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2017

Sustainability Development Report

Environmental, Social and Governance Report





About This Report

This report is the fifth annual sustainability development report (environmental, social and governance report) issued by Sinopec Engineering (Group) Co., Ltd. (SEG) from 2013. It mainly discloses the performance of corporate social responsibility (CSR for short) in 2017 in aspects of economic, social and environmental. This report is free of and from false information, misleading statements, and the company guarantees the authenticity, accuracy and completeness of the contents hereof.

Report Subject:

Sinopec Engineering (Group) Co., Ltd., also called "SEG", "The Company", "we", "us" in this report.

Time Frame:

January 1, 2017 to December 31, 2017, some contents are properly traced back to previous years to enhance comparability and forward looking of the Report.

Report Cycle:

This report is an annual report.

Content Scope:

This report covers Sinopec Engineering (Group) Co., Ltd. and its branches and subsidiaries.

Sources of Information:

Corporate documents, statistical reports, and summary and statistics of the performance of responsibilities by affiliated enterprises. All information is examined by the company's management, the competent departments and all affiliated enterprises. Some of the operation and financial data in this report is extracted from the company's 2017 annual report. If there is any discrepancy of financial information between This Report and the Annual Report, the information in the Annual Report shall prevail. Renminbi is used as the measuring currency for the monetary amounts referred in this Report unless otherwise stated.

Reporting Reference:

SASAC's "Guidelines – About Central Enterprises' Implementation of Social Responsibility"; (No1, 2008, Research of SASAC);

Environmental, Social and Governance Reporting Guide (ESG) issued by the Stock Exchange of Hong Kong Ltd;

Global Reporting Initiative's Guidelines issued by the Global Reporting Initiative (GRI Version G4); ISO 26000 – Social Responsibility issued by International Standard Organization;

CASS-CSR3.0 of Chinese Academy of Social Sciences issued by the Chinese Academy of Social Sciences.

Access to the Report:

This report is provided in both printed and electronic versions. For the electronic version, please visit the website www.segroup.cn. The electronic version can be downloaded and browsed.

Disclaimer:

The Report includes forward-looking statement. Besides historical facts, all events that are possible to or will happen in future and event statements are covered in forward-looking statements, including but not limited to preconditions, targets, estimates and business plans. Due to the influence from variables, future development results or trend of facts might be different from the statements. The forward-looking statement of the Report was made in March 2018. Sinopec Engineering (Group) Co., Ltd will not be liable or responsible for modification of the forward-looking statement. And the Report is printed in both Chinese and English. In case of any contradiction, the Chinese one shall prevail.

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Chairman's Statement



Ling Yiqun, Chairman

Operating Income

CNY 36208 one hundred million

Total energy consumption converting to standard coal

39,524.42 tons of standard coal

Total donations

 $\mathsf{CNY}\,47.3\,\mathsf{ten}\,\mathsf{thousand}\,\mathsf{yuan}$

Dear shareholders and friends,

First of all, on behalf of the Board of Directors of Sinopec Engineering (Group) Co., Ltd., I would like to express our heartfelt thanks for your attention and support.

2017 was a very extraordinary and unforgettable year. The global energy and chemical engineering industry was faced with major opportunities and challenges. SEG remained true to our original aspiration and forged ahead, stuck to our mission of "Better energy for better living, building and sharing SEG good community", brought into play our own advantages, and actively responded to the complicated domestic and international situations. The Company has achieved outstanding operational results and laid a solid foundation for realizing the beautiful vision of "Building a world-class engineering corporation". In 2017, The Company realized operating revenue of 36,208 million yuan, realized operating profits of 1,635 million yuan, and the value of newly signed contracts reached 39,063 million yuan.

At the same time, we were fully aware that the corporate development depended on the sustainable development of the society and environment. We have been insisting on the corporate values of people, responsibility, integrity, excellence, innovation and collaboration, and found opportunities in meeting social needs and solving common challenges. We have been focused on operating in good faith and in accordance with the law; giving priority to life safety and conducting safe development; providing high-quality services and creating outstanding values; Working Together with Partners and Achieve Win-Win Cooperation; upholding the people-oriented principle and caring for employees; devoting to environmental protection and realizing green development; making earnest efforts to promote public good and giving back to the society, earnestly performed our social responsibilities, worked hard with our stakeholders, in order to promote nature co-exist harmoniously, and achieve the coordinated and sustainable development of economy, society and environment.

