2017 CORPORATE SOCIAL RESPONSIBILITY REPORT





(A joint stock inflited company incorporated in the People's Republic of Ci

Stock code: 00338 Hong Kong 600688 Shanghai

Corporate Mission

Better Energy for Better Living

Corporate Strategic Positioning

To Build "a domestically leading and globally first-class" Refining-chemical Company

Corporate Core Value

People, Responsibility, Integrity, Excellence, Innovation, and Collaboration

Corporate Working Style

10000

Stringent, Meticulous, and Practical

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Address by Chairman of Board



Generally speaking, the economic operation in petrochemical industry was good in 2017 and it sought improvement in stability. The global economy was in the progress of slow resurgence. The ideological trend of "reverse globalization" and the tendency of trade protectionism underwent slight rising; the quality and benefit of domestic economic development kept on improving, the economy remained growth at a moderately high speed; the contradiction and risk of structural surplus of production capacity in petrochemical industry still existed. The petrochemical enterprises must possess high degree of adaptability and flexibility and proactively meet the challenges, keep on improving quality and benefit to continuously improve their competitiveness at international market.

SPC has proactively adapted itself to the complicated and severe

domestic and international economic situations in the past one year, made great efforts to focus on safe and stable operations of the units, optimization of production operations, cost reduction as well as market development and marketing expanding, positively adjusted the product mix, optimized technologies and improved the capacity of critical upstream units, thusly achieving satisfactory production operations. In 2017, SPC achieved total industrial output value of 68.454 billion RMB and operation revenue of 92.014 billion RMB and totally paid tax revenue of 16.209 billion RMB. In the meanwhile, SPC optimized the oil product structure and upgraded regular diesel to national V standard, thusly providing energy support and premium quality products to the society; achieved total volume of principal commodities of 12.4011 million tons throughout the year. SPC has created new historic record in implementation of total profit for two consecutive years.

SPC has always been adhering to the values of "people, responsibility, integrity, excellence, innovation, and collaboration", keeping in mind of the state-owned enterprises' mission and the people's expectations, considering people's yearning for good life as the company's objective, proactively assuming the corporate social responsibility, incorporating the requirements of fulfilling social responsibility into the whole process of company operations, closely combining corporate self-development with social progress and improving the corporate business performance in the course of positive fulfillment of social responsibility.

Led by the values of "good life is closely connected with petrochemical products", SPC is committed to provide energy for economic development and ecological civilization construction in a production manner of safety, environment and cleanness. SPC intensified special assessment of HSE performance management, continuously promoted super-low emissions and energy conservation revamping projects, initiated the management of such "four kinds of water into one" as fresh water, cooling water, chemical water and waste water and maintained zero record of major accidents of work safety and environmental pollution incidents. Discharge of industry waste water was reduced by 5.87% on a year-on-year basis throughout the year, emissions of COD reduced by 4.06%, NOx by 17.66%, ammonia nitrogen by 1.97%, VOCs by 16.87% and hazardous wastes were 100% properly treated. SPC managed to reduce the sulfur content of regular diesel from 400 mg/m³ to below 10 mg/m³, thusly making positive contributions to energy conservation and emission reduction, green and low carbon development.

SPC was committed to taking the lead in industry market development by implementing innovations throughout corporate production operations through the concept of "based on leading and pursuit of excellence". SPC proactively participated in building "the corridor of G60 scientific innovations", promoted building of "the intelligent plant" with priority and accelerated optimization of the whole process in building integrated refining and chemical industry. The Company intensified the strength of awards to the achievements of innovation and accelerated research and development of new products. As a result, SPC developed and produced 260.6 KT new products throughout the year; applied for 56 patents and obtained 17 patent licensing.

SPC was committed to "repaying the society with the best", persisted in giving play to industrial advantages and promoted winwin cooperation with various parties, thusly providing energy to development of the society. SPC established normalized program of "Public Open Day" to facilitate communication, exchange and interactions between SPC and the public. SPC established linkage and interfacing mechanism with Jinshan District of Shanghai and Pinghu of Zhejiang Province, so as to jointly carry out trans-boundary environmental protection and emergency rescue activities.

SPC was committed to building a harmonious enterprise and advocated the concept of "improving benefit for the company and increasing value for employees", thusly providing energy to the joint development of employees and enterprise. In 2017, SPC tested improvement of talent development system, improved the employees' performance assessment system, expanded the channels for flexible introduction of talents and intelligence, secured the immediate interests of the employees and improved the employees' sense of benefit and sense of happiness.

SPC's efforts and practice in terms of social responsibility have been acknowledged and recognized by the society. In 2017, SPC consecutively won the title of "National Model Establishment" for five times and was granted with "Shanghai Municipal Demonstration Spot for Humanistic Care and Psychological Counseling" and the honorary title of "Green Development Award" issued by the third Summit Meeting of Corporate Social Responsibility of China (Shanghai) Listed Companies.

The 19th CPC National Congress has pointed out the direction for sustainable and healthy development of petrochemical industry. In the coming new year, we will roll up our sleeves and work hard with added energy, overcome the bottlenecks of unbalanced and inadequate industrial development, challenge the advanced level, keep pace with the highest standard, practically and adequately fulfill the economic responsibility, political responsibility and social responsibility and provide products and services with better quality to the society by centering on the development vision of building SPC into "a domestically leading and globally first-class" refining-chemical company, never forgetting our original intention of "loving my country and revitalizing petrochemical industry", keeping in mind of our mission of "providing better energy for better living" and focusing on satisfaction of the people's demand of good life.

A time will come for us to ride the wind and cleave the waves to reach the bank of our dream across the sea. Our past development benefits from the great support from all sectors of society and our future development needs your joint participation. We are grateful to all walks of society for your concern and support to us. We are convinced that SPC will have a brighter future as a result of our joint efforts.

Mar. 20. 2018

2017 Responsibility Performance Sheet

Economics			andin	
Indicators	Unit	2017	2016	2015
Total assets	100 million RMB	396.10	341.24	280.22
Operating revenue	100 million RMB	920.14	778.94	808.03
Total profit	100 million RMB	78.51	77.65	42.09
Earnings per share	RMB	0.568	0.551	0.301
Quantity of applications for invention patents	Piece	56	55	53
Customer satisfaction	%	96.49	96.22	95.33
Spot check compliance rate of products	%	100	100	100
Online procurement rate	%	99.6	100	100
Direct supply from manufacturers	%	99.2	97.5	97.60
Contract performance rate	%	100	100	100
Ratio of suppliers' obtaining ISO14000 environmental management system certification	%	58.53	38.61	34.00



Safety	and the set of the			
Indicators	Unit	2017	2016	2015
Annual morality rate of employees' work injuries	%	0	0	0
Annual rate of employees' serious injuries	%	0	0	0
Number of major incidents of fire hazards and explosions	Pce.	0	0	0
Number of major incidents of environmental pollutions	Pce.	0	0	0
Number of major incidents of occupational hazards	Pce.	0	0	0
Major incidents of chemical spills	Pce.	0	0	0
Major traffic accidents	Pce.	0	0	0
Major liability incidents	Pce.	0	0	0
Mortality rate per million man-hours	%	0	0	0
Input into work safety	10 K RMB	19369.7	23508.3	22346.5

Environment			, an trut	
Indicators	Unit	2017	2016	2015
Total environmental investment	10 K RMB	73411	17110	35670
Fresh water consumption	10 KT	6027.05	5762.28	5986.28
Discharge of industrial waste water	10 KT	2163.26	2298.27	2735.15
COD discharge	10 KT	0.73	0.76	0.81
Discharge of ammonia nitrogen	10 KT	0.0269	0.0274	0.0291
Discharge of waste gas	10K m ³	479.54	480.54	494.80
SO ₂ discharge	10 KT	0.98	1.27	2.47
Discharge of nitrogen oxide	10 KT	0.73	0.89	0.96
Total consumption of industrial energy resources	10 K	739.2	753.7	763.5
Electricity consumption	10 K kilowatt · hour	355568	361667	370333
Discharge of hazardous wastes	10 KT	1.01	0.71	0.42
Discharge of non-hazardous wastes	10 KT	67.23	69.51	75.75
Comprehensive recycling volume of sludge	10 KT	1.31	1.53	2.06
Frequency of major leakage of chemicals	Times	0	0	0

Note 1. Part general solid wastes were classified as hazardous wastes by adjustment in the National Hazardous Waste Inventory that took effect in August 2016, so the SPC's outsourced disposal of hazardous wastes in 2016 and 2017 was significantly increased on a year-on-year basis.

2. The Company purchases and uses packaging materials based on the demands from its wide customer base. As the types and amounts of packaging materials purchased and used are very diversified, the Company has not collected such data.

Company Profile



Located in Jinshan District, Shanghai, Sinopec Shanghai Petrochemical Company Limited (hereinafter referred to as "the Company") is one of the largest comprehensive petrochemical enterprises with integration of refining and chemical industry in China and also an important producer of oil products, intermediate

China. The Company owns independent utilities and environmental protection system as well as associated transportation facilities, including ocean transport, inland waterway channels, railway transportation and highway transportation.

petrochemical products, synthetic resin and synthetic fiber in

The Company grows out of Shanghai Petrochemical Complex, which was founded in 1972. In 1993, as a result of standardized reform of shareholding system for the state-owned enterprises, the Company became the first limited liability company in China with its shares listed on Shanghai Stock Exchange, the Stock Exchange of Hong Kong and New York Stock Exchange at the same time.

The Company has over 40 years of experience in petrochemical production operation and management. The product are classified into four varieties. The Company has won the premium quality product awards issued by the state and local government for many times.

Taking advantage of the advantages of integration of refining and chemical, the Company has proactively adjusted and optimized the product mix, kept on improving the product quality and varieties, optimized the production technology and improved the capacity of critical upstream units and improved enterprise in-depth resource utilization and the efficiency of comprehensive utilization, and constantly improved the capability of sustainable development.





As a refining-chemical company with strong awareness of social responsibility, the Company has always been considering "better energy for better living" as the corporate mission and proactively practicing sustainable development and social responsibility. The Company has adhered to the philosophy of "corporate shall have harmonious development with the environment" and incorporated the concept of "green and low carbon, beautiful petrochemical plant" into daily business activities, thusly awarded by all walks of society. The Company has followed provisions of "justification in case of non-observations" as stipulated by Guidelines for Report on Environment, Society and Governance, which are the rules for listing of securities at the Stock Exchange of Hong Kong Limited.

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Development Strategy



Considering "domestically leading and globally first-class" as the strategic positioning and led by the values of "good life is closely connected with petrochemical products", the Company benchmarked the advanced level of domestic and overseas refining and chemical enterprises, focused on the development idea of building a worldclass refining and chemical base, considered benefit improvement and intensification of growth as the target, took scientific & technological innovation and integration of IT application with industrialization as the driving force, based upon the industry and resources of SPC and surrounding areas, adhered to the concept of "mobilizing inventory with increments, expanding the extension from connotation, giving priority to low cost with due consideration to differentiation, paying equal attention to large-scale and refinement, attaching equal importance to intensification of management and encouragement of innovations", intensified refining and refined the chemical industry and spared no effort to build a safe, low-carbon, high-end and intelligent refining and chemical enterprise, thusly becoming an excellent enterprise of "prominent principal industry, green and low carbon, advanced culture and standardized management".

