



2022

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT





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MESSAGE FROM THE CHAIRMAN

We will firmly promote the shift of oil refining to chemical industry, chemical industry to materials, materials to high-end ones, and industry park to ecological ones, and strive to be the vanguard of high-quality development and a national team with self-reliance and self-improvement of high-level science and technology.

Dear friends,

On behalf of the Board of Directors of the Company, I'd like to thank you for your long-term care and support for SPC.

SPC always regards social responsibility as the biggest driving force for its growth, sticks to the combination of its business with environmental protection, social responsibility and corporate governance (ESG) and integrates the ESG concept into its operation management system. On the basis of releasing social responsibility reports for 14 consecutive years, the Company starts to release the ESG report this year. We will continue to practice ESG management, take on social responsibility and respond to the concerns of investors and stakeholders with concrete actions.

In the past year, faced with severe challenges such as energy security and climate change the green and low-carbon development under the carbon peak and carbon neutrality goals has turned into a global expectation and consensus. As industry chain, supply chain and value chain in the global petrochemical industry started to undergo profound adjustments, the competitive environment of the industry became severer and petrochemical companies were under multiple pressure from demand contraction, supply shocks and weakening expectations. In this new situation, SPC established and implemented the development idea of "shifting the focus from refining to chemicals, chemicals to materials, materials to high-end ones, and petrochemical park to eco-friendly park", took overall considerations to promote production and operation, sci-tech innovation, reform and management, project construction, and COVID-19 pandemic prevention and control, strived to strengthen competitiveness and development resilience and basically completed all the target tasks.

SPC exerted maximum effort to ensure supply and drive the industry chain to resume work and production in a coordinated way. During the period of lockdown management due to the COVID-19

pandemic, we overcame many difficulties to ensure the supply of livelihood goods and meet market demand, optimized the production plan and material balance, and smoothed logistics by establishing transfer storage facilities, expanding receiving channels and increasing joint water and land transportation, to strive to complete the tasks to guarantee supply. We maintained the record of zero interruption to the supply of more than 200 major chemical raw and auxiliary materials, thus providing solid support for the stable production of downstream enterprises. On the premise of guaranteeing the market supply of our original products, we developed and switched to producing special materials for nucleic acid sampling tubes, which ensured the market supply of anti-COVID-19 supplies.

SPC took on the responsibility as a member of the national strategic scientific and technological force and actively advanced the deep integration of the innovation chain and industry chain. We adhered to the combination of independent innovation and collaborative innovation, strengthened innovation platform construction, established a high-level experts joint meeting mechanism, proactively served the country's strategic needs, bravely undertook major research tasks, promoted breakthroughs in core technologies in key fields, structured our innovation chain based on the industrial chain, extended our industrial chain through the innovation chain, gradually came up with industrial achievements in carbon fiber and hydrogen energy fields and became the first enterprise in China and the fourth enterprise in the world mastering the industrialization technology of 48K large-tow carbon fiber. The "Flying" torch made of carbon fiber composite material by SPC for the first time in the world appeared on the site of the Olympic and Paralympic Winter Games Beijing 2022 successively.

SPC actively advanced green and low-carbon development and promoted "shifting the focus from petrochemical park to eco-friendly





park". We contributed to green transformation and development through project construction, participated in the market-oriented trading of "Green Electricity Certificate" for the first time, actively advanced clean energy substitution projects and promoted the transition of traditional energy plants to new energy production bases. We systematically conducted air pollution control and strictly controlled the boundary VOCs concentration index, and achieved remarkable results. In addition, we strengthened sewage source control, internal production management and daily monitoring and control, to continuously improve sewage treatment capacity. SPC passed the environment friendly enterprise review in 2022.

SPC strove to improve its intrinsic safety. We steadily and orderly advanced the emergency response to the "June 18" explosion accident in refining unit of #1 ethylene glycol plant, potential risk investigation and rectification, restorative maintenance and resumption of work and production and adhered to "prohibition of production, construction and startup unless safety conditions are in place". As a result, we achieved the successful one-time startup of 62 sets (series) of production units and the whole industrial chain resumed normal operation. We put into use a digital-intelligent control platform for double prevention, fully implemented the double prevention mechanism of safety risk control by level and hidden danger inspection and handling, strengthened the risk control of key links such as engineering construction, equipment maintenance, direct operation and contractor management and comprehensively promoted improvement of intrinsic safety and environmental protection, striving to consolidate the foundation of high-quality development.

SPC earnestly performed its social responsibility and shared its development results. We paid attention to the integration and joint development with the adjacent communities and continued to launch

"Public Open Days" activities so that the public could feel the results of SPC's green development. In the severest moment battling COVID-19 in Shanghai, SPC undertook the task of receiving more than 400 medical workers who came to aid Shanghai and exerted maximum effort to ensure service support for them. We implemented rent reduction and exemption and other relief policies to reduce or exempt rent for micro and small enterprises and individual businesses. Besides, we continuously launched social welfare actions and contributed to the rural revitalization of the paired cooperation areas through supportive spending and education support.

The year 2023 is a year full of hopes and uncertainties. The journey ahead is long and arduous, but with determined steps, we will reach our destinations. We will completely, accurately and fully implement the new development concept, take keeping stability the top priority and seek progress while maintaining stability, actively integrate into the new pattern of development, better coordinate development and safety, strive to promote our production and operation to "outperform the general trend and be better than counterparts", continuously bolster the future development momentum and market competitiveness, create a new situation of high-quality development with all our strength and strive to contribute SPC's bit to the realization of Chinese modernization.

Wan Tao
Chairman

March 23, 2023



ABOUT US

Located in Jinshan District, Shanghai, Sinopec Shanghai Petrochemical Co., Ltd. (hereinafter referred to as SPC) is a holding subsidiary of China Petroleum & Chemical Corporation, one of the major refining-chemical integrated petrochemical companies in China and also an important production base of refined oil products, intermediate petrochemical products, synthetic resins and synthetic fibers in China.

SPC grows out of Shanghai Petrochemical Complex which was founded in 1972. In 1993, as one of the state-owned enterprises subject to the standardized reform of the shareholding system, SPC became the first joint stock limited company in China, with its shares listed on the Shanghai Stock Exchange, the Stock Exchange of Hong Kong and the New York Stock Exchange at the same time.

CORPORATE PERFORMANCE



Total assets

412.43

in RMB 100 million



Operating revenue

825.18

in RMB 100 million



Total profit

-36.00

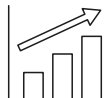
in RMB 100 million



Total taxes

136.65

in RMB 100 million



Number of employees

8007

persons



R&D expense

1.31

in RMB 100 million

INDUSTRY CLUSTER



The Company actively strengthens its major business such as refining, chemicals, synthetic resin and synthetic fiber and explores such new fields as carbon fiber, advanced materials and new energy, to build a cluster of "4+" petrochemical industries.

Refining

Gasoline, diesel, aviation kerosene, LPG, etc.



Synthetic resins

Polyethylene, polypropylene, polyester, polyvinyl alcohol, etc.



Chemicals

Ethylene, propylene, butadiene, pure benzene, p-xylene, ethylene glycol, ethylene oxide, vinyl acetate, C5 fractions, etc.



Synthetic fibers

Carbon fiber, acrylic fiber, polyester staple fiber, polyester filament yarn, etc.



With the mission of "Fighting for a Brighter Life", the Company always strives towards a "Leading Domestically, First-class Globally" company specialized in energy chemical products and new materials!



AWARDS AND HONORS

Title of "Collective with an Outstanding Contribution to Olympic and Paralympic Winter Games Beijing 2022"

One gold medal and one silver medal in 2022 National Industrial Vocational Skills Contest

Excellent Organization Award in 2022 National Industrial Vocational Skill Contests - Sulfur Recovery Unit Operators Contest

Group Third Prize in 2022 National Industrial Vocational Skills Contests - Pyrolysis Gasoline Hydrogenation Unit Operators Contest

Second Prize in "Action for Healthy China" National Broadcast Gymnastics Online Competition

Title of "2020-2021 Shanghai Enterprise with Good Credit in Honoring Contracts (Grade AAA)"

First Prize of National Corporate Culture Excellent Achievement Award 2020-2021

Excellent Site in National Survey on the Condition of Scientific and Technical Workers by China Association for Science and Technology 2021

2022 Shanghai May Day Labor Award

Title of Excellent Collective in Blood Donation Work Assessment of Shanghai Communities and Enterprises and Public Institutions 2021

Second Prize of Shanghai Corporate Culture Excellent Achievement Award 2020-2021

Second Prize in Comprehensive Evaluation of Energy Statistics Work in Shanghai 2022

Second Prize in Comprehensive Evaluation of Industrial Statistics Work in Shanghai 2022

Second Prize in Comprehensive Evaluation of Investment and Construction Statistics Work in Shanghai 2022

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GOVERNANCE OF SUSTAINABLE DEVELOPMENT

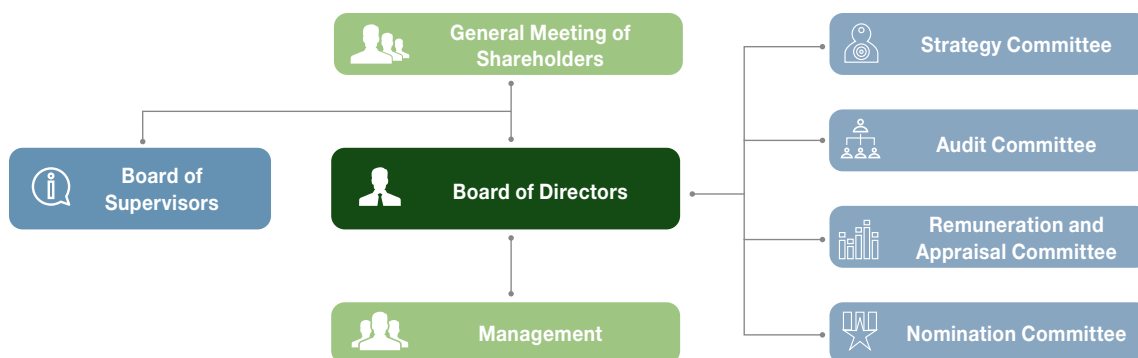
- 01 Governance structure
- 02 Communication with stakeholders
- 03 Development strategy
- 04 ESG risk management
- 05 Integrity and compliance
- 06 Technological innovation
- 07 Digital transformation

SPC continuously improves its standardized corporate governance structure, integrates the ESG concept into its development strategy and whole operation process, strives to modernize its corporate governance system and governance capacity, actively safeguards the legitimate interests of investors, communities, customers, employees and other stakeholders and explores to strengthen scientific and effective corporate governance and improve the long-term mechanism for its lawful and compliance operations.



GOVERNANCE STRUCTURE

The Company strictly complies with its Articles of Association and domestic and overseas securities regulation provisions, actively establishes a corporate ESG governance structure in line with regulatory requirements and international rules, integrates ESG into its development strategy and works to build a scientific and professional ESG management system and a clear and transparent ESG governance structure, to continuously promote the modernization of its corporate governance system and governance capacity. In the Company, the general meeting of shareholders, the Board of Directors and its special committees, the Board of Supervisors, and the management under the responsibility of the General Manager, have well-defined rights and responsibilities, work closely together and operate efficiently.



BOARD OF DIRECTORS

The Company has directors elected by the general meeting of shareholders. As of December 31, 2022, the Company had 11 members in its Board of Directors, including four executive directors, two non-executive directors and five independent non-executive directors. Wan Tao was appointed as the executive director and Chairman of SPC with effect from September 8, 2022. In 2022, the Company held 13 meetings of the Board of Directors, and these meetings were attended by all directors in general.

As the highest authority in management and information disclosure regarding the Company's ESG matters, the Board of Directors attaches great importance to sustainable development management by integrating ESG into the whole process of the corporate operation, and establishing an effective ESG management mechanism. Thanks to this, a governance structure with clear hierarchy and division of labor was formed and applied to effectively control ESG-related risks and further improve the corporate governance.

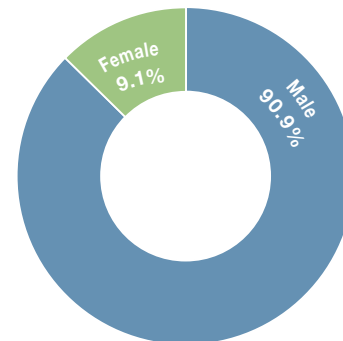
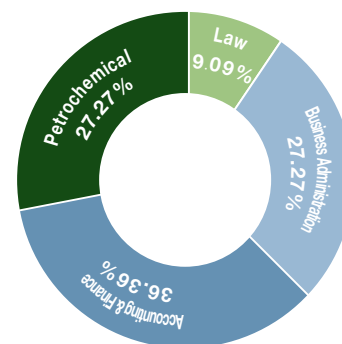
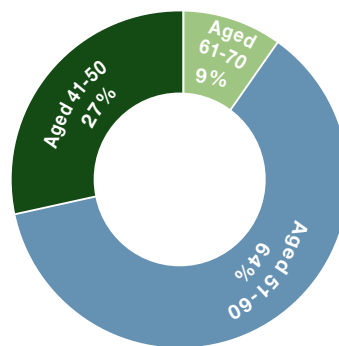


See the 2022 Annual Report of SPC for details of the members of the Board of Directors



Diversification of the Board of Directors

The Company has formulated the Policy on Diversified Members of the Board of Directors. In line with the objectives and requirements of the Board of Directors for diversifying members, the Company selects directors considering their professional experience, knowledge and skills, service term, region, education, gender, age, etc. SPC had 9.1% of female directors at the end of 2022.



INDEPENDENCE OF THE BOARD OF DIRECTORS

The Company has established a sound independent director system. It selects and appoints independent directors strictly following the election procedures and job qualification specified in these Articles of Association, ensuring not less than 1/3 of independent directors in the Board of Directors. Independent directors participate in the decision-making of the Board of Directors, give feedback on problems to the management and listen to reports, actively pay attention to the dual carbon goals, new materials and other major strategic issues, and guide the prevention and mitigation of risks. By the end of 2022, SPC had five independent members in the Board of Directors, accounting for 45.5%.

SPECIAL COMMITTEES OF THE BOARD OF DIRECTORS

The Company has four special committees under the Board of Directors. In collaboration with the leading group of social responsibility of the Company, the Strategy Committee is responsible for research, analysis and risk assessment of sustainable development, ESG and other related matters and relevant major investment decision-making of SPC, and makes recommendations to the Board of Directors.

The Audit Committee is responsible for reviewing the Company's financial report and discussing risk management, internal control and financial reporting matters. In 2022, the Audit Committee held five meetings, and these meeting were attended by all members of the committee.

The Remuneration and Appraisal Committee studies the standards for evaluating directors and the senior management and implements the evaluation, and studies and reviews the remuneration policies and programs for directors, supervisors and the senior management. It includes ESG indicators as the obligatory targets in the performance evaluation, and incorporates ESG performance into the annual performance evaluation system of the management at all levels. In 2022, the Remuneration and Appraisal Committee held four meetings, and these meeting were attended by all members of the committee.

The Nomination Committee makes suggestions to the Board of Directors on the size and composition of the Board of Directors, studies the criteria and procedures for selecting directors and the senior management, and reviews and makes recommendations on respective candidates. In 2022, the Nomination Committee held two meetings, and these meeting were attended by all members of the committee.

MANAGEMENT

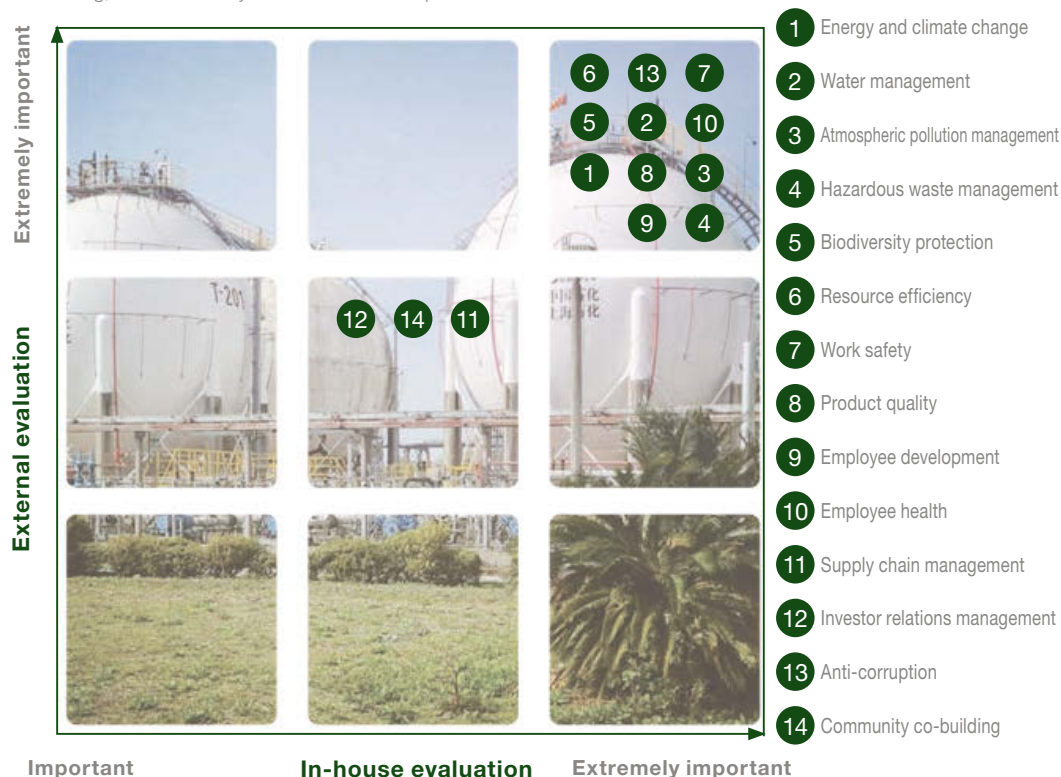
The Company's management consists of the General Manager, Deputy General Manager, Chief Financial Officer, Board Secretary and other leaders, as well as the departments related to various ESG issues. The management is responsible for promoting the implementation of ESG matters according to the requirements of the Board of Directors, and reports to the Board of Directors on a regular basis.



