltd. Shanghai Huayi Polymer Co., Shanghai Huayi Polymer Co., Shanghai Tiantan Auxiliaries Co., Ltd Shanghai Tiantan Auxiliaries Co., Ltd Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Tiantan Auxiliaries Co., Ltd Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled	Shanghai Tianyuan Group		2,099.51	-1,174.0	925.51				
Shanghai Huayi Engineering Co., Ltd.  Shanghai Huayi Engineering Co., Ltd.  Shanghai Huayi Acrylic Acid Controlled subsidiary of parent company  Shanghai Huayi Fine Chemical Co., Ltd.  Shanghai Huayi Fine Chemical Co. Ltd.  Shanghai Soap Making Co., Controlled subsidiary of parent company  Shanghai Huayi Energy Controlled subsidiary of parent company  Shanghai Huayi Energy Controlled subsidiary of parent company  Shanghai Huayi Energy Controlled subsidiary of parent company  Shanghai F New Materials Controlled subsidiary of parent company  Shanghai Huayi Polymer Co., Ltd.  Shanghai Huayi Polymer Co., Ltd.  Shanghai Tiantan Auxiliaries Controlled subsidiary of parent company  Shanghai Yiping Pigment Co., Controlled Subsidiary of parent Company	Shengde Plastics Co., Ltd.	subsidiary of		0					
Shanghai Huayi Engineering Co., Ltd.  Shanghai Huayi Acrylic Acid Controlled subsidiary of parent company  Shanghai Huayi Fine Chemical Co., Ltd.  Shanghai Huayi Fine Chemical Co. Ltd.  Shanghai Soap Making Co., Controlled subsidiary of parent company  Shanghai Huayi Energy Controlled subsidiary of parent company  Shanghai Huayi Energy Controlled subsidiary of parent company  Shanghai F New Materials Co., Ltd.  Shanghai Huayi Polymer Co., Ltd.  Shanghai Huayi Polymer Co., Ltd.  Shanghai Huayi Polymer Co., Ltd.  Shanghai Tiantan Auxiliaries Controlled subsidiary of parent company  Shanghai Yiping Pigment Co., Controlled 6.75 8.82 15.57		_							
Co., Ltd.  Subsidiary of parent company  Shanghai Huayi Acrylic Acid Co., Ltd.  Shanghai Huayi Fine Chemical Co. Ltd.  Shanghai Huayi Fine Chemical Wholly-owned subsidiary of parent company  Shanghai Soap Making Co., Ltd.  Controlled subsidiary of parent company  Shanghai Huayi Energy Controlled subsidiary of parent company  Shanghai Huayi Energy Chemical Co., Ltd.  Shanghai 3F New Materials Co., Ltd.  Shanghai Huayi Polymer Co., Ltd.  Shanghai Huayi Polymer Co., Ltd.  Shanghai Huayi Polymer Co., Ltd.  Shanghai Tiantan Auxiliaries Co., Ltd Shanghai Tiantan Auxiliaries Co., Ltd Shanghai Tiantan Auxiliaries Co., Ltd Shanghai Yiping Pigment Co., Controlled	Shanghai Huayi Engineering		28.51	271.04	299.55	11.42	187.21	198.63	
Shanghai Huayi Acrylic Acid Co., Ltd. Shanghai Huayi Fine Chemical Co. Ltd. Shanghai Huayi Fine Chemical Co. Ltd. Shanghai Soap Making Co., Controlled Subsidiary of parent company  Shanghai Soap Making Co., Controlled Shanghai Huayi Energy Controlled Shanghai Huayi Energy Chemical Co., Ltd. Shanghai F New Materials Co., Ltd. Shanghai Huayi Polymer Co., Ltd. Shanghai Huayi Polymer Co., Shanghai Tiantan Auxiliaries Controlled Shanghai Tiantan Auxiliaries Co., Ltd Shanghai Tiantan Auxiliaries Co., Ltd Shanghai Tiantan Auxiliaries Co., Ltd Shanghai Yiping Pigment Co., Controlled	Co., Ltd.	subsidiary of							
Shanghai Huayi Acrylic Acid Controlled subsidiary of parent company  Shanghai Huayi Fine Chemical Co. Ltd.  Wholly-owned subsidiary of parent company  Shanghai Soap Making Co., Controlled subsidiary of parent company  Shanghai Huayi Energy Controlled subsidiary of parent company  Shanghai 3F New Materials Co., Ltd.  Shanghai Huayi Polymer Co., Ltd.  Shanghai Huayi Polymer Co., Ltd.  Shanghai Tiantan Auxiliaries Controlled subsidiary of parent company  Shanghai Yiping Pigment Co., Controlled 6.75 8.82 15.57									
parent company   Shanghai Huayi Fine Chemical Co. Ltd.   Wholly-owned subsidiary of parent company   Shanghai Soap Making Co., Controlled subsidiary of parent company   Shanghai Huayi Energy   Controlled subsidiary of parent company   Shanghai 3F New Materials   Controlled subsidiary of parent company   Shanghai Huayi Polymer Co., Ltd.   Subsidiary of parent company   Shanghai Huayi Polymer Co., Ltd.   Subsidiary of parent company   Shanghai Tiantan Auxiliaries   Controlled subsidiary of parent company   Shanghai Yiping Pigment Co., Controlled   Co., Ltd   Co., Ltd   Co., Controlled   Co., Co., Co., Controlled   Co., Co., Co., Co., Co., Co., Co., Co.,	Shanghai Huayi Acrylic Acid		88.84	-81.25	7.59				
parent company   Shanghai Huayi Fine Chemical Co. Ltd.   Wholly-owned subsidiary of parent company   Shanghai Soap Making Co., Controlled subsidiary of parent company   Shanghai Huayi Energy   Controlled subsidiary of parent company   Shanghai 3F New Materials   Controlled subsidiary of parent company   Shanghai Huayi Polymer Co., Ltd.   Subsidiary of parent company   Shanghai Huayi Polymer Co., Ltd.   Subsidiary of parent company   Shanghai Tiantan Auxiliaries   Controlled subsidiary of parent company   Shanghai Yiping Pigment Co., Controlled   Co., Ltd   Co., Ltd   Co., Controlled   Co., Co., Co., Controlled   Co., Co., Co., Co., Co., Co., Co., Co.,	Co., Ltd.	subsidiary of							
Shanghai Huayi Fine Chemical Co. Ltd.  Shanghai Huayi Fine Chemical Co. Ltd.  Shanghai Soap Making Co., Controlled subsidiary of parent company  Shanghai Huayi Energy Chemical Co., Ltd.  Shanghai 3F New Materials Co., Ltd.  Shanghai Huayi Polymer Co., Ltd.  Shanghai Huayi Polymer Co., Ltd.  Shanghai Tiantan Auxiliaries Co., Ltd  Shanghai Tiantan Auxiliaries Co., Ltd  Shanghai Yiping Pigment Co., Controlled									
Co. Ltd.  Subsidiary of parent company  Shanghai Soap Making Co., Ltd.  Subsidiary of parent company  Shanghai Huayi Energy Chemical Co., Ltd.  Shanghai 3F New Materials Co., Ltd.  Shanghai Huayi Polymer Co., Ltd.  Shanghai Huayi Polymer Co., Ltd.  Shanghai Tiantan Auxiliaries Co., Ltd  Shanghai Tiantan Auxiliaries Co., Ltd  Shanghai Yiping Pigment Co., Controlled Shanghai Yiping Yigha Yiping Vision Visio	Shanghai Huayi Fine Chemical	Wholly-owned	0.47	72.65	73.12				
Shanghai Soap Making Co., Ltd.  Shanghai Soap Making Co., Ltd.  Shanghai Huayi Energy Controlled Subsidiary of parent company  Shanghai Huayi Energy Chemical Co., Ltd.  Shanghai 3F New Materials Co., Ltd.  Shanghai Huayi Polymer Co., Ltd.  Shanghai Tiantan Auxiliaries Co., Ltd Shanghai Tiantan Auxiliaries Co., Ltd Shanghai Yiping Pigment Co., Controlled Shanghai Yiping Pigment Co., Shanghai Yip	Co. Ltd.								
Ltd. subsidiary of parent company  Shanghai Huayi Energy Controlled subsidiary of parent company  Shanghai 3F New Materials Controlled subsidiary of parent company  Shanghai Huayi Polymer Co., Ltd. subsidiary of parent company  Shanghai Tiantan Auxiliaries Controlled subsidiary of parent company  Shanghai Tiantan Auxiliaries Controlled subsidiary of parent company  Shanghai Tiantan Auxiliaries Controlled subsidiary of parent company  Shanghai Yiping Pigment Co., Controlled 6.75 8.82 15.57		parent company							
Shanghai Huayi Energy Chemical Co., Ltd. Subsidiary of parent company Shanghai 3F New Materials Co., Ltd. Subsidiary of parent company Shanghai Huayi Polymer Co., Ltd.  Subsidiary of parent company Shanghai Tiantan Auxiliaries Co., Ltd Subsidiary of parent company Shanghai Tiantan Auxiliaries Co., Ltd Subsidiary of parent company Shanghai Tiantan Auxiliaries Co., Ltd Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled	Shanghai Soap Making Co.,	Controlled		0.00		0.54	0.00	0.54	
Shanghai Huayi Energy Chemical Co., Ltd. Subsidiary of parent company Shanghai 3F New Materials Co., Ltd. Subsidiary of parent company Shanghai Huayi Polymer Co., Ltd. Subsidiary of parent company Shanghai Tiantan Auxiliaries Controlled Subsidiary of parent company Shanghai Tiantan Auxiliaries Controlled Subsidiary of parent company Shanghai Tiantan Auxiliaries Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Subsidiary of Subsidiary of Parent company Shanghai Yiping Pigment Co., Controlled Subsidiary Of Subsidia	Ltd.	subsidiary of							
Chemical Co., Ltd. subsidiary of parent company  Shanghai 3F New Materials Co., Ltd. subsidiary of parent company  Shanghai Huayi Polymer Co., Ltd. wholly-owned subsidiary of parent company  Shanghai Tiantan Auxiliaries Co., Ltd subsidiary of parent company  Shanghai Tiantan Auxiliaries Co., Ltd subsidiary of parent company  Shanghai Yiping Pigment Co., Controlled 6.75 8.82 15.57		parent company							
Shanghai 3F New Materials Co., Ltd.  Shanghai Huayi Polymer Co., Ltd.  Shanghai Huayi Polymer Co., Ltd.  Shanghai Tiantan Auxiliaries Co., Ltd  Shanghai Tiantan Auxiliaries Co., Ltd  Shanghai Yiping Pigment Co., Controlled Co., Co., Co., Co., Co., Co., Co., Co.,	Shanghai Huayi Energy	Controlled	144.18	-4.96	139.22				
Shanghai 3F New Materials Co., Ltd.  Co., Ltd.  Subsidiary of parent company  Shanghai Huayi Polymer Co., Ltd.  Shanghai Tiantan Auxiliaries Controlled Subsidiary of parent company  Shanghai Tiantan Auxiliaries Controlled Subsidiary of parent company  Shanghai Yiping Pigment Co., Controlled Shanghai Yiping Pigment Co., Shanghai Yiping P	Chemical Co., Ltd.	subsidiary of							
Co., Ltd. subsidiary of parent company  Shanghai Huayi Polymer Co., Ltd. Wholly-owned subsidiary of parent company  Shanghai Tiantan Auxiliaries Controlled subsidiary of parent company  Shanghai Yiping Pigment Co., Controlled 6.75 8.82 15.57		parent company							
Shanghai Huayi Polymer Co., Ltd. Wholly-owned subsidiary of parent company  Shanghai Tiantan Auxiliaries Controlled subsidiary of parent company  Shanghai Yiping Pigment Co., Controlled 6.75 8.82 15.57	Shanghai 3F New Materials	Controlled	21.88	-10.18	11.70				
Shanghai Huayi Polymer Co., Wholly-owned subsidiary of parent company  Shanghai Tiantan Auxiliaries Controlled subsidiary of parent company  Shanghai Yiping Pigment Co., Controlled 6.75 8.82 15.57	Co., Ltd.	subsidiary of							
Ltd. subsidiary of parent company  Shanghai Tiantan Auxiliaries Controlled subsidiary of parent company  Shanghai Yiping Pigment Co., Controlled 6.75 8.82 15.57		parent company							
parent company Shanghai Tiantan Auxiliaries Co., Ltd Co., Ltd Subsidiary of parent company Shanghai Yiping Pigment Co., Controlled Co., Co., Co., Co., Co., Co., Co., Co.,	Shanghai Huayi Polymer Co.,	Wholly-owned	107.52	-107.52	0.00				
Shanghai Tiantan Auxiliaries Controlled subsidiary of parent company  Shanghai Yiping Pigment Co., Controlled 6.75 8.82 15.57	Ltd.	subsidiary of							
Co., Ltd subsidiary of parent company Shanghai Yiping Pigment Co., Controlled 6.75 8.82 15.57		parent company							
parent company	Shanghai Tiantan Auxiliaries		0.81	-0.81	0.00	0.00	53.47	53.47	
Shanghai Yiping Pigment Co., Controlled 6.75 8.82 15.57	Co., Ltd	subsidiary of							
Ltd. subsidiary of	Shanghai Yiping Pigment Co.,		6.75	8.82	15.57				
	Ltd.	subsidiary of							