Corporate Culture

The Company pursued a corporate culture by inheriting Sinopec's corporate spirit of "loving my country, revitalizing petrochemical industry" and fine tradition of "three honesties and four strictness (to be an honest person, to speak honestly and act honestly in revolutionary cause; to have strict requirements, well-arranged organization and strict discipline in work)", "hard-working and down-to-earth style" as well as "refinement and preciseness", adhering to Jinshan spirit of "Entrepreneurship, Pragmatism, Solidarity, Dedication" and the management philosophy

of "challenging the advanced, performing refined management", observing the occupation code of "being dedicated to be a cultured person, observing regulations to be an honest person, keeping faith to be a civilized person" and practicing the corporate values of "People, Responsibility, Integrity, Excellence, Innovation, and Collaboration" and other fine traditions. As a result, they played a powerful leading and support role in SPC's development history.



Corporate Governance

The Company strictly abided by various laws and regulations of the state and listing locations and established a set of company governance system in compliance with international and domestic laws and regulations. SPC continued boosting innovation of system and mechanism in 2017, thusly laying a foundation for further standardization of operations as well as reform and development.

The Company firmly implemented the spirit of CPC central committee's Some Comments on Upholding the Party Leadership and Intensification of Party Building in Deepening Reform of the Stateowned Enterprises and unified intensification of the Party leadership with improvement of corporate governance by incorporating the contents of "the Party organization shall give play to the core functions of politics and the company Party committee shall have prepositioned deliberation right in BOD's important decisions" into the Articles of Association and the Rules of BOD's Debate for the first time in combination with the work practices of "new three committees" and "old three committees".

The Company perfected the investment decision-making procedure and improved the scientificity and quality of decision-making by way of the Rules of Debate for BOD's Strategic Committee.

Shareholders meeting



Meeting of board of supervisors



Deepen Reform

The Company earnestly implemented the state overall deployment for deepening the reform of state-owned enterprises, proactively adapted itself to the new situations of economic development and market and stably boosted the enterprise reform in depth by considering pushing forward the supply-side structural reform as well as quality upgrading and benefit improvement as the main line and taking intensification of enterprise vitality and anti-risk capability as the acting point.

The Company established a steering group for deepening of reform, released SPC's Guidelines for Implementation of Deepening the Reform and systematically deployed the activities of deepening the reform during "the 13th Five-year Plan". SPC sorted out 28 reform projects and finalized 7 key projects in 2017, for which the responsible departments were designated, the roadmap and schedules were defined. The Company established sound system and mechanism of "integrated overall arrangement, specialized management and market-oriented operations" to improve the enterprise management level of production operations.



Grassroots building year of party building

The Company determined that 2017 was "the grassroots building year of party building" and fully gave play to the role of grassroots party organization in boosting development, serving the masses, cohere the will of the people and promoting harmony. As a result, SPC's grassroots party organization building was solider and the party members' work performance kept on improving.

The Company established system framework, prepared and released "the 13th Five-year Planning of Party Building" and 13 work systems of party building, thusly obtaining system support for party building at SPC.



The Company intensified the leadership responsibilities. SPC party committee prepared and issued the Handbook for Party Building Practice of SPC Leading Group Members, so as to ensure that the party building requirements were implemented timely and accurately.

The Company explored new mechanisms and established "Accumulated Points System for Party Member Management" for quantitative assessment of the party members in fulfillment of their obligations and playing their roles, thusly constantly motivating the enthusiasm and initiative of grassroots party members.



Management and Planning of the 13th Five-year Plan of CPC Building

The Company will continue promoting process-orientation of the management mode, simplification of the organizational system, high-efficiency of the operating mechanism, documentation of system management, informatization of business implementation etc. during the 13th Five-year Plan of CPC Building, so as to continuously improve the management capability of "serving the business, pursuing efficiency and motivating vitality".



Process-orientation of management mode

Targets

- guide SPC to transform from functional management to process management;
- improve the company's capability of value creation and risk control;
- improve the business process handling efficiency

Measures

- Developed Guidelines for the Structure of SPC Process Management System;
- Implemented integration and optimization of core operating process;
- Continuously promoted optimization of business process, improved the business handling efficiency.

organizational system

Targets

 establish "simplified, efficient, flexible" corporate organization operation mode

Measures

- Simplified and optimized the total number of corporate management departments and specialized service
- organizations; • Scientifically adjusted the management scope of level-2 units;
- Explored the flat management mode of part level-2 units or business;
- Improved the system and mechanism of science and technology;
- Innovated capital management mode, improved the operating efficiency of state-owned capital and expanded the influence.

High-efficiency of operating mechanism

Targets

 establish the corporate operating mechanism of "efficiency, speediness, flexibility, compliance" and

responsibility system;

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- Measures • Innovatively established new type cooperative relationship for corporate internal split of work;
- Intensified quick transfer mechanism of external market and benefit stress;
- Explored introduction of authorization mechanism to improve the company overall decision-making speed.

Documentation of system management

Targets

 Improve the integrated documentation system that supports the enterprise operating mechanism

Measures

- Incorporated core value into routine management, promoted evolution from system management to cultural management;
- Comprehensively improved the design of SPC integrated management system;
- Intensified the work system building of "three basics" (basic level organization building, basic work, basic skill training);
- Adequately incorporated internal control and overall risk management into integrated management system.



Targets

 Achieve integration of informatization and industrialization, improve the capability of information to management innovations and support management

Measures

- Focused on development of three new types of capability, i.e. "lean and efficient production and organization capability of integrated refining and chemical, prompt and premium product supply service capability, accurate decision-making for operation and investment", which are identified under the situations of information;
- Built SPC process information platform;
- Promoted big data application.

Responsibility Management

On the basis of "the Triple Bottom Line" theory and the social responsibility management theory, the Company established the framework of social responsibility management, practiced the corporate social responsibility from such six aspects as the responsibility strategy, responsibility governance, responsibility incorporation, responsibility performance, communication of responsibilities and responsibility capability, and considered following items as core topics, including "revitalize petrochemical industry with innovation and pragmatic mindset", "create value in good faith", "develop business through winwin cooperation", "refined operation, safe and green management", "people foremost, benefit the staff" and "fulfill responsibilities, serve the society".



Responsibility Strategy

The Company firmly implemented such five major development concepts as "innovation, harmony, green, open and sharing", incorporated fulfillment of corporate social responsibility into the development strategy, established the strategic positioning of "building a domestically leading and globally first-class refiningchemical company", adhered to the corporate mission of "better energy for better living", practiced the corporate value of "People, Responsibility, Integrity, Excellence, Innovation, and Collaboration" and promoted the enterprise innovation development, green development and low carbon development. In combination with SPC management planning of "the 13th Five-year Plan", the Company incorporated the core indicators of corporate social responsibility with the management indicators and promoted achievement of processorientation of the management mode, simplification of the organizational system, high-efficiency of the operating mechanism, documentation of system management and informatization of business implementation.

Responsibility Governance

The Company kept on improving the mechanism of management system for corporate social responsibility, perfecting the management framework consisting of a corporate social responsibility steering group, in which the chairman of the board acts as the group leader and directors of all departments concerned work as the group members, and an implementation level undertaken by various function departments. The Company continuously improved various rules and regulations on corporate social responsibilities, incorporated the corporate social responsibility system into production operation management system and ensured implementation of the corporate social responsibility strategy.





Responsibility Incorporation and Responsibility Capability

The Company implemented responsibility incorporation strategy, boosted responsibility capability building and improved the responsibility management level.





Responsibility Performance

The Company abided by the CSR assessment indicator system by incorporating the requirements of listing locations and the advanced CSR standard system both at home and abroad with our own industrial characteristics and kept on improving the assessment indicator system and

Communication of Responsibilities

The Company's main stakeholders include governments, shareholders, customers, suppliers, employees and communities. Through establishment of diversified CSR communication channels, including the traditional media and new media, the Public Open Day, CSR report etc., SPC released the progress of CSR

performance management system through PDCA management mode.

In 2017, SPC won"the Green Development Prize"at the third Corporate Social Responsibility Summit Meeting of China (Shanghai) Listed Companies.

related system building and implementation to the stakeholders, listened to appeals from all parties and accepted reasonable recommendations, thusly establishing the relationship of win-win cooperation of mutual support and mutual benefit.



Communication ways: public benefit activities, Public Open Day, volunteer service, SPC exhibition hall Key actions: Co-construction with Jinshan District, SPC forum of science & technology

Communication ways: customer visit, marketing of new products, after-sales service, satisfaction survey Key actions: customer satisfaction survey, product introduction and marketing event

Communication ways: workers' congress, trade union, Youth League Committee, employees' activities, new media Key actions: workers' congress, publicity and dissemination of situations and assignments

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Communication ways: policy guidance, supervision and inspection, special subject exchange, routine exchange

Key actions: paid taxes according to laws and with credibility, security for important events, grassroots survey and research

Communication ways: shareholders' meeting, corporate announcement, regular reports, investors' exchange Key actions: released regular reports, timely and effective information disclosure

Communication ways: suppliers' meeting, bidding meeting, commendation of excellent suppliers

Key actions: make innovation of supplier management mode, suppliers' HSE meeting







At the transformation stage when new growth momentum was being bred and weakening of traditional growth momentum coexisted in petroleum and chemical industry, SPC adhered to the innovationdriven development strategy, upheld business promotion through quality improvement and was committed to satisfying sustained economic development and people's new demand of high-end petrochemical products for better living.

Supply premium products
 Deepen quality for business promotion
 Make innovations in petrochemical technology
 Build smart plant

Supply premium products

Based upon deployment of the Development Planning of Petrochemical and Chemical Industry (2016-2020), the Company was aimed at meeting the demand of new chemical materials required by economic and social development, strengthening process technology management, production operation management and production optimization management, being specialized in providing high-end and green energy and chemicals efficiently and stably in 2017, thusly providing better energy for better living.

Clean textiles

Clean fibrous raw materials that can reduce discharge of waste water from downstream, Functional fibrous raw materials that are harmless to the environment and human body

Reliable medical treatment

Raw materials of medical equipment and packaging materials that are in compliance with safety standards, Special fiber materials that are in compliance with medical standards

Sustainable dwelling

Architectural engineering plastics that meet low carbon environmental requirements, Plastic raw materials for piping, doors and windows that meet low carbon environmental requirements



Clean energy

Oil products with continuously updated environmental standards, More energy-saving and more environmental friendly energy exploration equipment and materials

Reliable beverage and food

Food packaging container and materials that are in compliance with sanitary safety standards, Degradable agricultural films and food packaging materials

Sustainable transportation

Vehicle and aviation fuel with continuously upgraded quality, Solid and reliable infrastructure construction and reinforced new materials



Improved the technology, the sulfur content of national V regular diesel was significantly reduced

SPC adopted catalytic diesel oil modification technology for technical revamping of diesel hydrorefining unit, which enabled the sulfur content of diesel to be reduced from about 400 mg/m³ to below 10 mg/m³. The quality of SPC's national V regular diesel had all achieved the target of "sulfur content should be below 10 mg/m³".





Strengthened process technology management

In 2017, SPC continued strengthening management of the technology discipline, improving the process technology system, refining process management and taking great efforts to improve the level of technological and economic indicators.