COMMUNICATION WITH STAKEHOLDERS

MATERIALITY ANALYSIS

The Company has established a materiality analysis process of ESG topics. It determines material topics with vital impacts on the Company and stakeholders through the primary steps of identification, evaluation and screening, and makes key disclosures and responses.



STAKEHOLDER ENGAGEMENT

Identification of stakeholders	Expectations and demands	Communication and responses
Government and regulators	<ul style="list-style-type: none"> ◆ Legal compliance operations, safe and reliable products ◆ Implementing the goals of carbon peak and carbon neutrality, and facilitating industry strides 	<ul style="list-style-type: none"> ◆ Executing policies and inspecting institutions ◆ Discussions, symposiums, communication and reporting
Investors	<ul style="list-style-type: none"> ◆ Sound performance and stable tendency ◆ Intensify operation and information disclosure 	<ul style="list-style-type: none"> ◆ General meeting of shareholders and information disclosure ◆ Investor relations management, rationalization of profit distribution
Customers	<ul style="list-style-type: none"> ◆ Serving customers to create value ◆ Providing premium products and services 	<ul style="list-style-type: none"> ◆ Customer visits and satisfaction surveys ◆ Customer service hotline, website and WeChat official account
Public	<ul style="list-style-type: none"> ◆ Enhancing operational transparency ◆ Offering quality products 	<ul style="list-style-type: none"> ◆ Exchange and interviews, media communications ◆ On-site research and visits, and "Public Open Days" events
Peers and industry groups	<ul style="list-style-type: none"> ◆ Achieving shared growth through discussion and collaboration, and advancing win-win cooperation ◆ Drawing on each other's strengths, and facilitating industry transformation 	<ul style="list-style-type: none"> ◆ Exchanges and mutual visits, and cooperative research and development ◆ Industry forum and expansion of platforms
Employees	<ul style="list-style-type: none"> ◆ Guaranteeing occupational health and safeguarding the rights and interests of employees ◆ Polishing vocational skills and providing a development platform 	<ul style="list-style-type: none"> ◆ Staff meeting and staff training ◆ Corporate culture activities and internal communication platform
Suppliers and partners	<ul style="list-style-type: none"> ◆ Open, equitable and fair procurement ◆ Integrity and compliance, and mutual benefit and win-win 	<ul style="list-style-type: none"> ◆ Supplier communication, evaluation and training ◆ Transparent procurement and responsible supply chain
Community	<ul style="list-style-type: none"> ◆ Community co-building and environmental protection ◆ Supporting public welfare and targeting poverty relief 	<ul style="list-style-type: none"> ◆ Volunteer services, public benefit and charity ◆ Community activities and risk assessment



SAFEGUARDING THE RIGHTS AND INTERESTS OF INVESTORS

In 2022, the Company innovated information disclosure methods, raised the quality of information disclosure, deepened communication with investors, strengthened corporate governance and fully protected the legitimate rights and interests of investors.



Compliance and effectiveness of information disclosure

- ◆ Prepare annual reports, interim performance reports and first and third quarterly reports on a regular basis, and update the 20F annual reports filed with the SEC.
- ◆ Release 47 interim announcements, including resolutions of the Board of Directors and the Board of Supervisors, resolutions of the general meeting of shareholders, performance forecasts, etc.
- ◆ Enrich the content of CSR reports, strengthen the requirements of non-financial information disclosure and the targets of controlling carbon emission intensity

Innovation in investor relations management proves effective

- ◆ The Company continues the online annual and interim results conferences as well as performance briefings
- ◆ Establish communication with investors and media reporters via telephone and the Internet to ensure open and clear communication channels
- ◆ Attend online investor meetings to communicate with fund managers, securities analysts and shareholders to underscore the value of the Company



Meetings are organized in a standardized and efficient manner

- ◆ Draw up work plans and make preparations for the meeting of the Board of Directors and the general meeting of shareholders
- ◆ The general meeting of shareholders was held online for the first time
- ◆ Meetings were efficiently organized in compliance with laws and regulations, and all motions were adopted

Innovate "Public Open Days" events

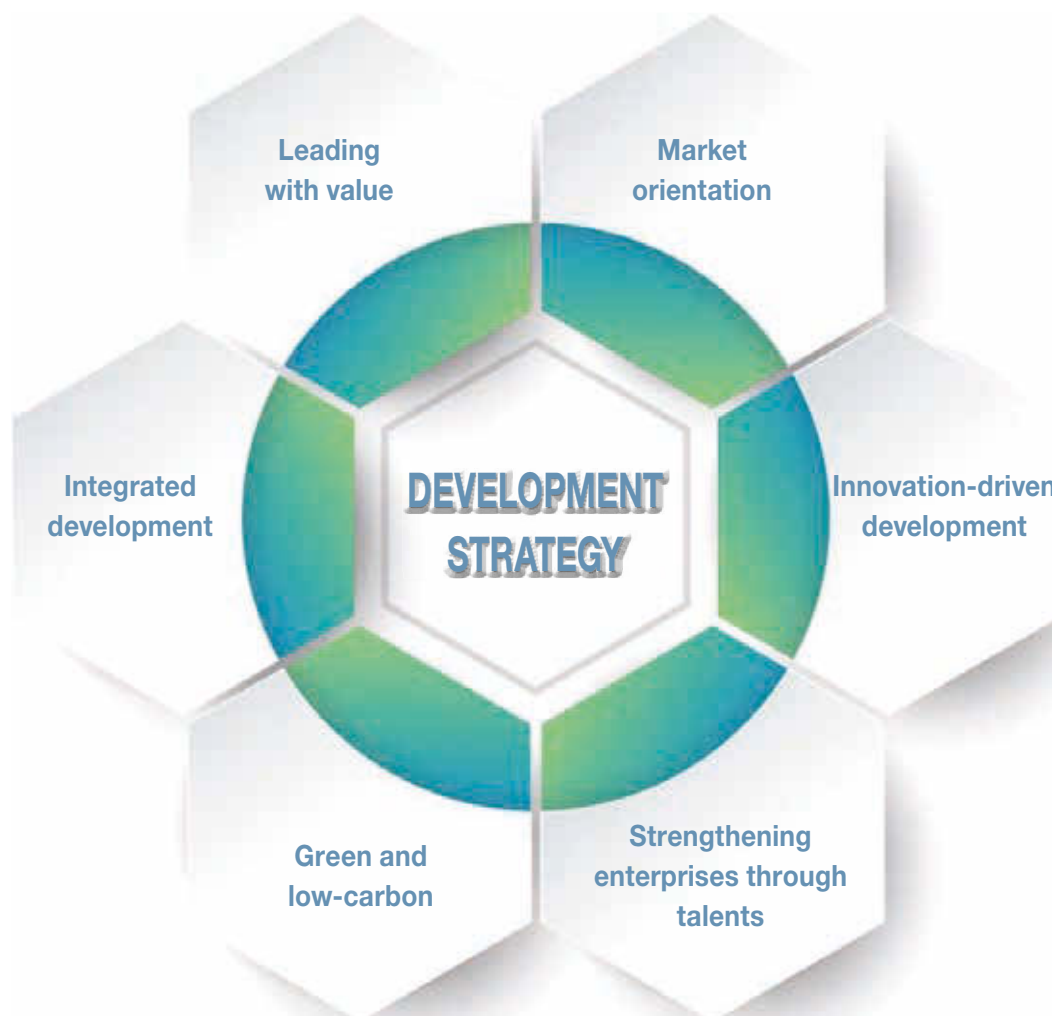
In addition to holding daily public open days, inviting local governments, sister companies and residents in and around the community to enter the Company to experience and know about its evolution, the Company also successively arranged many themed public open days, such as "Return home as often as possible", "The plants are so beautiful. Why not visit them together?" and "Jointly build a clean and pretty world", with a total of 72 events and 1,421 participants throughout the year.

The Company's attitude towards and spirit of practicing the philosophy of green development, centering on environmental protection governance and scientific and technological innovation, and seriously implementing corporate ESG governance were unanimously praised by the visitors.



DEVELOPMENT STRATEGY

The Company thoroughly applies the spirits of the CPC's 20th National Congress, upholds the new development concepts of "innovation, coordination, green, openness and sharing", actively responds to the national strategic goals of "dual carbon", Shanghai's strategic requirements of "south-north industrial transformation" and Sinopec's industrial strategic layout of "one base, two wings and three new growth poles", and deeply implements the six major development strategies of "leading with value, market orientation, innovation-driven development, strengthening enterprises through talents, green and low-carbon, and integrated development". It firmly shifts its focus from oil refining to chemicals, chemicals to materials, materials to high-end ones, petrochemical park to eco-friendly park, and strives to create a "Leading Domestically, First-class Globally" company specialized in energy chemical products and new materials.

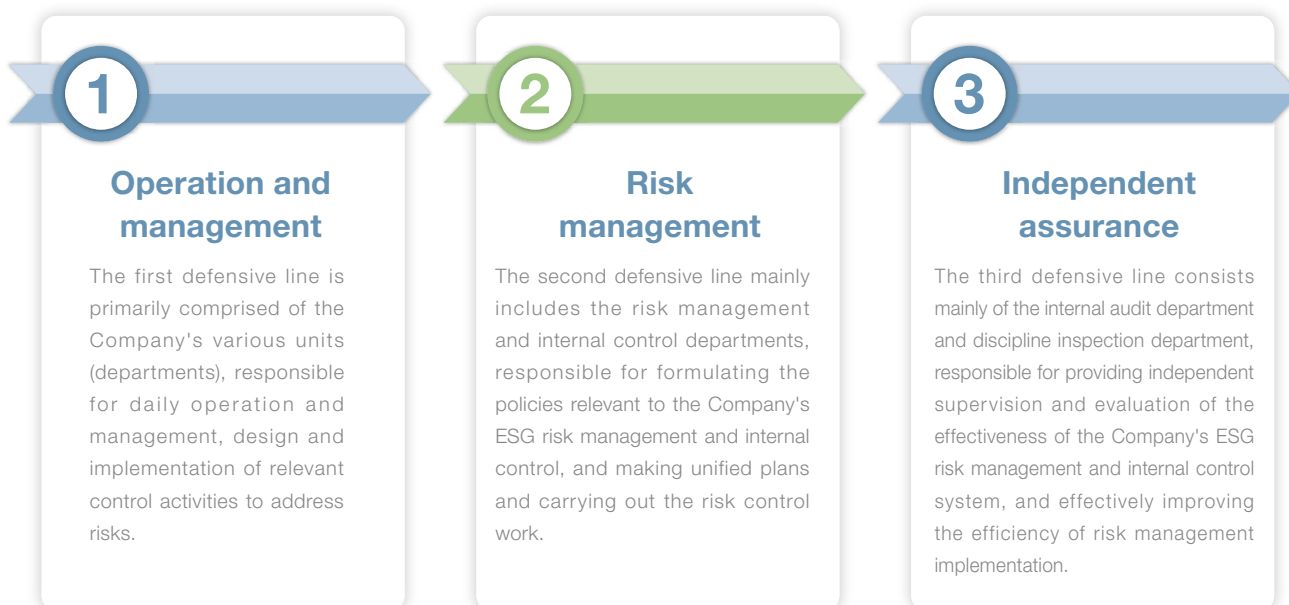


ESG RISK MANAGEMENT

The Company complies with the relevant requirements on ESG risk management and internal control of the Environmental, Social and Governance Reporting Guide of the Stock Exchange of Hong Kong (HKEX), the Sustainable Development Reporting Guidelines of the Global Reporting Initiative (GRI) and so on, to continuously improve its ESG risk management structure and comprehensive risk control system.

"THREE DEFENSIVE LINES" RISK MANAGEMENT MODEL

In order to ensure the effectiveness of risk management and internal control, the Company has established a risk management structure consisting of various units (departments), a risk management executive office and a risk management supervisory office, and has adopted a "three defensive lines" risk management system. We focus on dynamic monitoring of ten major risks, including work safety risk, ecological and environmental protection risk, macro economy risk, market competition and price risk, human resources risk, scientific and technological innovation risk, strategic planning risk, procurement and supply chain management risk, investment risk, and Party conduct and clean & honest governance risk (moral honesty), and put in place the "double prevention mechanism" of grading and controlling safety risks as well as investigating and addressing potential accidents, and solidly prevent and resolve major risks.



INTERNAL CONTROL SYSTEM

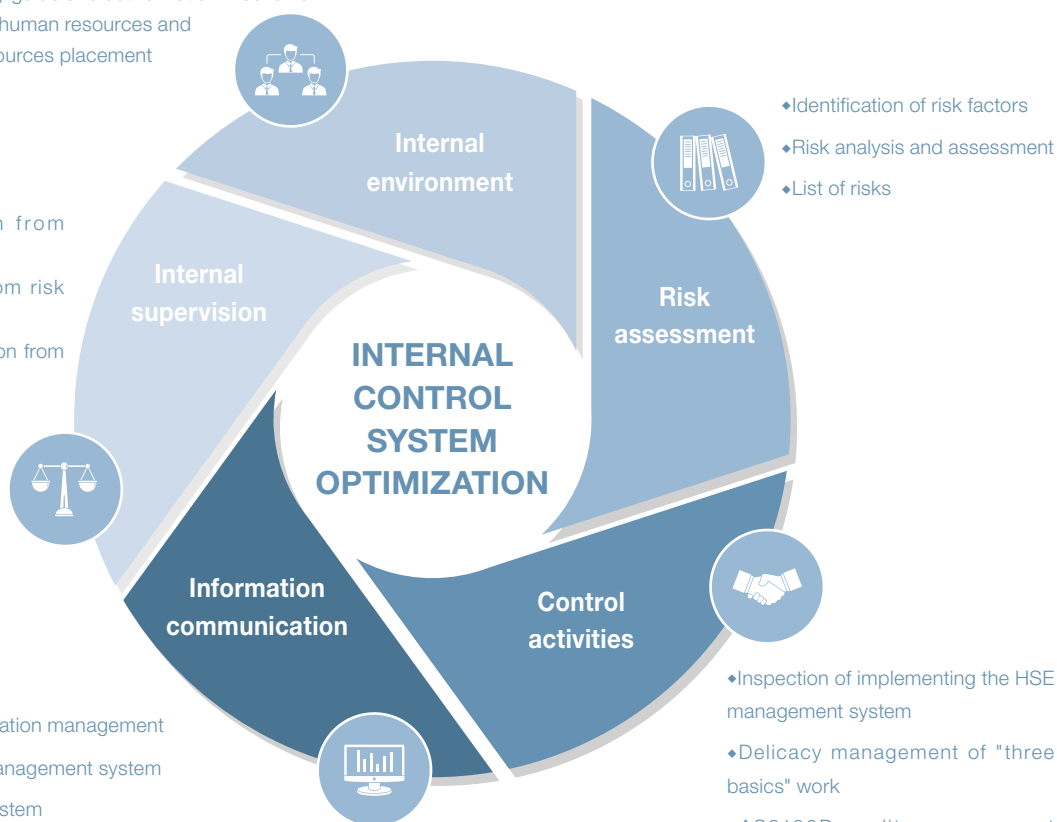
In 2022, the Company continued to strengthen the foundation construction of internal control system, optimize the internal control system by centering around the elements of internal environment, risk assessment, control activities, information communication, and internal supervision, constantly improve the internal control process, promote the construction of internal control informatization, strengthen the supervision of institutional implementation and guarantee the effective operation of the system, so as to integrate internal control into the day-to-day corporate management on an ongoing basis.



- ◆ Establishment and improvement of the organizational structure, optimization of the governance structure, management system and operation mechanism
- ◆ Establishment of authority guide and authorization mechanism
- ◆ Reasonable allocation of human resources and optimization of human resources placement

- ◆ Routine supervision from business departments
- ◆ Special supervision from risk control departments
- ◆ Supervision and evaluation from audit department

- ◆ Internal control informatization management
- ◆ Information disclosure management system
- ◆ Investor relations work system



The audit evaluation report of risk internal control conducted by the SPC's audit department showed that, during the reporting period, there were no significant gaps in internal control, the significant risks were generally controllable, and the audit evaluation result of the internal control was "generally effective". Meanwhile, in compliance with the requirements of the internal control normative system, the Company has formulated a system revision plan, made a revision of and improvements in the system without delay, and standardized the activities related to the system management.