	parent company						
Yixing Huayi Colourating	parent company Controlled	303.40	-29.29	274.11			
		303.40	-29.29	2/4.11			
Science and Technology Co.,	subsidiary of						
Ltd. Shanghai Huayi Information	parent company Controlled	<i>(5.02)</i>	<i>(5.02)</i>	0.00	0.71	2.00	12.60
		65.93	-65.93	0.00	8.71	3.98	12.69
Technology Co., Ltd.	subsidiary of						
	parent company	0.00	. O.				
Shanghai Pacific Chemica	Controlled	0.00	6.07	6.07			
Equipment Engineering Co.,	subsidiary of						
Ltd.	parent company						
Shanghai Huayi New	Controlled	0.00	6.37	6.37			
Materials Co., Ltd	subsidiary of						
	parent company						
Shanghai New Tianyuan	Controlled				11.08	49.45	60.53
Chemical Transport Co., Ltd.	subsidiary of						
	parent company						
Shanghai Chemical Industry	Wholly-owned				1.41	46.80	48.21
Inspection & Detection Co.,	subsidiary of						
Ltd.	parent company						
Shanghai Chemical Supply	Wholly-owned				10.36	-1.72	8.64
and Marketing Co., Ltd.	subsidiary of						
	parent company						
Shanghai Huayi Equipment	Wholly-owned				12.20	14.89	27.09
Engineering Co., Ltd	subsidiary of				12.20	11.02	27.07
Engineering Co., Eta	parent company						
Huayi Group (Hong Kong)	Wholly-owned				3,730.85	-2 1/15 8	1,585.00
Co., Ltd.	subsidiary of				3,730.63	-2,143.6 5	1,565.00
Co., Liu.						3	
Chanahai Huayi Eina Chamiaal	parent company				0.00	27.77	27.77
Shanghai Huayi Fine Chemical					0.00	21.11	27.77
Co. Ltd.	subsidiary of						
	parent company	0.00	10.55	10.55	00.605.5	02.602	17 001 0
Shanghai Huayi (Group)	Controlling	0.00	12.55	12.55	99,685.7		17,001.8
Company	shareholder				4	89	5
Shanghai Shenyu Medicine	Controlled				0.02	-0.02	0.00
Chemical Co., Ltd.	subsidiary of						
	parent company						
Shanghai Huifeng Resin Plant					5.14	0.00	5.14
	subsidiary of						
	parent company						
Shanghai Huayi Group	Controlled				0.17	0.00	0.17
Huayuan Chemical Co., Ltd.	subsidiary of						
	parent company						
Shanghai Sanaisi Reagent Co.,	Controlled				0.08	-0.01	0.07
Ltd.	subsidiary of						
	parent company						
Shanghai Peony Painting Ink	Controlled				0.14	0.00	0.14
Co., Ltd	subsidiary of						
	parent company						
Shanghai Huayi Group	Affiliated				7.04	1.99	9.03
Finance Co., Ltd.	company				7.01	1.,,,	7.03
	1- 2	2.911.40	-1,081.9	1 829 42	103 542	-84 477	19,065.3
Total		2,711.40	2,001.9	1,047.74	90	-64,477. 58	
Cause for the related creditor's	rights and dahts	Caused by	nurchase	and cala i			
Cause for the related creditor s	rigins and ueus	operation	purchase	anu saie ii	ıı regulal ]	production	i anu
Influence of the related creditor	'a righta and dal-t-		100 0r 41.	o Come	mx, <sup>2</sup> c c==	rotina ==	milto cm.1
	5 rights and debts			e Compa	any s ope	raung res	suns and
on the Company		financial st	atus				

### (V) Other

□Applicable √Not applicable

## XV. Important contracts and the implementation

### (I) Custody, contracting and leasing

## 1. Custody

□Applicable √Not applicable

### 2. Contracting

□Applicable √Not applicable

#### 3. Leasing

√Applicable □Not applicable

Unit: 10<sup>4</sup>Yuan Currency: RMB

						Omt. 10 1			
Name of lessor	Name of lessee	Leased assets	Amount of leased assets	Starting date of leasing	End date of leasing	Income from leasing	Basis for setting leasin g incom e	Rela ted trans actio n or not	Related relation
Shanghai	Shanghai	Fixed	3,466.16	01-01-2	12-31-201	1,384.68	Settled	Yes	Controlled
Chlor-Alkali	Huayi	asset		016	6		throug		subsidiary
Chemical	Tianyuan						h		of parent
Co., Ltd.	Chemical						negoti		company
	Logistics						ated		
	Co., Ltd.						price		
Shanghai	Shanghai	Fixed	633.35	01-01-2	12-31-201	365.08	Settled	Yes	Wholly-o
Chlor-Alkali	Tianyuan	asset		016	6		throug		wned
Chemical	Group						h		subsidiary
Co., Ltd.	Shengde						negoti		of parent
	Plastics						ated		company
	Co., Ltd.						price		

#### (II) Guarantee

□Applicable √Not applicable

## (III) Management on cash assets made through committing others

## 1. Financing through commitment

□Applicable √Not applicable

## 2. Loan through commitment

 $\Box$ Applicable  $\sqrt{\text{Not applicable}}$ 

## 3. Other financing investment and derivative investment

□Applicable √Not applicable

## (IV) Other important contracts

#### XVI. Notes to other major events

□Applicable √Not applicable

#### XVII. Fulfillment of social responsibility

### (I) Poverty alleviation of listed company

□Applicable √Not applicable

#### (II) Work on social responsibility

 $\sqrt{\text{Applicable}}$   $\square \text{Not applicable}$ 

For details, see 2016 Social Responsibility Report of Shanghai Chlor-Alkali Chemical Co., Ltd. (Summary) announced in the website of Shanghai Stock Exchange: www.sse.com.cn on March 30, 2017.

## (III) Information about environmental protection of the company and its subsidiaries belonging to key pollutant discharging unit published by environmental protection department

√Applicable □Not applicable

1. As for the environmental protection work in 2016, the Company has always adhered to the sustainable development path, strengthened the awareness of social responsibility, promoted the management and governance simultaneously based on the concept of green chemical industry, and the technical and economical indicators of environmental protection have been well fulfilled. The indicators of "three rates" for environmental protection have been completed, the running rate of environmental protection treatment facilities was 100%, the industrial wastewater treatment rate was 100 %, and the external monitoring qualification rate of the "three wastes" discharge was 100%. The environmental protection expenditures of the Company in 2016 was RMB 38,922,800 Yuan, including RMB 16,720,000Yuan operating expenses, RMB 7,412,300Yuan of environmental protection maintenance fee and RMB 14,790,500Yuan of effluent charge. The environmental protection completion acceptance of by-product hydrogen energy project, integrated wastewater operation project in industrial area and 500m<sup>3</sup> finished-product sodium hypochlorite storage tank construction project have been completed. Through setting goals and targets, operation control and emergency plan, the environmental management system of the company ensured the control of key environmental factors throughout the year. After the adjustment of the organizational structure of the company in July, the environmental management system shall follow the newly adjusted organizational structure to modify relevant procedure documents and supporting documents, update and identify the environmental factors of the Company and key environmental factors and implemented the control means of key environmental factors, and passed the third-party supervision and examination organized by Shanghai Audit Center of Quality System on November 30 and December; the environmental management system of the company was in continuous and effective operation. After optimized operation of wastewater integrated project of the two plants in chemical area in 2016 and incorporating the organic wastewater of Tianyuan into the organic wastewater treatment system of Huasheng, the problem that the organic wastewater of Tianyuan exceeded the takeover standard had been solved in 2016 and the organic wastewater of Huasheng was basically stable and operated up to standard after operation optimization. 244.22 tons of hazardous wastes from the two plants in chemical area were treated according to relevant regulations; more than 200 tons of hazardous wastes generated from the removal of production unit have been packed and stored in accordance with regulations for incineration treatment.

Take the monitoring of environmental protection data of state-controlled enterprise as the basis to ensure the stability and reliability of the daily operation of environmental protection devices. The operating ratio and load rate of environmental protection device has reached the discharge standard specified by laws and regulations; the unplanned shutdown of environmental protection shall be managed as that of production unit, in case of shutdown for more than four hours, report to the quality, environmental protection and security department of the company to be put on records and implement the emergency plan of production unit at the same time to ensure the up-to-standard discharge of wastewater and waste gas. Organize technical force to strive to make technological breakthrough for environmental protection unit to ensure the effective operation of environmental protection device.

Since 2016, the comprehensive qualified rate of internal wastewater monitoring of the company has always been 100%; except for the VCM recovery flue of Tianyuan Chemical Plant, the flue

monitoring comprehensive qualified rate of others is 100%. The comprehensive qualified rate of rainwater discharge monitoring is 100%. The environmental protective on-line monitoring instrument for inorganic wastewater runs well, the qualification rate of on-line data transmission is 100% and the transmission rate is 98% (indicator > 80%).

Promoted the discharge reduction of VOCs, strengthened the management and control of startup and shutdown of production and the production site and reduced fugitive emission to further cut down the pollutant discharge from the source. As for VOCs discharge reduction, the Company has conducted leakage detection and repair (LDAR), quarterly detection and repair and EDC loading exhaust gas collection facility reconstruction, and the wastewater silo tail gas recovery project has been carried out as planned. On Dec. 14, 2016, Shanghai Academy of Environmental Sciences organized relevant technical experts to hold the technical verification and investigation meeting for special support funds of Shanghai Industrial VOCs emission reduction and enterprise pollution control project in Huasheng Chemical Plant and Tianyuan Chemical Plant of the Company. After one days' material examination and on-site inspection, the assessment of the Company for applying for special support fund for Shanghai industrial VOCs emission enterprises pollution control project passed.

### (IV) Other information

 $\Box$ Applicable  $\sqrt{\text{Not applicable}}$ 

#### XVIII. Convertible bond of the Company

#### (I) Convertible bond issuing

□Applicable √Not applicable

#### (II) Information about the convertible bond holder and guarantor in reporting period

 $\Box$ Applicable  $\sqrt{\text{Not applicable}}$ 

#### (III) Changes of convertible bond in reporting period

□Applicable √Not applicable

Information about cumulative shares transfer of convertible bond in reporting period

□Applicable √Not applicable

#### (IV) Previous adjustments of conversion price

 $\Box$ Applicable  $\sqrt{\text{Not applicable}}$ 

#### (V) Liabilities, credit change and cash arrangement for debt repayment in future years

□Applicable √Not applicable

#### (VI) Other information about convertible bond

□Applicable √Not applicable

## **Section VIChanges of Ordinary Shares and Particulars of Shareholders**

- I. Changes of ordinary shares
- (I) Changes of ordinary shares
- 1. Changes of ordinary shares

In the reporting period, the total number and share structure of the ordinary share were not changed.

## 2. Description of the changes in ordinary shares

 $\sqrt{\text{Applicable}}$   $\square$  Not applicable

On July 28, 2016, to support and participate in the establishment of Shanghai state-owned assets flow platform, Shanghai Huayi (Group) Company purchased Shanghai state-owned enterprises ETF shares with 34,692,000 Chlor-Alkali shares (accounting for 5.16% of total equity of Huayi Group). After such exchange and purchase, the direct shareholding ratio of Shanghai Huayi (Group) Company reduced from 50.29% to 47.29%.