Strengthened production operation management

1. Unplanned shutdown management

Enhanced performance appraisal of unplanned

incident cause analysis and implementation of

• The performance appraisal should focus on

Revised and improved the performance

appraisal for production operations;

shutdown incidents;

rectifications.

In 2017, SPC continued reviewing and supervising major events of the production system, improving the operation management system and strictly implementing the performance appraisal and management of process technology, so as to minimize the production operation risks.

appraisal;

reduction:

control.

• Revised the indicators for performance

refined the detailed rules of performance

appraisal of flare gas emission reduction and

Carried out labor contest for flare gas emission

Incorporated source management and process

- gas emission management
- Special contest
- Worked out the Scheme of Special Contest for 2017 Long-term, Stable, Full Capacity and Optimized Operations of the Plant;
- Assessed the technical indicators of production units, indicators for assurance of utilities, indicators for implementation of shift coordination and indicators for implementation of major work in production system.

Delivery of regenerated asphalt from SPC

To solve the problem of difficulties in balancing of catalytic slurry oil, SPC's 2# FCC slurry oil deep topping system underwent processing technology revamping for hot-mix asphalt and the system was successfully put into operation on August 24, 2017. With catalytic slurry oil as the fundamental feedstock, the regenerate of hot-mix asphalt is blended with aged asphalt at appropriate proportion and then mixed at hot state. In this way, the aged asphalt is regenerated.

Continuous implementation of production optimization management

SPC further carried out production optimization management in 2017 to ensure stable supply of energy and chemical products and improve the profitability, while material balance and optimization of feedstock allocation proceeded.

SPC's Measures for Production Optimization Management in 2017



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Frequency of SPC's unplanned shutdown (times)

2015

2016

Deepen quality for business promotion

SPC was aimed at adjusting the structure, promoting transformation and increasing benefit for petrochemical industry, enhancing the total quality management system featured with all directions, whole process and all staff participation, so as to ensure all links impacting the product quality were under control, thusly improving the quality level in an all-around way and promoting quality upgrading and benefit improvement of downstream industry.

The product compliance rate reached 100% throughout the year. There were no quality incidents or recalls of the sold products due to quality issues.



Continuously improved the quality control system

Adhering to the quality policy that "quality is always the first priority", SPC kept on improving the quality control system in accordance with actual production operation situations at SPC.

Strengthened quality risk prevention and control

In 2017, SPC further improved the product quality risk awareness, expanded the product quality risk identification activities to various main products, pushed forward and followed up implementation of the quality control measures.



Based upon two basic national standards of food safety—General Requirements of Safety for Food Contact Materials and Products (GB4806.1-2016) and the Standard for Application of Additives Applicable for Food Contact Materials and Products (GB9685-2016), which officially took effect in 2017, SPC practically carried out implementation of the standards related to food contact materials (resins) and products as well as statement of compliance, and organized expressing the requirements of compliance statement to additive suppliers, so as to minimize our products' risks of health and safety as far as possible.

Further intensified standardization management

In 2017, SPC continued proactively endeavoring to draft national and industrial standards and further intensified SPC's leading position in relevant products. Besides, through strict enterprise standardization management, we pushed forward the normalization, scientization and routinization of main elements and links in production operations.



SPC's Measures to Intensify Standardization Management in 2017

Make Innovations in Petrochemical Technology

In 2017, SPC further enhanced the sense of urgency and sense of responsibility to accelerate the implementation of innovationdriven strategy, considered high-performance, high value-added, fine chemical new technology as SPC's main direction of scientific and technological innovations, continuously motivated the vitality and

product was awarded with the prize of 2016 Shanghai top 100

high-tech achievements transfer projects.

momentum of scientific and technological innovations and scored remarkable achievements in development of new technologies and new products, thusly making contribution to improvement of the comprehensive self-sufficiency rate of our country's new chemical materials.



Municipal industrial youth innovation contest.

Build Smart Plant

In 2017, based upon the Requirements for Incorporation of Information Technology with Industrialization GB/T23001-2017 issued by the Ministry of Industry and Information Technology, SPC pushed forward building of the information technology in an all-around way, deeply promoted building of smart plant and built the integrated and shared operation management platform, interconnected and smart production operation platform as well as prompt and safe

Improved specialized management of information technology

Centering on forging three new capabilities under the situations of information technology, SPC included the incorporation of information technology with industrialization into the integrated management system and enhanced system and standard building and performance appraisal of inspections, thusly continuously improving the capability of specialized management of information technology.

Information management system building Revised SPC Implementation Measures for Safety Management of Information System

Revised SPC Implementation Measures for Management of Information Technology Projects

Revised SPC Measures for Operation Maintenance Management of nformation Technology System







Academicians' work station assisted intelligent optimization and manufacturing

Qian Feng, academician of the Chinese Academy of Engineering and vice president of East China University of Science and Technology, established "the academicians' work station" at SPC. The academician expert team together with SPC and Jinshan District made collaborative innovation and development and provided reproducible and propagable experience to petrochemical enterprises to realize intelligent optimization and manufacturing. infrastructure platform. We provided powerful and new momentum to "transformation of method and adjustment of structure" through improvement of new capability under the information technology.

SPC was granted with the title of the model unit for implementation of the Incorporation of Information Technology with Industrialization by the Ministry of Industry and Information Technology in August 2017.

Deeply promoted building of smart plant

In combination with the Company's planning, current situations and demand of information technology, SPC worked out the construction framework and implementation plan for smart plant and associated projects and proactively consulted with research institutes to finalize the communication mode and data format for smart plant, thusly obtaining the industrial discourse right.





SPC carried out comprehensive emergency drill for information system

It was simulated in the drill that there was failure with network access to SPC relevant systems, which caused malfunction of ERP system, and it was expected that the repair would take two hours. Therefore, ERP level-2 emergency response plan was initiated and IC card emergency response module was also initiated synchronously. All relevant personnel at various positions implemented ERP business emergency process in accordance with the emergency response plan.





SPC is always committed to operating business in good faith, so as to create value through cooperation with the customer and supplier. We are committed to jointly developing with our partners through providing premium quality and sufficient quantity of diversified products and meticulous professional service as well as developing green supply chain.

Jointly create value with our customers
 Management of green supply chain

Jointly Create Value with Our Customers

Adhering to the concept of "customer the first priority", SPC provided high added-value products and value-added services to customers and jointly created value with customers in 2017; kept on

improving the customers' satisfaction, carrying out marketing with responsibility, safeguarding the customers' rights and interests, thusly becoming the customers' professional and intimate partner.



Improved efficiency and quality, provided high added-value products

Studied and judged the market trend, improved efficiency and quality

In 2017, SPC invited the market analyzer of professional information organization to review and analyze the data of daily anticipated prices, so as to improve the accuracy of market trend anticipation and provide decision-making support to optimization of product mix and benefit improvement.

Optimized linkage mechanism and supplied high added-value products

SPC optimized the linkage mechanism of production, marketing, study and application, continuously researched, developed and produced high added-value new products that met the customers' demand of quality and improved the product competitiveness.



Overfulfilled the plan and indicators for special feedstock of new products

Adhering to the customer-oriented concept, SPC pushed forward linkage of production, marketing and research of special materials for new products and held monthly meeting of production, marketing and research, thusly ensuring high efficient progressing of such links as the development and trial production of new products as well as optimization and production scheduling of special materials through favorable internal coordination mechanism.

Developed market and provided valueadded services

Intensified communication and cooperation, developed overseas market

SPC intensified business communication with domestic customers and improved the product quality safety by providing product service information via multiple modes; enhanced cooperation with overseas customers and improved the product market shares through maintaining regular customers and developing new customers.

Innovated e-marketing mode and provided valueadded services

In 2017, SPC adopted the customer service information system platform to release the service information in a timely manner and expanded new channels of online transaction for agent products and self-marketed new products; reached the two parties satisfactory best price with the customer through online auctions, so that the customers could obtain the highest product value.



Achieved win-win through "Internet + sales" SPC analyzed the varieties, distribution, monthly tendency and volume of online transactions as well as the regional distribution status of new customers, so as to provide products of premium quality and adequate quantity to "the retail customer" who can create considerable benefit.



Secured high quality service and improved product satisfaction

In 2017, SPC established different levels of customer visit and exchange mechanism to understand the customers' demand, opinions and recommendations, and provided diversified, individualized and all-round services to the customers. As a result, the product satisfaction reached 96.49%.



Carried out survey of customers' satisfaction SPC attached importance to serving the customer and proactively carried out survey of customers' satisfaction. Through analysis of the customers' feedback and recommendations, the Company sorted out 10 comments of rectifications and recommendations and organized SPC all departments to make specific corrections, prevention and rectifications.



Mean value of SPC's product satisfaction (%)



Carried out marketing with responsibility and safeguarded customers' rights and interests

Enhanced customer audit and contract quality management

In 2017, SPC adopted the marketing strategy of "direct sales as the principal sales model and combination of direct sales with distribution", enhanced new partner's access audit management from the source and suspended sales to customers who could not reach the national environmental requirements.

SPC improved the contract performance of agent sales and self-sales of new products in form of standing books, intensified the customers' information feedback, followed up the management mechanism and improved the contract management quality. As a result, the performance rate of sales contract reached 100%.



Improved the sales service management system

In 2017, SPC continued implementing differentiated product marketing strategy, redefined the sales process and standardized the sales service in accordance with the transition requirements of quality and environment management standard system, perfected the mechanism of performance appraisal for sales service, prevented and controlled the operation risks.

Secured the customers' rights and interests as well as information security

SPC has organized honest employment training for multiple times over the past years and signed 659 annual Statements of Honest Employment Responsibility. SPC concluded confidentiality agreement with every salesman to protect the customers' information security.

Green Supply Chain Management

Centering on the main work line of "advocating governance by law, proactive service, accurate control and safe assurance of supply", SPC abided by the Guidelines for Enterprise Green Procurement (Tentative), maintained the market environment of green and just supply, refined management and control of material warehousing quality, drove the supply chain to perform social responsibility, developed green supply chain and sought sustainable development with our partners in 2017.



Maintain market environment of green and just supply

Improved the supply resources management system

In 2017, SPC revised and improved the management system of supply resources for many times, enhanced suppliers' classification management, cultivated and motivated green strategic suppliers and main suppliers. As a result, the manufacturers' direct supply rate rose up to 99.20%; the suppliers' pass rate of ISO14000 environmental management system certification achieved 58.53%.

SPC intensified exclusive purchase assessment system by strictly controlling multi-hierarchy agents and severely punishing the incompliant suppliers, including punishment of suspending transactions and terminating the qualification of transaction.



Built just and transparent green procurement platform

SPC continued promoting framework agreement purchase, intensified auditing of schemes at the front-end stage of invitation to bids and carried out follow-up of the network platform for important and key materials, thusly ensuring that the overall bidding progress was under control and achieving dual improvement of both ITB scale and the procurement efficiency.

In 2017, SPC procurement rate through ITB reached 92.14% and the proportion of green purchase amount reached 100%; the purchase contract performance rate reached 100%; the saving rate of annual purchase funds reached 7.19%.