公司代码: 600888

公司简称: 上海石化

中国石化上海石油化工股份有限公司 2022 年度内部控制评价报告

中国石化上海石油化工股份有限公司全体董事:

根据《企业内部控制基本规范》及其配套指引的规定和其他内部控制监管要求(以下简称企业内部控制规范体系),结合本公司(以下简称公司)内部控制制度和评价办法,在内部控制日常监督和专项监督的基础上,我们对公司2022年12月31日(内部控制评价报告基准日)的内部控制有效性进行了评价。

一、重要声明

按照企业内部控制规范体系的规定,建立健全和有效实施内部控制,评价其有效性,并如实披露内部控制评价报告是公司董事会的责任。监事会对董事会建立和实施内部控制进行监督。经理层负责组织领导企业内部控制的日常运行。公司董事会、监事会及董事、监事、高级管理人员保证本报告内容不存在任何虚假记载、误导性陈述或重大遗漏,并对报告内容的真实性、准确性和完整性承担个别及连带法律责任。

公司内部控制的目的是合理保证经营管理合法合规、资产安全、财务报告及相关信息真实完整,提高经营效率和效果,促进实现发展战略。由于内部控制存在的固有局限性,故仅能为实现上述目标提供合理保证。此外,由于情况的变化可能导致内部控制变得不恰当,或对控制政策和程序遵循的程度降低,根据内部控制评价结果推测未来内部控制的有效性具有一定的风险。

二、内部控制评价结论

1. 公司于内部控制评价报告基准日,是否存在财务报告内部控制重大缺陷

☐是 ☒否

2. 财务报告内部控制评价结论

☒有效 ☐无效

根据公司财务报告内部控制重大缺陷的认定情况,于内部控制评价报告基准日,不存在财务报告内部控制重大缺陷,董事会认为,公司已按照企业内部控制规范体系和相关规定的要求在所有重大方面保持了有效的财务报告内部控制。

3. 是否发现非财务报告内部控制重大缺陷

☐是 ☒否

根据公司非财务报告内部控制重大缺陷认定情况,于内部控制评价报告基准日,公司未发现非财务报告内部控制重大缺陷。

The Company discloses the internal control evaluation reports to the public every year

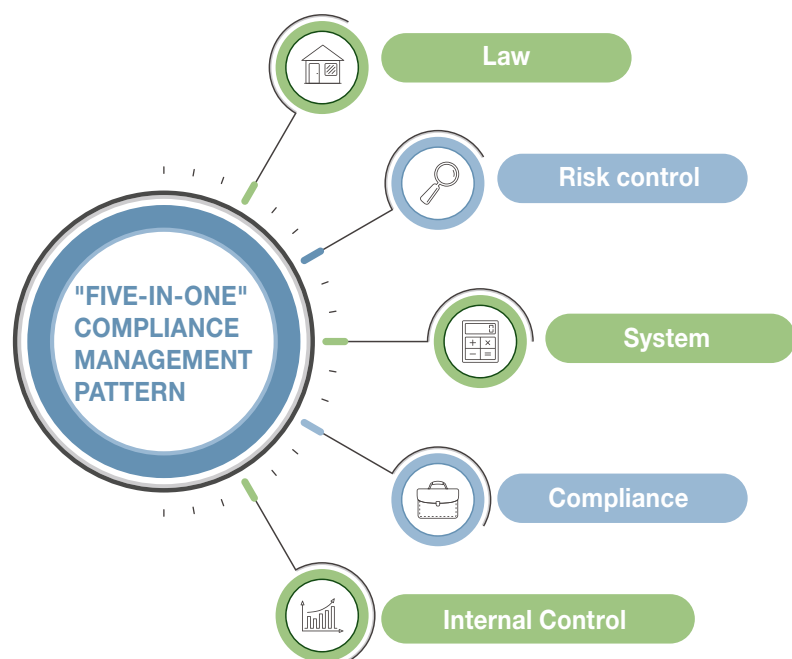


INTEGRITY AND COMPLIANCE

SPC adheres to the rule-of-law culture's philosophy of "legality, compliance, fairness and integrity", strictly complies with the Anti-monopoly Law of the People's Republic of China, the Anti-unfair Competition Law of the People's Republic of China and other relevant laws and regulations, unceasingly reinforces compliance management, constantly intensifies the construction of an honest and clean government, and cultivates a culture of anti-corruption and integrity. In 2022, the Company was conferred the title of "2020-2021 Shanghai Enterprise with Good Credit in Honoring Contracts", and was given the highest credit rating of Grade AAA.

STRENGTHENING THE COMPLIANCE MANAGEMENT

Refining the compliance system



- ◆ Building of a cross-departmental cooperative pattern of compliance management
- ◆ Establishment of the system of compliance management filing
- ◆ Establishment of a routine meeting system of compliance management
- ◆ Revision and refinement of the SPC's Management Procedures for the Identification and Compliance Evaluation of Laws, Regulations and Other Requirements
- ◆ Performance of professional compliance evaluations
- ◆ Establishment of a mechanism for feedback reports on compliance risk events
- ◆ Development of the compliance management informatization platform

We constructed the informatization process of identifying laws and regulations, identified a total of **2,140** requirements throughout the year from laws, regulations and other requirements which are related to the Company's production and operation, and entered **2,057** items into the identification checklists of laws, regulations and other requirements



Year of Compliance Management Enhancement

- ◆ Formulating the SPC's Work Implementation Rules for "Year of Compliance Management Enhancement" and forming 97 implementation items
- ◆ Organizing and holding the meetings to advance and implement the "Year of Compliance Management Enhancement" and the monthly compliance management meetings
- ◆ Conducting special inspections of the "Year of Compliance Management Enhancement"
- ◆ Carrying out tracking and supervision of rectifying compliance management issues every quarter

Heightening awareness of integrity and compliance

- ◆ Carrying out rotation training for compliance administrators
- ◆ Vigorously arranging a series of publicity activities for the Civil Code and integrity and compliance
- ◆ Organizing the quizzes of "Integrity and Compliance Management Knowledge" and "Civil Code Knowledge" for law popularization on WeChat Over **10,000** people participated in the WeChat quiz for law popularization

Strengthen supplier compliance management

- ◆ The suppliers' production and operation license qualifications of all outsourcing raw and auxiliary materials (hazardous chemicals) of SPC were comprehensively checked, sorted, and improved.



The suppliers' production and operation license qualifications of all outsourcing raw and auxiliary materials of SPC are within the validity period.

ENHANCING CLEAN GOVERNANCE CONSTRUCTION

The Company strictly abides by anti-corruption laws and regulations and fully supports the United Nations Convention against Corruption and other related initiatives.

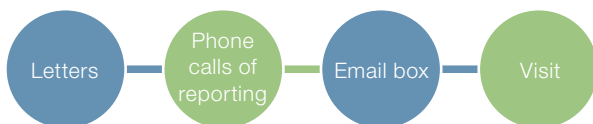
Improving anti-corruption mechanism

- ◆ Formulated and issued the SPC Key Points for Improving the Party Working Style, Boosting Clean Governance and the Fight Against Corruption in 2022
- ◆ Formulated and issued the SPC Breakdown of the Objectives and Tasks for Improving the Party Working Style, Boosting Clean Governance and the Fight Against Corruption in 2022
- ◆ The Secretary of the Company's Discipline Inspection Commission signed 21 copies of the Letter of Responsibility for Supervision and Enforcement of Improving the Party Working Style, Boosting Clean Governance and the Fight Against Corruption with the Secretaries of the Discipline Inspection Commissions (General Branches) of the directly-controlled entities

	2020	2021	2022
Sessions of clean governance training	240	148	284
Number of people receiving clean governance training (person times)	5189	8230	8580
Hours of clean governance training	498	356	568

0: The number of cases involving corruption at SPC from 2021-2022 was 0

Improve the whistleblowing & reporting mechanism



- ◆ Smoothen the channels of whistleblowing & reporting
Prepare and distribute the Pocket Book of Reporting and Accusation to all employees to publicize the acceptance scope and reporting channels of reporting and accusation.
- ◆ According to the principle of "centralized management and hierarchical handling", the letters of reporting and accusation shall be subject to unified management of SPC's discipline inspection and supervision department, and shall be handled after review and approval level by level.
- ◆ Conscientiously implement the relevant requirements of national laws and regulations on the protection of whistle-blowers, and strictly keep confidential the information of whistle-blowers and the contents of reports and accusations.

Investigation of clean governance risks in positions

- ◆ Carried out sort-out and investigation of clean governance risks in positions
A total of **1,003** clean governance risk posts were investigated and sorted out, with **2,418** personnel in risky positions.
- ◆ For those who have changed their clean governance risk positions, timely one-on-one information and education on clean governance risks were provided, with **27** people exchanging sensitive posts throughout the year

Carrying out regular supervision

- ◆ Strengthening supervision over the "top leaders" and the leadership
A total of **2,344** person times interviews were conducted by the Company's leadership for various departments and units.
- ◆ Promoting the clean governance "loose-leaf binder" system
The contents of the "loose-leaf binder" information platform for the clean governance of leaders were dynamically updated and maintained, adding **146** middle-level leaders and **360** grass-roots principal leaders to the "loose-leaf binder"

Strictly implementing the partners' access system

Optimizing the dynamic access and exit mechanism for partners

- ◆ Partners involved in breaches of clean governance agreements and major accidents (incidents) in safety and environmental protection, quality and security stability were dynamically excluded or banned

Controlling the access threshold of partners

- ◆ Signed a letter of responsibility for clean governance with related parties through the Sinopec Epec platform.

CULTIVATING A CULTURE OF CLEAN GOVERNANCE

Continuously carrying out "three education" on clean governance

Daily education	Organized the study of regulations such as the Administrative Regulations on Business Enterprises Run by the Relatives of Sinopec Leaders, distributed 517 books such as case warning records to middle-level and young leaders, and published 22 issues of WeChat tips for clean governance
Special subject education	Organized the anti-corruption and integrity education month themed with "rectifying abuse of power to seek personal gains from enterprise"
Warning education	Carried out special warning and education activities on typical spiritual problems in violation of the central government's eight regulations; carried out special warning and educational lectures on "abuse of power to seek personal gains from enterprise" cases, with a total of 176 lectures and 4,365 people attendees

Carrying out the "dual clean governance assistance" campaign

- ◆ **Family clean governance assistance:** Excavate the typical example of "establishing family rules and cultivating family style", and constantly expand the spread and penetration of family clean governance assistance. **453** written proposals for family clean governance assistance were distributed, **613** books on clean governance and family integrity were presented, **127** families of leaders at and above the grass-roots level and key posts were supported, and **461** leaders and employees and **266** family members participated in family clean governance assistance campaign
- ◆ **Partner clean governance assistance:** Continue to deepen partner clean governance assistance. **2,961** "clean governance reminder cards" were distributed to partners and clean governance risk position personnel, **1,272** partners were queried for bribery files, **391** partners signed the letter of responsibility for co-construction of clean governance, and **804** employees signed the letter of commitment for clean governance maintenance, actively promoting the co-construction of clean governance between enterprises and businesses.



TECHNOLOGICAL INNOVATION

The Company bravely shouldered the burden of scientific and technological innovation, strove to make breakthrough in terms of key and core "bottleneck" technologies such as the development of complete technology for large tow carbon fiber and the packaged technology for critical industrialization equipment, promoted the deep integration of innovation chain with industrial chain, and drove SPC to accelerate the transformation to a technology-oriented company and build a "chain leader" enterprise in the industrial chain.

In 2022, the Company invested a total of RMB 131 million in R&D and applied for 82 national invention patents.

Organizational mechanism for science and technology innovation

In 2022, the Company deepened the reform of the scientific and technological system and mechanism to further stimulate the vitality of scientific research and innovation in accordance with the requirements of the SPC Continuous Benchmarking Management Improvement Plan and the Three-year Action for Deepening the Reform of State-owned Enterprises.

Research platform

- ◆Formulate the Implementation Measures for "the Open Competition Mechanism to Select the Best Candidates" of SPC Scientific Research Projects, and explore and implement the project organization and management mode of "the open competition mechanism to select the best candidates"
- ◆Implement the project leader responsibility system for key projects.

Cooperation platform

- ◆National Engineering Research Center for Synthetic Fibers
- ◆Cooperation platforms such as Sinopec Key Laboratory of Carbon Fiber and Its Composite Materials and Joint Research Institute of Carbon Fiber
- ◆Cooperation platform established with universities, institutes and enterprises for other research fields

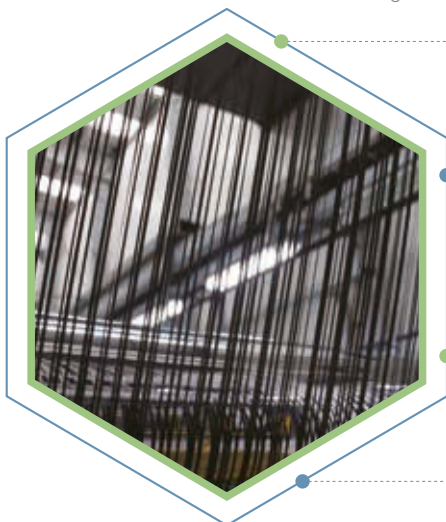
Communication platform

- ◆Plan and implement the high-level expert joint meeting mechanism
- ◆Organize experts at all levels to participate in the whole process of management such as preparation of science and technology planning, plan formulation, project identification, project review, project acceptance, and results evaluation.



KEY CORE TECHNOLOGICAL BREAKTHROUGH

In 2022, by focusing on national strategic needs, key emerging fields, and the requirements of high-quality development, the Company accelerated the research and breakthrough of key core technologies.



Large-tow carbon fiber technology

The Company mastered the industrialization technology of 48K large-tow carbon fiber and achieved localization of key equipment in large-tow industrialization.

New energy technology

With the hydrogen energy joint laboratory as the platform, the Company cooperated in researching and developing organic liquid hydrogen storage, electrolysis of ethylene glycol waste liquid to produce hydrogen, and total photolysis of water to produce hydrogen.

Energy-saving and environmental protection technologies

Hydrophilic modification technology of enhanced ultrafiltration membrane, modified anaerobic coupling resource treatment technology of petrochemical excess sludge, etc.

New material technologies

The carbon fiber composite materials used in green & environment-friendly vehicle lightweight material technology, Winter Olympics torch, rail traffic, civil works, etc.



In 2022, the Company made breakthrough in the key core technology of large-tow carbon fiber, and realized localization of critical industrialization equipment such as the oxidizing furnace and carbonization furnace. The first production line of 48K large-tow carbon fiber production unit has been successfully started operation and produced qualified products, which marked the breakthrough of the Company in the field of related bottleneck material technology, and laid a solid foundation for the Company's quality improvement and efficiency upgrade.

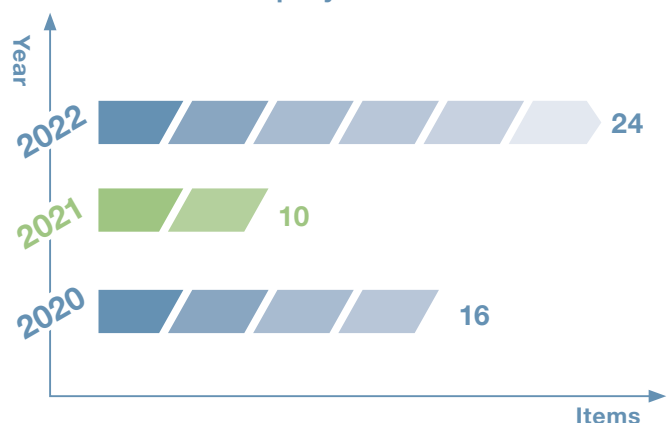


MAINTAINING INTELLECTUAL PROPERTY RIGHTS

The Company strictly complies with Intellectual Property Law and other laws and regulations and pays attention to the maintenance and management of intellectual property. In 2022, the Company established a leading group and working group for the standardized management and overall inspection of intellectual property under the responsibility of SPC's main leaders and with the participation of relevant departments of the Company, which organized comprehensive investigation and rectifications of the current status and existing problems of the intellectual property, and revised the SPC Measures for the Management of Intellectual Property. SPC regularly carried out monitoring and risk assessment on its own brand to file trademark applications for registration, invalidity, objection, etc. to the national intellectual property administration based on the results. In addition, the Company managed patent protection, implementation, maintenance and abandonment as a whole, made full use of existing technical information in the R&D process, and carried out patent technology tracking to avoid infringement.



Number of invention patents authorized by the Company in 2020-2022



REDUCING HEALTH AND SAFETY RISKS

To minimize the health and safety risks of products, the Company introduces new technologies or advanced technologies in the R&D process and conducts hazard identification according to HSE management requirements as well as risk assessment on all hazard sources identified according to the evaluation criteria, thus determining the maximum hazard degree and the maximum range of possible impact. The risks identified are summarized to determine risk control measures.



DIGITAL TRANSFORMATION

Following the development trend of digitalization and intelligent transformation, SPC builds a two-in-one management system, strengthens digital technology empowerment, and accelerates the process of smart engineering construction. Through the application of the IoT, AI and digital technology, SPC drives the transformation of management mode and the upgrading of core business to achieve the goals of value addition, management efficiency, production optimization, and safety and environmental protection.

PROMOTING DIGITAL MANAGEMENT REFORM

From two aspects, namely system design and facility platform construction, SPC promotes the digital transformation of management and improves its fine management.

Improving the information management system

- ♦ **Organization** - SPC established the "leading group and promotion office of the Company's digital and intelligent integrated management system"
- ♦ **Planning** - Compiled and improved the "14th Five-Year Plan" for Information Development of SPC
- ♦ **System** - Revised the Management Measures for the Operation and Application of the SPC Information System. The Detailed Rules for Application Management of SPC ERP System and the Detailed Rules for Emergency Management of SPC Information System entered the publication process.

Improving information facilities and platforms

In 2022, there were 52 informatization projects in SPC, of which 25 projects were completed with acceptance inspection or qualified for acceptance and 6 projects were in the online operation stage.

Site safety control platform

Integrated management and control platform for safety and environmental protection

Safety and environmental protection data management

Equipment integrity platform

Maintenance management system

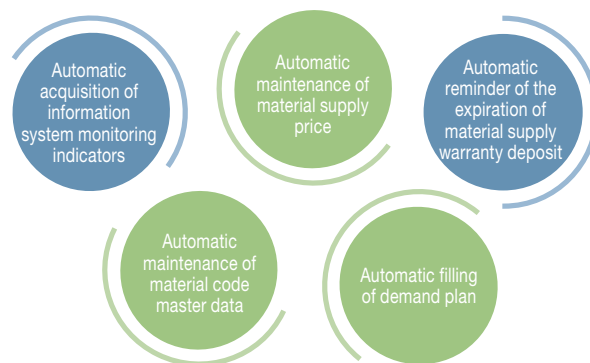
Water management information system

Deepening application of measurement management information system

STRENGTHENING DIGITAL TECHNOLOGY EMPOWERMENT

Digital technology enables business development

The robot process automation demand development project realized multiple functions:



Digital technology enables production optimization

- ♦ Advanced process control system (APC)
- ♦ Automatic control optimization of the whole water and steam process
- ♦ Simulation training system



Digital technology enables risk prevention and control

EMOC intelligent change management system helps change risk control

- ♦ The production process change, equipment and facilities change, interlock change, etc. are managed on the same platform, solving the current unreasonable situation of separating the approval process of process changes and equipment changes.

Informatization of process anti-corrosion to improve chemical units' anti-corrosion control

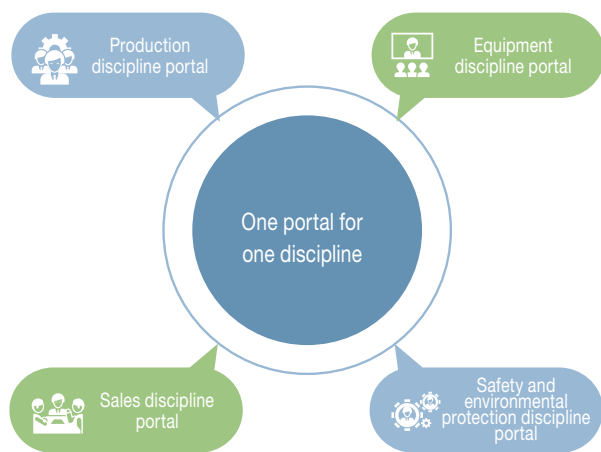
- ♦ The mechanism of advance warning, weekly analysis, and monthly closed-loop reporting of process anti-corrosion is combined with information technology tools to help the safe, stable, and long-cycle operation of production units.