## 3. Impact of changes of ordinary shares on the earnings per share and net asset value per share in last year and the latest period (if any)

□Applicable √Not applicable

## 4. Other content deemed necessary by the Company to be disclosed or required by the securities regulatory institution to be disclosed

□Applicable √Not applicable

### (II) Changes of the shares limited to be sold

□Applicable √Not applicable

#### II. Issuing and listing of securities

#### (I) Securities issuing in the reporting period

□Applicable √Not applicable

Note on the securities issuing in the reporting period (for bonds with different interest rates, state respectively)

□Applicable √Not applicable

## (II) Changes of the total number of the ordinary shares and structure of the shareholders and changes of the structure of the Company's assets and liabilities

□Applicable √Not applicable

#### (III) Existing internal staff shares

□Applicable √Not applicable

### III. Particulars of the shareholders and the actual controller

#### (I) Total number of shareholders

Total number of ordinary shareholders as of end of the reporting	85,244
period	
Total number of ordinary shareholders at end of the previous month	85,677
before the disclosing date of the annual report	

## (II) Top 10 shareholders, top 10 holders of tradable shares (or shareholders not under restricted sales condition)

Unit: share

Top 10 shareholders									
	Increase or	Shares held		Shares with		ged or 1 status	Nature		
Name of shareholder (in full)	decrease in the reporting	at end of the reporting	Proport ion (%)	restrict ed sales	Share	Numb	of sharehol		
	period	period	1011 (70)	conditi	status	er	der		
	24 601 000	546,000,447	47.20	on			<b>G</b>		
Shanghai Huayi (Group) Company	-34,691,900	546,900,447	47.29	0	NT	0	State owned		
					None		legal		
	_						person		
SCBHK A/C BBH S/A	0	7,859,532	0.68	0		0	Overseas		
VANGUARD EMERGING					None		legal		
MARKETS STOCK INDEX FUND					Tione		person		
Central Huijin Asset	0	7,438,100	0.64	0		0	State		
Management Limited Liability		. ,			M		owned		
Company					None		legal		
							person		

Industrial and Commercial	6,526,623	6,526,623	0.56	0		0	Unknow
Bank of China Co., Ltd. —					None		n
China Securities Shanghai							
State-owned Enterprises ETF	550,004	1 021 701	0.40	0			
VANGUARD TOTAL	668,901	4,921,701	0.43	0	M	0	Overseas
INTERNATIONAL STOCK INDEX FUND					None		legal
	-730,000	3,000,000	0.26	0		0	person Domesti
Miao Guoqing	-730,000	3,000,000	0.20	U	None	0	c natural
					None		
TICO Trust Corporation	2,956,790	2,956,790	0.26	0		0	person Unknow
Limited — Qingshan No. 1	2,930,790	2,930,790	0.20	U		0	n
structured securities investment					None		11
assembled funds trust plan							
Fang Jianwei	-651,781	2,751,206	0.24	0		0	Domesti
Tang Jianwei	-031,761	2,731,200	0.24	U	None	0	c natural
					TVOILE		person
Bank of China Wuxi Branch	0	2,605,981	0.23	0		0	State
Bank of China Waxi Branch	· ·	2,003,701	0.23	O			owned
					None		legal
							person
ISHARES CORE MSCI	1,157,500	2,441,900	0.21	0		0	Overseas
EMERGING MARKETS ETF	, ,	, ,			None		legal
							person
Holding	s of top 10 share		restricted	sales cond	ition		
		Number of		Type a	nd numb	er of share	S
Name of sharehold	ar	shares withou	l l				
Traine of sharehold	<i>C</i> 1	restricted sale	es	Type		Num	ber
		condition					
Shanghai Huayi (Group) Compar		546,900,44		A share		54	16,900,447
SCBHK A/C BBH S/A VANGU		7,859,53	32	<b>D</b> 1			7,859,532
EMERGING MARKETS STOCI	X INDEX			B share			
FUND	4 T. Co. No. 3	7 420 10	20				7 420 100
Central Huijin Asset Managemen	t Limited	7,438,10	)0	A share			7,438,100
Liability Company Industrial and Commercial Bank	of China Co	6,526,62	)2				6,526,623
Ltd.—China Securities Shanghai		0,320,02	23	A share			0,320,023
Enterprises ETF	State-Owned			A share			
VANGUARD TOTAL INTERNA	ATIONAI	4,921,70	)1				4,921,701
	7,721,70	71	B share			7,721,701	
I STOCK INDEX FUND							3,000,000
STOCK INDEX FUND Miao Guoging		3,000,00	00	B share			
Miao Guoqing	— Qingshan	3,000,00		B share			
Miao Guoqing TICO Trust Corporation Limited		3,000,00 2,956,79					2,956,790
Miao Guoqing TICO Trust Corporation Limited No. 1 structured securities investi				B share A share			
Miao Guoqing TICO Trust Corporation Limited No. 1 structured securities investi funds trust plan		2,956,79	90	A share			2,956,790
Miao Guoqing TICO Trust Corporation Limited No. 1 structured securities investr funds trust plan Fang Jianwei		2,956,79 2,751,20	)6	A share B share			2,956,790 2,751,206
Miao Guoqing TICO Trust Corporation Limited No. 1 structured securities investi funds trust plan Fang Jianwei Bank of China Wuxi Branch	ment assembled	2,956,79 2,751,20 2,605,98	90 96 81	A share B share A share			2,956,790 2,751,206 2,605,981
Miao Guoqing TICO Trust Corporation Limited No. 1 structured securities investr funds trust plan Fang Jianwei	ment assembled	2,956,79 2,751,20	90 96 81	A share B share			2,956,790 2,751,206
Miao Guoqing TICO Trust Corporation Limited No. 1 structured securities investifunds trust plan Fang Jianwei Bank of China Wuxi Branch ISHARES CORE MSCI EMERG	ment assembled	2,956,79 2,751,20 2,605,98	90 96 31 90	A share  B share A share B share	een trada	able since	2,751,206 2,605,981 2,441,900
Miao Guoqing TICO Trust Corporation Limited No. 1 structured securities invests funds trust plan Fang Jianwei Bank of China Wuxi Branch ISHARES CORE MSCI EMERO MARKETS ETF	ment assembled	2,956,79 2,751,20 2,605,98 2,441,90	90   90   90   90   90   90   90   90	A share  B share A share B share have all b			2,956,790 2,751,206 2,605,981 2,441,900 November
Miao Guoqing TICO Trust Corporation Limited No. 1 structured securities invests funds trust plan Fang Jianwei Bank of China Wuxi Branch ISHARES CORE MSCI EMERO MARKETS ETF Note on the related relation or con-	ment assembled	2,956,79  2,751,20  2,605,98  2,441,90  The Company	90   90   90   90   90   90   90   90	A share  B share A share B share have all b	older is u	under restr	2,956,790 2,751,206 2,605,981 2,441,900 November icted sales
Miao Guoqing TICO Trust Corporation Limited No. 1 structured securities invests funds trust plan Fang Jianwei Bank of China Wuxi Branch ISHARES CORE MSCI EMERO MARKETS ETF Note on the related relation or con-	ment assembled	2,956,79 2,751,20 2,605,98 2,441,90 The Company 12, 2009, and	90 90 91 93 93 93 93 94 95 96 97 97 98 98 98 98 98 98 98 98 98 98	A share  B share A share B share have all bethe sharehown to the sharehown to the share concert	older is to Comparted actor	under restr ny whethe or specifie	2,751,206 2,605,981 2,441,900 November icted sales or there is
Miao Guoqing TICO Trust Corporation Limited No. 1 structured securities invests funds trust plan Fang Jianwei Bank of China Wuxi Branch ISHARES CORE MSCI EMERO MARKETS ETF Note on the related relation or con-	ment assembled	2,956,79 2,751,20 2,605,98 2,441,90 The Company 12, 2009, and condition. It	900 900 900 900 900 900 900 900	A share  B share A share B share have all bethe sharehown to the econcert on In	older is to Comparted actoriation	under restr ny whethe or specifie n Disclo	2,956,790  2,751,206 2,605,981 2,441,900  November icted sales or there is ead in the source for

Holdings of top 10 shareholders with restricted conditions and the restricted conditions  $\Box Applicable$   $\sqrt{Not\ applicable}$ 

# (III) Strategic investors or general legal person become top 10 shareholders due to rights issue $\Box$ Applicable $\sqrt{Not}$ applicable

- IV. Particulars of the controlling shareholder and the actual controller
- (I) Particulars of the controlling shareholder
- 1 Legal person

 $\sqrt{\text{Applicable}}$   $\square \text{Not applicable}$ 

Name	Shanghai Huayi (Group) Company
Unit principal or legal representative	Liu Xunfeng
Date of establishment	Jan. 23, 1997
Main business	Operation and management of state-owned assets within authorized
	range, investment on industry, manufacture and sale for chemical
	and medical products and equipment, installation, maintenance and
	contracted service for projects of chemical and medical equipment.
Shares held in other domestic or	During the reporting period, Shanghai Huayi (Group) Company
overseas listed companies during the	held 69.79% equity interest of Shanghai Huayi Group Co., Ltd and
reporting period	31.53% equity interest of Shanghai 3F New Material Co., Ltd.

## 2 Natural person

□Applicable √Not applicable

3 Special description of nonexistence of controlling shareholder in the Company

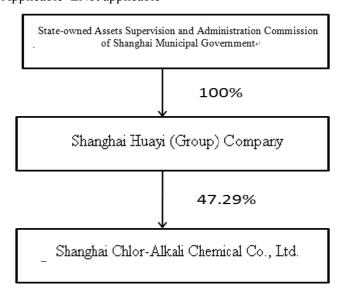
□Applicable √Not applicable

4 Index and dates of the changes of controlling shareholders in reporting period

 $\Box$ Applicable  $\sqrt{Not applicable}$ 

5 Block diagram of property and control relations between the Company and controlling shareholder

√Applicable □Not applicable



#### (II) Particulars of the actual controller

### 1 Legal person

17 ippliedole = 1 (of appliedole	
Name	State-owned Assets Supervision and Administration Commission
	of Shanghai Municipal Government

## 2 Natural person

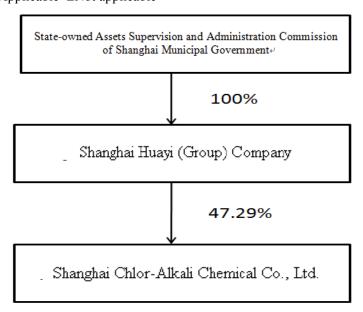
□Applicable √Not applicable

3 Special description of nonexistence of actual controller in the Company

□Applicable √Not applicable

4 Index and dates of the changes of actual controller in reporting period  $\Box$ Applicable  $\sqrt{Not}$  applicable

5 Block diagram of property and control relations between the Company and actual controller  $\sqrt{\text{Applicable}}$   $\square \text{Not applicable}$ 



6 Actual controller controls the Company through trust or other assets management modes  $\Box$ Applicable  $\sqrt{Not}$  applicable

# (III) Other information about the controlling shareholder and actual controller $\Box$ Applicable $\sqrt{Not}$ applicable

- V. Legal person shareholders with the holdings more than 10%
- □Applicable √Not applicable

#### VI. Note on the limitation of shares for reduction

□Applicable √Not applicable

## Section VII Particulars of Preferred Shares

## Section VIII Particulars of the Directors, Supervisors, Senior Executives and Staff Members

## I. Changes in shareholding and particulars of rewards

(I) Particulars of Directors, Supervisors and senior executives (including the ones leaving post during the reporting period)