Refined the quality control for material warehousing

In 2017, SPC consulted with the customers and suppliers to utilize or replace the existing batches of overstocked materials to reduce the inventory backlog. The sum of annual "modifications for substituted utilization" amounted to 8.1355 million RMB; SPC continuously pushed forward "storage by the supplier" to optimize the inventory structure and achieved "storage by the supplier" by annual 73.68 million RMB. SPC enhanced the follow-up and on-site inspection of the progress for class A level 1 and level 2 materials. The compliance rate of material warehousing inspection reached 99.62%.

Drove the supply chain to fulfill social responsibility

Honest employment and standardized management

SPC carried out special education and lecture as well as knowledge test of honest employment; revised and improved 16 management systems, including material purchase, invitation to bids, transportation, management and etc. to define the requirements, duty interface and operation process for management of various links of material supply chain.

Safe production and green environment

In 2017, SPC intensified contractors' HSE supervision and control and strictly implemented prequalification of contractors' HSE; enhanced management of explosive hazardous chemicals and implemented the inspection and surveillance mechanism for unloading of hazardous chemicals; distributed the revised Notification about HSE for Carriers' Entry into Closed Area to carriers for prevention and reduction of various incidents.





Develop Business through Win-win Cooperation



As the first listed company listed on the stock markets in Shanghai, Hong Kong and New York, SPC strictly abided by the securities supervision rules and regulations of the listing exchanges, strictly executed financial audit system and information disclosure system, continuously perfected the governance structure, optimized operations, improved the investors' relationship management, so as to safeguard the investors' rights and interests, improve the corporate business performance and realize win-win cooperation.

Improve business performanceSafeguard investors' rights and interests

Improve business performance

Generally speaking, international oil prices underwent inter-area oscillation in 2017. The implementation rate of OPEC output reduction was far more than expected in the first quarter, so the international oil prices kept on running at high position. In the second quarter, the oil output in the USA, Libya and Nigeria increased, international oil prices went downwards in an oscillation way. In the third and fourth quarter of 2017, the international oil prices were at relatively high positions, which provided a favorable market circumstance to SPC. SPC started with our own operations to achieve cost reduction and benefit improvement and improve the corporate business performance with great efforts.

Business growth

SPC's state of business was good in 2017. The total assets, operating revenue increased.



Operation income

In 2017, centered on overall efficiency and profits of SPC, SPC made great efforts to seize the favorable market situation and actively carried out safety and environmental protection, optimizing operation, market development and cost reduction, which achieved good results in production and operation and created a high level of economic benefits in history.

index	2015	2016	2017
Total profit (unit: 100 million RMB)	42.09	77.65	78.51
Return on equity (%)	17.83	26.38	20.84
Earnings per share (RMB)	0.301	0.551	0.568

Financial security

In 2017, SPC's asset-liability ratio was stable, amounting to 27.94%, always below 30%.





Cost reduction and benefit improvement

Faced with complicated market and business situations in 2017, SPC took great efforts to achieve cost reduction and benefit improvement by centering on improvement of the development quality and benefit and carrying out activities from the perspective of optimizing production, refining management and technology advancement.



Focused on material balance and optimized the production operation scheme: optimized the process technology, reduced element input; promoted new mechanism of energy conservation to reduce energy consumption in production. Deepened the refined management, focused on key links and deeply carried out cost reduction and benefit improvement by means of funds management, price management, risk control etc. As a result, net financial expenses were reduced by 1.989 billion RMB and overhead expenses by 11 million RMB on yearon-year basis. Increased the product additional value and reduced the cost through technological advancement, thusly achieved cost reduction and benefit improvement. In 2017, SPC researched and developed 260.6 KT new products and achieved 2.037 billion RMB output value of new products; in which the product differentiation rate of new plastic products amounted to 88.63%. Compared with conventional products, the gross margin of benefit increase reached 141 million RMB.

Optimized the technology to reduce transitional materials By optimizing the process conditions,

such as the reaction gradient, reaction temperature and additive injection rate of the reaction kettle, the output of transitional materials in single renovation of full dull polyester chip product was decreased by 25.5% on a year-on-year basis, which thusly reduced the production cost.





Carried out special efficiency supervision for 7S management

SPC carried out special efficiency supervision for laboratory 7S management. Various analytical stations successively took actions to place laboratory instruments in an orderly and tidy way, so that they are easily dried and cleaned, which not only improved the laboratory environment but also realized cost reduction and benefit improvement.

Research and development of new polyethylene products SPC adopted the high density

bimodal polyethylene pipe material developed with domestic catalyst, which took ethylene as the co-monomer, to complete the commercialization pilot production, thusly laying the foundation to continue occupying high-end market in domestic PE piping products and maintaining the leading position.



Safeguard investors' rights and interests

In the course of improving business performance, SPC persisted in assuring the quality of information disclosure, enhanced communication with investors and safeguarded the investors' rights and interests.

Assure the quality of information disclosure

Adhered to the principle of authenticity, accuracy, timeliness and integrity of the information disclosure, concurrently followed the requirements of information disclosure raised by various exchange supervision organizations, coordinated SPC various departments to push forward information disclosure in an orderly way in accordance with specific requirements raised by chairman of the board at preparatory meeting concerned.



Improve investors' relationship management

SPC highlighted development of good relationship with investors and attached importance to building a communication platform with investors.





Refined Operations, Safety and Green Development



SPC deeply carried out green development concept, strictly implemented all the work safety management systems, kept the record of zero incident of work safety and environmental pollutions for consecutive years, prevented and reduced adverse impact to the natural environment brought about by production operation activities, thusly achieving the company's harmonious development with the nature.

Strengthen safety management
 Intensify environmental improvement
 Develop recycling economy
 Boost green development

Strengthen Safety Management

In 2017, SPC positively implemented the spirit of annual safety meeting, split and implemented the entity responsibility for work safety in an all-around way and deeply carried out identification and control of safety risks as well as investigation and control of potential hazards by considering "identification of major risks, eliminating of great potential hazards and prohibition of major incidents" as main line and overall implementation of the Safety Management Manual as the carrier; organized and developed drill of emergency plan and emergency response training to improve the emergency capacity against risks; enhanced contractors' management and improved the capability of



Overall split and implementation of entity responsibility for safety management

• Based upon the work safety management requirements of "identical responsibility for Party and government offices, dual duties for one position", the principal of Party and government offices, the administrative principal of organs and departments of all units signed on the 2017 HSE Responsibility Statement;

• Various levels of each unit signed the HSE Responsibility Statement and all staffs signed Letter of HSE Commitment. The on-thejob signature rate reached 100%;

 Established specialized sub-committee of safety for logistics and communications to assume responsibility for corresponding specialized safety management.



self-management; continuously carried out HSE management training to improve all staffs' awareness of HSE responsibility; SPC attached great importance to the work safety management of hazardous chemicals; implemented the documents of "thirteen ministries and committees" and organized the establishment of specialized firefighting brigades. There were no major or extra serious incidents of work safety, occupational poisoning or environmental pollution at SPC in 2017. Various HSE indicators were successfully accomplished and the safety management indicator of ensuring "Seven Zeros" was achieved.





Carried out drill of emergency plan and emergency response training

Based upon the work requirements of various parties on emergency management, SPC works out the annual emergency drill plan every year. In total, there were 933 emergency drill plans submitted to Shanghai Municipal Emergency Response Office and Sinopec Safety Supervision Bureau in 2017. SPC jointly carried out the table-top drill of Fire and Explosion at SPC Storage Tanks with the Party School of Shanghai Municipal Party Committee. As a result of the drill, we tested the effectiveness of the emergency plan, improved the decisionmaking and execution capability in quick handling of emergencies and enhanced the emergency linkage with local government.

Carried out investigation of potential hazards and achieved the objectives of potential hazard control

SPC mobilizes all staffs of every unit to find out various potential hazards existed in production operations and construction work every year, makes identification and rectifications of potential hazards that are difficult to be rectified, works out specific preventive measures and emergency response plan before the rectifications are completed and carries out drills on a regular basis, so as to prevent occurrence of incidents. In 2017, SPC arranged all units to re-investigate the potential hazards at the tank farms in accordance with the Guidelines for Investigation and Identification of Potential Hazards at the Tank Farms in Sinopec Uphill Battle, summarized and discussed about the existed problems and discussed about the rectification scheme.



Enhanced contractor management and improved self-management capability

SPC adopted following measures to enhance contractor management: carries out annual prequalification of HSE for all contractors; carried out contractors' mobilization HSE education and training on a regular basis; perfected whole process video monitoring of the production area and high risk operations; intensified performance appraisal for contractor violations participating in the construction; incorporated contractors into SPC's HSE management system for unified requirements and management as well as strict performance appraisal; organized contractors' "dual certificate" training; continued with contractors' second party HSE review.





Intensified management and control of safety risks in an all-around way

Based upon regulations on risk management, SPC assessed, reviewed and released the company level major safety risks and worked out requirements for management and control of major safety risks. As per different risk levels, we established "four colored" safety risk distribution diagram and set up the bulletin board.

As per the requirements that "risks must be contracted", contractor of the company level safety risks participated in fixed point risk contact activities and understood the risk situations at the risk point as well as implementation of risk mitigation measures and risk value reduction status.



Complete coverage of work safety management for hazardous chemicals

SPC convened producers of main hazardous chemicals and essential departments for coordination about the MSDS (material safety data sheet) and label fabrication issues of hazardous chemicals, defined the work process and requirements; strictly required units which didn't complete the notification board of major hazards to implement ERP report, fabrication and installation within limited time; organized Training Course for Safety Standardization Self-Assessor of Hazardous Chemical Producer to Obtain Certificate; organized amendment of SPC's Detailed Rules for Implementation of Hydrogen Sulfide Protection and Safety Management and SPC's Regulations on Safety Management at Unloading Station.



Established full-time firefighting team to secure firefighting safety

With help of Shanghai Firefighting Department and Jinshan Firefighting Detachment, SPC proactively organized establishment of full-time firefighting team. In the meantime, SPC reached a substantial consensus on how to make handover with the firefighting department, enhancement and improvement of equipment, construction of the commanding center for receiving and handling of alarm, and made deployment for specific handover/takeover. The first batch of backbones of the full-time firefighting team was officially stationed at SPC in August 2017 and the second batch successively in October.



Leaders take charge of the shift and go to grassroots for supervision in case of major operations

SPC organized leaders to implement leading of the shift and grassroots safety supervision in case of major operations, implement "dual duties for one position" to ensure effective development of safety and environmental protection activities. In 2017, leaders took charge of the shift for 591 times and went to the grassroots for supervision for 2,770 times, timely solved and rectified 1,259 safety and environmental problems and potential hazards.





Carried out HSE education and training to improve awareness of safety

• Organized multiple levels of HSE education & training and contest to improve the staffs' consciousness of HSE responsibility. In total, 9,592 person times participated in various HSE management training courses organized by SPC;

• Carried out collection of HSE exchange paper;

 Prepared pocket book for anthology of 2017 quarterly incident cases, which included various incidents occurred recently. The pocket books were distributed to various shifts for employees to learn HSE and receive incident cautionary education.