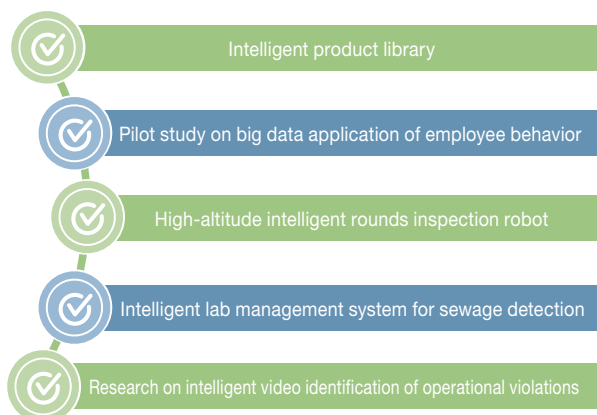
ACCELERATING THE CONSTRUCTION OF SMART PLANT

Promoting the construction of information integration portal

In 2022, in accordance with the design principle of "one portal for one discipline" of the smart plant, SPC, through continuous planning, design, establishment, and improvement of each discipline information integration portal, uniformly displayed the data required by the discipline in one portal, eliminated the information island, thus effectively promoting the sharing and utilization of data resources, improving the level of informatization application of various disciplines, and enhancing the work efficiency of business personnel. The production and equipment discipline portals have been completed.



Explore and apply new digital intelligence technology



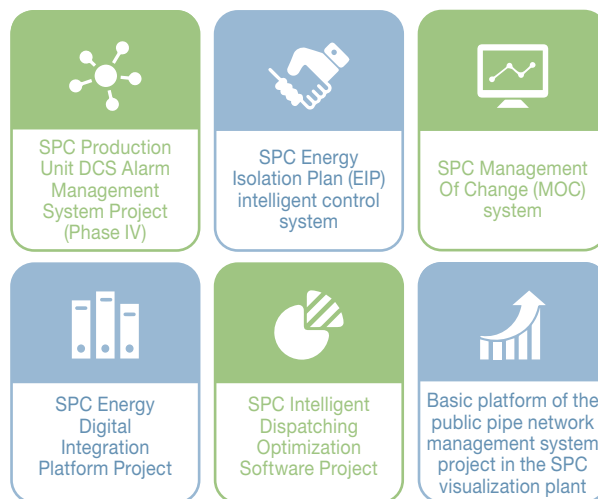
- ◆ Exploration of new digital technology
- ◆ Exploration of digital management mechanism

The research report Highlighting the "Digital Transformation and Building the Intelligent Security System of Large Petrochemical Enterprises" applied as the Sinopec's 31st Management Modernization Innovation Result

Promoting the intelligent transformation of production data

The production portal is promoting the construction of DCS alarm phase IV, intelligent patrol phase IV, and visualized public pipe network system in the plant.

Digital transformation projects in the production field in 2022:



Promoting equipment management informatization

The equipment portal improved the function of the equipment integrity platform and built functional sub-modules such as rotating equipment reliability management and equipment operation environment monitoring system.

Equipment integrity platform

- The equipment integrity management platform enables big data management of equipment, and timely detection of repetitive and large-scale defects in equipment, realizing the information management of the whole process of equipment maintenance
- SPC Equipment Integrity Management Platform has launched 222 scheduled affairs, including 21 for comprehensive discipline; 57 for static equipment discipline; 25 for rotating equipment discipline; 52 for electrical discipline; 67 for instrument discipline.

Promoting the digitalization of storage and transportation logistics

- ◆ **Logistics** - The modern logistics management platform (LMP system) can realize the query of the batch, delivery and storage of the company's products stored in the external warehouses
- ◆ **Storage and transportation** - Intelligent material management platform, video image intelligent analysis, and material movement management





SAFE OPERATION AND GREEN & LOW-CARBON DEVELOPMENT

- 01 Responding to climate change
- 02 Strengthening safety management
- 03 Intensifying environmental protection
- 04 Developing a circular economy
- 05 Protecting biodiversity

Taking safe development, green and low-carbon development as the premise and basis for the survival and sustainable development of the enterprise, and taking "clean, efficient, low-carbon and circular" as the essential characteristics, SPC promotes the green & low-carbon development of the Company and continuously improves the level of intrinsic safety and environmental protection by actively responding to climate change, strengthening safety management, strengthening environmental protection, developing circular economy, and paying attention to biodiversity protection.



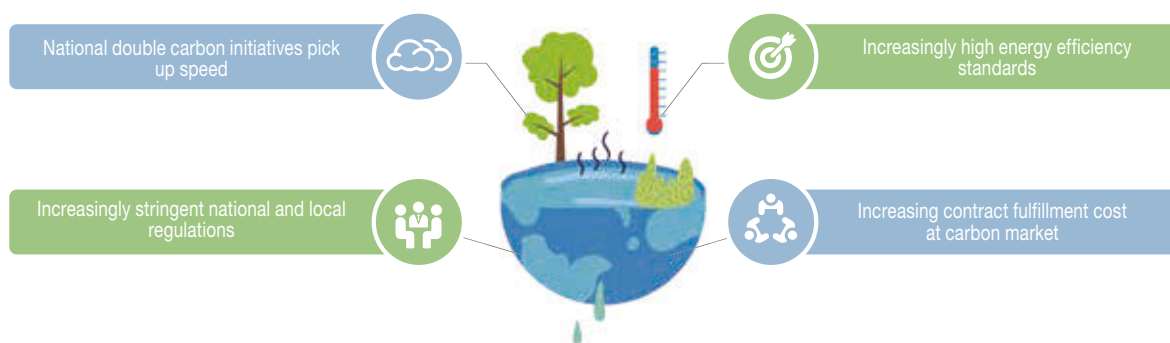
RESPONDING TO CLIMATE CHANGE

Under the influence of global climate change and green energy transition, and the overall layout of the national "dual carbon" strategy, the Shanghai Municipal Government issued the Shanghai Carbon Peak Action Plan and the Shanghai Carbon Peak Implementation Plan for Industrial Sector in 2022, requiring the strict implementation of the "Hundreds of One" actions for energy saving and carbon reduction, and actively promoting the carbon peak action in key industries such as petrochemicals and chemicals. By comprehensively implementing the concept of green development, actively carrying out energy-saving and carbon-reducing actions, and accelerating green and low-carbon technology research, the Company has improved energy utilization efficiency and continuously promoted green and low-carbon development, providing petrochemical contributions to help China achieve the "dual carbon" strategic goal.

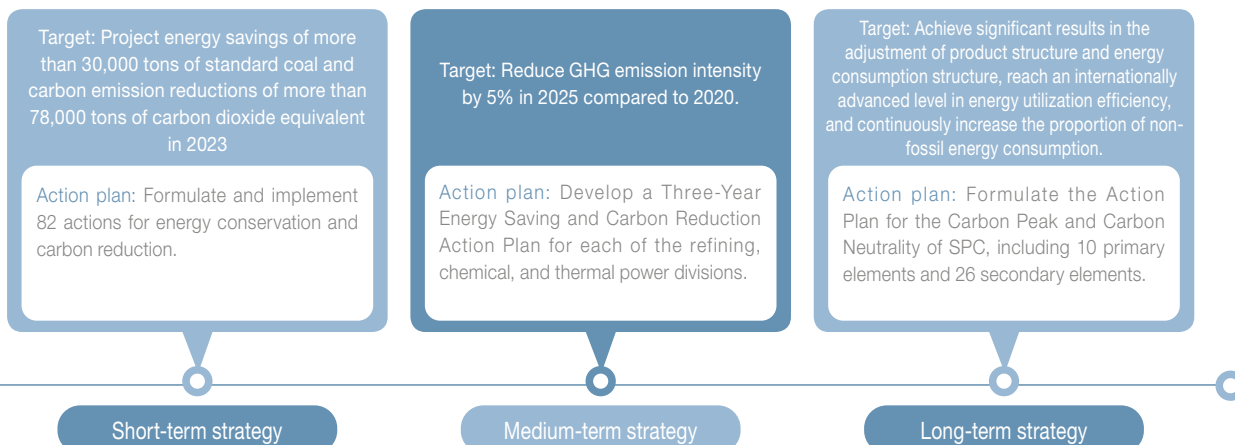
STRENGTHEN THE TOP-LEVEL DESIGN TO ADDRESS CLIMATE CHANGE



Challenges in promoting carbon peak



Strategic deployment to response to climate change



Implementation of carbon peak strategy

- ◆ Established a leading group for the promotion of new energy in SPC.
- ◆ Conducted an online presentation on the "Dual Carbon" situation analysis of SPC.
- ◆ Carried out carbon inventory at the national, Sinopec and Shanghai levels in 2021.
- ◆ The company formulated 82 actions for energy saving and carbon reduction for the first time and completed 57 actions, with an energy saving of 36,600 tons of standard coal.

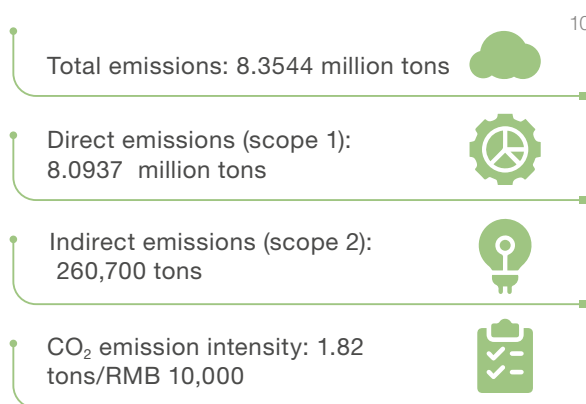


REDUCE GHG EMISSION

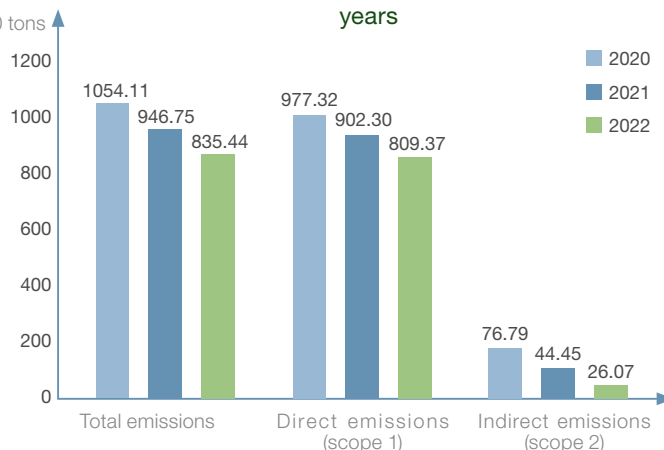


The Company has been actively promoting the carbon peak initiatives and has achieved significant energy savings and carbon reduction. Total CO₂ emissions in 2022 decreased by 11.76% year-on-year, with direct emissions down by 10.30% and indirect emissions down by 41.35%.

CO₂ emissions in 2022



Change trend of CO₂ emissions in last three years



Carbon asset trading and management

- ① Implement carbon budget, carbon quota surplus and deficit, and trading strategy. Make a carbon emission budget at the beginning of the year according to the production schedule, and forecast surplus and shortage and trading strategy according to the allowance allocation scheme. The Company will conduct monthly carbon inventory, track the progress of allowance usage, and participate in government auctions, CCERs, or allowance purchases at the appropriate time according to market conditions and compliance requirements.
- ② In September 2022, the Company participated in the government auction in Shanghai Carbon Market and purchased 100,000 tons of carbon quota at the base price for future (2023) carbon performance. In December, the Company fully completed the performance and settlement of the carbon quota in Shanghai Carbon Market (quota criterion) in 2021.
- ③ The Company actively participated in the transaction of green certificates, fulfilled its social responsibility, and purchased 10,000 green certificates.



PROMOTE LOW-CARBON ENERGY TRANSITION



The Company actively promotes low-carbon energy transition, and the total energy consumption has decreased significantly. In 2022, the total industrial energy consumption fell by 17.98% year on year, of which fuel energy consumption decreased by 12.09% year on year, achieving the yearly planned indicators.

01

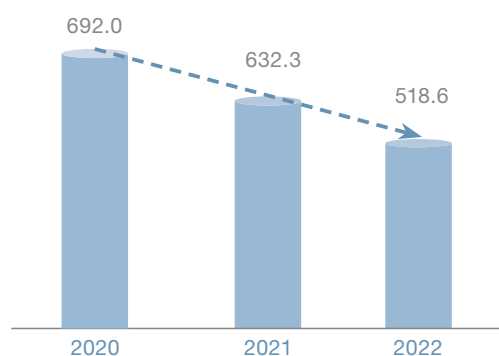
Total industrial energy consumption in 2022:
5.186 million TCE.



Energy consumption per unit output value in 2022:
1.092 TCE/RMB 10,000

02

Variation tendency of total industrial energy consumption in recent three years



■ Total industrial energy consumption (10,000 TCE)

In 2022, the Company's total industrial energy consumption was 5.186 million TEC, of which fuel energy consumption (excluding FCC coke burning) accounted for 56.52%, raw material consumption accounted for 32.53% and loss and others accounted for 10.95%, with an investment in energy conservation of RMB 181.56 million. In the past three years, the Company's main energy consumption has shown a continuous downward trend, and the energy consumption structure has been gradually optimized.



SPC'S MAIN ENERGY CONSUMPTION IN RECENT THREE YEARS

Indicators	Unit	2020	2021	2022
Coal consumption	10,000 TCE	189.84	175.21	173.52
Electric power consumption (excluding external power supply)	10,000 kWh	334818	306914	266993
Crude oil consumption	10,000 tons	1467.2	1377.63	1045.33
Natural gas consumption	100 million m ³	5.55	5.19	4.67
Comprehensive energy consumption of refining	KOE/ton	49.86	50.98	57.40



FIVE ACTIONS FOR CARBON PEAK



Improvement of the supply capacity of clean and low-carbon energy

- ◆The Company promoted photovoltaic power generation projects, such as large-tow roof-distributed photovoltaic power generation and warehouse roof-distributed photovoltaic power generation in Huanjiang Road.
- ◆The generating capacity of the roof photovoltaic power generation project for a switchgear room of 220,000 kV in the west area of the Thermal Power Department was 480,000 kWh in 2022.
- ◆The hydrogen supply center was put into operation .



Transformation and upgrading of the structure of the refining and chemical industry

- ◆The Company promoted the intensive and green development of refining and chemical businesses, shut down outdated production facilities and carried out comprehensive technological upgrading and quality upgrading projects in an orderly manner.
- ◆The Company adjusted the product structure. The first phase of the 48K large-tow carbon fiber project has been put into production, and the 250,000 tons/year styrene thermoplastic elastomer project proceeds orderly.
- ◆The Company obsolete 78 motors with low energy efficiency in operation and replace the ones with class-I energy efficiency and obsolete 12 transformers with low energy efficiency and replace the ones with class-I energy efficiency.

Energy conservation and carbon reduction campaign

- ◆The Company completed energy conservation projects, such as the waste heat recovery system renovation of heating furnaces, the renovation of lean/rich amine heat exchangers for 3# diesel oil hydrogenation solvent regeneration system, and the renovation of heating furnace linings.
- ◆The Company completed the through-flow reconstruction of 5# and 6# units, and the power supply coal consumption of 5-6# units decreased by 43g/kWh compared with that before the renovation, with an increase in generating capacity of 7.48 million kWh; the Company also completed the energy-saving reconstruction of four fans of 5# furnace and four feed pumps of 6# unit, saving about 3 million kWh of electricity per month.
- ◆The Company carried out CO₂ capture and utilization, and 41,293 tons of crude CO₂ has been recovered from EG unit in 2022, which could be used to produce food-grade CO₂ products.
- ◆ The Company promoted the industrial application of low-NOx new technology for environmental protection and energy conservation in cracking furnaces. If a cracking furnace runs 8000h/year, 740.4t/year of fuel gas can be saved.
- ◆ The Company promoted the renovation of thermoelectric units to use clean fuel and improve efficiency. The carbon emission intensity for the power supply is expected to decrease from 0.83tCO₂/MWh to 0.36tCO₂/MWh.

Optimization and adjustment of the energy structure

- ◆ The Company achieved a generating capacity of 9.66 million kWh by biomass fuel blending and coupling, thus reducing CO₂ emissions by 17,600 tons, which is equivalent to planting 950,000 trees.
- ◆ The Company steadily increased the proportion of "green electricity" used, and purchased green certificates equivalent to wind electricity of 10 million kWh in 2022, which is equivalent to a reduction of 8,719 tons of CO₂ emissions.



Green and low-carbon action for all

- ◆ The Company strengthened the publicity and guidance of green and low-carbon and carried out cloud publicity of the Company's "carbon peak and carbon neutrality" situation for the first time.
- ◆ The Company establishes the concept of green and low-carbon production and advocates a green and low-carbon lifestyle.

- ◆ 2020-2021 Advanced Group for Energy Conservation and Emission Reduction by Shanghai Energy Conservation Association
- ◆ The Company won the "Best Deal Award" in the 2021 member evaluation and the selection of related awards conducted by Shanghai Environment and Energy Exchange in 2022.
- ◆ The Company won the Outstanding Organization Award in the knowledge contest of the Energy Conservation Week conducted by Shanghai Energy Conservation Association in 2022.