√Applicable □Not applicable

Unit: share

	1	1	1	1	I	1			1	I	Onit. Share
Name	Position (note)	Gender	Age	Start date of office term	End date of office term	Shares held at the beginning of year	Shares held at the end of year	Increase or decrease	Reason of change	Reward got from the Company during the reporting period (RMB'0000) (before tax)	Get reward from the Company's related party or not
Huang Dailie	Chairman of the board	Male	58	04-25-2016	04-25-2019	1,000	1,000	0		0	Yes
Zhang Weimin	Director, general manager	Male	49	04-25-2016	04-25-2019	10,000	10,000	0		72.40	No
Wang Wei	Director, deputy party secretary	Male	48	04-25-2016	04-25-2019	0	0	0		61.50	No
Li Ning	Director	Female	49	04-25-2016	04-25-2019	0	0	0		0	Yes
Yu Zhaojun	Employee representative director	Male	58	04-25-2016	04-25-2019	2,000	2,000	0		53.90	No
Zhang Wenlei	Outside director	Male	46	04-25-2016	04-25-2019	1,000	0	-1,000	Sold 1000 shares on secondary market at RMB 15.72Yuan/share	10	No
Shao Zhengzhong	Independent director	Male	52	04-25-2016	04-25-2019	0	0	0		10	No
Wang Jinshan	Independent director	Male	55	04-25-2016	04-25-2019	0	0	0		5	No
Zhao Ziye	Independent	Male	37	04-25-2016	04-25-2019	0	0	0		5	No

	director									
Gu Lili	Chairman of supervisory committee	Male	45	04-25-2016	04-25-2019	0	0	0	0	Yes
Zhang Hu	Supervisor	Male	47	04-25-2016	04-25-2019	0	0	0	0	Yes
Tang Liang	Supervisor	Male	46	04-25-2016	04-25-2019	0	0	0	40.21	No
Zhou Mei	Employee representative supervisor	Female	48	04-25-2016	04-25-2019	0	0	0	34.92	No
Zhang Guohua	Employee representative supervisor	Male	48	04-25-2016	04-25-2019	0	0	0	37.21	No
Cao Jinrong	CFO	Male	41	04-25-2016	04-25-2019	1,000	1,000	0	48.32	No
Yuan Maoquan	Deputy general manager	Male	48	04-25-2016	04-25-2019	1,000	1,000	0	56.31	No
Dong Yan	Secretary of the board of directors	Female	44	04-25-2016	04-25-2019	1,000	1,000	0	47.03	No
Wang Linzao	General manager assistant	Male	54	04-25-2016	04-25-2019	1,000	1,000	0	64.43	No
Hu Yongkang	Former director, deputy Party secretary	Male	61	12-20-2012	04-25-2016	3,000	3,000		41.15	No
Wang Zengjin	Former director	Male	50	12-20-2012	04-25-2016	1,000	1,000		0	Yes
Li Zengquan	Former independent director	Male	42	12-20-2012	04-25-2016	0	0		5	No
Zhang Guoming	Former independent director	Male	54	12-30-2014	04-25-2016	0	0		5	No
Chen Yao	Former chairman of supervisory	Male	53	09-17-2013	04-25-2016	0	0		0	Yes

	committee										
Yu Bin	Former supervisor	Male	42	12-20-2012	04-25-2016	1,000	1,000			0	Yes
Wang Mingchun	Former supervisor	Female	55	12-20-2012	04-25-2016	10,000	2,000	-8,000	Sold 8000 shares on secondary market at RMB 13.56Yuan/share	21.94	No
Xu Peiwen	Former secretary of the board of directors	Male	60	12-20-2012	04-25-2016	7,000	7,000	0		44.58	No
Total	/	/	/	/	/				/	663.90	/

Name	Main work experience
Huang Dailie	He used to be the Deputy Party secretary, executive Director and general manager of Shanghai Huayi Group Enterprise Development Co., Ltd. and manager of Enterprise Adjustment Department of Huayi Group. Now he is the director and general manager of Shanghai Huayi (Group) Company; director, deputy secretary of CPC Committee and chairman of trade union of Shanghai Huayi Co., Ltd.; Chairman of the Board of Shanghai Chlor-Alkali Chemical Co., Ltd.
Zhang Weimin	He used to be the assistant of general manager and deputy general manager of Shanghai Huayi Acrylic Acid Co., Ltd., deputy general manager of economic operating department of Shanghai Huayi (Group) Company and general manager of safety & environmental protection department and chief of armed security department of Shanghai Huayi (Group) Company. Now he is the Director, general manager and deputy secretary of Party Committee of Shanghai Chlor-Alkali Chemical Co., Ltd.
Wang Wei	He used to be the deputy general manager of human resources department of Shanghai Huayi (Group) Company and the deputy general manager of Shanghai Huayi Investment Co., Ltd. Now he is the director and deputy secretary (executive) of Party Committee of Shanghai Chlor-Alkali Chemical Co., Ltd.
Li Ning	She used to be the general manager of financial department of Shanghai Huayi (Group) Company. Now she is the general manager of capital operation department of Shanghai Huayi Group Co., Ltd., the director of Shanghai 3F New Materials Co., Ltd and the director of Shanghai Chlor-Alkali Chemical Co., Ltd.
Yu Zhaojun	He used to be the Party secretary of PVC factory of Shanghai Chlor-Alkali Chemical Co., Ltd. Now he is the employee representative director, Deputy Party secretary, secretary of Party discipline committee, chairman of trade union and party secretary of department office of Shanghai Chlor-Alkali Chemical Co., Ltd.

Zhang Wenlei	He used to be deputy chief of technical operation department, chief of general department and deputy secretary general of China Chlor-Alkali Industry Association. Now he is vice chairman and secretary general of China Chlor-Alkali Industry Association, routine councilor of China Petrochemical Industry Association, vice chairman of China Chemical Environment Protection Association, Independent Director of Tangshan Sanyou Chemical Group Co., Ltd. and outside Director of Shanghai Chlor-Alkali Chemical Co., Ltd.
Shao Zhengzhong	He used to be the lecturer of material science department of Fudan University, the lecturer, associate professor, subdean and professor of polymer science department of Fudan University and associate professor of biology research institute of Aarhus University in Denmark. Now he is the doctoral tutor in polymer science department of Fudan University. He is also the councilor of Shanghai Municipal Chemistry & Chemical Engineering Association, subeditor of Journal of Materials Chemistry-B of Britain Royal Society of Chemistry (RSC) and member of multiple academic committees and the Independent Director of Shanghai Chlor-Alkali Chemical Co., Ltd.
Wang Jinshan	He used to be the Vice Chairman of the Board of Directors and President of Nanjing First-O-Lite Co., Ltd.; Chairman of the Board of Directors and President of Nanjing First New Materials Co., Ltd. Now he is the director and general manager of Nanjing First-O-Lite Co., Ltd. He is the Independent Director of Shanghai Chlor-Alkali Chemical Co., Ltd.
Zhao Ziye	He used to be the associate professor of Shanghai University of Finance and Economics, the Independent Director of Anshan No. 1 Engineering Co., Ltd and the Independent Director of Shanghai Jinshan Development Co., Ltd. as well as the Independent Director of Shanghai Chlor-Alkali Chemical Co., Ltd.
Gu Lili	He used to be the vice secretary of discipline inspection commission and general manager of supervision and examination department of Shanghai Huayi (Group) Company. Now he is the vice president of Shanghai Huayi Group Co., Ltd. and the Chairman of Supervisory Committee of Shanghai Chlor-Alkali Chemical Co., Ltd.
Zhang Hu	He used to be the CFO of Shanghai Huayi Acrylic Acid Co., Ltd. Now he is the deputy general manager of finance department of Shanghai Huayi Group Co., Ltd. and the supervisor of Shanghai Chlor-Alkali Chemical Co., Ltd.
Tang Liang	He used to be the manager of technical development department of Shanghai Chlor-Alkali Chemical Co., Ltd. Now he is the manager of investment planning department of Shanghai Chlor-Alkali Chemical Co., Ltd. and the supervisor of Shanghai Chlor-Alkali Chemical Co., Ltd.
Zhou Mei	She used to be the assistant manager of the supervision, examination and security department of Shanghai Chlor-Alkali Chemical Co., Ltd. Now she is the manager of armed security department and vice-chairman of trade union of Shanghai Chlor-Alkali Chemical Co., Ltd. as well as the supervisor of Shanghai Chlor-Alkali Chemical Co., Ltd.
Zhang Guohua	He used to be the director of party office and the deputy party secretary of department office of Shanghai Chlor-Alkali Chemical Co., Ltd. Now he is the regional secretary of party committee of Shanghai Chlor-Alkali Chemical Co., Ltd. in Caojing, and the supervisor of Shanghai Chlor-Alkali Chemical Co., Ltd.
Cao Jinrong	He used to be the deputy manager of assets department of Shanghai Huayi (Group) Company and deputy general manager of Shanghai Huayi Group

	Investment Co., Ltd. Now he is CFO of Shanghai Chlor-Alkali Chemical Co., Ltd.
Yuan Maoquan	He used to be the assistant chief and routine deputy chief of technical center of Shanghai Chlor-Alkali Chemical Company and deputy chief engineer of Shanghai Chlor-Alkali Chemical Co., Ltd. Now he is the deputy general manager of Shanghai Chlor-Alkali Chemical Co., Ltd.
Dong Yan	She used to be assistant manager, manager, deputy chief economist of the human resource department of Shanghai Chlor-Alkali Chemical Co., Ltd. Now she is the Secretary of the Board of Directors and deputy chief economic engineer of Shanghai Chlor-Alkali Chemical Co., Ltd.
Wang Linzao	He used to be the manager of production director department of Shanghai Chlor-Alkali Chemical Co., Ltd., deputy general manager of Shanghai Tianyuan Huasheng Chemical Co., Ltd., secretary of CPC general branch and factory director of Huasheng Chemical Plant, and production controller of Shanghai Chlor-Alkali Chemical Co., Ltd. Now he is the employee representative Supervisor and assistant of general manager of Shanghai Chlor-Alkali Chemical Co., Ltd.
Hu Yongkang	He used to be general manager, Party secretary and Chairman of the Board of Shanghai Wujin Chemical Co., Ltd. and director, Party secretary and deputy general manager of Shanghai Chlor-Alkali Chemical Co., Ltd.
Wang Zengjin	He used to be the director of Shanghai Chlor-Alkali Chemical Co., Ltd.
Li Zengquan	He used to be the independent director of Shanghai Chlor-Alkali Chemical Co., Ltd.
Zhang Guoming	He used to be the independent director of Shanghai Chlor-Alkali Chemical Co., Ltd.
Chen Yao	He used to be the Chairman of Supervisory Committee of Shanghai Chlor-Alkali Chemical Co., Ltd.
Yu Bin	He used to be the supervisor of Shanghai Chlor-Alkali Chemical Co., Ltd.
Wang Mingchun	He used to be deputy Party secretary, secretary of Party disciplinary committee and chairman of trade union of PVC factory of Shanghai Chlor-Alkali Chemical Co., Ltd., vice chairman of trade union of Shanghai Chlor-Alkali Chemical Co., Ltd. and secretary of CPC committee of PVC factory. Now he is the employee representative Supervisor of Shanghai Chlor-Alkali Chemical Co., Ltd.
Xu Peiwen	He used to be the Board Secretary of Shanghai Tianyuan (Group) Co., Ltd., and the Board Secretary and chief of the Board Secretary's office of Shanghai Chlor-Alkali Chemical Co., Ltd.

Presentation of other events √Applicable □Not applicable On March 25, 2016, the 28<sup>th</sup> Conference of the Eighth Board of Directors and the 19<sup>th</sup> Conference of the Eighth Board of Supervisors reviewed and passed the proposal for general selection of directors and supervisors, the selections had been conducted on 2015 Annual Shareholders' Meeting held on Apr. 25, 2016, and the employee directors, employee supervisor were selected on the joint conference of the congress of workers and staff of the Company. On Apr. 25, 2016, the Chairman of Board of Directors and Chairman of Supervisory Committee were elected on the first conference of the Ninth Board of Director and Board of Supervisors of the Company, the new session of senior executives were engaged; relevant announcements had been disclosed on the website (<a href="https://www.sse.com.cn">www.sse.com.cn</a>) of Shanghai Stock Exchange on Apr. 26, 2016.