Carried out surveillance and inspection of equipment maintenance on a regular basis to eliminate potential hazards of safety

SPC found out various problems through many safety surveillance and inspection methods, such as monthly inspection of positions, comprehensive major safety inspections before festivals, "four-no and two-direct" inspections (no issuance of notice, no prior notice, no listening to report, no reception or escort; direct rush to grassroots, direct rush to job site), specialized inspection and etc.; timely implemented rectifications and troubleshooting in case of any findings of potential hazards, worked out and implemented effective safety measures for potential hazards or problems that could not be rectified for the time being, listed the rectification plan to eliminate the potential hazards of incidents as far as possible.

Intensify Environmental Protection

SPC attached great importance to the environmental protection and carried out the concept of environmental protection through every link of production operations, thusly minimizing impact of production operation activities to natural environment and achieving harmonious corporate development with the nature.

Clean production

- Optimize production
- technological process

 Patrol inspection and
- treatment of odor
- Informatization building for environmental protection



Strictly abided by environmental laws and regulations

In 2017, SPC strictly controlled discharge of pollutants by following applicable laws and standards, such as the Environmental Protection Act of the People's Republic of China, the Atmospheric Pollution Prevention Law of the People's Republic of China, the Water Pollution Prevention and Control Law of the People's Republic of China, the Solid Waste Environmental Pollution Prevention and Control Law of the People's Republic of China, the Discharge Standard for Pollutants of Petroleum Refining Industry, the Discharge Standard for Pollutants of Petrochemical Industry, General Rules for Technical Guidance on Self-monitoring of Pollutant Discharging Organizations. Shanghai Municipal Environmental Protection Rules, Shanghai Municipal Standard for Comprehensive Discharge of Atmospheric Pollutants, Shanghai Municipal Standard for Comprehensive Discharge of Sewage etc.

Intensified clean production from the sources



Optimized production technological process

In 2017, SPC continuously carried out technical innovations for clean production, constantly optimized the production technological process, worked out the implementation plan for clean production projects, achieved effective recycling of high value-added organics and practically solved the problem of pollutant discharge.



Enhanced odor monitoring and treatment

SPC developed the Rules for Patrol Inspection of Odor within the Plant Area to define the route of patrol inspection of odor, enhanced odor monitoring at the plant, focused on traceability and rectifications of the odor and achieved continuous emission reduction of volatile organics (VOCs). The VOCs discharge at SPC in 2017 decreased by 16.87% on a year-on-year basis.



Improved informatization in environmental monitoring

SPC established and commissioned the informatization platform for environmental management and auxiliary decision-making system for traceability of environmental protection for real-time understanding of the pollution discharge and improved the company's capability of analysis of and response to emergency environmental monitoring and environmental sudden events.

Deeply carried out environmental cooperation

Deepened cooperation in regional environmental protection

In 2017, SPC continued participating in comprehensive environmental treatment of Jinshan District and held 12th joint conference for regional environmental protection with Jinshan District of Shanghai and Pinghu of Zhejiang Province to jointly push forward regional ecological environmental protection.

Continuously carried out the Public Open Day Program

SPC has accumulatively held 54 times of the Public Open Day Program, truthfully disclosing the environmental information to the public, eliminating the public misunderstanding and prejudice against petrochemical enterprises and enhancing mutual trust between enterprises and local government.



Intensified terminal pollution treatment



Standardized the environmental protection management for construction projects

SPC standardized management of "Three Simultaneities" for construction projects, strictly reviewed the implementation of environmental protection measures in various links, such as the feasibility study, design, construction and confirmation of pilot production conditions, and eliminated potential environmental hazards in later period of project construction and production.



Pushed forward plant modifications for ultralow emissions

In 2017, SPC implemented and completed the boiler modification project for ultralow emissions and replaced the desulfurization, denitration and dedusting devices. The concentration of pollutants at the boiler outlet was significantly decreased after completion of modifications, which laid a solid foundation for enforcement of new environmental standard.



Ensured harmless treatment of wastes

SPC strictly observed and enforced applicable laws and regulations of the state and listing locations by entrusting qualified organizations for disposal of various hazardous wastes generated in the course of production. Hazardous wastes transfer manifest system is strictly enforced for the process of transfer of hazardous wastes. SPC generated hazardous wastes 10,082.1 tons, harmless wastes 672,000 tons in 2017 and the proper treatment rate of hazardous wastes reached 100%.

Discharge of pollutants continuously decreased

SPC's discharge of COD, ammonia nitrogen, waste water, nitrogen oxide, SO_2 and waste gas amounted to 7,292.5 tons, 268.5 tons, 21.633 million tons, 7,346.0 tons, 9,756.5 tons and 4.795 million m³, respectively in 2017, which presented a decreasing tendency on a year-on-year basis.



Changes of water pollutant discharge on a year-on-year basis





-20%





Changes of atmospheric pollutant discharge on a year-on-year basis



Develop Recycling Economy

Through modifications of environmental protection equipment, optimization of production technology, enhancement of accurate control and development of technical exchange, SPC proactively developed recycling economy, pushed forward efficient application and recycling application of resources and promoted comprehensive utilization of by-products, thusly achieving low consumption, low emissions and high efficiency.



Benefit of recycling economy continuously increased

SPC proactively developed the recycling economy. The production impact to environment continuously decreased.



Implementation of emission reduction and benefit improvement in plant modifications

SPC focused on intensification of equipment modifications for hydrogenation unit, EG unit and spent sulfur recovery unit of refining, so as to promote recovery of wastes and achieve emission reduction and benefit improvement.

Repair of existing equipment and utilization of discarded equipment to increase output and reduce consumption

SPC selected existing equipment from the out-of-service FCC unit for utilization, thusly facilitating output increase of aviation kerosene and reduction of energy consumption, monthly achieved:



Increase the output of aviation kerosene by **4,230** tons Reduction of energy consumption by **0.032** ton standard oil Economic benefit by **21,6** million RMB

Promoted recovery of spent sulfur from oil refining through equipment replacement

SPC put the spent sulfur recovery equipment into service, which achieved dual effects of emission reduction & benefit improvement and recycling. As of December 2017, totally 300 tons of spent sulfur was cleaned from the unit.



Cleaned spent sulfur **300** tons Direct economic value **246,000** RMB

Saved **almost 1 million** RMB of environmental protection expenses

Diesel quality upgrading

SPC revamped the hydrogenation unit and improved the diesel quality; the heavy oil utilization rate reached above 45% and the centane number of diesel increased by nearly 10 units.





Replaced equipment to facilitate waste gas recovery

SPC's EG CO_2 offgas catalytic oxidation project and EG waste gas incinerator project were put into operations, which transformed organics in waste gas into harmless products and recovered the heat generated from incineration.

Reduced offgas emissions from the unit

SPC took multiple measures at the same time for implementation of offgas standard upgrading and emission revamping project, oxidation RTO upgrading project etc., improved and optimized equipment and facilities to reduce hazards caused by offgas emissions.



Optimized the process to facilitate recycling of wastes

SPC proactively optimized such production technologies as condensed water circulating and recovery technology as well as oil vapor recovery technology, thusly pushing forward recovery of condensed water, transition materials and waste gas.

Made technical revamping for recycling of condensed water

SPC implemented clean production revamping projects and thusly achieved energy conservation through blower by 10% and comprehensive energy conservation by 20%; optimized the steam condensed water user terminal and achieved recycling of condensed water.



Adoption of cutting-edge technology to facilitate complete oil vapor recovery

In 2017, SPC adopted new catalytic oxidation technology, which enabled all five berths at the chemical jetty to possess capability of oil vapor recovery and avoided oil vapor pollution in the course of lading at the jetty.



Facilitated green development through accurate management and control

SPC highlighted fulfillment of responsibilities and pursued accurate management and control, improved benefit through management, facilitated green development through management, plotted new blue print of corporate development through management and adapted ourselves to new economic era of China through management.

Facilitated recovery of scattered agent through adoption of series recovery measures

SPC took series recovery measures in the course of unloading and recovery at EG unit. As a result, the loss quantity of scattered agent significantly decreased and the recovery volume created a historical new height.

Agent recovered **183.65tons**



Optimized process to reduce feedstock loss

SPC kept on optimizing the feedstock process, achieved boundary operations through adoption of advanced control system and reduced the material loss in the fractionating tower. Consequently, various feedstocks and materials had their best use.

As of December, material loss was cumulatively reduced by 157.5KT

Benefit increased by
4.14 million RMB
Recovery of residual slurry for cost reduction

SPC carried out recovery of residual slurry and recovered 200 kg slurry with 24 filters per day in average, which reduced waste of residual slurry and saved the production cost by above one thousand RMB for the unit.





Optimization of management for settlement of inner leakage of reboiler

SPC adopted "reverse differential pressure" method, which properly controlled inner leakage of reboiler. The problem of oil contamination of FCC gasoline was effectively solved.

Reduction of package loss with innovative method

SPC adopted fixation of wood pallet for elimination of the loss of heavy film due to tipping or fraction in the course of transportation. Consequently, the utilization rate of heavy film for packaging purpose was increased to 98.2%.



Implementation of material recovery

SPC placed environmental protection at the same height with safety. In the course of shutdown, on the basis of ensuring recovery of liquid phase materials, the system gaseous phase materials were recovered. The liquid phase materials at the cold and hot section of the compressor were adequately recovered. The system materials were pressed to the storage tanks via the recovery pipeline. Materials in the system were "eaten up and sucked clean" as far as possible.



Extensive exchange for improvement of technical level

Based upon the partners' mechanism of exchange and the platform of peer technical exchange, SPC enhanced technical exchange with domestic and overseas organizations about recycling of wastes.

Technical exchange with partners

SPC positively carried out technical exchange with the design institute of Zhenhai Petrochemical Engineering Company Limited and other partners about offgas purification at sulfur recovery unit and side ammonia extraction at sour waste water stripper unit, thusly providing effective schemes to the "safe, stable, long-term, full capacity and excellent" operations of the circulating unit.



Carried out peer technical contest of HAZOP

SPC took part in 2017 Sinopec contest for technical application of HAZOP and won three gold medals, one silver medal in individual competition and second prize in team competition, in which the sulfur recovery unit won bronze medal in team competition.

Carried out technical exchange with foreign company about circulating and recovery technology

Dupont—MECS Corporation visited SPC for technical exchange about offgas desulfurization, mutual learning of experience and passing on technology about level control of the knockout tower and foaming of the scrubbing solution.





Boost Green Development

As per the Energy Conservation Law of the People's Republic of China as well as Guidelines for Energy Conservation and Emission Reduction in Petrochemical and Chemical Industry and other policies and regulations, SPC practiced low carbon development and made contributions to mitigation of and adaptation to climate changes. The Company kept on improving the landscaping level of the plant area, continuously carried out bay ecological remediation activities, conserved biological diversity and maintained ecological safety.

Intensified energy conservation and consumption reduction, practiced low carbon development

Enhanced performance appraisal of energy consumption

The Company kept on establishing and perfected energy conservation management and performance appraisal system and rationally worked out the performance appraisal indicators for energy consumption of the units. Multiple indicators of performance appraisal for energy conservation reached industry advanced level.

Technical revamping for energy conservation

In 2017, SPC accelerated to promote construction of waste heat recovery, ethylene debottlenecking revamping and other key technical revamping projects of energy conservation, which in total saved 20,000 tons standard coal.