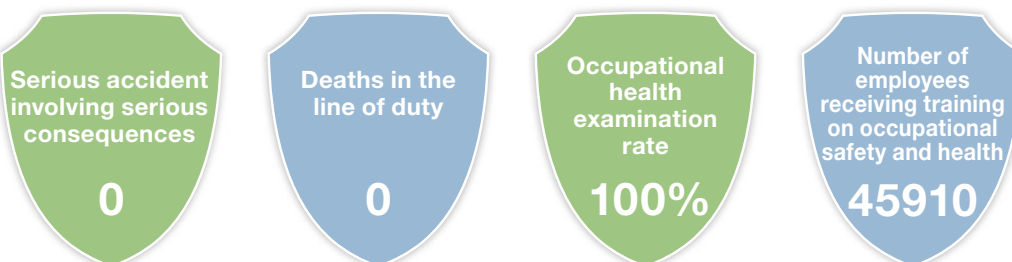
Relevant awards and honors



STRENGTHENING SAFETY MANAGEMENT

PURSUING SYSTEMIC THINKING AND IMPROVING THE INTRINSIC SAFETY LEVEL

In 2022, the Company thoroughly implemented General Secretary Xi Jinping's important remarks on work safety, took HSE management system thinking as a guarantee to improve the Company's intrinsic safety level in strict accordance with the Work Safety Law and Shanghai Administrative Rules on Work Safety, and upon the continuous implementation of the requirements of the Sinopec's Three-year Action Plan for Special Rectification on Work Safety, the Implementation Plan of the Three-year Action for Special Rectification on Work Safety of Shanghai and other documents. The Company firmly establishes the idea that "all accidents can be avoided" and adheres to the problem-oriented principle to effectively identify safety risks and hidden dangers, actively carry out special rectification, constantly enhance the emergency response capacity, strengthen all employees' responsibilities for work safety, and prevent and reduce work safety accidents.



Fully implementing HSE management system to form a safety management and operation mechanism

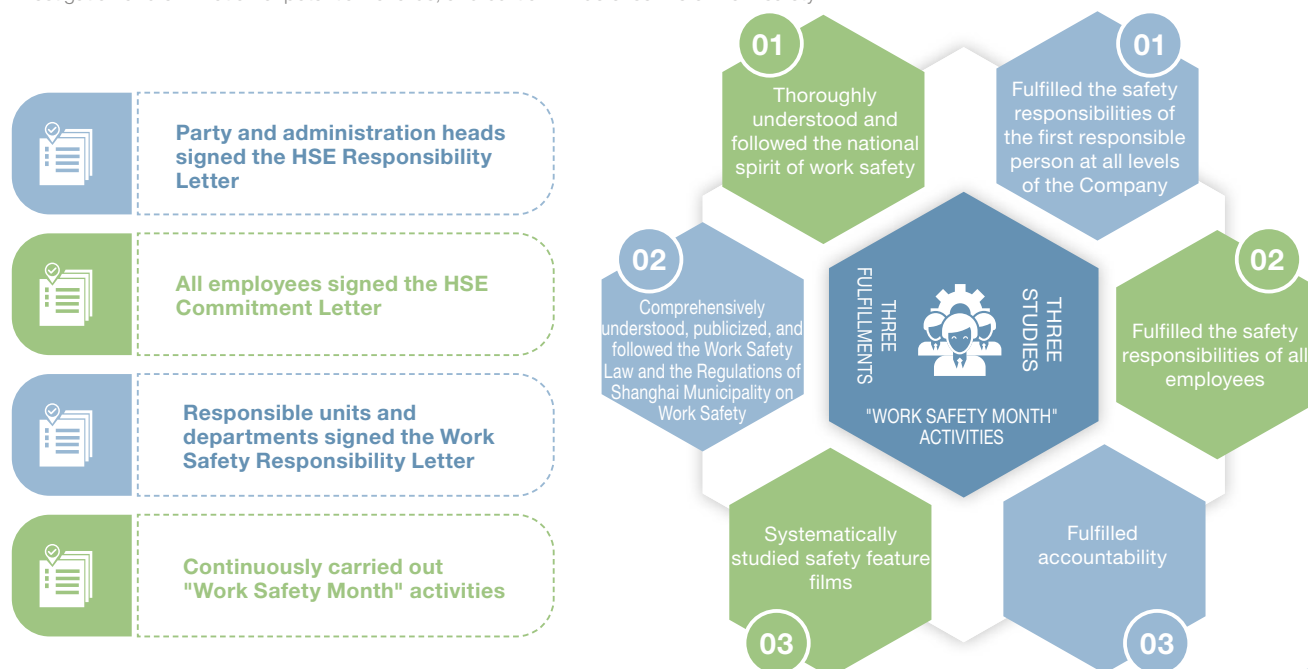
In 2022, leaders at all levels of the Company took the lead in publicizing and implementing the HSE management system and took serious measures to ensure the effective operation of the HSE management system, forming a safety management and operation mechanism with each performing his own duties and responsibilities and coordinated operations; established dynamic management of safety factors to achieve closed-loop management of each safety problem and realize the intrinsic safety of production management.

Strengthening work safety accountability to ensure the intrinsic safety of personnel quality

In 2022, the Company strengthened the work safety responsibility of all employees by focusing on "Three Studies" and "Three Fulfillments"; broke down and implemented the work safety responsibility system, and strictly implemented the safety scoring and assessment of all employees against violations of rules and regulations to ensure the intrinsic safety of personnel quality.

Risk investigation and elimination of potential hazards

After the June 18th incident took place at 1# EG unit of SPC Chemical Division, SPC steadily and orderly promoted the emergency disposal, restorative maintenance and resumption of production, and the whole industrial chain resumed normal operation at the end of September. The preliminary investigation of the "June 18th" incident showed that the incident was identified as a general incident. Based upon relevant regulations, SPC actively cooperated to carry out the incident investigation, deeply learned lessons from the incident, comprehensively performed risk investigation and elimination of potential hazards, and built a firm defense line of work safety.



Strengthening the production process safety management to enhance the level of process safety control

In 2022, the Company prepared the post manual of "Five Understandings, Five Capabilities, and Five Abilities" for work safety to strengthen the intrinsic safety management of the production process; carried out the safety risk assessment of the production process for all employees, established and improved the risk lists at all levels; and established a comprehensive alarm management system to systematically improve the level of production process safety control.



Carrying out special renovation of old units to improve the safe operation level of equipment

In 2022, the Company formulated the Work Plan for Special Renovation of Old Units for Safety Risk Prevention and Control of SPC, established the renovation plan of "one policy for one unit"; and implemented the special competition for the stability rate, reliability, and operation rate of production units to improve the safe operation level of units and equipment.



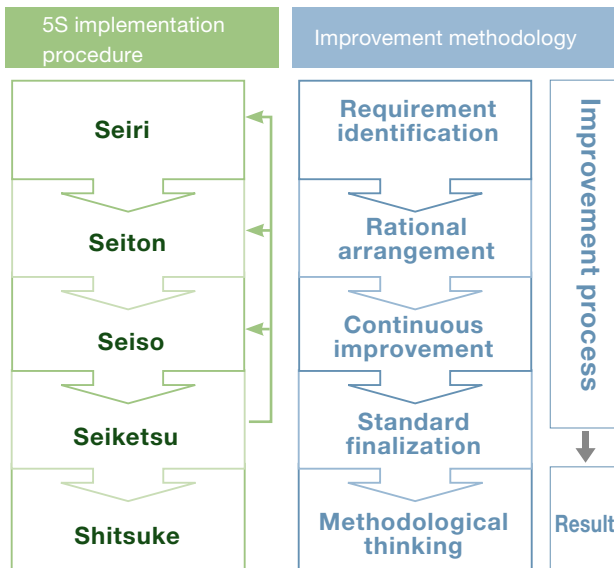
Treating safety risks and hazards in a centralized manner to improve the prevention and control of hazardous chemicals

In 2022, the Company formulated the Plan for Safety Risk Management and Centralized Hazard Treatment of Dangerous Chemicals of SPC, developed a digital intelligent control platform for the dual prevention of graded risk control and hazard identification and treatment at the enterprise level, carried out the "Look Back" action for the special treatment of hazardous waste, and improved the level of dual prevention and control of hazardous chemicals.



Innovating the operation supervision and inspection mode to ensure the intrinsic safety of on-site operation

In 2022, the Company formulated eight operation management systems including the Detailed Rules for the Management of Work Permits of SPC, innovated the on-site operation supervision and inspection mode, launched the 5S standardized management pilot, and adopted the scientific improvement methodology to ensure the intrinsic safety of the on-site operation environment.

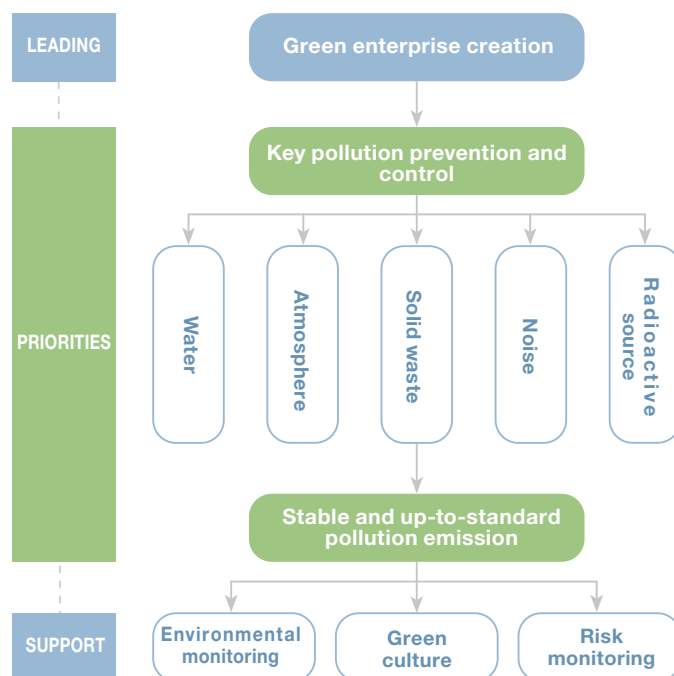


Continuously strengthening the management of contractors to ensure that safety accident risks were controllable

In 2022, the Company continued to strictly review the qualification of contractors, strengthened the assessment of contractors' violation of regulations, completed the HSE performance assessment of contractors' key positions, and ensured safety accident risks were controllable. The Company established the concept of "emergency response of all employees", improved the emergency plan system, strengthened the emergency fire drill, and enhanced the ability of grass-roots employees to deal with safety accidents.

INTENSIFYING ENVIRONMENTAL PROTECTION

The Company strictly followed the laws and regulations related to environmental protection and actively responded to the environmental protection policies formulated by the State and Shanghai. In 2022, the Company actively fulfilled its main responsibility of environmental protection as an enterprise, continued to promote the development of a green enterprise, implemented whole-process clean management, strictly controlled its emission of pollutants, continuously improved the environmental monitoring and management system, strived to improve the level of the Company's green culture, and helped build the vision of a "Leading Domestically, First-class Globally" energy chemical and new material company. In 2022, the Company's total expenditure on environmental protection was RMB 0.28 billion.



CREATING A GREEN ENTERPRISE



Carrying out green enterprise indicator development

In 2022, the Company successfully established itself as a green enterprise by focusing on "green development, green production, green energy, green technology, green service, and green culture".



Keeping track of "two lists"

The Company formulated the 2022 Green Enterprise Action Plan of SPC and continuously promoted the implementation of the Task Breakdown List for Green Enterprise Creation and the Implementation List for the Green Enterprise Creation Project. The Company completed one item in each of the Task List and the Project List in 2022 and other tasks and items are under continuous progress.



Creating "green grassroots"

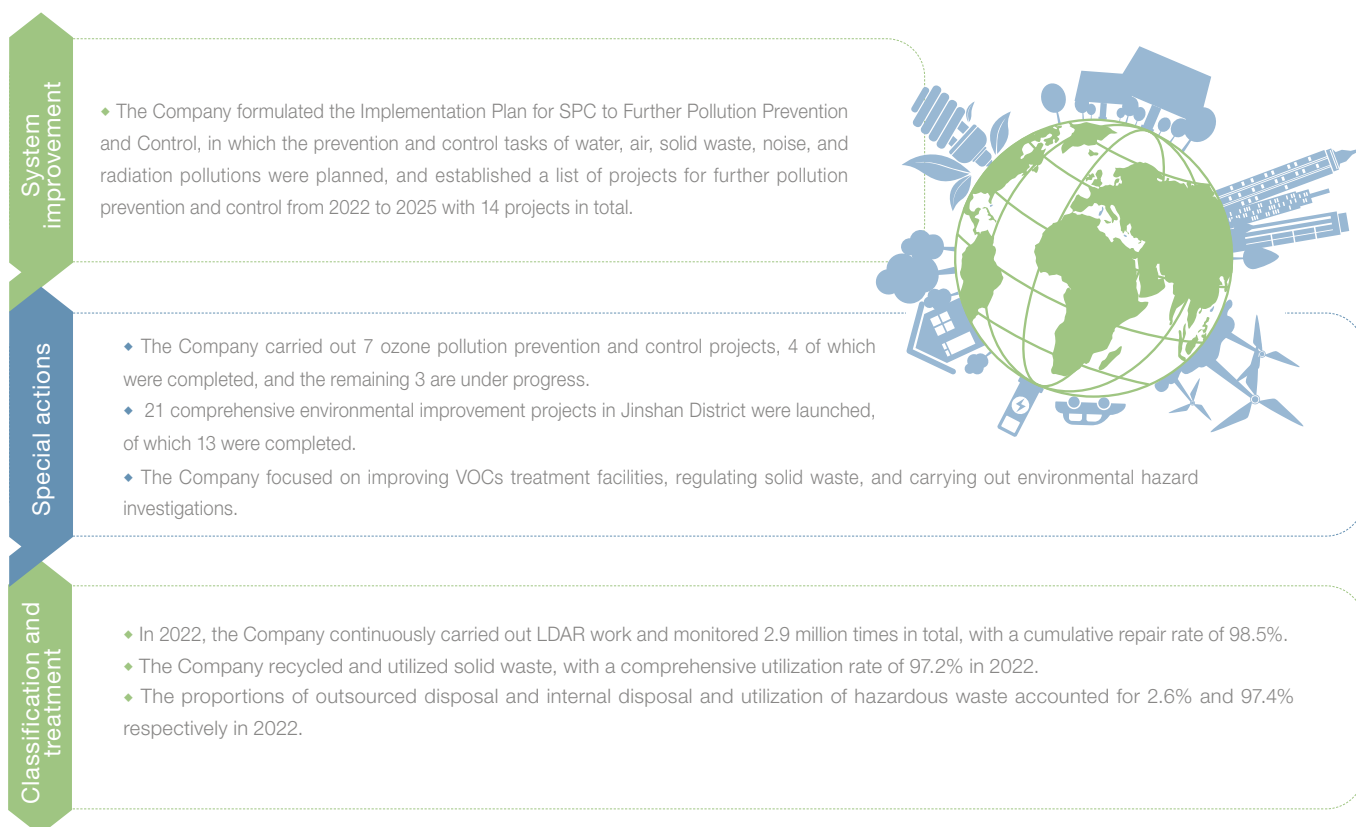
The Company formulated the 2022 Work Plan for the Creation of Green Grassroots of SPC. As of September 21, 2022, it completed the cultivation of 51 green grassroots organizations.



CONTROLLING POLLUTION EMISSION

According to the environmental protection assessment indexes of the Energy and Environmental Responsibility Letter and the pollutant permit control indexes of the Pollution Emission License, the Company clarified the relevant tasks, broke down the control indexes, and implemented the assessment rules. The total emission of the chemical oxygen demand, ammonia nitrogen, sulfur dioxide, and nitrogen oxides of the main pollutants all met the assessment indexes.

MAJOR POLLUTANTS	EMISSION INDEX	ACTUAL EMISSION
Chemical oxygen demand (t)	730	719.32
Ammonia nitrogen (t)	30	11.11
Sulfur dioxide (t)	210	152.02
Nitrogen oxides (t)	1180	954.84



Comprehensive compliance rate for discharged industrial wastewater

100%

Compliance rate of controlled exhaust

99.99%

Disposal compliance rate of hazardous waste

100%

STRENGTHENING ENVIRONMENTAL MONITORING

Improving environmental risk identification and assessment

The Company reassessed environmental risk source indexes. According to the latest assessment, there are 160 environmental risk sources in the Company, which can be divided into four categories, high, relatively high, medium, and low environmental risk sources, without extremely high environmental risk sources.



Strengthening the identification and rectification of potential environmental hazards

In 2022, the Company identified VOCs treatment facilities and an in-line monitoring system of fixed pollution sources as the key points of treatment, carried out rolling environmental hazard inspections, and reported 7 environmental protection treatment projects. All the reported projects have been completed.



Improving water and soil risk management

In 2022, the Company continued to strengthen water and soil risk management according to the requirements of the construction of a green enterprise. The Company prepared a list of groundwater monitoring wells and developed a self-monitoring plan; investigated buried storage tanks and abandoned wells, established a list, and declared it for recording; and completed the preliminary investigation of soil pollution in the Suitang Substation plot.



Improving environmental risk identification and assessment

In 2022, the Company organized the "Meeting on the Preparation of Emergency Response Plans for Environmental Emergencies in SPC", and required to focus on the preparation of special and on-site response plans, and form practical emergency response cards from them.



Strengthening the supervision of radioactive sources

In March 2022, the Company's radiation safety license was approved for renewal and the validity period of the radiation safety license was extended.



PROMOTING GREEN CULTURE

The Company promoted the concept of green culture and translated it into specific work and actions of employees, established a long-term mechanism for green production and green development, cultivated and practiced green concepts, created a green environment, advocated green office and green lifestyles, and strengthened publicity to create a green development image.



Raise employees' green awareness

- ◆ Enhance supervision and inspection
- ◆ Set up an environmental protection role model
- ◆ Carry out theme promotion activities

Improve green production management

- ◆ Promote landscaping efforts
- ◆ Improve environmental monitoring
- ◆ Enhance sanitation management

Strengthen external publicity

- ◆ Carry out the "Public Open Days" activities
- ◆ Strengthen external press campaign
- ◆ Enhance community-based publicity



DEVELOPING A CIRCULAR ECONOMY

Committed to building a resource-saving and recycling-oriented enterprise, the Company followed the circular economy principle, i.e., "reduction, reuse, and recycling", in the whole process of resource input, enterprise production, and product consumption and disposal and continuously reduced resource consumption and recycled waste resources via innovative technology R&D and optimized management to achieve sustainable development.

SOLID WASTE RECYCLING

The Company strictly implemented the newly enacted Law of the People's Republic of China on the Prevention and Control of Environment Pollution Caused by Solid Wastes and Solid Waste Pollution Prevention and Control Regulations of SPC, strengthened the whole process management of hazardous waste, general industrial solid waste, construction waste, and domestic waste, created a solid waste identification list, actively researched on waste minimization and comprehensive utilization, and promoted the construction of "waste-free factories". The Company achieved a 100% solid waste disposal compliant rate in 2022.