Practicing the responsibility to promote management. We have paid high attention to the management of social responsibility, focused on embedding the concept of social responsibility in the corporate decision-making management and business operation, established a relatively sound social responsibility management organization system, formed a social responsibility management promotion mechanism under making joint effort, and created more refined social responsibility management process and more professional social responsibility practice capability.

Operating in good faith and in accordance with the law. We adhered to the development goals and philosophy of "legal corporate governance and compliant operation", strictly abided by the requirements of the laws and regulations of the State and the territories of operation, continued to standardize the corporate governance structure, further deepened the construction of corporate compliance management system, earnestly implemented anti-corruption management, earnestly implemented the obligation to abide by laws and regulations, adhered to the bottom line responsibilities, enhanced the ability to prevent and control compliance risks, and promoted the healthy and stable development of the company.

Prioritizing life safety and conducting safe development. We have been adhering to the management philosophy of "safety is above all and life is the most precious", long-term concerned about the corporate security issues in all aspects of our operations, fulfilled our main responsibilities, strengthened our management foundation, established a thorough safe operation management system, and actively spread the concept of safety, and continued to strengthen the prevention and control of security risks, to create a safe and stable atmosphere for sustainable development and ensure the security of operations at home and abroad. In 2017, we achieved 198 million safe man hours.

Providing high-quality services and creating outstanding values. We have been committed to providing clients with quality products and creating maximum value for the society. We vigorously expanded market in the fields of environment, energy saving and new energy, deepened overseas business development, strengthened the construction of quality management system, guaranteed the delivery of guality projects, established the corporate brand and reputation, and enhanced the sustainable competitiveness of the company. In 2017. three projects undertaken by eight subsidiaries won the Gold Medal of National High Quality Project Award and eight projects won the National High Quality Project Award. Meanwhile, we vigorously promoted scientific and technological innovation, increased efforts of scientific and technological research and development, stimulated the creativity of all employees, promoted the transformation and industrialization of scientific and technological achievements. Under the drive of technology, creating greater social value. In 2017, the two projects including "Development and Application of the Integrated Large-scale Coal-to-oil Products/Olefin Technology" and "Whole process of High-efficiency Methanol to Olefins Technology" won the First Prize of National Scientific and Technological Progress awarded by the state science and technology awarding meeting of the People's Republic of China, and "Deep Delay Coking Technology for Maximum Light Oil" won the second prize.

Cooperating with partners and achieving mutual benefits. Supply chain is an important stakeholder for the company's sustainable development. Relying on the information technology, we actively integrated the concept of sustainable development into supply chain management, innovated information-based procurement management mode, built the supplier informationbased management platform, realized the supply chain management and supervision, promoted suppliers to fulfill their responsibilities, and cooperated with partners to achieve mutual benefits and build an ecosystem of the co-construction and sharing of resources and achievement. In 2017, we established service relations with 2,541 suppliers, E&E suppliers 653 and 103 suppliers on record. We also signed procurement service agreements with 27 well-known overseas suppliers for overseas projects to achieve strategic cooperation and realized sustainable development. Meanwhile, we built an overseas cooperation platform for suppliers in combination with the national development strategy – "the Belt and Road", and supported suppliers to go global.

Upholding the people-oriented principle and Caring for employees. We have been regarding employees as valuable assets for the corporate sustainable development. We have adhering to the concept of "respecting talents, caring talents and cultivating talents", implemented the strategy of "Making enterprise stronger through promoting talents resources development", safeguarded the basic rights and interests of employees, paid attention to employees' occupational health, focused on employees' development, enhancing employee care, and devoted to creating a harmonious, healthy, friendly and pleasant working environment for employees, and strived to build a harmonious and winwin labor relations and realized development together with employees. In 2017, The Company had 19,000 employees, of which minority employees accounted for 2.66%; 4,688 employees had senior or higher professional technical qualifications, accounting for 24.95% of the total number of employees; and 33,900 employees were trained by the company.

Devoting to environmental protection and realizing green development. We are a responsible large energy and chemical engineering company, and fulfilling environmental protection responsibility is an important issue for us to achieve sustainable development. We have adhering to the development concept of "green and low-carbon", implemented energy-saving and emission reduction management in the whole operation process, promoted efficient use of resources, paid attention to the protection of ecological and natural resources, built environmentally friendly corporate brand, and achieved harmonious development of economy, society and environment. In 2017, our company used comprehensive energy consumption 39,524.42 tons of standard coalin total.