#### (II) Equity incentive awarded to the Director and senior executives during the reporting period

□Applicable √Not applicable

#### II. Particulars of Directors, Supervisors and senior executives (including the ones leaving post during the reporting period)

#### (I) Position in shareholder's unit

√Applicable □Not applicable

Name	Name of shareholder's unit	Position in shareholder's unit	Start date of office term
Huang Dailie	Shanghai Huayi (Group) Company	Director, general manager	12-02-2015

## (II) Position in other unit

Name	Name of other unit	Position in other unit	Start date of office term
Zhang Weimin	Shanghai Huntsman Polyurethane Co., Ltd.	Director, Vice chairman of the board of	08-20-2015
		directors	
Zhang Weimin	Shanghai Huayi Group Finance Co., Ltd.	Director	08-20-2015
Zhang Weimin	Shanghai Chlor-Alkali New Materials Trading	Executive director	02-18-2016
	Co., Ltd.		
Wang Wei	Shanghai Chlor-Alkali Machinery Co., Ltd.	Inner Mongolia Junzheng Tianyuan	12-18-2015
		chemical Co., Ltd.	
Wang Wei	Shanghai Tianyuan (Group) Co., Ltd.	Director	12-18-2015
Zhang Wenlei	Tangshan Sanyou Chemical Group Co., Ltd.	Independent director	09-15-2014
Wang Linzao	Shanghai Jinyuan Tap Water Co., Ltd.	Director	07-01-2011
Wang Linzao	Shanghai Lianheng Isocyanic Acid Grease Co.,	Director	01-10-2016
	Ltd.		
Cao Jinrong	Shanghai Ruisheng Enterprise Co. Ltd.	Executive director	03-01-2012
Cao Jinrong	Inner Mongolia Junzheng Tianyuan Chemical	Chief supervisor	12-14-2016

	Co., Ltd.		
Dong Yan	Inner Mongolia Junzheng Tianyuan Chemical	Director	12-14-2016
	Co., Ltd.		
Dong Yan	Shanghai Huntsman Polyurethane Co., Ltd.	Director	01-11-2016
Dong Yan	Shanghai LvWei Plasitics Co., Ltd.	Director	01-11-2016
Tang Liang	Inner Mongolia Junzheng Tianyuan Chemical	Director	12-14-2016
	Co., Ltd.		

## III. Rewards of the Directors, Supervisors and senior executives

√Applicable □Not applicable

Tippined of application	
Decision-making process for the rewards of the	The rewards of the Directors, Supervisors and senior executives shall be decided by the Company's salary &
Directors, Supervisors and senior executives	examination committee.
Basis for deciding the rewards of the Directors,	Issued according to the Examination Measures for the Reward of the Directors, Supervisors and senior executives.
Supervisors and senior executives	
Actual issuing of the rewards of the Directors,	The Board of Directors decided the reward standard for the Directors, Supervisors and Senior Executives getting
Supervisors and senior executives	salary from the Company this year and paid the rewards monthly in accordance with the Company's unified salary
	management system and the annual performance review by the salary & checking committee of the Board of
	Directors. The standard for allowance to Independent Directors was examined and passed by the shareholders'
	meeting.
Total reward got actually by all the Directors,	RMB 6,639,000Yuan
Supervisors and Senior Executives at end of the	
reporting period	

## IV. Changes of the Directors, Supervisors and senior executives

Name	Position	Change	Reason of change
Li Ning	Director	Elected	Mrs. Li Ning was elected as the director of the Company by voting on 2015 Annual Shareholders'
			Meeting On Apr. 25, 2016 and related announcement was disclosed on the website of Shanghai Stock
			Exchange on Apr. 26, 2016.
Wang Wei	Director	Elected	Mr. Wang Wei was elected as the director of the Company by voting on 2015 Annual Shareholders'
			Meeting On Apr. 25, 2016 and related announcement was disclosed on the website of Shanghai Stock
			Exchange on Apr. 26, 2016.
Wang Jinshan	Independent director	Elected	Mr. Wang Jinshan was elected as the independent director of the Company by voting on 2015 Annual
			Shareholders' Meeting On Apr. 25, 2016 and related announcement was disclosed on the website of

			Shanghai Stock Exchange on Apr. 26, 2016.
Zhao Ziye	Independent director	Elected	Mr. Zhao Ziye was elected as the independent director of the Company by voting on 2015 Annual Shareholders' Meeting On Apr. 25, 2016 and related announcement was disclosed on the website of Shanghai Stock Exchange on Apr. 26, 2016.
Gu Lili	Chairman of supervisory committee	Elected	Mr. Gu Lili was elected as the shareholder representative supervisor by voting on 2015 Annual Shareholders' Meeting On Apr. 25, 2016 and was elected as the Chairman of Supervisory Committee after examination and pass on the first meeting of the 9 <sup>th</sup> Board of Supervisors on Apr. 25, 2016. Related announcements was disclosed on the website of Shanghai Stock Exchange on Apr. 26, 2016.
Zhang Hu	Supervisor	Elected	Mr. Zhang Hu was elected as the supervisor of the Company by voting on 2015 Annual Shareholders' Meeting On Apr. 25, 2016, and related announcement was disclosed on the website of Shanghai Stock Exchange on Apr. 26, 2016.
Tang Liang	Supervisor	Elected	Mr. Tang Liang was elected as the supervisor of the Company by voting on 2015 Annual Shareholders' Meeting On Apr. 25, 2016, and related announcement was disclosed on the website of Shanghai Stock Exchange on Apr. 26, 2016.
Zhou Mei	Employee supervisor	Elected	Elected democratically by staff representatives on the 9 <sup>th</sup> meeting of the 3 <sup>rd</sup> Congress of Workers and Staff. Related announcement had bee disclosed on the website of Shanghai Stock Exchange on Mar. 9, 2016.
Zhang Guohua	Employee supervisor	Elected	Elected democratically by staff representatives on the 9 <sup>th</sup> meeting of the 3 <sup>rd</sup> Congress of Workers and Staff. Related announcement had bee disclosed on the website of Shanghai Stock Exchange on Mar. 9, 2016.
Dong Yan	Secretary of the board of directors	Engaged	Engaged by the first meeting of the 9 <sup>th</sup> Board of Directors of the Company on Apr. 25, 2016.
Wang Linzao	General manager assistant	Engaged	Engaged by the first meeting of the 9 <sup>th</sup> Board of Directors of the Company on Apr. 25, 2016.
Hu Yongkang	Director, deputy party secretary	Left the post	Expiration of the term of office.
Wang Zengjin	Director	Left the post	Expiration of the term of office.
Li Zengquan	Independent director	Left the post	Expiration of the term of office.
Zhang Guoming	Independent director	Left the post	Expiration of the term of office.
Chen Yao	Chairman of supervisory committee	Left the post	Expiration of the term of office.
Yu Bin	Supervisor	Left the post	Expiration of the term of office.
Wang Mingchun	Supervisor	Left the post	Expiration of the term of office.
Xu Peiwen	Secretary of the board of directors	Left the post	Expiration of the term of office.

## V. Punishment by the securities regulatory authorities in recent 3 years

□Applicable √Not applicable

### VI. Employees of the parent company and main subsidiaries

### (I) Particulars of employees

692
223
915
4,255
n structure
Number of people
569
50
72
20
204
915
onal status
Number of people
257
345
260
53
915

## (II) Salary policy

√Applicable □Not applicable

The Company implements the Position Level Salary Measures of Shanghai Chlor-Alkali Chemical Co., Ltd.

## (III) Training plan

√Applicable □Not applicable

In 2016, the Company made employee training for 4797 men-times. The training includes 3987 men-times for front-line employees, accounting for 83.11% in total training. The main training content: post operation training (on-the-job training and job-transfer training), special work training (including the training for obtaining certificate of post), QHSE training, staff skill and skill level training (including skill level and training for employment with certificate), HSE entire staff training,

team leader training, series training of labor union, degree program training, professional qualification improvement training and young employee cultivation. The training includes 810 men-times for non front-line employees, accounting for 16.89% in total training. Main training content: professional technical training at the engineers advanced study and training base in party school, engineering training for professional technical personnel, special topic lecture, management and strategy course training, title and further education training, QHS training and HSE entire staff training.

#### (IV) Labor outsourcing

□Applicable √Not applicable

VII. Other

□Applicable √Not applicable

## **Section IXCompany Governance**

### I. Introduction to Company governance

√Applicable Not applicable

The Company kept on improving the Company's corporate governance structure, regulating its operation and strengthening its internal management strictly in accordance with the provisions and requirements of the *Company Law*, *Securities Law* and the *Management Principle of the Listed Companies* and the files for company's governance issued by China Securities Regulatory Committee and Shanghai Stock Exchange.

1. About the shareholders and the shareholders' meeting

The Company convened the shareholders' meeting strictly according to relevant provisions and procedures in the Articles of Association and the Rules of Procedure of the Shareholders' Meeting. It can ensure the equal position and lawful rights and interests of all the shareholders, especially the middle and small shareholders, let them enjoy and exercise fully their rights. All of the Company's related transactions have been made strictly according to the principle of fair and equitable, the principle are disclosed to the public, and the related Director and related shareholders avoided the voting.

2. Controlling shareholder and the listed Company

The controlling shareholder exercises its right and bears the obligation according to law, not intervening directly or indirectly the Company's decision-making and operating activities without the authority of the shareholders' meeting. The Company and the controlling shareholder make Five Independence, i.e. assets, business, organization, finance and personnel. The Company's Board of Directors, Supervisory Committee and the internal institutions can all make operation independently to ensure the Company making and implementing the significant decisions independently.

3. Directors and the Board of Directors

The Company elects the Directors strictly in accordance with the procedure specified in the *Company Law* and *Articles of Association*, the Board of Directors is of scientific composition, clear responsibilities and perfect systems. The Company establishes four special committees, i.e. strategy, audit, nomination and salary & checking, under the Board of Directors, and all these committees can work earnestly and diligently strictly in accordance with the *Articles of Association* and the Work *Enforcement Regulations of the Special Committees under the Board of Directors*. For the Company's significant decisions and investments all the Directors can well play their professional role, raise their professional opinions and proposals, provide great support to the Company's scientific policy-making, and perform their duties loyally, cautiously, earnestly and diligently.

#### 4. Supervisors and the Supervisory Committee

The Company's Supervisory Committee elects the Supervisors strictly in accordance with the procedure specified in the *Company Law* and the *Articles of Association*, and the convening procedure conforms to the *Rules of Procedure of the Supervisory Committee* and has intact and true meeting record. The Company's Supervisors can perform earnestly their duties, make supervision independently on the Company's finance and operation status and the legitimacy and compliance of the Company's Directors, managers and other senior executives based on the manner of being responsible to all the shareholders, and safeguard the lawful rights and interests of the Company and the shareholders.

#### 5. Performance appraisal and incentive and constraint mechanism

The Company has established and gradually improved the performance appraisal standard and incentive and constraint mechanism for the Directors, Supervisors and senior executives, and the engagement of the senior executives is open and transparent and meets the requirements of relevant laws and statutes.

#### 6. Information disclosure and transparence

The Company has truly, accurately, completely and timely discloses relevant information strictly in accordance with the requirements of relevant laws and codes and its own Management System on the Information Disclosure Affairs and the internal report system on Significant Information, and ensure all the investors can obtain effective information equally. In the reporting period, the Company totally completed 4 periodic reports and 22 provisional announcements, making the investors can learn the status of the Company timely, fairly, accurately and completely.

## 7. Management on insider information

During the reporting period, the Company executed strictly the *Management on Registration of the Persons in the Know of Insider Information*, got down with the work on keeping secret of the insider information and required to fill in the record file of the person in the know of the insider information to safeguard the interest of the shareholders.

If there is significant difference between company governance and the requirements of relevant regulations of China Securities Regulatory Commission; if yes, give the reason

□Applicable √Not applicable

#### II. Briefing on the shareholders' meeting

The meeting	Convening date	Index on the website specified for carrying the resolutions	Date for disclosing the resolutions
2015 annual shareholders' meeting	04-25-2016	www.sse.com.cn	04-26-2016

Information about shareholders' meeting

## III. Duty performance of the Directors

## (I) Particulars of the Directors for attending the Board meetings and shareholders meeting

Particulars of attending the Board Meetings  Name of Discourse Particulars of attending the Board Meetings						Particulars of attending the shareholders' meeting		
director	Director or not	Number of Board meetings in current year	Number of attendances in person	Number of attendances through communication	Number of attendances through commitment	Number of absence	Whether not attending in person the meeting consecutively for 2 times or not	Number of attendances in the shareholders' meeting
Huang Dailie	No	8	8	0	0	0	No	1
Li Ning	No	6	5	0	1	0	No	1
Zhang Weimin	No	8	8	0	0	0	No	1
Wang Wei	No	6	6	0	0	0	No	1
Yu Zhaojun	No	8	8	0	0	0	No	1
Zhang Wenlei	No	8	8	0	0	0	No	1
Shao Zhengzhong	Yes	8	8	0	0	0	No	1
Wang Jinshan	Yes	6	6	0	0	0	No	1
Zhao Ziye	Yes	6	6	0	0	0	No	1

Explanations for not attending the meeting in person consecutively for 2 times:  $\Box$ Applicable  $\sqrt{N}$ Ot applicable

Number of Board meetings convened in current year	8
Incl.: Number of on-site meetings	2
Number of meetings convened through communication	6
Number of meetings convened on-site and through communication	0

## (II) Objection of the Independent Directors on relevant events of the Company

□Applicable √Not applicable

## (III) Other

## IV. Important opinions and proposals raised by the special committees under the Board of Directors while performing their duties in the reporting period, and if any objection exists, the details shall be disclosed

√Applicable Not applicable

In 2016, the special committee of the Company's Board of Directors, based on the provisions of the *Enforcement Regulations of Special Committees under the Board of Directors*, performed their duties earnestly, conducted work actively, gave full play to their own special skills and played active role on the decision-making of the Board of Directors for significant events. The audit committee could perform its duty earnestly in the work for annual report and relevant work, raised construction suggestions on the Company's periodic report, internal control systems, asset disposal and related transactions, and supervised the Company to make healthful, stable and rapid development furthermore. The salary & checking committee convened meeting to check the salary of the senior executives in 2015, and raised the checking plan on the salary of the senior executives in 2016. The nomination committee convened the meeting to discuss and make proposal for change of the Company's Directors. The Company lay stress on exerting the knowledge of the special committees under the Board of Directors in specialty and information to promote the decision-making of the Board of Directors more scientific and more effective.