During the "14th Five-Year Plan" period, the Company will research the recycling technology of waste plastics and oil, promote the recycling of resources, and cultivate a new recycling model for petrochemical products.



WATER RESOURCES UTILIZATION

The Company compiled the Water Conservation Work Plan of SPC for the "14th Five-Year Plan" to further improve the efficiency of water resource utilization.

INDICATOR	UNIT	2020	2021	2022
Total industrial energy consumption	10,000 tons	4981	4768	3742
Water consumption per RMB10,000 output	Ton/RMB 10,000	5.49	7.72*	8.14*
Water consumption per ton of oil processed	Ton/Ton	0.36	0.40	0.48
Water discharge per ton of oil processed	Ton/Ton	0.140	0.158	0.145

* The water consumption per RMB 10,000 output value in 2021 and 2022 is calculated at the constant price of 2020. If it is calculated according to the old scope, it is 5.43 in 2021.



Recycled circulating water

The Company carried out in-depth water conservation transformation projects, optimized the production and operation of water fields, transformed water pumps to save energy, increased the proportion of make-up water in circulating water, and adopted pipeline pumps and other methods to reduce the pressure of circulating water systems. In 2022, the Company reduced the annual pollutant discharge of circulating water by 524,000 tons, a 25.77% decrease.



Industrial water system upgrades

The Company actively adopted multiple measures, including water intake optimization, pressure reduction for water supply, reuse of sludge water, leak detection of pipeline network, etc., to reduce costs and optimize the operation of sludge water recovery unit. In 2022, the Company recycled 1.8996 million tons of sludge water.

Wastewater system optimization

The Company strengthened the wastewater system optimization, monitored the conductivity of the MBR feed water and other indicators, promptly checked and adjusted where exceeded standards, and regularly cleaned the MBR membrane modules offline and replaced them. In 2022, the Company recycled 5.7977 million m³ of wastewater, achieving a 41.94% recycling rate of wastewater treatment.



Domestic water pipeline network renovation

The Company renovated the domestic water main network, significantly reducing domestic water leakage. In 2022, it reduced the cost of domestic water by RMB 1.64 million. The Company successfully acquired data from primary and secondary water meters, monitored the changes in domestic water consumption, and detected abnormalities promptly.



Action plan for water resource utilization during the 14th Five-Year Plan Period

The Company aims to reduce its industrial water consumption by more than 5% compared to 2020, save more than 5 million m³ of water and achieve controlled total amount of water drawn by the end of the 14th Five-Year Plan Period.

◆ Optimize the direct use of wastewater.

The Company studied the feasibility of using the sour water generated by this unit to replace the purified water for water injection at the top of the fractionation column of the FCC unit and the outlet of the rich gas compressor to reduce the total amount of sour water in the whole plant supplied to the sour water stripping unit.

◆ Strengthen the recycling of condensed water.

The Company lowered the amount of demineralized water and the load of wastewater treatment plant, increased the recovery rate of condensed water, and reduced effluent.

◆ Optimize integration of circulating water system.

The Company studied the technical and economic feasibility of applying advanced water-saving technologies, including the defogging process of the cooling column for circulating water and the closed circulating water process, to reduce the evaporation loss of the circulating water system and the amount of make-up water.

◆ Improve wastewater reuse rate.

The Company enhanced the treatment of wastewater discharged outside the wastewater treatment plant, reduced the wastewater discharge, increased the wastewater reuse rate, and strived to achieve the goal of "zero discharge of wastewater".

◆ Establish a smart water system.

The Company studied the feasibility of establishing a smart water management system for the whole plant to ultimately optimize water resources and realize the intelligent management of the enterprise water system.



EXHAUST RECYCLING

The Company established two sets of high-sulfur and low-sulfur gas holder systems, allowing the high-concentration exhaust produced by the production system to enter the gas holder for recycling purposes. By this way, the Company recycled and turned the exhaust passing through desulfurization and other pretreatment facilities into fuel gas. In 2022, the Company recovered 31.56 million m³ of low-sulfur flare gas and 19.22 million m³ of high-sulfur flare gas.

The Company adopted a combined recycling and treatment process to reduce the total amount of final treatment pollutants in volatile organic compounds, thus reducing resource consumption.

Green maintenance



The Company practiced the concept of green maintenance, adhered to the principle of "gas does not go to the sky, oil does not fall to the ground", optimized the structure of gas sources, strengthened the monitoring of the discharge back pressure flow of the unit, effectively reduced the impact on the operation capacity of the flare gas recovery system, and ensured the maximal recycling of flare gas of the system.



Technology upgrading



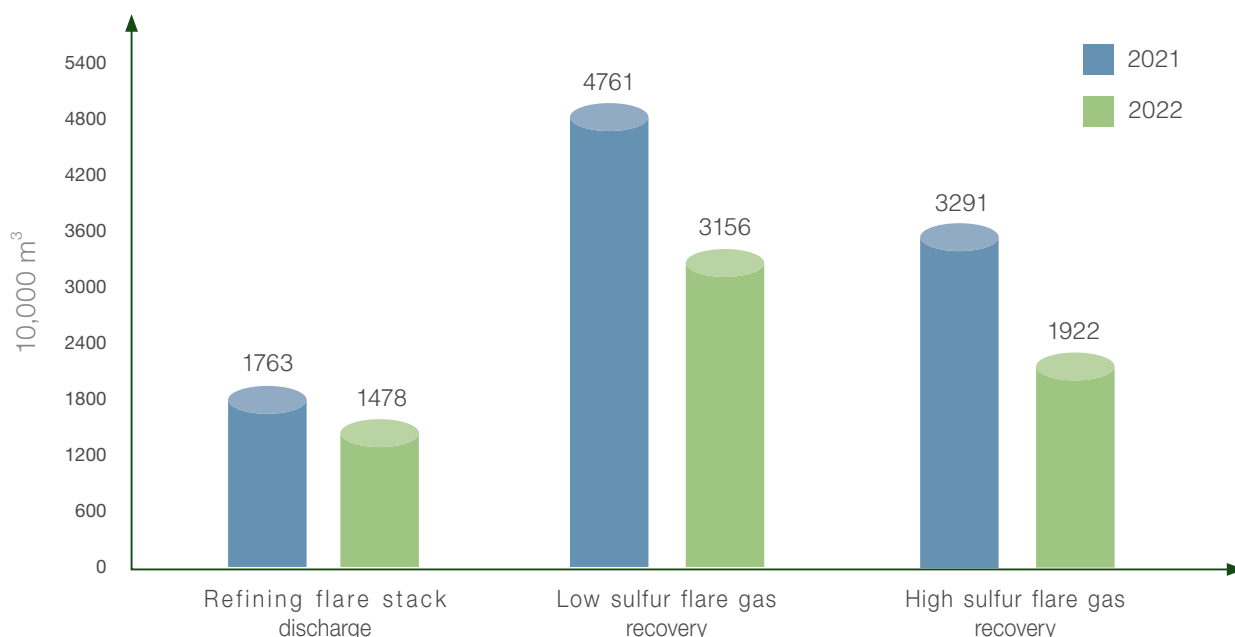
The Company newly introduced a VOCs deep treatment system, which adopts liquid nitrogen cryogenic technology to extend the treatment capacity of tank truck exhaust gas to up to 800m³/hour, improve the collection and treatment of oil and gas in storage tanks, and reduce costs. The Company introduced an adsorbed gas layered adsorption equipment to reduce the dust in the desorbed gas and reduce the emission of flare gas.



System optimization



The Company optimized the start-up combustion chamber of some flare heads and regularly drained the inlet filter and the condensate from the wastewater pipe of the gas holder's external pipeline, thus effectively saving fuel gas.



BIODIVERSITY PROTECTION

The Company strictly abides by relevant international and domestic laws and regulations, actively responds to global initiatives and international conventions, including the 2030 Agenda for Sustainable Development and the Convention on Biological Diversity, implements the Opinions on Further Strengthening Biodiversity Protection, strengthens biodiversity protection, and promotes the coexistence of man and environment in harmony.

The Company has integrated biodiversity protection into the whole process of its operations, continued to carry out ecological monitoring, maximized the benefits of greenery in biodiversity protection, promoted the construction of "garden factories", and actively protected natural ecological environments such as wetlands and oceans to build a sustainable world where people and nature dwell in peace.

1

Carry out ecological monitoring

The Company continues to improve the ecological monitoring method by integrating multiple functions, including water quality monitoring, ecological monitoring, and environmental protection display, via the ecological park as a carrier to bring the practicality and aesthetics of environmental monitoring in alignment with each other.



Build a garden plant

The Company actively builds garden plants and established a balance system of greenery occupation and compensation, enabling the greenery to swing from reduction to expansion. The Company follows the ecological laws of flora to expand greenery, cultivates new salt- and alkali-tolerant cultivars that could adapt to the environment full of chemical gases, and enriches the plant diversity in the plant area.

As of 2022, the Company's greenery had expanded to 2.909 million m², with a green coverage rate of 42.2%, making green the distinctive background color of units.

2

3

Protect the living environment

The Company pays attention to reducing the impact of each link of production and operation on the biological habitat environment. It has built a green, eco-friendly wharf with low energy consumption, noise, and emissions. It has also replaced the ship's fuel generator for power supply with the shore power system, thus reducing the impact of wharf operations on the natural entities in the coastal zone and ecological processes.

The Company actively contributes to improving the quality of the ecological environment. It has become the first company to produce low-sulfur heavy marine fuel oil in China, providing clean oil products to improve the marine eco-environment and reduce the impact of shipping on it.





FULFILLING RESPONSIBILITIES AND SERVING SOCIETY

- 01 Product liability performance
- 02 Supply chain management
- 03 Employees' rights and interests & development
- 04 Dedication to society

SPC always keeps its "original mission" in mind and firmly fulfills its responsibilities as a central SOE. The Company bravely takes the core responsibility of the national strategic scientific and technological force and improves the supply capacity of high-end petrochemical products; continues to promote the construction of a responsible supply chain to help the entire supply chain achieve environmental and social goals; respects and safeguards the rights and interests of its employees and promotes the common growth of its employees and itself; and insists on rooting for the greater good, working hard, and making altruistic decisions to give back to society.



PRODUCT LIABILITY PERFORMANCE

Following the requirements of the Guiding Opinions on Promoting High-Quality Development of the Petrochemical and Chemical Industry during the "14th Five-Year Plan" Period and aiming at the theme of high-quality development, the Company vigorously developed clean energy products and new chemical materials, established itself as a leader in high-end industries, and made great strides in developing strategic emerging industries such as the new material industry in the region in 2022.

FOCUSING ON HIGH-END SUPPLY

In 2022, the Company accelerated structural adjustment, focused on the core industry of carbon fiber and its composite materials, actively planned the layout of new and renewable energy industries, and made constant breakthroughs in the fine chemical and new material industries.

Large-tow carbon fiber and composite materials

The Company successfully put large-tow carbon fiber into production, which will remove China's current reliance on imports and a longstanding, underserved market and effectively promote the development of China's carbon fiber and manufacturing industries.

In 2022, the Company introduced its large-tow carbon fiber products to various applications, including the "Flying" torch of the Beijing 2022 Winter Olympic Games, the hydrogen-powered Linggang T2 public tram, and the Haikou Road Crossing Fenghe Bridge in Qingdao.

In 2022, the Company's 10,000-ton-level 48K large-tow carbon fiber project was selected as one of the "Top Ten National Key Projects of Central SOEs in 2022". The Company received a commendation letter from the Civil Aircraft Materials Industry Development Alliance. The industry also praised the Company for its outstanding contributions to developing domestically produced large aircraft and its independent and controllable research on civil aircraft materials.



National VIB standard gasoline



Clean energy

In October 2022, the Company took the lead in producing National VIB gasoline, achieving a cumulative production of 759,000 tons by the end of December. The national VIB gasoline produced by the Company is transported to Minhang Oil Depot in Shanghai and Chenshan Oil Depot in Zhejiang via Jinmin Long-distance Pipeline and Chenjin No. 3 Long-distance Pipeline to secure market supply in Shanghai, Zhejiang, and Jiangsu.

Dicyclopentadiene



C5 separation

In September 2022, at the "Longzhong 15th World C5C9 and Petroleum Resin Industry Conference 2022", the Company won the "Champion of 2021-2022 Annual Production of Dicyclopentadiene in China" title.

By the end of May 2022, the Company produced 15,584.8 tons of polypropylene medical materials, including 3,800 tons of high-melting index polyethylene products that can make nucleic acid sampling tubes, hence contributing SPC's strength to anti-pandemic efforts.



SERVING CUSTOMERS WITH UTMOST SINCERITY

The Company strictly abided by laws and regulations, including the Law of the People's Republic of China on Protection of Consumer Rights and Interests and Anti-Unfair Competition Law of the People's Republic of China, safeguarded the rights and interests of customers, and fully guaranteed that relevant issues they identify are remedied appropriately. The Company practiced the service concept of "do it now", constantly improved the customer service mechanism, and continued to pursue customer satisfaction.

In 2022, the Company received no product complaints, and the satisfaction its products and services generated had been on an upward trend for four consecutive years.

Safeguard customer rights and interests

Take customer opinions seriously

- ◆ The Company handled customer complaints and suggestions following the Customer-related Process Management Procedures of SPC and Product Sales Management Rules of SPC and updated relevant procedures promptly according to their actual needs.

Value customer privacy

- ◆ The Company explained the purpose of the information collection to customers to gain their permission before collecting necessary sales-related information.
- ◆ Relevant business personnel strictly observed the Company's applicable confidentiality regulations by signing a confidentiality agreement and accepting the supervision by the discipline inspection department.

Improve customer service mechanism

Effective communication mechanism

- ◆ The Company carried out customer visit activities through "National Quality Month" and other forms;
- ◆ it strengthened the connection and communication with professional sales companies and dispatch experts to provide on-site services;
- ◆ it combined online and offline channels to provide customers with company product and service information.

Track service mechanism

- ◆ The Company responded to customer service information promptly via a matrix model in the form of a sales service professional working group;
- ◆ it optimized parts of user service processes of the BPM platform;
- ◆ it continued to improve the e-commerce platform to enhance the purchasing experience.



CREATING A QUALITY-CENTERED SPC TOGETHER

Following the Law of the People's Republic of China on Product Quality, Metrology Law of the People's Republic of China, Standardization Law of the People's Republic of China, and other laws and regulations, the Company formulated and continuously improved Quality Management Measures of SPC, Product Standard Management Measures of SPC, and other quality management and quality management systems to keep all links that affect product quality in check.

In 2022, the Company's product spot-check passing rate reached 100%, without any recall of sold products due to quality, safety, and health concerns.

Improve the quality management system

- ◆ The Company revised 7 quality management systems and established the Ledger for Unqualified Product Process Inspection mechanism.



Rely on standards to ensure compliance

- ◆ It took charge of drafting 1 national standard and 2 industry standards;
- ◆ Formulated relevant management measures to ensure the compliance of its products;
- ◆ Discussed and reviewed the agreement standards related to its compliance management of ex-factory products;
- ◆ Revised and issued 4 corporate standards



Improve quality informatization

- ◆ It enhanced the online application management of quality instruments,
- ◆ promoted the online approval of the quality management process, and
- ◆ focused on the capacity-building of labs.

Build a corporate quality-centered culture

- ◆ It actively carried out quality improvement activities and strived for customer satisfaction; Utilized the "Quality Day" and "Quality Month" activities to guide all employees to internalize the "Customer-first and Quality-centered Enterprise" concept.



SUPPLY CHAIN MANAGEMENT

With the goal of "safety, timeliness, sustainability, and cost-effectiveness", the Company built a green supply chain and promoted supply chain security to create a win-win situation with suppliers for mutual benefit and a better future.

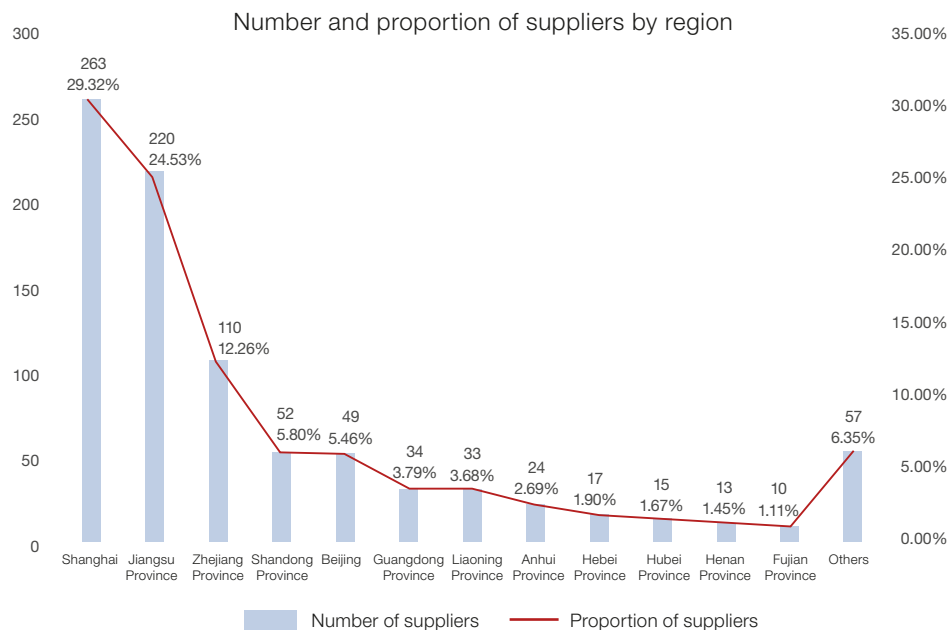
CREATING A GREEN SUPPLY CHAIN



Case: The successful green packaging

By promoting green packaging of chemical materials, the Company reduced 4,358 packaging barrels in 2022, saving RMB 217,900. After using liner bags for paint, the Company reduced 24.17 tons of barrels for storing hazardous waste, saving RMB 96,700.

In 2022, the Company established business relations with 897 suppliers from 24 provinces (municipalities). All the above suppliers are managed according to the relevant supply chain management system of the Company.