Promoted energy conservation technology

SPC highlighted research & development of and input into energy conservation technology, enhanced technical exchange about energy conservation with external world and continuously improved the energy conservation technology's supporting role to energy conservation and consumption reduction.

Carried out afforestation and landscaping to maintain ecological safety

SPC is committed to the conservation of biological diversity and has been successively carrying out afforestation activities for many years. In 2017, the increased green area was 7,293 m² and the green coverage ratio reached 36.3%. SPC's levee road was selected as Shanghai "characteristics road of landscaping". In 2017, SPC enhanced management of energy conservation and technical energy conservation, so the total consumption of industrial energy resources was 7.392 million tons, decreased by 1.92% on a year-on-year basis, and the energy consumption per unit output value was 1.080 ton standard coal/ 10 K RMB, decreased by 17.30% on a year-on-year basis. The carbon dioxide emission of SPC was 10.3984 million tons, decreasing by 0.59% on a year-on-year basis.









SPC was committed to safeguarding the employees' rights and interests, improving the employees' welfare, securing the employees' health and boosting the employees' career development, so that they can have a sense of gain, a sense of satisfaction and a sense of happiness.

Harmonious labor relations
Occupational health and safety
Boost employees' career development

Harmonious Labor Relations

SPC abided by the Labor Law and the Trade Union Law of the People's Republic of China, respected and safeguarded the employees' rights and interests, prohibited the use of child labor and the forced laborer and protected the employees' privacy; SPC established and perfected multi-level, multiform and multi-channel routine coordination

Played the bridge role of the workers' congress and the trade union

Considering the worker's congress and the trade union as the platform and channel and based upon the situations, challenges and opportunities, development & planning and key measures, SPC deeply communicated with employees, listened to and responded to the employees' comments and recommendations.

SPC established and perfected multi-level, multiform and multi-channel routine coordination and communication mechanism and was committed to establishing harmonious labor relations. The Company's democratic management received favorable comment from experts of All China Federation of Trade Union.



First session of 7th term of workers' congress at SPC

Prohibited any forms of discrimination

SPC equally treated all staffs and employees by strictly prohibiting such discriminations as gender, region, religion, nationality etc. in terms of recruitment, remuneration, training, promotion etc.

SPC concluded special collective contract for protection of female employees' rights and interests and safeguarded the female employees' special rights and interests; promoted equality of opportunities for both male and female employees by way of female employees' quality engineering construction and the mechanism of fostering model female employees.

> Social insurance coverage rate 100%

articipation rate

Percentage of female management staff 17.80%



and communication mechanism and was committed to establishing harmonious labor relations. By the end of 2017, there were 10,361 staff members and employees at the Company, of which staffs and employees with university degree and above accounted for 25.76%. The employee quitting rate in 2017 was 0.97%.

Improved remuneration and holiday system

Abiding by the Labor Law and applicable Shanghai municipal regulations, SPC paid five social insurances and one housing fund for employees and established incentive annuity and supplementary public reserve fund system; avoided employees' overtime as far as possible, paid overtime pay to overtime workers; established and improved the employees' paid leave and recuperation system.



Company leaders greeted first-line employees at festivals and on hot days

Financial underpinning of poverty stricken employees level by level

By paying supplementary medical insurance for employees and establishing corporate help and mutual fund for employees, the Company underpinned the poverty stricken employees level by level.

Caring for laid-off workers and retirees

The Company established a complete set of assistance systems for laid-off workers who were laid off due to adjustment of the corporate production operations and retirees, caring for and assisting the retirees with their health care and recreational activities.

3464 persons

at festivals 225 person times 16.59 million RMB

Physical examination rate for retirees **85%**

Occupational Health and Safety

SPC abided by the Work Safety Law and the Law on Prevention and Control of Occupational Disease of the People's Republic of China, was committed to creating safe working conditions to safeguard employees' health.

Safeguarded employees' health

SPC safeguarded the employees' health through organizing physical examination, establishing health file, cooperating with wellknown hospitals to open green passage for medical treatment etc.

Employees' physical	Health file	Occupational
examination rate	coverage rate	disease rate
99%	100%	0%



Promoted EAP application in an all-around way

To help employees relieve their work stress, adjust emotion and boost psychological health, SPC started experimental implementation of EAP (employee assistance program) from the second half of 2013 and promoted the same in an all-around way in 2017.



Collection and selection of "happy employee" through public appraisal

In combination with EAP, SPC carried out collection and election of "happy employee" through public appraisal, requiring that the candidate could take the lead

to promote working with joy and drive employees to form a joyful atmosphere of work.



Intensified protection of occupational safety

SPC intensified the occupational safety protection through establishment of sub-committee of safety for disciplines of logistics and transportation as well as quantitative evaluation of risk.



"double blind" drill and desktop drill, targeting at avoiding damage to employees in case of incident.

Safety education rendered by lively activities

of QC Center released their inhouse periodicals of safety on HSE bulletin board, reminding employees to improve their safety awareness through vivid cartoon and real cases.

employees to create safety cartoons and demonstrate them, so as to boost indepth development of safety education.

Activity of "I Diagnose for Safety"

adoption rate

96%

Employees'	Employe
participation rate	
100%	

ees' recommendation Treatment rate of diagnosis recommendations above 85%

Boost Employees' Career Development

The Company abided by the Vocational Education Law of the People's Republic of China and improved the training software and hardware to facilitate employees' career development; improved the employee incentive mechanism and provided diversified and fair

Built intelligent training system

The company attached great importance to intelligent building of training system. Apart from existing simulation training, remote training and courseware development, the Company also established training resource sharing platform, including the curriculum bank, teacher resource bank and teaching material bank.

Intensified training quality control

Through intensification of inspection of teaching quality and patrol inspection records, the Company conducted assessment of training courses and items to strengthen training quality control.

Intensified assessment of satisfaction to training programs

The Company incorporated the assessment of satisfaction to training programs into the performance assessment indicator sheet of the training and exchange arrangement center and further split the performance assessment indicators to its subordinated departments and even every staff of the departments, so as to transmit stress level by level and ensure the training quality.

Training programs **110**

Person times of training Exc 14,764 person times

4

Improved the mechanism of incentive and performance assessment

The Company developed the Rules for Scoring of 2017 Performance Assessment Indicators, strengthened the guiding role of performance assessment and enhanced the transparency and justice of performance assessment.

All staff monthly performance score management By adopting "all staff monthly performance score management", workshop 1 of the Storage & Transport Division allocated specific work to individuals, thusly forming an incentive mechanism to positively guide the employees and building harmonious and positive working environment.

Diversified and just passage for development

The Company provided various promotion sequences for management personnel, technicians and operators, so that employees can obtain suitable development opportunities. In addition, the Company also established an equal, open and fair procedure for competitive recruitment, so that competent persons can be employed. development passages to various employees. Besides, SPC organized various kinds of recreational and sports activities to facilitate employees to relax themselves, so that they can be more proactive with a more positive mindset in their career.

Organized colorful recreational and sports activities

By way of organizing diversified recreational and sports activities, the Company facilitated employees to relax themselves, so that they can strive to make more progress in career development with more positive mindset.

Enabled the recreational and sports activities to be emotional bond

The Company facilitated communication between employees and boosted the feeling among them by way of various recreational and sports activities. The Storage & Transport Division carried out the themed activity of "a thanksgiving heart, thanks for your company, gratitude to mentors, keeping in mind of mentors' kindness", in which the apprentice and mentor jointly completed the flower arrangement works and the apprentices wrote down their blessings on the card to express their gratitude to mentor.

Combination of recreational activities with Party building activities

The Company combined recreational & sports activities with Party building ones, incorporated lively activities into coaching and cultivated employees with favorable mindset of serving the people and devoting to the people. For example, SPC held the speech contest "greeting the 19th CPC National Congress with my youth and follow the steps of CPC with mission in mind"; the Storage & Transport Division held the youth development challenging contest of "practicing the spirit of 19th CPC National Congress in the name of youth"; the Chemical Division carried out reading activity of "reading theory and tasting typical works".





Fulfill Responsibilities and Serve the Society

The Company was keen on public welfare, joined hands with surrounding communities for joint development, enhanced communication with the public, jointly built a harmonious society and was committed to helping the poverty stricken people, so that more mass in straitened situations could enjoy warmth offered by the big family in the society.

Pay taxes in good faith and jointly plan development
Focus on communication and jointly create harmony
Combat corruption and advocate integrity
Public welfare and volunteer service

Pay taxes in good faith and jointly plan development

The Company abided by the Law of Corporation Income Tax and Provisional Regulations on Value-added Tax of the People's Republic of China, paid taxes with honesty, established all-round cooperation mechanism with surrounding communities and jointly plan development with them.

Paid taxes honestly according to law

The Company paid taxes honestly according to law and the amount of taxes paid has ranked top three in Shanghai industry enterprises for consecutive years.



Establishment of multi-level cooperation mechanism

To jointly plot development with surrounding communities, the Company established a stable working mechanism of cooperation and communication with Shanghai Municipal Jinshan District Government and Pinghu Municipal Government of Zhejiang Province, thusly maintaining high level consultation and communication.

Leaders of Pinghu, Zhejiang Province visited SPC for cooperation

On September 18, 2017, Qi Hailong, Secretary of CPC Jiaxing Pinghu Municipal Committee, Hu Shuiliang, director of the standing committee of Jiaxing Pinghu municipal people's congress, Xu Chunlin, chairman of Jiaxing Pinghu municipal committee of CPPCC and Zhong Xudong, executive vice mayor of Jiaxing Pinghu visited SPC for discussion about in-depth cooperation.

Through establishment of grassroots cooperation mechanism between SPC's grassroots Party branches and the Party branches of surrounding communities, the Company and locality achieved mutual complementation and sharing of resources.



community Party branch for joint development

he The Company co-developed with educational and cultural

Jointly fostered solid human capital

organizations of surrounding communities, jointly fostering sustainable developed human capital.

The Company provided training programs and opportunities of internship to Jinshan District, Shanghai and even national wide colleges, vocational schools, technical secondary schools that have petroleum and chemical disciplines. In 2017, SPC established mechanism of internship for university students with 12 universities of "the 985 and 211 project", including Zhejiang University, Dalian University of Technology etc. for the first time.

The Company kept on upgrading SPC exhibition hall to provide science popularization education and patriotism education to surrounding communities.

Co-established safe living environment

The Company co-created safe living environment for the people through establishment of the mechanism of emergency information release and feedback with Shanghai Municipal Emergency Early Warning Center and implementation of joint emergency drill of firefighting, anti-terrorist, pipeline leakage and etc. together with Shanghai Jinshan District, Pinghu of Zhejiang Province, Jiaxing harbor district etc.

Established the mechanism of emergency information release and feedback with Shanghai Early Warning Center

The Company had access to terminal of Shanghai emergency early warning release system in 2016 and established the mechanism of emergency information demand feedback with Shanghai Municipal Emergency Early Warning Center in 2017, cooperating to ensure work safety in petrochemical industry with professional meteorological service.

Guided by experts from the Ministry of Public Security, SPC cooperated with Shanghai Firefighting Department and Jinshan Firefighting Detachment and established the corporate full-time firefighting brigade in 2017.