## V. Note of the Supervisory Committee on discovering the Company's risk

√Applicable Not applicable

## VI. Note of the Company on being unable to ensure independence and self operation capability in business, assets, organization and finance with the controlling shareholder

 $\Box$ Applicable  $\sqrt{\text{Not applicable}}$ 

In case of the existence of horizontal competition, the corresponding solutions, job schedule and subsequent wok plan of the Company  $\Box$ Applicable  $\sqrt{Not}$  applicable

## VII. Establishing and implementing the check mechanism and incentive mechanism for the senior executives in the reporting period

√Applicable Not applicable

The Company implements the *Checking Method on the Salary of Senior Executives of the Company*, and the salary & checking committee under the Board of Directors made the annual performance review, decided the reward standard for the Directors, Supervisors and Senior Executives getting salary from the Company and paid the rewards monthly.

## VIII. Whether disclose the internal control self-assessment report or not

For details of the 2016 Internal Control Self-assessment Report of Shanghai Chlor-Alkali Chemical Co., Ltd., see relevant announcement in the website of Shanghai Stock Exchange www.sse.com.cn on March 30, 2017.

Note on significant deficiencies in the internal control during the reporting period  $\Box$ Applicable  $\sqrt{Not}$  applicable

### IX. Note on relevant status of the auditor's report for internal control

√Applicable Dot applicable

For details of the Auditor's Report for Internal Control of Shanghai Chlor-Alkali Chemical Co., Ltd. in 2016, see relevant announcement in the website of Shanghai Stock Exchange <a href="https://www.sse.com.cn">www.sse.com.cn</a> on March 30, 2017.

Whether disclose the auditor's report for internal control or not: yes

#### X. Other

□Applicable √Not applicable

## Section X Particulars of the Company's Bonds

## **Section XIFinancial Report**

#### I. Auditor's report

√Applicable □Not applicable

XKSHBZ [2017] No. ZA11253

#### To all shareholders of Shanghai Chlor-Alkali Chemical Co., Ltd.,

We have audited the attached financial statements of Shanghai Chlor-Alkali Chemical Co., Ltd. (hereafter referred to as Chlor-Alkali Chemical), including the consolidated and the Company's balance sheets as of Dec. 31, 2016, the consolidated and the Company's income statements in 2016, the consolidated and the Company's cash flow statements, the consolidated and the Company's statements of changes in owner's equity and the notes on the financial statements.

#### I. The responsibility of the management

To prepare the financial statements and make fair presentation in it is the responsibility of the management of the Company. Such responsibility shall include: (1) to prepare the financial statements and make fair presentation in them in accordance with the provisions of the enterprise accounting standard; (2) to design, execute and maintain necessary internal control to prevent the financial statements from making significant misreport caused by fraud or error.

#### II. Responsibility of the certified public accountants

Our responsibility is to express audit opinion to the financial statements based on the execution of the audit work. We have made the audit work in accordance with the provisions in the audit standard of China certified public accountant. The audit standard of China certified public accountant requires us to observe the code of professional ethics of China certified public accountants, plan and execute the audit work and obtain the reasonable assurance for not making significant misreport in the financial statements

The audit work involves the implementation of audit procedure to obtain the amount of financial statements and disclosed audit evidences. The selection of the audit procedure depends on the judgment of the certified public accountants, including the evaluation to the risk of significant misreport of the financial statements caused by the fraud or error. While making risk evaluation, the certified public accountant shall consider the internal control related to the preparing of the financial statements and the fair presentation to design proper audit procedure, but the purpose is not to express opinion for the effectiveness of the internal control. The audit work shall also include to evaluate the suitability of the accounting policy selected by the management and the reasonableness of the accounting estimate and to evaluate the general presentation of the financial statements.

We believe, the audit evidences we have obtained are adequate and proper and provide basis for expressing the audit opinion.

### III. Audit opinion

We deem that, the financial statements of the Company have been prepared in accordance with the provisions of the enterprise accounting standard in all significant aspects, and have reflected the consolidated and the Company's financial status on Dec. 31, 2016 and the consolidated and the Company's operating results and cash flow in 2016

BDO China Shu Lun Pan Certified Public Accountants LLP China certified public accountant:
Gu Xuefeng

China certified public accountant: Chen Luying

Shanghai ·China

March 28, 2017

## 2. Financial Statement

## Consolidated Balance Sheet

December 31, 2016

Prepared by: SHANGHAI CHLOR-ALKAL CHEMICAL CO.,LTD

Unit: Yuan Currency: RMB

Item	Note	Closing balance	Opening balance
Current assets			
Cash and cash balances		433,999,695.91	240,425,945.13
Settlement reserve			
Lent to banks and other financial institutions			
Financial assets at fair value through profit or loss			

Item	Note	Closing balance	Opening balance
Derivative financial asset			
Notes receivable		448,822,006.32	336,221,352.79
Accounts receivable		202,272,347.66	259,044,580.24
Prepayments		50,056,591.51	136,446,799.31
Insurance Premium receivable			
reinsurance account Receivable			
Reserves for reinsurance contract Receivable			
Interest receivable			
Dividends receivable			
Other receivables		762,159.00	3,561,716.78
Financial assets purchased under resale agreements			
Inventories		159,466,728.86	384,885,265.71
Assets classified as held for sale			
Non-current assets due within one year			
Other current assets			
Total current assets		1,295,379,529.26	1,360,585,659.96
Non-current assets:			
Loans and advances			

Item	Note	Closing balance	Opening balance
Available-for-sale financial assets		453,209,607.08	424,078,182.70
Investment held to maturity			
Long-term receivables			
Long-term equity investments		365,215,620.38	288,855,432.45
Investment properties			
Fixed assets		1,978,086,015.56	2,132,521,000.23
Construction in progress		97,570,414.69	305,408,986.91
Project materials		37,478.63	1,381,336.82
Disposal of fixed assets			
Productive biological assets			
Oil & gas assets			
Intangible assets		267,521,472.23	281,295,016.13
Development expenditure		17,364,046.98	30,247,277.15
Goodwill			
Long-term prepaid expenses		15,196,164.92	23,460,981.73
Deferred tax assets		35,696.33	20,529.71
Other non-current assets			
Total non-current assets:		3,194,236,516.80	3,487,268,743.83

Item	Note	Closing balance	Opening balance
Total assets		4,489,616,046.06	4,847,854,403.79
Current liabilities:			
Short-term borrowing		1,256,000,000.00	620,000,000.00
Borrowing from the central bank			
Customer deposits and deposits from banks and other financial			
institutions			
Interbank borrowing			
Financial assets measured with fair value and having its			
changes accounted in current income and loss			
Derivative financial assets			
Notes payable			
Accounts payable		358,647,789.59	376,955,805.82
Receipts in advance		243,595,103.99	253,175,587.07
Financial assets sold for repurchase			
Handling fees and commissions payable			
Employee benefits payable		131,471,648.00	780,802.00
Taxes payable		80,270,216.68	14,824,741.55
Interest payable		1,955,378.33	2,788,929.31

Item	Note	Closing balance	Opening balance
Dividends payable		2,724,553.75	2,724,553.75
Other payables		88,814,552.29	441,394,365.43
Reinsurance accounts payable			
Reserve for insurance contract			
Acting trading securities			
Acting underwriting securities			
Assets classified as available-for-sale assets			
Non-current liabilities due within one year			
Other current liabilities			
Total current liabilities		2,163,479,242.63	1,712,644,784.93
Non-current liabilities			
Long-term borrowing			
Bonds payable			
Including: Preferred stock			
Debt sustainability			
Long-term payables		170,000,000.00	645,000,000.00
Long-term employee benefits payable		181,130,000.00	190,880,000.00
Special payables		11,050,000.00	11,050,000.00

Item	Note	Closing balance	Opening balance
Provisions		1,238,255.07	
Deferred income		6,873,750.00	6,650,100.00
Deferred tax liabilities		14,562,645.00	11,653,477.05
Other non-current liabilities			
Total non-current liabilities		384,854,650.07	865,233,577.05
Total liabilities		2,548,333,892.70	2,577,878,361.98
Shareholders' equity:			
Share capital		1,156,399,976.00	1,156,399,976.00
Other equity instruments			
Including: Preferred stock			
Debt sustainability			
Capital reserve		1,674,270,987.60	1,674,270,987.60
Less :Treasury stock			
Other Comprehensive Income		20,585,420.26	12,317,916.44
Special reserve			
Surplus reserves		11,329,760.39	11,329,760.39
General risk reserve			
Retained earnings		-920,865,356.69	-592,773,594.89

Item	Note	Closing balance	Opening balance
Total shareholders' equity attributable to shareholders of the		1,941,720,787.56	2,261,545,045.54
Company		1,011,120,101.00	_,,,
Minority interests		-438,634.20	8,430,996.27
Total shareholders' equity		1,941,282,153.36	2,269,976,041.81
Total liabilities and shareholders' equities		4,489,616,046.06	4,847,854,403.79

Legal representative: Superintendent responsible for accounting: Superintendent for accountancy firm:

## **Balance Sheet of Parent Company**

December 31, 2016

Prepared by: SHANGHAI CHLOR-ALKAL CHEMICAL CO.,LTD

Unit: Yuan Currency: RMB

Item	Note	Closing balance	Opening balance
Current assets:			
Cash and cash balances		371,434,054.50	212,133,296.30
Financial assets at fair value through profit or loss			
Derivative financial assets			
Notes receivable		256,156,372.62	334,581,352.79
Accounts receivable		323,192,407.70	253,571,576.96
Prepayments		51,172,870.23	137,481,599.22
Interest receivable			
Dividend receivable			
Other receivables		4,509,657.46	10,766,735.59

Item	Note	Closing balance	Opening balance
Inventories		155,028,612.34	371,277,788.79
Assets classified as held for sale			
Non-current assets due within one year		20,000,000.00	
Other current assets			
Total current assets		1,181,493,974.85	1,319,812,349.65
Non-current assets:			
Available-for-sale financial assets		426,458,325.42	413,190,044.22
Held-to-maturity investments			
Long-term receivables			
Long-term equity investments		473,550,440.36	355,444,207.96
Investment properties			
Fixed assets		1,960,644,705.74	2,111,593,701.25
Construction in progress		91,697,502.44	302,075,871.66
Project materials		37,478.63	1,381,336.82
Disposal of fixed assets			
Productive biological assets			
Oil & gas assets			
Intangible assets		254,644,610.18	259,886,963.38
Development expenditure		17,364,046.98	30,247,277.15
Goodwill			
Long-term prepaid expenses		15,196,164.92	23,152,249.71
Deferred tax assets			
Other non-current assets			20,000,000.00
Total non-current assets		3,239,593,274.67	3,516,971,652.15
Total assets		4,421,087,249.52	4,836,784,001.80
Current liabilities:			
Short-term borrowing		1,256,000,000.00	620,000,000.00