Note: The number and proportion of suppliers from other provinces (municipalities) in the above chart are as follows: Hunan Province (9,1.00%); Jiangxi Province (7,0.78%); Shaanxi Province (7,0.78%); Sichuan Province (7,0.78%); Heilongjiang Province (7,0.78%); Tianjin (6,0.67%); Gansu Province (6,0.67%); Chongqing (4,0.45%); Guangxi Province (1,0.11%); Hainan Province (1,0.11%); Ningxia Province (1,0.11%); Yunnan Province (1,0.11%).

PROMOTING SUPPLY CHAIN SECURITY

In 2022, the Company compiled the Implementation Rules for the Management of Material Loading and Unloading Operations, revised the Quality Management Measures of SPC for Material Supply, Supervision Management Measures of SPC for Equipment and Material, and Inspection Management Measures of SPC for Material Quality Inspection and Acceptance, and defined the job responsibilities and requirements of each unit (department) in supply chain security management from the system level.



EMPLOYEES' RIGHTS AND INTERESTS & DEVELOPMENT

EMPLOYEES' RIGHTS AND INTERESTS

SPC abides by the Labor Law of the People's Republic of China and other laws and regulations, signs labor contracts with employees as per the law, and never terminates the labor relationship with employees unless under specific conditions stipulated by the law; SPC has the responsibility for reviewing and confirming its employment practices and system each year and strictly abides by the Provisions on the Prohibition of Using Child Labor and policies on the prohibition of forced labor to prohibit the use of child labor and forced labor; SPC respects and safeguards the rights and interests and equal opportunities of its employees and protects their privacy.

The Company offers fair opportunities in employment, promotion, etc.

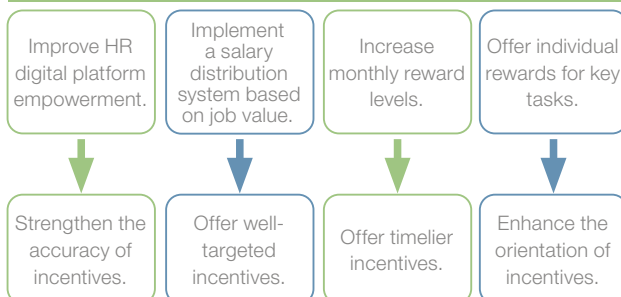
Number of employees in 2022	8007	Including: female employees 1462	Employees aged 30 and below 1054
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The Company offers fair employment and promotion opportunities for vulnerable groups, including women and the disabled. In 2022, the Company hired 180 female managers, accounting for 12.31% of the total number of its female employees, which is close to the ratio (12.7%) of its overall management personnel to the total number of employees. In 2022, the Company employed 95 people with disabilities.

The Company provided 100% protection of rights and interests for its employees



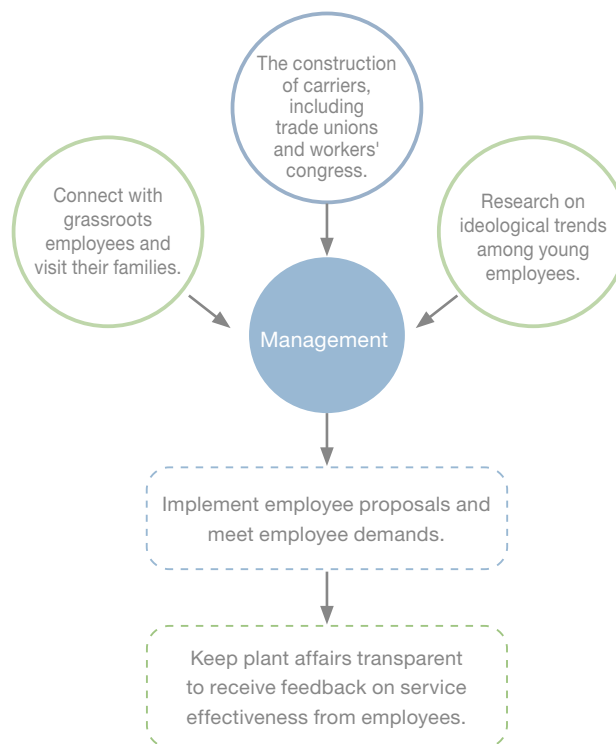
The Company implements a fair and incentive remuneration policy



CARE FOR EMPLOYEES

The Company abides by the Trade Union Law of the People's Republic of China and other laws and regulations and establishes and improves a diversified mechanism for daily consultation and communication between the management and employees. The Company conducts in-depth research on the demands of employees and takes different care measures for the needy, retired, and young.

The Company learns the demands of employees through multiple channels and improves its feedback mechanism.



Precisely implement policies for different categories of employees and provide comprehensive care and assistance.

Enforce policies for employees at different levels, precisely help the needy, offer support to the retired, and deliver results for the young.

Leverage supplementary medical insurance and employee support and mutual aid fund to create multiple layers of safety net for employees.

Actively promote practical projects to serve employees, including "staff huts" and cultural and sports venues.

Respond quickly to the needs of workers by providing them with relief supplies during the COVID-19 pandemic.



EMPLOYEE HEALTH

The Company abides by the Work Safety Law of the People's Republic of China and Law of the People's Republic of China on the Prevention and Control of Occupational Diseases and other rules and regulations, establishes a comprehensive health management mechanism, and devotes itself to protecting the physical and mental health of its employees.

Establishing a comprehensive health management system to promptly identify, evaluate, and eliminate occupational health hazards

Whole process

The Company established a leading group for comprehensive health management to pull together the strength of multiple departments to comprehensively manage employees' health and provide all-inclusive protection, from source prevention and control and process tracking to follow-up diagnosis and treatment.

Control risk

The Company identified and strictly controlled occupational health hazards from the source through routine occupational disease and hazard evaluation, daily occupational disease and hazard monitoring and investigation, comprehensive physical examination, etc.

"Three simultaneities"

The Company rigorously implemented the "three simultaneities" system of occupational health. It designed and constructed occupational disease protection facilities and simultaneously put them into service for each construction project.

Point-to-point

Relevant departments of the Company monitored employees with abnormal health conditions or high health hazards on an ad hoc basis, routinely monitored their conditions, and provided timely diagnosis and treatment.

100%

The Company scored full marks in the detection rate of occupational disease hazard factors, the occupational health examination rate, and the intervention rate of occupational contraindications and other risk factors in 2022.

0%

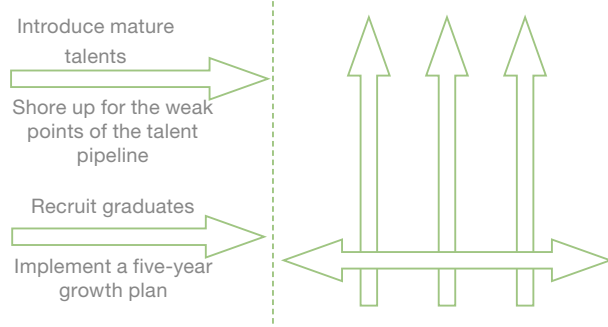
The Company maintained a 0% rate of occupational disease incidence in 2022.

EMPLOYEE GROWTH

The Company followed the Vocational Education Law of the People's Republic of China and other laws and regulations, implemented the project of building a talent-rich enterprise and the project of upskilling employees, and improved the staff training system and the fair, just, and diversified promotion channels.

Establishing a fair, accurate talent introduction, education, and selection mechanism.

Establish three major sequences, i.e., management, specialized technology, and skills operation, and create three corporate ladders.



Line up horizontal flow channels and increase opportunities for diversified development.

Set out the mechanism of characteristic cultivation, selection, and reserve of talents for different groups.

Leading cadres

It carried out LII (Leadership Insight Inventory) and MR (Leadership Readiness) tests and established a "selection, cultivation, and retention" system for cadres based on the competency model.

Expert

It improved the assessment and appointment system of chief experts and experts, implemented closed-loop management of experts, and constantly expanded the high-end talent pool.

Frontline workers

It created an "employee innovation studio" and cultivated craftsmen in Shanghai.

Female employees

It promoted the advanced cultivation of female workers.

Youth

It cultivated young experts, implemented the "Sailing Plan", and set up a "young and middle-aged talent class" and "young cadre class" to train young cadres.

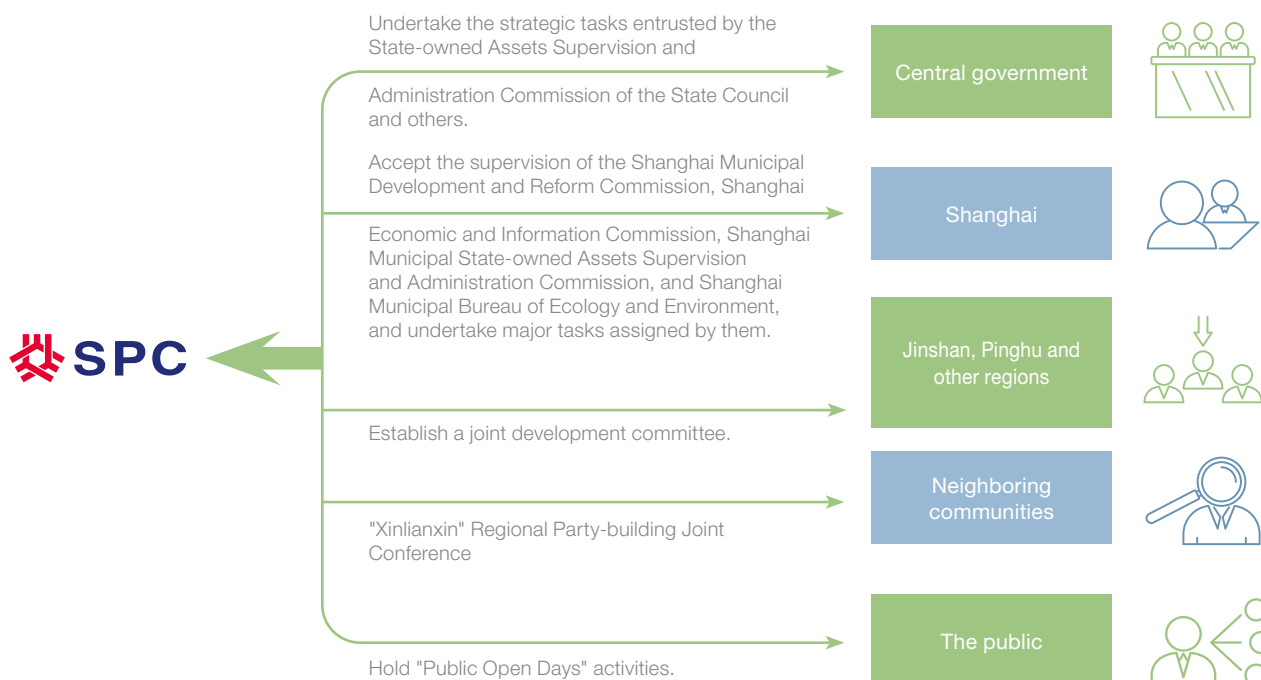


DEDICATION TO SOCIETY

PROMOTING COMMUNITY DEVELOPMENT

The Company abided by the Law of the People's Republic of China on Enterprise Income Tax, Interim Regulations of the People's Republic of China on Value-added Tax, and other laws and regulations, paid taxes in good faith, established an all-round cooperation mechanism with neighboring communities, and contributed to China's overall plan for economic growth; According to the Environmental Protection Law of the People's Republic of China, the Measures for the Disclosure of Environmental Information by Enterprises and Public Institutions, and other laws and regulations, the Company disclosed corporate environmental information to residents, attached great importance to public opinion response, and promoted understanding through communication.

The Company established a multi-level and all-round communication and cooperation mechanism with surrounding stakeholders.



Regularly hold regional linkage development symposiums

Under the framework of the joint development committee, the Company, Shanghai Jinshan District People's Government, and Shanghai Chemical Industry Park regularly held regional linkage development symposiums to formulate and implement linkage development work points, undertook critical decision-making consulting topics in Jinshan District every year, and participated in regional development strategic planning.

The Company actively supported the national strategy and aligned its development with that of the nation.

Serve the carbon peak and carbon neutrality strategy

- ◆ The Company takes "building a world-class clean energy chemical company" as its positioning and development vision
- ◆ It implemented the Shanghai Carbon Peak Implementation Plan, formulated and implemented the Carbon Peak Action Plan of SPC Before 2030.
- ◆ Cooperated with surrounding partners, and built a hydrogen energy industry chain and industrial clusters based on the hydrogen energy joint laboratory.

Serve the industry chain and supply chain security strategy

- ◆ It completed the "bottleneck" technical research task assigned by the superior governments, overcame critical technological issues in carbon fiber manufacturing, and put it into mass production.
- ◆ It planned to build a national high-end new material scientific and technological innovation consortium demonstration base.



The Company promoted the development of surrounding areas by leading industrial upgrading, paying taxes in good faith, and creating local job opportunities.

The Company invested in industrial upgrading, building green chemical industry, carbon fiber, advanced materials, new energy, and other industrial clusters with formidable international competitiveness to help Shanghai implement the north-south transformation development strategy.

RMB
136.65
100 million

The Company established a complete taxpayer self-inspection and internal control mechanism and generated a tax bill of RMB 13.665 billion yuan in 2022.



93.08%

The Company actively created jobs for the surrounding areas, achieving a local employment rate of 93.08% in 2022.



The Company served the surrounding areas and peers regarding infrastructure, science popularization, training, material supply security, etc.

Infrastructure

The Company leveraged its power supply, water supply, wastewater treatment, and other facilities to provide services for neighboring communities and included its environmental monitoring points in the Shanghai monitoring network.

Popular science education

The Company opened the SPC Exhibition Hall to the public, participated in many activities, including Jinshan Science and Technology Festival and various exhibitions, where it displayed cutting-edge scientific and technological achievements

Training services

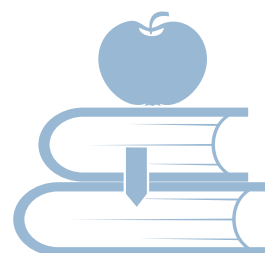
The Company provided comprehensive training services for SGPC, Sinopec Shanghai Offshore Petroleum Bureau, other fellow companies relevant government departments, and colleges and universities

Responsibility for guaranteed supply

The Company was tasked with guaranteeing the supply of refined oil and key plastic raw materials for surrounding areas and maintaining the normal operation of society at a fraught moment during the COVID-19 pandemic



The Company seized opportunities in "Public Open Days" and other events to provide science education to surrounding primary and middle schools.



CONTRIBUTING TO PUBLIC WELFARE UNDERTAKINGS

The Company has engaged in many demand-driven, result-oriented public welfare projects to fulfill the responsibility of large state-owned enterprises in rural revitalization, education assistance, and community aid; The Company spent decades creating, constantly reforming, and innovating the volunteer service brand "Starry Sky".

Inherit and promote "Starry Sky", a volunteer service brand

Since establishing the "Starry Sky" volunteer service team in 1996, the Company has always been adhering to the volunteerism of "dedication, friendship, mutual assistance, and progress", constantly exploring and improving the organization and management mechanism, and actively improving the service quality.



ADVOCATE AND ENCOURAGE EMPLOYEES TO DONATE HEMATOPOIETIC STEM CELLS.

In 2015, Mao Jun, an employee of the Company, established the volunteer team of "Xin Youth Home" of Jinshan District. By 2022, the number of Jinshan District stem cell volunteers increased from 5481 to 8638, and the number of donors increased from 21 to 49 cases. Mao Jun was named "the most beautiful volunteer" by the Publicity Department of the Central Committee of the Communist Party of China and the Office of Central Guidance Commission on Building Spiritual Civilization.

Invest in rural revitalization, education assistance, and other public welfare undertakings

The Company stayed committed to helping the needy in underdeveloped and surrounding areas and continued investing in rural revitalization, education assistance, consumption assistance, etc., enabling people in underdeveloped regions to enhance their self-sufficiency skills.



BUILD "A HIGH-QUALITY MIDDLE SCHOOL WITH THE HIGHEST ELEVATION"

The Company provided "one enterprise on one school" support for Baingoin County Middle School in Nagqu Town, Tibet Autonomous Region. From digitization, library, gymnasium, and other hardware, to teacher training, "SPC Chaoyang Scholarship", and "one-on-one" hand-in-hand fund donations, it invested in many aspects to build "a high-quality middle school with the highest elevation".



During the COVID-19 pandemic, the Company participated in numerous voluntary services, including nucleic acid testing, errands, and distribution of supplies.



The Shanghai Conference Center and Jinshan Hotel, owned by the Company, provided logistical support for the Shanghai medical team fighting the COVID-19 pandemic.

76

In 2022, the Company organized 76 volunteer service projects in neighboring communities.

3,932
person-times

In 2022, the Company provided various volunteer services to 3,932 members of neighboring communities.

38,759
hours

In 2022, the Company volunteered 38,759 hours to serve neighboring communities.

9.94
million

In 2022, the Company invested RMB 9.94 million to support the development of neighboring areas and communities

SPC ESG PERFORMANCE TABLE

ENVIRONMENTAL PERFORMANCE

POLLUTANT DISCHARGE



Indicators	Unit	2022	2021	2020
Chemical oxygen demand (COD) emissions	Ton	719.32	671.09	987.23
Ammonia nitrogen emissions	Ton	11.11	26.23	45.22
Exhaust emissions	100 million m ³	405.36	419.32	526.71
Sulfur dioxide (SO ₂) emissions	Ton	152.02	199.76	210.18
Nitrogen oxide (NOx) emissions	Ton	954.84	1067.59	1224.05
Hazardous waste emissions	10,000 tons	1.63	1.65	1.68
Non-hazardous waste discharge	10,000 tons	59.18	70.54	74.41

ENERGY CONSUMPTION



Indicators	Unit	2022	2021	2020
Total industrial energy consumption	10,000 TCE	518.6	632.3	692.0
Comprehensive energy consumption of industrial output value	TCE/RMB 10,000	1.092	0.991	0.743
Natural gas consumption*	100 million m ³	4.67	5.19	5.55
Coal consumption	10,000 tons	173.52	175.21	189.84
Crude oil consumption	10,000 tons	1045.33	1377.63	1467.2
Comprehensive energy consumption of refining	KOE/ton	57.40	50.98	49.86
Electric power consumption	10,000 kWh	266993	306914	334818

WATER RESOURCE



Indicators	Unit	2022	2021	2020
Total industrial water intake	10,000 tons	3742	4768	4981.15
Water consumption per RMB 10,000 output value	Ton/RMB 10,000	8.14*	7.72*	5.49
Reuse rate of industrial water	%	98.05	97.83	97.95
Water consumption per ton of oil processed	Ton/Ton	0.48	0.40	0.36
Water discharge per ton of oil processed	Ton/Ton	0.145	0.158	0.140

* The water consumption per RMB 10,000 output value in 2021 and 2022 is calculated at the constant price of 2020. If it is calculated according to the old scope, it is 5.43 in 2021.