Making earnest efforts to promote public good and giving back to the society. We have been basing on the concept of "extracting sources from the society and giving back to the society", enthusiastically serviced the society, paid attention to charity, organized employees to take part in voluntary activities, established a harmony and win-win relationship with the society, expanded the community happiness space, and achieved the unification of social benefits and economic benefits. In 2017, our company carried out charitable donation CNY473,000 yuan in total and had 1,200 employee volunteers who accumulatively engaged in voluntary service for 5,700 hours.

In 2018, We will continue to adhere to our mission of "Better energy for better living, building and sharing SEG good community", fulfill obligations of corporate citizen, jointly take responsibility of our era to promote sustainability. We hope to contribute our intelligence and strength to economic and environmental sustainable development, while hoping to realize economic benefit.



About Us

- · Company Profile
- · Company Philosophy
- · Organizational Structure
- · Key Performance



Sinopec Engineering (Group) Co., Ltd. (SEG) is a leading engineering company in China. With our advanced corporate management philosophy and more than 60 years of industry experience and the efforts in constantly innovating technical expertise, we are a big player in terms of the design and construction of large and complicated projects, including refining, petrochemical engineering, new coal-chemical engineering, natural gas processing, storage and transportation projects and so on. We have constantly created greater value for economic, social and environmental sustainable development.

Company Profile

Sinopec Engineering (Group) Co., Ltd.

The world's top 250 engineering contractors

53 «

The international top 250 engineering contractors

53 "

The world's top 150 engineering design enterprises

47 th

The international top 225 engineering design enterprises



is a Sinopec-held large-scale complex project service and technical patent provider oriented to domestic and foreign refinery chemical engineering market, and is one of the largest construction enterprises at home. At home the Group has twelve wholly owned subsidiaries: Sinopec Engineering Incorporation Ltd., Sinopec Luoyang Engineering Co., Ltd., Sinopec Shanghai Engineering Co., Ltd., Sinopec Ningbo Engineering Co., Ltd., Sinopec Nanjing Engineering Co., Ltd., Sinopec Guangzhou Engineering Co., Ltd., Sinopec Fourth Construction Co., Ltd., Sinopec Fifth Construction Co., Ltd., Sinopec Tenth Construction Co., Ltd., Sinopec Ningbo Research Institute Co., Ltd., Sinopec Heavy Lifting Transporting Engineering Co., Ltd., and SEG Energy Conservation Technology Service Centre. One branch SEG Energy Conservation Technology Service Centre.

In May, 2013 The Company made the first global public offer of 1.328 billion H shares, the price being 10.5 Hongkong dollars per share, and on 23rd May 2013 it was listed for transaction in HKSE and successfully entered international capital market.

The Company holds certificates granted by such international and domestic government bodies and authorities as National Development and Reform Commission, Ministry of Housing and Urban-Rural Development, Ministry of Commerce, State Administration of Work Safety, State Environmental Protection Administration, Loyd's Register of Shipping, and International Federation of Consulting Engineers, and has developed an all-dimensional, multi-level and wide-scope talent framework. Relying upon goodquality talents, rich engineering and constructing experience and deep technical capabilities, it is able to provide fine and full service for domestic and overseas clients in petrol refining and chemical engineering, coal chemical engineering, natural gas chemical engineering, environmental project and public utilities and other areas.

The Company entered international market in 1990 and has established business platforms in all regions with large oil refinery and chemical engineering capital output including Middle East, Central Asia, Asia-pacific, Africa and South America. It has undertaken many oil refinery and chemical engineering projects in Kuwait, Saudi Arabia, Katar, Kazakhstan, Nigeria, Singapore, Bangladesh, etc. and acquired fixed client group and fine international acclaim. It has implemented a total of over 100 projects in international project market from 2005 to the present. According to Engineering News-Record (ENR) in the United States, the Company ranked 53rd among the world's top 250 engineering contractors, 53rd among the international top 250 engineering contractors, 47th among the world's top 150 engineering design enterprises, and 65th among the international top 225 engineering design enterprises. The overall strength brand influence of our company continued to improve.