Inauguration ceremony of SPC's full-time firefighting brigade

Focus on communication Combat corruption and and jointly create harmony advocate integrity

The Company abided by the Environmental Protection Act and Measures for Disclosure of Environmental Information of Enterprises and Public Institutions of the People's Republic of China, intensified communication with surrounding residents in forms of the public visit day etc., responded to the public concerns, gained the public understanding and co-created harmonious social atmosphere.

Gave play to the role of popularization of science to gain the public understanding

The Family Day Activity bears the function of science popularization

The Company held the Family Day Activity of the Public Open Day on July 27, 2017, invited pupils and their parents to take part in the "Summer Camp of Science Popularization", popularized petrochemical knowledge in the course of their visit to the central control room of part refining units, SPC exhibition hall and emergency commanding center and responded to the public concern about the work safety in petrochemical industry.

The Company attached importance to giving play to the role of public visit day, so as to enable the public to understand SPC's efforts and achievements in securing safety and environmental protection and gain the public understanding of work safety in petrochemical industry. SPC retained public environmental supervisor for proactive acceptance of surveillance, thusly gaining trust of the public.

Intensified system building of Public Open Day

Gave play to the role of external publicity platform and won reputation for the country

SPC attached importance to giving play to the role of external publicity platform of the Public Open Day and received higher level of foreign delegation, offering opportunities for them to take a glance at SPC to perceive the achievements scored by Sinopec enterprises in improvement of safety and environmental protection, and thusly won reputation for our country.

To improve the standardized management level of the Public Open Day, the Company organized personnel to go to Zhenhai Petrochemical Co., Ltd. for survey and research and present schemes about optimization of the system design, organization structure, business process, the mechanism of performance appraisal and etc., including improvement of measures for training and management, performance appraisal and rewards of the volunteer commentators.



training course in Public Open Day

The Company abided by China and Shanghai municipal applicable laws, strictly combat corruption and uphold integrity, prohibit blackmail, fraud, money laundering etc., thusly making contribution to purification of the social morality.

Improvement of anti-corruption system

in Overall Control of SPC's

The Company established "SPC surveillance committee", set supervisor of Party conduct and clean & honest governance, controlled the risks of sensitive positions and partners and reinforced the system fence against corruption.

System in Overall Control of SPC's Anti-corruption Developed the Scheme for Implementation of SPC's System and Mechanism of Surveillance Established SPC's Surveillance Committee				
Supervisor System of Party Conduct and Clean & Honest governance Established 3-level supervisor network for clean & honest governance, adopted hierarchical responsibility system	Carders' Archives Management System Loose-leaf binder for record of middle-level carders' clean governance			
Position Risk Prevention and Control System Established position cleanness risk prevention and control system Established exchange and job rotation system for sensitive positions	Partners' Risk Prevention and Control for Clean & Honest Governance Carried out inquiry of Partners' archives about bribery crimes			
Fundamental Clue N	lanagement System			

Carried out Anti-corruption Education

The Company carried out anti-corruption education in forms of Party lecture, League lecture, new media and "clean and honest governance of a family", thusly firmly setting up the awareness of cleanness.

Continuously promoted the program of "building an honest family"

The Company sent goody back of clean governance and greeting letters for promotion of clean governance to family members, signed letter of commitment for promotion of clean governance and reminded the family members to act as "secretary of family discipline inspection commission".



Public welfare and volunteer service

Considering significant building of "Babysbreath" volunteer service brand as the fulcrum, the Company was dedicated to various public welfare activities and poverty & difficulty relief, so that more poverty stricken mass can enjoy the warmth of the social big family.

"Babysbreath" volunteer service brand

The Company established the Youth Volunteer Service Team in 1996 and formed the unified identification of "Babysbreath" in 2015. Since then, the corporate volunteer service brand building has entered into quick development stage.



Three major lines of SPC's volunteer services



1300 members

in 2017 60 sessions



The Company successfully built "the Babysbreath" volunteer

Donated stem cell to save life

The Company called on employees to carry forward the humanitarian spirit and proactively enroll for China's stem cell bank, so as to save more lives with the best effort.



Feng and He Dan from the Public Utilities Division

Participants of China's 6 persons

stem cell bank: 1700 persons

690 person times

Poverty and difficulty relief

The Company organized employees to carry out normalized charity activities to cope with serious disasters, such as donation, contribution, charity bazaar etc.

of "autumn student fund" in the past 20 years 2424 person times

Cumulative amount 4.886 million RMB



Outlook of 2018

With a global view, the international situations are undergoing profound and complex changes and the world economy generally maintains a growing tendency. Look back to domestic situations, we can see that the development of the Chinese economy remains stable with momentum, the economic development has shifted from rapid growth to high quality development stage, the petrochemical and chemical industries are right at a critical stage of transformation and upgrading. It is proposed by the 19th CPC National Congress report that the socialism with Chinese characteristics has entered a new era, which is calling for a new mission, and the new journey shall be guided by new ideas. We will deeply implement the spirit of the 19th CPC National Congress, consider construction of a "domestically leading, globally first-class" refining-chemical company as our development target, follow the trend to seize the strategic opportunities of the eastward movement of global petrochemical product market, "One Belt and One Road" and construction of Yangtze River Economic Zone, attach more importance to pursuit of higher economic value and environmental responsibility and achieve sustainable development in proactive fulfillment of social responsibility.

In 2018, we will profoundly grasp and uphold Xi Jinping's thought on socialism with Chinese characteristics for new era, consider learning and understanding of the spirit of the 19th CPC National Congress as our prioritized political tasks for present and a certain period in the future, constantly compact the development foundation, improve vitality, enhance party building and improve the development quality by centering on such three main lines as quality upgrading and benefit improvement, deepening of reform & innovations and strengthening of party self-discipline in an all-around way.

In 2018, we will deepen supply-side structural reform, adhere to decapacity, de-inventory, de-leveraging, cost reduction and strengthening of weakness and promote intensive, clean, low-carbon, safe and sustainable development. we will deeply carry out and implement new development concept, significantly boost innovations in terms of technology, management, product, market, resources and strategy. We will adhere to the development path of diversified feedstock routes, highend product mix and ecologicalization in energy conservation and environmental protection, energetically develop products with more competitiveness, richer innovation and higher added-value and push forward upgrading of the enterprise product value chain.

In 2018, we will continue perfecting and improving the environmental management system and mechanism, which considers HSE management system as the core and is friendly for green development; we will further implement the position responsibility for environment, strengthen disclosure of environmental information and improve the management level of safety and environment; we will focus on intensification of environmental protection and environmental improvement, achieve continuous decrease of such pollutants as waste water, waste gas and solid wastes, proactively boost high efficient utilization and recycling of resources and create new advantages of green and low carbon development.

In 2018, we will keep carrying out and implementing the guiding spirit of building modernized economic system, continue perfecting the modern enterprise system and the performance appraisal system for social responsibility, continue improving the management level of social governance and green supply chain and jointly creating value with our customers; we will keep inheriting people foremost development concept, caring for community development, fulfilling the corporate citizenship responsibilities, ensuring that the corporate development achievements can be shared with employees and endeavoring to improve the corporate employee and community residents' sense of gain.

At the new era of socialism with Chinese characteristics, with the great foresight and the awareness of crisis in times of prosperity, the courage of renovations and innovations as well as the mindset of avoiding ossification and stagnancy, we will take our initiatives to lead the petroleum and chemical industry development at the north bank of Hangzhou Bay, do our utmost to foster high-end petrochemical industrial base of China and make unremitting efforts to build SPC as a "domestically leading and globally first-class" refining-chemical company.

2017 Chronicle of events of social responsibilities



Written Comments on Assessment of Corporate Social Responsibility Report

No. K00314

Title of report	2017 Annual Corporate Social Responsibility Report
Company name	Sinopec Shanghai Petrochemical Company Limited
Business profile	Located in Jinshan District, Shanghai, Sinopec Shanghai Petrochemical Company Limited (hereinafter referred to as "SPC" or "the Company") is one of the largest comprehensive integrated refining and petrochemical enterprises in China and also an important producer of oil products, intermediate petrochemical products, synthetic resin and synthetic fiber in China. The Company owns independent utilities and environmental protection system as well as associated transportation facilities, including ocean transport, inland waterway channels, railway transportation and highway transportation. The Company grows out of Shanghai Petrochemical Complex, which was founded in 1972. In 1993, as a result of standardized reform of shareholding system for the state-owned enterprises, the Company became the first limited liability company in China with its shares listed on Shanghai Stock Exchange, the Stock Exchange of Hong Kong and New York Stock Exchange at the same time. In 2017, SPC completed the total volume of main commodities of 12.4011 million tons; completed gross industrial production of 68.454 billion RMB; implemented operating revenue of 92.014 billion RMB and paid tax of 16.209 billion RMB. The Company has created new historic records in implementation of total profit for consecutive two years, thusly making new contribution to the state and local economic and social development. Nowadays, SPC has 10,361 staff members and employees, in which employees with bachelor's degree and above education background account for 25.76% and the employee turnover rate is 0.97%. The Company was granted with 18 various social honorary awards in 2017, including the Green Development Prize of the Third China (Shanghai) Listed Companies' Corporate Social Responsibility Summit Meeting. Contact information: (please visit the website for further information) Add:: 48 Jinyi Road, Jinshan District, Shanghai, P.R. China Zip code: 200540 Tel.: +86(21) 57941941 Fax: +86(21) 57940050 Email box: spc@spc.com.cn
Report Issue	Tenth release
Assessment basis	Shanghai municipal group standard Guidelines for Corporate Social Responsibility T31/01001-G001-2014)
Assessment method	Written assessment was conducted for 2017 Annual Corporate Social Responsibility Report (called "the Report" for short) of SPC. in accordance with the requirements of T31/01001-G001-2014 Guidelines for Corporate Social Responsibility. The assessment process included confirmation of the source of information disclosed by the Report and its reliability with help of the enterprise official website and the third party's data concerned.



Assessment matters

Environmental protection and saving: the Company abided by state laws and regulations on environmental protection, enhanced clean production from the sources, carried out environmental cooperation with local governments, intensified the pollution treatment and control at the production terminal and developed the circular economy to further boost green development.

In 2017, the Company standardized the environmental management of construction projects and boosted revamping of boilers and other units for extra-low emissions. As a result, the discharge of various pollutants had all decreased, in which COD decreased by 4.06% on a year-on-year basis, ammonia nitrogen by 1.97%, industry waste water by 5.9%, nitric oxides by 17.66%, SO₂ by 23.0% and VOCs by 16.87%; hazardous wastes were 100% properly treated.

In 2017, SPC continued participating in comprehensive environmental treatment of Jinshan District and held 12th joint conference for regional environmental protection with Jinshan District of Shanghai and Pinghu of Zhejiang Province to jointly push forward regional ecological environmental protection. SPC has accumulatively held 54 times of the Public Open Day Program, truthfully disclosing the environmental information to the public.

In 2017, SPC's total consumption of industry energy decreased by 1.92% on a year-on-year basis, energy consumption per unit of output value decreased by 17.30% on a year-on-year basis and discharge of CO_2 decreased by 0.59%.