GHG EMISSIONS AND MANAGEMENT



Indicators	Unit	2022	2021	2020
Total carbon dioxide emissions	10,000 tons	835.44	946.75	1054.11
-Scope 1 emissions	10,000 tons	809.37	902.30	977.32
-Scope 2 emissions	10,000 tons	26.07	44.45	76.79
Carbon dioxide emission intensity	Ton/RMB 10,000	1.82*	1.53*	1.41

* The carbon dioxide emission intensity in 2021 and 2022 is calculated at the constant price of 2020. If it is calculated according to the old scope, it is 1.06 in 2021.



SOCIAL PERFORMANCE

EMPLOYMENT AND TRAINING



Indicators	Unit	2022	2021	2020
Total number of employees	persons	8007	8230	8466
-Number of male employees	persons	6545	6656	6758
-Number of female employees	persons	1462	1574	1708
-Number of employees aged 30 and under	persons	1054	796	702
-Number of employees aged 31 to 50	persons	3477	3989	4518
-Number of employees aged 51 and over	persons	3476	3445	3246
-Total number of non-regular or dispatch workers	persons	153	164	168
-Local employment rate	%	93.08	91.38	89.32
Employee turnover rate *	%	0.30	0.29	0.23
-Turnover rate of male employees	%	0.22	0.23	0.18
-Turnover rate of female employees	%	0.07	0.06	0.05
-Turnover rate of employees aged below 30	%	0.24	0.19	0.08
-Turnover rate of employees aged 31-50	%	0.06	0.07	0.13
-Turnover rate of employees aged over 51	%	0	0.03	0.01
Signing rate of employment contract	%	100	100	100
Coverage of labor contracts	%	100	100	100
Coverage of social insurance	%	100	100	100
Coverage of anti-commercial bribery training	%	100	100	100

* The above-mentioned employee turnover rates are all domestic data, and the Company has no employees abroad.

OCCUPATIONAL HEALTH



Indicators	Unit	2022	2021	2020
Annual employee injury mortality rate	%	0	0.0120	0.0116
Lost days due to work injury	day	3540	3950	1918
Incidence rate of occupational diseases	%	0	0	0
Occupational safety and health training personnel	Person-time	45910	51839	29904
Occupational health examination rate	%	100	100	100

SUPPLY CHAIN



Indicators	Unit	2022	2021	2020
Tendering and purchasing rate	%	88.38	89.74	89.77
Direct supply rate of manufacturers	%	99.66	99.77	99.62
Ratio of suppliers passing the ISO 14000 environmental management system certification	%	65.73	64.60	63.50





SAFETY

Indicators	Unit	2022	2021	2020
Major fire and explosion accident	case	0	0	0
Major environmental pollution accident	case	0	0	0
Major occupational hazard accident	case	0	0	0
Major chemical spill accident	case	0	0	0

ECONOMIC PERFORMANCE

Indicators	Unit	2022	2021	2020
Operating revenue	in RMB 100 million	825.18	892.80	747.05
Total profit	in RMB 100 million	-36	26.48	5.74
Total assets	in RMB 100 million	412.43	470.39	447.49
Total taxes	in RMB 100 million	136.65	144.89	151.19
Number of invention patent applications	piece	82	81	50
Customer satisfaction	%	99.11	98.70	98.26
One-time resolution rate of customer service telephone complaints	%	100	100	100
Product sampling pass rate	%	100	100	100



WRITTEN COMMENTS ON ASSESSMENT OF CORPORATE ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

No.

Title of report	2022 Annual Environmental, Social and Governance Report
Company name	Sinopec Shanghai Petrochemical Company Limited
Company Profile	<p>Located in Jinshan District, Shanghai, as the holding subsidiary of China Petroleum & Chemical Corporation, Sinopec Shanghai Petrochemical Company Limited (hereinafter referred to as "SPC") is one of the major integrated comprehensive enterprises of refining and chemical industry in China and also an important production base of oil products, intermediate petrochemical products, synthetic resin and synthetic fiber in China.</p> <p>SPC grows out of Shanghai Petrochemical Complex, which was founded in 1972. In 1993, as a result of standardized restructuring of shareholding system for the state-owned enterprises, SPC 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. As of the end of 2022, SPC has a total of 8,007 employees.</p> <p>In 2022, SPC achieved operating revenue of RMB 82.518 billion, operating profit of RMB -3.6 billion, and total tax payment of RMB 13.665 billion.</p> <p>SPC actively strengthens four major businesses of oil refining, chemicals, synthetic resin and synthetic fiber, explores new fields such as carbon fiber, advanced materials and new energy, and builds a "4 +" petrochemical industry cluster. SPC has become the first enterprise in China and the fourth in the world that has mastered the commercial production technology of 48K large tow carbon fiber</p> <p>In 2022, SPC was awarded the title of "Collective with an Outstanding Contribution to Olympic and Paralympic Winter Games Beijing 2022"; Won one gold medal and one silver medal in 2022 National Industrial Vocational Skills Contest; Won the honor of "Shanghai May Day Labor Award".</p> <p>Adhering to the mission of "Providing Energy for Better Living", SPC established and implemented the development idea of "shifting the focus from refining to chemicals, chemicals to materials, materials to high-end ones, and petrochemical park to eco-friendly park", strove to create a "Domestically Leading, Globally First-class" company specialized in energy, chemicals and new materials, and contributed to boosting sustainable development of economy, fulfillment of social responsibilities and etc.</p>
Report Issue	Fifteenth issue of corporate social responsibility report and the first issue of ESG development report.
Assessment basis	Shanghai municipal group standard Guidelines for Corporate Social Responsibility (T31/01001-G001-2014)
Assessment method	Assessment was conducted in writing for SPC's 2022 Environmental, Social and Governance Report (hereinafter referred to as the Report) in accordance with the requirements of Guidelines for Corporate Social Responsibility (T31/01001-G001-2014) to verify and assess the process, substantiality, integrity, comparability, readability and innovation of the Report.
Assessment issues:	
Process	<p>SPC's Report Preparation Working Team makes overall planning and coordinates the preparation work, controls the overall direction and key nodes, and the Board of Directors is responsible for the final approval of the report.</p> <p>The Report identified substantive issues according to national macro policies, international and domestic standards for environment, social responsibility and governance, corporate development strategies, and social concerns, and positioned the Report as an important tool for improving social responsibility management, continuously promoting green and low-carbon development, and enhancing the scientificity and effectiveness of corporate governance, with clearly defined functional value orientation.</p> <p>The Report will be presented in electronic and print-out forms and available in Chinese and English versions. The electronic edition will be uploaded to the websites of Shanghai Stock Exchange, Hong Kong Exchanges and Clearing Limited and the website of Sinopec Shanghai Petrochemical Company Limited (http://www.spc.com.cn).</p>



Substantiality

The Report disclosed SPC's environment, society and corporate governance activities and their performance in 2022.

1. Governance of sustainable development. SPC integrated the ESG concept into its development strategy and whole corporate operation process, strove to modernize its corporate governance system and governance capacity, actively safeguarded the legitimate interests of investors, communities, customers, employees and other stakeholders and explored to strengthen scientific and effective corporate governance and improved the long-term mechanism for its legal and compliance operations.

1) SPC strengthened the compliance management, improved the compliance system, and established "Five-in-one" compliance management pattern. The Company carried out the quizzes of "Integrity and Compliance Management Knowledge" and "Civil Code Knowledge" for law popularization on WeChat, and over 10,000 person times participated in the WeChat quiz for law popularization.

In 2022, SPC revised and improved the SPC's Management Procedures for the Identification and Compliance Evaluation of Laws, Regulations and Other Requirements, the coverage of anti-commercial bribery training reached 100%, and there was no violation of competition laws and regulations or infringement of property rights.

2) SPC has formed a relatively sound anti-corruption system. Through sort-out and investigations of clean governance risks in posts, cultivating a clean governance culture and carrying out the "dual clean governance assistance" campaign, it ensured 100% full coverage of clean governance risk prevention and control and 100% full coverage of anti-corruption warning education.

3) Focusing on national strategic needs, key emerging fields, and the requirements of high-quality development, and investing a total of RMB 131 million in R & D, SPC made breakthrough in the key core technology of large-tow carbon fiber, realized localization of critical equipment for commercial production such as oxidizing furnace and carbonization furnace, and the first production line of 48 K large-tow carbon fiber unit successfully started up and produced on-spec. products. To further stimulate the vitality of scientific research and innovation, SPC carried out reform of the scientific and technological system and mechanism, and set up the platforms of research, cooperation and communication.

In 2022, SPC applied for 82 national invention patents and 24 invention patents were authorized.

2. Safety operation and green & low-carbon development. Considering "clean, efficient, low-carbon and circular" as the essential characteristics, SPC actively responded to climate change, strengthened safety management, enhanced environmental protection, developed circular economy, and paid attention to biodiversity protection, promoted the harmonious development of the Company with nature and strove to improve the level of intrinsic safety and environmental protection.

Total CO₂ emissions in 2022 amounted to 8.3544 million tons, decreased by 11.76% on a year-on-year basis; Total industrial energy consumption in 2022 was 5.186 million tons of standard coal, decreased by 17.98% on a year-on-year basis; The total emission of the chemical oxygen demand, ammonia nitrogen, sulfur dioxide, and nitrogen oxides of the main pollutants all met the assessment indexes, with the comprehensive compliance rate of discharged industrial wastewater reaching 100%, compliance rate of controlled exhaust gas reaching 99.99%, and compliance rate of disposal of hazardous waste reaching 100%.

In 2022, deaths in the line of duty were 0, and occupational health examination rate was 100%.

3. Fulfilling responsibilities and serving society. SPC has always remained true to the original aspiration and mission, and has firmly fulfilled the responsibility as a central SOE. SPC bravely takes the core responsibility of the national strategic scientific and technological force and improves the supply capacity of high-end petrochemical products; continues to promote the construction of a responsible supply chain to help the entire supply chain achieve environmental and social goals; respects and safeguards the rights and interests of its employees and promotes the common growth of its employees and the company; and insists on providing fuel for better living, working hard, and making altruistic decisions to give back to the society.



Substantiality	<p>Aiming at the theme of high-quality development, the Company vigorously developed clean energy products and new chemical materials, played the leading role of a leading enterprise and high-end industries, and boosted the rapid development of strategic emerging industries such as the new material industry in the region in 2022. The Company's 10,000-ton 48K large-tow carbon fiber project was selected as one of the "Top Ten National Key Projects of Central State-owned Enterprises in 2022". The compliance rate of product quality spot check in the whole year of 2022 reached 100%, and no sold products were reclaimed due to quality problems, and there were no product complaints. The satisfaction of the Company's products and services achieved positive growth for four consecutive years.</p> <p>2) With the goal of "safety, timeliness, sustainability, and cost-effectiveness", SPC built a green supply chain and promoted supply chain security to create a win-win situation with suppliers for mutual benefit and a better future.</p> <p>3) SPC regards employees as the power source of enterprise development and devotes itself to building harmonious labor relations. The Company abides by the Labor Law and Trade Union Law, signs labor contracts with employees according to law, respects and safeguards employees' rights and interests and equal opportunities, does not use child labor and forced labor, protects employees' privacy, implements the project of strengthening enterprises with talents and the project of employees' quality, and improves the all-staff quality training system and the fair and just diversified promotion channels.</p> <p>By the end of 2022, SPC had a total of 8,007 employees, with a turnover rate of 0.30%. Employees' labor contract conclusion rate reached 100%, collective contract coverage rate 100%, social insurance coverage rate 100%, occupational health examination rate 100%, occupational health and safety training rate 100%, and employees' occupational disease incidence rate was zero.</p> <p>4) By adopting various methods such as holding activities of "Public Open Days" and "Xinlianxin" regional Party-building joint conference, SPC legally disclosed corporate environmental information to surrounding residents, attached great importance to public opinion response, and promoted understanding through communication.</p> <p>In 2022, SPC organized 76 items of volunteer services in neighboring communities, provided 3,932 person times volunteer services in surrounding communities, rendering volunteer services for 38,759 hours and invested RMB 9.94 million to support development of surrounding regions or communities.</p> <p>The report descriptions are detailed and full, presenting a good substantive performance.</p>
Integrity	<p>The main body of the "Report" systematically disclosed SPC's accomplishment of the core indicators from the perspectives of "Governance of Sustainable Development; Safe Operation and Green & Low-carbon Development; Fulfilling Responsibilities and Serving Society".</p> <p>The framework, topics and information content of the Report meet the requirements of "Basic Information, Responsibility Management, Responsibility Performance, Outlook of Responsibility and Appendix of the Report" of T31/01001-G001-2014 Guidelines for Corporate Social Responsibility.</p>
Comparability	<p>The "Report" disclosed the comparative data of multiple key performance indicators such as "total tax payment", "exhaust emissions", "total industrial energy consumption", "total carbon dioxide emissions" and "major fire and explosion accidents" for three consecutive years, which has good vertical comparability; Besides, the Report also made horizontal comparisons by describing the fact that SPC became the first enterprise in China and the fourth in the world mastering the industrialization technology of 48K large-tow carbon fiber through carbon fiber and hydrogen energy.</p>
Readability	<p>The "Report" comprehensively expounded the concept, actions and achievements of corporate annual fulfilment of responsibilities, communicated and responded to the expectations and demands of stakeholders from three dimensions, such as governance of sustainable development; safe operation and green & low carbon development; fulfilling responsibilities and serving the society, and the framework structure is clear; Through the "Starry Sky" volunteer service, enthusiastic "rural revitalization, education assistance" and other pictures of fulfilling responsibilities, it enhanced the recognition and readability of the Report.</p> <p>The "Report" demonstrated the scenarios of corporate fulfillment of responsibility with characters, data, real pictures, etc., which enhanced the recognition of the report and had strong readability.</p>



Innovation	Focusing on the responsibility actions and achievements in terms of the governance of corporate sustainable development; safe operation and green & low carbon development; fulfilling responsibilities and serving society, the Report manifests the undertakings of central state-owned enterprise to implement macro policies; Through preparation of SPC Management Measures for Corporate Social Responsibilities (2022 revision) and improvement of ESG top-level design, the report management is intensified, thus presenting good innovation performance.
Overall comments	The critical information, data and activities of fulfillment of social responsibility disclosed by the Report are basically in conformity with Guidelines for Corporate Social Responsibility (T31/01001-G001-2014).
Suggestions for improvement	1. Add the horizontal comparison of the industry. 2. Add data on key indicators including social donation, rural revitalization and education assistance to the social performance section.
Statement	The assessment comments are only specific to the Report.

Auditor: Wang Xiulan

Assessment agency: Beijing Sanxing 9000 Certification Body Co., Ltd.

Date of Audit: March, 2023



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ABOUT THIS REPORT

This report is the 15th CSR report and the first ESG development report issued by Sinopec Shanghai Petrochemical Co., Ltd. This report addresses the sustainability philosophy and policies of the Company and its efforts regarding environmental protection, social responsibility and corporate governance in 2022, while responding to the expectations and concerns of stakeholders.

Time range

From January 1, 2022 to December 31, 2022. In view of continuity and comparability, it is appropriate to use data for three years since 2020.

Reporting period

This report is an annual report.

Data source

All data in the report are from official documents and statistical reports of the company.

Report scope

Consistent with the business coverage of SPC.

Appellation

For the convenient presentation and reading, "Sinopec Shanghai Petrochemical Co., Ltd." is also stated as "SPC", "the Company" or "we" in the report.

Report language

This report is available in both English and Chinese. In case of any discrepancy, the Chinese version shall prevail.

Review and approve

This report has been approved by the Board of Directors of the Company on March 22, 2023.

Report standard

This report has been compiled in accordance with the No. 1 Guidance for Self-Regulation of Listed Companies in the Shanghai Stock Exchange - Standardized Operation and Guidelines on Environmental Information Disclosure of Companies Listed on the Shanghai Stock Exchange by Shanghai Stock Exchange, Environmental, Social and Governance Reporting Guide by HKEX, and with reference to the Guidelines for the ESG Evaluation of Listed Companies in China's Petroleum and Chemical Industry, TCFD-Aligned Reporting Report by the Oil and Gas Industry (2020) jointly issued by the International Petroleum Industry Environmental Conservation Association and the American Petroleum Institute (API), GRI General Standard (Version 2021) and GRI 11: Oil and Gas Industry Standard (2021 Edition) issued by GSSB, ISO2600: Ten Principles of UN Global Compact, Global Compact requirements for disclosure of annual progress, and other Guidelines

Report promotion

The Company promises that there is no false record, misleading statement or material omission in the Report and assumes legal liabilities for its authentically, accuracy and completeness.

Access to the report and further reading

Please visit the website of the Company (<http://spc.sinopec.com/>) to view or download the electronic text of this report for more information.



READER FEEDBACK

Dear readers,

Thank you for reading the 2022 SPC ESG Report. We appreciate and look forward to hearing your feedback on the sustainable development of SPC and this report. Your comments and suggestions provide an important reference for us to improve our ESG performance. Please send us your feedback by mail, email or fax. We welcome and appreciate your valuable comments!

Name:

Employer:

Tel:

Email:

Your comments on this report:

Your comments on this report:	Excellent	Good	General	Poor
Do you consider the structure of this report reasonable?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you understand the ESG philosophy and practice characteristics of SPC from this report?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you consider this report easily readable?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you consider the content arrangement and layout of this report reasonable?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What is your overall assessment of this report?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Your suggestions on SPC ESG Report:

Your suggestions on the sustainable development of SPC:

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