Item	Note	Closing balance	Opening balance
Financial assets measured with fair value and having its changes			
accounted in current income and loss			
Derivative financial assets			
Notes payable			
Accounts payable		341,939,490.32	370,153,498.98
Receipts in advance		232,409,605.46	253,775,506.41
Employee benefits payable		121,407,244.00	513,377.00
Tax payable		75,506,168.49	12,682,879.20
Interest payable		1,955,378.33	2,788,929.31
Dividend payable		1,189,676.90	1,189,676.90
Other payables		81,786,755.91	457,108,038.56
Assets classified as available-for-sale assets			
Non-current liabilities due within one year			
Other current liabilities			
Total current liabilities		2,112,194,319.41	1,718,211,906.36
Non-current liabilities			
Long-term borrowing			
Bonds payable			
Including: Preferred stock			
Debt sustainability			
Long-term payables		170,000,000.00	645,000,000.00
Long-term employee benefits		181,130,000.00	190,880,000.00
Special payables		11,050,000.00	11,050,000.00
Provisions			
Deferred income		6,873,750.00	6,650,100.00
Deferred tax liabilities		9,728,506.05	10,785,123.90
Other non-current liabilities			

Item	Note	Closing balance	Opening balance
Total non-current liabilities		378,782,256.05	864,365,223.90
Total liabilities		2,490,976,575.46	2,582,577,130.26
Shareholders' equity:			
Share capital		1,156,399,976.00	1,156,399,976.00
Other equity instruments			
Including: Preferred stock			
Debt sustainability			
Capital reserve		1,690,068,638.82	1,690,068,638.82
Less: Treasury stock			
Other Comprehensive Income		7,715,149.28	11,345,002.84
Special reserve			
Surplus reserves		11,329,760.39	11,329,760.39
Retained earnings		-935,402,850.43	-614,936,506.51
Total shareholders' equity		1,930,110,674.06	2,254,206,871.54
Total liabilities and shareholders' equity		4,421,087,249.52	4,836,784,001.80

#### Consolidated Income Statement

January-December 2016

Prepared by: SHANGHAI CHLOR-ALKAL CHEMICAL CO.,LTD

Item	Note	Amount incurred in current period	Amount of previous period
Total Operating income		6,754,397,061.69	6,170,874,223.67
Including: Operating income		6,754,397,061.69	6,170,874,223.67
Interest income			
Earned premium			

Item	Note	Amount incurred in current period	Amount of previous period
Fee and commission income			
2. Total Operating Cost		7,245,409,457.47	6,427,713,999.83
Including: Operating costs		6,128,517,218.57	5,559,439,778.97
Interest expenditure			
Fee and commission expense			
Returned premium			
Net compensation expenditure			
Withdrawn net insurance contract reserve			
Dividend expenditure on insurance policies			
Reinsurance expenses			
Business taxes and levies		28,916,705.72	19,193,727.90
Selling expenses		184,329,793.95	199,911,085.12
Administrative expenses		480,214,277.58	402,196,032.57
Financial expense		74,994,167.59	140,436,053.89
Asset impairment losses		348,437,294.06	106,537,321.38
Plus: Income from fair value changes (for loss, fill in "-")			
Investment profit (loss is expressed with "-")		131,189,596.30	147,125,155.93
Including: Income from investments in associates and JCEs		97,360,187.93	44,597,649.84
Exchange gain/loss (for loss, fill in "-")			
3. Operating Profit (Indicate Loss with "-")		-359,822,799.48	-109,714,620.23
Plus: Non-operating income		26,386,162.15	220,140,784.81
Including: Gains from disposal of non-current assets		823,415.34	175,597,261.11
Less: Non-operating expenses		1,377,001.45	864,280.61
Including: Losses from disposal of non-current assets		525,479.38	520,754.37
4. Total Profit (Indicate Total Loss with "-")		-334,813,638.78	109,561,883.97
Less: Income tax expenses		1,703,353.49	4,672,427.26

Item	Note	Amount incurred in current period	Amount of previous period
5. Net Profit (Indicate Loss with "-")		-336,516,992.27	104,889,456.71
Net profit attributable to shareholders of the Company		-328,091,761.80	95,615,030.34
Profit or loss attributable to minority interests		-8,425,230.47	9,274,426.37
6. Net amount of other comprehensive revenues after tax		8,267,503.82	10,397,536.07
Net amount of other comprehensive revenues after tax attributable to shareholders of parent company		8,267,503.82	10,397,536.07
(1) Other comprehensive income that will not be reclassified subsequently to profit or loss		-460,000.00	-13,980,000.00
Changes in net liabilities or net assets due to remeasurement of defined benefit plans		-460,000.00	-13,980,000.00
Other comprehensive income that will not be reclassified subsequently to profit or loss of invested entities under equity method			
(2) Other comprehensive income that may be reclassified subsequently to profit or loss		8,727,503.82	24,377,536.07
Other comprehensive income that may be reclassified subsequently to profit or loss of invested entities under equity method in future			
2) Changes in fair value of available-for-sale financial assets		8,727,503.82	24,377,536.07
Profit or loss of held-to-maturity investments that are reclassified as available-for-sale financial assets			
4) Effective part of profit or loss of cash flow hedge			
5) Exchange differences on translating foreign operations			
6) Other			
Other comprehensive income (loss) attributable to minority interests			
7. Total Comprehensive Income		-328,249,488.45	115,286,992.78
Total comprehensive income attributable to shareholders of the Company		-319,824,257.98	106,012,566.41
Total comprehensive income attributable to minority interests		-8,425,230.47	9,274,426.37
8. Earnings per Share			
(1) Basic earnings per share		-0.2837	0.0827

ltem	Note	Amount incurred in current period	Amount of previous period
(2) Diluted earnings per share		-0.2837	0.0827

## Income Statement of Parent Company

January-December 2016

Prepared by: SHANGHAI CHLOR-ALKAL CHEMICAL CO.,LTD

Offic. Fuant Currency. Rivid			
Item	Note	Amount incurred in current period	Amount of previous
Operating income		4,221,442,504.36	5,306,202,144.25
Less: Operating cost		3,635,572,923.53	4,779,946,815.88
Business taxes and levies		25,583,943.98	16,200,534.43
Sales expenses		166,289,797.50	184,902,755.30
Administrative expenses		444,945,382.58	352,189,770.28
Financial expense		74,847,579.48	139,259,008.16
Asset impairment losses		350,543,850.73	104,311,645.14
Plus: Income from fair value changes (for loss, fill in "-")			
Investment profit (loss is expressed with "-")		132,724,899.42	196,816,182.18
Including: Income from investments in associates and JCEs		97,360,187.93	44,597,649.84
2. Operating Profit (Indicate Loss with "-")		-343,616,074.02	-73,792,202.76
Plus: Non-operating income		24,394,366.15	217,277,438.15
Including: Gains from disposal of non-current assets		541,341.67	175,459,449.37
Less: Non-operating expenses		1,244,636.05	460,655.84
Including: Losses from disposal of non-current assets		512,438.97	376,422.17
3. Total Profit (Indicate Total Loss with "-")		-320,466,343.92	143,024,579.55
Less: Income tax expense			
4. Net Profit (Indicate Loss with "-")		-320,466,343.92	143,024,579.55

5.Net amount of other comprehensive revenues after tax	-3,629,853.56	10,389,083.82
(1) Other comprehensive income that will not be reclassified subsequently to profit or loss	-460,000.00	-13,980,000.00
Changes in net liabilities or net assets due to remeasurement of defined benefit plans	-460,000.00	-13,980,000.00
Other comprehensive income that will not be reclassified subsequently to profit or loss of invested entities under equity method		
(2) Other comprehensive income that may be reclassified subsequently to profit or loss	-3,169,853.56	24,369,083.82
Other comprehensive income that may be reclassified subsequently to profit or loss of invested entities under equity method in future		
2) Changes in fair value of available-for-sale financial assets	-3,169,853.56	24,369,083.82
3) Profit or loss of held-to-maturity investments that are reclassified as available-for-sale financial assets		
4) Effective part of profit or loss of cash flow hedge		
5) Exchange differences on translating foreign operations		
6) Other		
6. Total Comprehensive Income	-324,096,197.48	153,413,663.37
7.Earnings per Share:		
(1) Basic earnings per share		
(2) Diluted earnings per share		

### Consolidated Cash Flow Statement

January-December 2016

Prepared by: SHANGHAI CHLOR-ALKAL CHEMICAL CO.,LTD

Item	Note	Amount incurred in current period	Amount of previous
1. Cash flow from operating activities:			

Item	Note	Amount incurred in current period	Amount of previous period
Cash received from sale of goods and rendering of services		7,509,526,827.49	7,510,561,650.86
Net increases in customer deposits and peer deposits			
Net increases in borrowing from central bank			
Net increases in interbank borrowing from other financial institutions			
Cash received from premiums on primary insurance contracts			
Net cash amount received from reinsurance business			
Net increase in deposits from policyholder			
Net increase from disposal of financial assets measured in fair value and having its changes accounted in current profit and loss			
Cash collected from interest, handling fees and commissions			
Net increases in interbank borrowing			
Net increase in repurchase business capital			
Receipts of tax refunds		807,011.37	1,550,381.55
Other cash received related to operating activities		101,174,531.77	176,962,786.84
Sub-total of cash inflow from operating activities		7,611,508,370.63	7,689,074,819.25
Cash payments for goods purchased and services received		6,460,589,082.43	6,546,749,918.62
Net increases in customer loans and advances			
Net increases in deposits with central bank and other financial institutions			
Original insurance contract claims paid			
Cash payments for interests, fees and commissions			
Policyholder dividend paid			
Cash payments to and on behalf of employees		372,744,973.77	392,633,278.07
Payments for various types of taxes		147,418,472.69	209,497,530.89
Other payments relating to operating activities		141,899,080.50	234,341,659.22
Sub-total of cash outflow relating to operating activities		7,122,651,609.39	7,383,222,386.80
Net cash flow from operating activities		488,856,761.24	305,852,432.45

Item	Note	Amount incurred in current period	Amount of previous
2. Cash flow from investing activities			
Cash receipts from recovery of investments		14,750,893.88	
Cash receipts from investment income		40,900,561.88	50,188,256.22
Net cash receipts from disposals of fixed assets, intangible assets and other long-term assets		1,895,801.68	366,988,374.84
Net cash paid for acquisition of subsidiaries and other business units			201,393,475.46
Other cash received related to investing activities		340,000.00	568,000.00
Sub-total of cash inflow from investing activities		57,887,257.44	619,138,106.52
Cash payment to acquire or construct fixed assets, intangible assets and other long-term assets		71,811,205.80	116,302,260.65
Cash payments to acquire investments		18,316,800.00	40,466,400.00
Net increase in pledge loans			
Net cash paid for acquisition of subsidiaries and other business units			
Other cash paid related to investing activities			
Subtotal of cash outflow from investing activities		90,128,005.80	156,768,660.65
Net cash flow from investing activities		-32,240,748.36	462,369,445.87
3. Cash flow from financing activities			
Cash received from capital contributions			
Including: cash receipts from capital contributions from minority shareholders of subsidiaries			
Cash received from borrowings		1,718,900,000.00	2,487,739,713.32
Cash received from bond issue			
Other cash received related to financing activities			
Sub-total of cash inflow from financing activities		1,718,900,000.00	2,487,739,713.32
Cash repayments of borrowings		1,909,900,000.00	3,277,077,512.61
Cash payments for distribution of dividends or profits or settlement of interest expenses		75,227,416.76	140,724,441.68

ltem	Note	Amount incurred in current period	Amount of previous period
Including: payments for distribution of dividends or profit to minority shareholders of subsidiaries			
Other cash payments relating to financing activities			
Sub-total of cash outflow relating to financing activities		1,985,127,416.76	3,417,801,954.29
Net cash flow from financing activities		-266,227,416.76	-930,062,240.97
Effect of foreign exchange rate changes on cash and cash equivalents		3,241,849.50	-325,298.50
5. Net increase in cash and cash equivalents		193,630,445.62	-162,165,661.15
Add: Opening balance of cash and cash equivalents		240,369,250.29	402,534,911.44
6. Closing balance balance of cash and cash equivalents		433,999,695.91	240,369,250.29