Work safety: SPC strictly enforced the laws and regulations on work safety management, split and implemented the entity responsibility for work safety in an all-around way and deeply carried out identification and control of safety risks as well as investigation and control of potential hazards by considering "identification of major risks, elimination of great potential hazards and prohibition of major incidents" as the main line; organized and developed drill of emergency plan and emergency response training to improve the emergency capacity against risks; enhanced contractors' management and improved the capability of self-management; implemented the documents of "thirteen ministries and committees" and organized the establishment of specialized firefighting brigades.

Substantial contents

In 2017, SPC hit the safety management target of "Seven Zeros", including zero of "major or extra serious incidents of work safety", zero of "the company employees' serious injury rate", zero of "major or extra serious traffic accidents", zero of "major or extra serious fire and explosion incidents", zero of "the company employees' mortality rate due to serious injury ", zero of "major or extra serious environmental pollution incidents" and zero of "major occupational hazards".

SPC organized leaders to implement leading of the shift and grassroots safety supervision in case of major operations, implement "dual duties for one position" to ensure effective development of safety and environmental protection activities. In 2017, leaders took charge of the shift for 591 times and went to the grassroots for supervision for 2,770 times, timely solved and rectified 1,259 safety and environmental problems and potential hazards.

In 2017, SPC organized HSE training courses and competitions at all levels, in which employees participated for totally 9,592 person times.

With help of Shanghai Firefighting Department and Jinshan Firefighting Detachment, SPC proactively organized establishment of full-time firefighting team. The Company had reached a substantial consensus on how to make handover with the firefighting department, enhancement and improvement of equipment, construction of the commanding center for receiving and handling of alarm, and made deployment for specific handover/takeover.

Customer and consumer's rights and interests: Adhering to the concept of "customer the first priority", SPC continuously researched, developed and produced new high value-added products that met the customers' quality demand by way of judging the market trend and optimizing the linkage mechanism of production, marketing, research and utilization; The Company intensified business communication with domestic customers, provided product service information in multiple ways and improved the product quality safety; achieved win-win with customers by way of "Internet + sales".

In 2017, the Company's product satisfaction reached 96.49%; As a result of customer satisfaction survey, SPC analyzed and sorted out 10 rectification ideas and implemented specific correction measures.

SPC signed confidential agreement with every salesman to ensure the customers' information security.

Assessment matters

Win-win cooperation: Centering on the main work line of "advocating governance by law, proactive service, accurate control and safe assurance of supply", SPC abided by the Guidelines for Enterprise Green Procurement (Tentative), drove the supply chain to perform social responsibility and co-developed with partners in 2017.

In 2017, SPC intensified contractors' occupational health and safety management, strictly conducted the contractors' prequalification, enhanced management of explosive hazardous chemicals, implemented the inspection mechanism for unloading of hazardous chemicals and distributed the revised Notification about HSE for Carriers' Entry into Closed Area to carriers for prevention and reduction of various incidents.

In 2017, SPC procurement rate through ITB reached 92.14% and the proportion of green purchase amount reached 100%; the purchase contract performance rate reached 100%; the saving rate of annual purchase funds reached 7.19%.

In 2017, the manufacturers' direct supply rate rose up to 99.20% and the suppliers' pass rate of ISO14001 environmental management system certification achieved 58.53%.

Harmonious labor relationship: SPC gave play to the role of communication bridge of the workers' congress and the trade union, was committed to safeguarding the employees' rights and interests by listening and responding to the employees' opinions and recommendations; paid five social insurances and one housing fund for employees and further improved the salary and paid leave system; objected to various discriminations and provided financial underpinning for poverty stricken employees level by level; intensified occupational safety protection to ensure employees' health; built intelligent training system and enhanced training quality control to boost employees' career development.

Substantial contents

To help employees relieve their work stress, adjust emotion and boost psychological health, SPC has started experimental implementation of EAP (employee assistance program) since 2013 and promoted the same in an all-around way in 2017.

SPC carried out various safety education programs through lively activities. In 2017, 100% employees took part in the activity of "I Diagnose for Safety", the employees' recommendation adoption rate reached 96% and the treatment rate of diagnosis recommendations reached 85%.

Community participation and development: The Company was keen on public welfare, joined hands with surrounding communities for joint development and jointly built a harmonious society.

The Company established stable work mechanism of cooperation and exchange with Shanghai Jinshan District Government and Pinghu Municipal Government of Zhejiang Province and maintained high level consultation and communication with them.

The Company had access to terminal of Shanghai emergency early warning release system in 2016 and established the mechanism of emergency information demand feedback with Shanghai Municipal Emergency Early Warning Center in 2017, cooperating to ensure work safety in petrochemical industry with professional meteorological service.

Considering significant building of "Babysbreath" volunteer service brand as the fulcrum, the Company was dedicated to various public welfare activities. At present, the "Babysbreath" volunteers have reached 1,300. In 2017, the volunteer service amounted to 60 sessions. The Company has continuously carried out "Autumn Student Fund" for 20 years, in which the funded students cumulatively reached 2,424 person times and the cumulative amount of patronage summed up to 4.886 million RMB.

Recommendations of improvement: appropriately add some information about horizontal comparisons with peer industry, thusly providing proofs to SPC as "domestically leading and globally first-class" refining and chemical enterprise.



Auditor: Guo Changping Approved by: Yan Zhuoming Assessment organization: Shanghai Quality System Audit Center Audit date: March 16, 2018



Titles	Level-2 titles	ISO26000	ESG	API	Cass-csr3.0	Pages
Address by Chairman of Board				SOC-1	P3.1 P3.2	2
2017 Responsibility Performance Sheet				ECO-1	P5.2	4
Company Profile					P4.1 P4.2 P4.3 P4.4	6
Development Strategy		6.2				7
Corporate Culture						7
Corporate Governance						8
Responsibility Management		6.2		SOC2	G1-G6	10
Honors of Responsibility of 2017					P5.3	12
	Supply premium products	6.7.4				14
Revitalize petrochemical industry with innovative and pragmatic mindset	Deepen quality for business promotion	6.7.4	B6.4		M2.1 M2.3	16
	Make innovations in petrochemical technology	6.7.4 6.7.5			M2.11-M2.16 E3.3	17
	Build smart plant					18
Jo Create value in good faith	Jointly create value with our customers	6.6 6.7	B6.2 B6.5		M2.4-M2.6 M2.8-M2.10 M3.10-M3.12 E2.25	20
	Green supply chain management	6.5 6.6	B5	ECO–3 SOC-8	E3.1	22
Develop business	Improve business performance			ECO-2	M1.4-M1.6	24
through win-win cooperation	Safeguard investors' rights and interests			ECO-2 ECO-1 ECO-A3	M1.2 M1.3	26
Refined operations, safety and green development	Strengthen safety management	6.4.6		ENV-6 H&S-5 H&S-4 H&S-2 H&S-5	S3.1 S3.2 S3.3 S3.4 S3.5 S3.6 S3.7	28

Titles	Level-2 titles	ISO26000	ESG	API	Cass-csr3.0	Pages
Refined operations, safety and green development	Intensify environmental protection	6.5.3	A1.1 A1.3 A1.4 A1.5 A1.6 A3.1	ENV-1 ENV-2 ENV-A3 ENV-A4	E1.1-E1.5 E1.6-E1.7 E1.8 E2.7-E2.24	31
	Develop recycling economy	6.5.4	A2.2 A2.4 A2.5	ENV-A7 ENV-A5	E2.27-E2.29	33
	Boost green development	6.5.5	A1.2 A2.1 A2.3	ENV-5 ENV-3 ENV-A8 ENV-A9	E2.1-E2.4 E4.1-E4.4 E5.1-E5.3	36
	Harmonious labor relations	6.3 6.4 6.8	B1.1 B1.2 B4	SOC-1 SOC-A2 SOC-4	S1.7 S1.8 S2.1-S2.7 S2.10-S2.14	38
People foremost, benefit the staff	Occupational health and safety	6.4	B3	SOC-1 SOC-5 SOC-4 SOC-1 SOC-A2	S2.18-S2.20	39
	Boost employees' career development	6.3 6.4 6.8	B2.1 B2.3	SOC-4 SOC-1	S2.15	40
	Pay taxes in good faith and jointly plan development	6.3 6.4 6.8 6.5	B8 B8.1 B8.2	ECO–1 SOC-A4 SOC-A3 SOC-A5	S1.5 S4.6 S4.7	42
Fulfill responsibilities and	Focus on communication and jointly create harmony				E1.9 S4.1 S4.2	43
serve the society	Combat corruption and advocate integrity	6.6	B7			43
	Public welfare and volunteer service	6.8			S4.10 S4.11 S4.13-S4.15	44
Outlook of 2018					A1	45
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Briefing of this report

Report release cycle Once every year

Definition of key topics SPC practice of corporate social responsibility

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Data sources

All data of the report are sourced from SPC official documents and statistical reports and have been reviewed by competent authorities.

Tenth report of social responsibility

Present report is the tenth report on enterprise social responsibility released by SPC, which includes the efforts and achievements made and scored by SPC in terms of economy, environment and society for sustainable development in 2017.

Reference standards of the report

References are made to the Guidelines on Enterprise Social Responsibility (SEO-CSR1.0) issued by Shanghai Federation of Economic Organization, ISO26000: Guidelines on Social Responsibility (2010) issued by International Standardization Organization, the Guidelines for Environment, Society and Governance Report issued by the Stock Exchange of Hong Kong Limited (has followed provisions of "justification in case of non-observations" as stipulated by the Guidelines) and Guidelines for Release of Report on Sustainable Development of Petroleum and Natural Gas Industry issued by the International Association of Environmental Protection in Petroleum Industry.

Abbreviations of the report

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SPC and the Company as mentioned in the report refer to Sinopec Shanghai Petrochemical Co., Ltd.

Time frame of the report

This report was developed on the basis of the data ranging from January 2017 to December 2017. However, we also adopted the data of the past three years since 2015 for certain quantity of achievements, so as to reflect the variation tendency in time.

Reliability assurance of the report

Present report does not contain intentionally fictitious fact, misleading statement or omission of major events and we guarantee its accuracy and authenticity.

Currency

Unless otherwise specified, all the amounts as described in the report shall be in RMB.

Improvement of the report

We aim at giving play to the dialogue roles of the report, interpreting the value and impact brought about by SPC's fulfillment of social responsibilities and jointly discussing with stakeholders about the opportunities and challenges faced by us in the course of development and then seeking solutions.

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Ways to access to the report and extended reading

You can also read the electronic version of this report by visiting the website (http://www.spc.com.cn).

Form of Readers' Feedback



Dear readers:

We appreciate your reading of 2017 SPC Report on Social Responsibility. We attach great importance to and expect your feedback comments about SPC sustainable development and this report. Your comments and recommendations are important references for us to improve the performance of social responsibility. You can send your feedback to us by mail, email or fax. We warmly welcome and sincerely appreciate your precious comments.

Name:

Company:

Contact telephone:

email box:

Your assessment of our report:

Your assessment of this report:	Excellent	Good	Average	Poor
How do you like the rationality of the structure of this report?				
Can you understand SPC concept of social responsibility and characteristics of practice?				
Is this report reader friendly and readable?				
How do you like the content arrangement and format design of this report?				
What is your overall assessment of this report?				

Your recommendations on SPC Report on Corporate Social Responsibility:

Your recommendations on SPC sustainable development:

You can contact us at:

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