### Cash Flow Statement of Parent Company

January-December 2016

Prepared by: SHANGHAI CHLOR-ALKAL CHEMICAL CO.,LTD

Item	Note	Amount incurred in current period	Amount of previous
Cash flow from operating activities:			
Cash receipts from the sale of goods and rendering of services		4,680,256,864.22	6,511,335,605.62
Tax rebate received		807,011.37	279,357.64
Other cash receipts relating to operating activities		83,844,488.95	156,904,899.36
Sub-total cash inflow from operating activities		4,764,908,364.54	6,668,519,862.62
Cash payments for goods purchased and services		3,674,822,963.70	5,714,454,512.78
Cash payments to and on behalf of employees		326,343,263.63	317,693,761.30
Payments for various types of taxes		135,326,338.40	182,897,891.76
Other payments relating to operating activities		129,019,340.43	198,804,795.65

Item	Note	Amount incurred in current period	Amount of previous
Sub-total cash outflow relating to operating activities		4,265,511,906.16	6,413,850,961.49
Net cash flow from operating activities		499,396,458.38	254,668,901.13
2. Cash flow from investing activities			
Cash receipts from recovery of investments		14,750,893.88	
Cash receipts from investment income		42,435,865.00	75,126,857.37
Net cash receipts from disposal of fixed assets, intangible assets and other long-term assets		1,520,827.72	366,829,419.15
Net cash paid for acquisition of subsidiaries and other business units			224,174,251.71
Other cash received related to investing activities		340,000.00	568,000.00
Sub-total cash flow from investing activities		59,047,586.60	666,698,528.23
Cash payments to acquire or construct fixed assets, intangible assets and other long-term assets		68,748,453.09	75,105,899.49
Cash payments to acquire investments		68,316,800.00	40,466,400.00
Net cash paid for acquisition of subsidiaries and other business units			
Other cash paid related to investing activities			
Sub-total cash outflow relating to investing activities		137,065,253.09	115,572,299.49
Net cash flow from investing activities		-78,017,666.49	551,126,228.74
3. Cash flow from financing activities			
Cash received from capital contributions			
Cash received from borrowings		1,739,000,000.00	2,373,595,009.82
Cash received from bond issue			
Other cash receipts relating to financing activities			
Sub-total cash inflow from financing activities		1,739,000,000.00	2,373,595,009.82
Cash repayments of borrowings		1,930,000,000.00	3,189,876,409.11
Cash payments for distribution of dividends or profits or settlement of interest expenses		74,319,883.19	137,950,238.68
Other cash paid related to financing activities			
Sub-total cash outflow relating to financing activities		2,004,319,883.19	3,327,826,647.79
Net cash flow from financing activities		-265,319,883.19	-954,231,637.97

Item	Note	Amount incurred in current period	Amount of previous
4. Effect of foreign exchange rate on cash and cash equivalents		3,241,849.50	-1,271,463.09
5. Net Increase in cash and cash equivalents		159,300,758.20	-149,707,971.19
Add: Opening balance of cash and cash equivalents		212,133,296.30	361,841,267.49
6. Closing Balance of cash and cash equivalents		371,434,054.50	212,133,296.30

# Consolidated Statement on Changes in Shareholders' Equity

January-December 2016

		Current period												
				;	shareholders	s's equit	ty Attributabl	e to the Pa	rent Comp	any				
Item	Other equity instruments Share			Less:		e Special	.l Cumhin	Common		Minor	Total shareholde			
		Preferr ed stock	Sustain able debt	Other s	Capital reserve	Share s in stock	nsive Income	reserve	Surplus	risk provision	e profit	shareholder s' equity	rs' equity	
1.Balance at the end of last year	1,156,399,9 76.00				1,674,270,9 87.60		12,317,916.4 4		11,329,76 0.39		-592,773,59 4.89	8,430,996.27	2,269,976,04	
Add: Change of accounting policy														
Correcting of previous errors														
Merger of entities under common control														
Others														
2.Balance at the beginning of this year	1,156,399,9 76.00				1,674,270,9 87.60		12,317,916.4 4		11,329,76		-592,773,59 4.89	8,430,996.27	2,269,976,04	
3. Increase/decrease at this term  (for decrease, fill in "-")							8,267,503.82				-328,091,76 1.80	-8,869,630.47	-328,693,888 .45	

(1) Total Comprehensive		8,267,503.82	-328,091,76 1.80	-8,425,230.47	-328,249,488 .45
(2) Capital injection and reduction by shareholders					
Total comprehensive income					
Investment or decreasing of capital by shareholders					
Amount of shares paid and accounted as shareholders'					
equity					
4) Others (3) Profit allotment				-444,400.00	-444,400.00
Providing of surplus reserves					
Providing of common risk provisions					
3) Allotment to the owners (or shareholders)				-444,400.00	-444,400.00
4) Others					
(4) Internal transferring of shareholders' equity					

1.Balance at the end of last year	1,156,399,9				1,683,394,0		1,920,380	0.37	11,329,76	3	-688,388,6	91,606,113.	2,256,261,620
	capital	Prefer red stock	Sustain able debt	Othe rs	reserve	Shares in stock	e Income	nsiv reserv	-	provisio n		s' equity	' equity
Item	Share		her equit		Capital	Less:	Other	Speci	al Surplus	Commo n risk	Attributabl	Minor shareholder	Total shareholders
		04	hor oguit		Shareholders	's equity <i>i</i>	Attributable t	o the Paren	t Company				
							Previo	us period					
term	76.00				87.60		6		0.39		6.69	-430,034.20	3.36
4. Balance at the end of this	1,156,399,9				1,674,270,9		20,585,420.2		11,329,76		-920,865,35	-438,634.20	1,941,282,15
(6) Other													
2) Used this term								13,368,608. 56					13,368,608.5
1) Provided this term								13,368,608. 56					13,368,608.5
(5) Special reserve													
4) Others													
Making up losses by surplus reserves.													
2) Capitalizing of surplus reserves (or to capital shares)													
Capitalizing of capital reserves (or to capital shares)													

76.00	15.86		0.39	25.23	33	.72
Add: Change of accounting						
policy						
Correcting of previous errors						
Merger of entities under						
common control						
Others						
2.Balance at the beginning of this 1,156,399,9	1,683,394,0	1,920,380.37	11,329,76	-688,388,6	91,606,113.	2,256,261,620
year 76.00	15.86	1,920,360.37	0.39	25.23	33	.72
3. Increase/decrease at this term	-9,123,028.	10,397,536.07		95,615,030	-83,175,117.	13,714,421.09
(for decrease, fill in "-")	26	10,397,330.07		.34	06	13,714,421.09
(1) Total Comprehensive		10,397,536.07		95,615,030	9,274,426.3	115,286,992.7
Income		10,397,330.07		.34	7	8
(2) Capital injection and	-9,123,028.				-89,649,543.	-98,772,571.6
reduction by shareholders	26				43	9
1) Total comprehensive income						
2) Investment or decreasing of						
capital by shareholders						
3) Amount of shares paid and						
accounted as shareholders'						
equity						
4) Others	-9,123,028.				-89,649,543.	-98,772,571.6

		26				43	9
(3) Profit allotment						-2,800,000.0 0	-2,800,000.00
1) Providing of surplus reserves							
2) Providing of common risk							
provisions							
3) Allotment to the owners (or shareholders)						-2,800,000.0 0	-2,800,000.00
4) Others							
(4) Internal transferring of shareholders' equity							
Capitalizing of capital reserves (or to capital shares)							
Capitalizing of surplus reserves (or to capital shares)							
3) Making up losses by surplus							
reserves.							
4) Others							
(5) Special reserve							
1) Provided this term				14,426,41 7.80			14,426,417.80
2) Used this term				14,426,41			14,426,417.80

				7.80				
(6) Other								
4. Palance at the and of this term	1,156,399,9		1,674,270,9	12,317,916.44	11,329,76	-592,773,5	8,430,996.2	2,269,976,041
4. Balance at the end of this term	76.00		87.60	12,317,910.44	0.39	94.89	7	.81

### Statement on Changes in Shareholders' Equity of Parent Company

January-December 2016

Prepared by: SHANGHAI CHLOR-ALKAL CHEMICAL CO.,LTD

						Current peri	od				
Item	Share	Other	Other equity instruments			Less: Shares in	Other	Special	Surplus	Attributabl	Total
	capital	Preferre d stock	Sustainabl e debt	Others	Capital reserve	stock	Comprehens ive Income	reserve	reserves		shareholder s' equity
1 Delenge at the and of last year	1,156,399,9				1,690,068,6		11,345,002.84		11,329,760.	-614,936,50	2,254,206,87
1.Balance at the end of last year	76.00				38.82		11,345,002.04		39	6.51	1.54
Add: Change of accounting											
policy											
Correcting of previous errors											
Others											

2.Balance at the beginning of this year	1,156,399,9 76.00		1,690,068,6 38.82	11,345,002.84	11,329,760. 39		2,254,206,87
3. Increase/decrease at this term (for decrease, fill in "-")				-3,629,853.56		-320,466,34 3.92	-324,096,197 .48
(1) Total Comprehensive				-3,629,853.56		-320,466,34 3.92	-324,096,197 .48
(2) Capital injection and reduction by shareholders							
1) Total comprehensive income							
Investment or decreasing of capital by shareholders							
Amount of shares paid and accounted as shareholders'							
equity 4) Others							
(3) Profit allotment							
1) Providing of surplus reserves							
2) Allotment to the owners (or shareholders)							
3) Others							
(4) Internal transferring of							

shareholders' equity									
1) Capitalizing of capital									
reserves (or to capital shares)									
2) Capitalizing of surplus									
reserves (or to capital shares)									
3) Making up losses by surplus									
reserves.									
4) Others									
(5) Special reserve									
1) Provided this term						13,368,608.			13,368,608.5
1) I TOVIGOG UNO COM						56			6
2) Used this term						13,368,608.			13,368,608.5
2) Osed this term						56			6
(6) Other									
4. Balance at the end of this term	1,156,399,9		1,690,068,6		7,715,149.28		11,329,760.	-935,402,85	1,930,110,67
	76.00		38.82				39	0.43	4.06

	Previous period											
ltem	Share capital		quity instru Sustainab le debt		Capital reserve	Less: Shares in stock	Other Comprehensiv e Income	Special reserve	Surplus reserves	Attributable profit	Total shareholde rs' equity	

1.Balance at the end of last year	1,156,399,97 6.00		1,690,068, 638.82	955,919.02	11,329,76	-757,961,08 6.06	2,100,793,2 08.17
Add: Change of accounting policy							
Correcting of previous errors							
Others							
2.Balance at the beginning of this year	1,156,399,97 6.00		1,690,068, 638.82	955,919.02	11,329,76	-757,961,08 6.06	2,100,793,2 08.17
3. Increase/decrease at this term (for decrease, fill in "-")				10,389,083.82		143,024,57 9.55	153,413,66 3.37
(1) Total Comprehensive Income				10,389,083.82		143,024,57 9.55	153,413,66 3.37
(2) Capital injection and reduction by shareholders							
1) Total comprehensive income							
2) Investment or decreasing of capital by shareholders							
Amount of shares paid and accounted as shareholders' equity							
4) Others							
(3) Profit allotment							

1) Providing of surplus reserves								
2) Allotment to the owners (or shareholders)								
3) Others								
(4) Internal transferring of shareholders' equity								
Capitalizing of capital reserves (or to capital shares)								
Capitalizing of surplus reserves (or to capital shares)								
3) Making up losses by surplus reserves.								
4) Others								
(5) Special reserve								
1) Provided this term					14,426,4 17.80			14,426,417. 80
2) Used this term					14,426,4 17.80			14,426,417. 80
(6) Other								
4. Balance at the end of this term	1,156,399,97 6.00		1,690,068, 638.82	11,345,002.84		11,329,76 0.39	-614,936,50 6.51	2,254,206,8 71.54

## **Section XII Documents For Reference**

Documents for reference	1. Financial statements signed and stamped by legal representative, principal in charge of accounting, CFO and head of accounting department;
Documents for reference	2. The original auditor's report stamped by the public accounting firm and signed and stamped by the certified public accountant;
Documents for reference	3.Articles of Association of Shanghai Chlor-Alkali Co.,Ltd. during the report period;
Documents for reference	4. The formal version of all files and originials of the announcements disclosed in the newspapers appointed by China Securities Regulatory Commission during the report period;
Documents for reference	5. The company shall furnish the above documents for reference while China Securities Regulatory Commission and the stock exchange request to provide them and the shareholders request to consult them according to the requirements of the statute or the Articles of Association.

Chairman of the Board :

Presenting date approved by the Board of Directors

March 30, 2017