▲ China's Top 100 Enterprises Award



China's Moral Enterprise Award



 The Most Social Responsible Listed Company



Organizational Structure



Key Performance





Corporate Governance

- · Governance Structure and Progress
- \cdot Compliance and Risk Management
- · Anti-Corruption



Good corporate governance is the foundation for realizing our business vision. We have constantly optimized our corporate governance structure, strengthened compliance and risk management, and earnestly implemented anti-corruption responsibilities in order to realize our healthy and sustainable development. We have been committed to building a world-class engineering company.

Governance Structure and Progress

The Company strictly abided by the relevant laws and regulations such as The Company Law of the People's Republic of China, The Guidelines for Articles of Association of Chinese Listed Companies and The Code of Corporate Governance for Listed Companies in China issued by the China Securities Regulatory Commission and so on, as well as the relevant provisions of the territories of operation. We constantly optimized the structure of corporate governance, further clarified the duties and boundaries of the governing bodies including general meeting of shareholders, the board of directors, the board of supervisors and senior management, and established a corporate governance checks and balances mechanism featuring "clearing division of rights and responsibilities, each performing its own functions, mutual coordination and effective checks and balances", promoted the formation of a corporate governance model featuring scientific decision-making, effective supervision, and sound operation to enhance the overall corporate governance of the company. At the same time, The Company strengthened its supervision and discipline execution accountability, increased its audit supervision, highlighted system development and implementation of responsibilities, and promoted the company's full implementation of its social responsibilities to achieve continuous and effective development.

The corporate board of directors consists of nine directors, including four executive directors, two non-executive directors and three independent non-executive directors. The board of directors has four special committees namely the nomination committee, the strategy and development committee, the remuneration committee, and the audit committee. They conduct research on professional issues and put forward opinions and suggestions. During the reporting period, the corporate board of directors organized and held one annual general meetings of shareholders, two extraordinary general meetings of shareholders, two classified general meetings of shareholders and five meetings of the board of directors; organized and held two meetings of the audit committee, and once meeting of the nomination committee, once meeting of the strategy and development committee, and once meeting of remuneration committee. In addition, the board of directors revised the company's articles of association once, amended the rules of procedure of the board of directors once.

Annual dividend



Annual distributive dividend rate



The corporate board of directors executed the resolutions passed by the general meeting of shareholders in strict accordance with the resolutions and authorizations of the general meeting of shareholders. The Company formulated a shareholder dividend policy and paid dividends twice a year according to the dividend policy. The annual dividend paid was no less than 30% of the annual net profit. In 2017, adding in interim dividend of 0.056 yuan/share distributed by shareholders, annual dividend 0.200 yuan/share, and the annual distributive dividend rate was 79%.

The Company attached great importance to investor relations management, smoothed communication channels. By regularly publishing annual/interim reports and voluntary announcements about production and management, organizing earning release and management roadshows, promoted investors' understanding of the company's operating conditions, grasped the reasons for changes of earning indicators and future trends, achieves close communication with investors, fully understood the opinions and suggestions from investors, and enhanced investor confidence.

Compliance and Risk Management

The Company have been adhering to the development philosophy of "legal corporate governance and compliant operation", and complied with the legal regulations and regulatory requirements of the countries where it was located and the territories of operation, and paid attention to development trends of government-related policies in the United States, the European Union, and Australia, and continued to guide the study of the legal environment of the territories of operations, and established a long-term working mechanism that provides policy advice and legal support for major business decisions. The Company collaborated with domestic and foreign compliance teams to build a dynamic compliance risk management and control system integrating compliance consulting, legal management, audit supervision, risk prevention and control, and internal control, and counselled and enhanced the compliance review and risk monitoring capabilities of domestic and overseas branches and subsidiaries, thereby achieved sustained and healthy development.



Compliance Management

The Company have been adhering to the principles of "sound, independent, effective, and development" and relying on global legal resources database and Sinopec Group legal risk management system and other shared databases, established a sound global legal resource platform and a dynamic information monitoring system coordinated with Sinopec Group, constantly concerned about the development of government policies in the United States, the European Union, and Australia, organized domestic and foreign compliance teams to conduct country-specific legal surveys of regulations and policies of the territories of business operation, regularly and irregularly issued compliance warnings and risk warnings to sensitive areas and business units, and guided ascending subsidiaries and branches' ability to manage and control

Risk Management

The Company persisted in preventing and controlling risks from the source, built a comprehensive risk management system, improved the risk monitoring and prevention mechanism, formulated corporate policies such as the Comprehensive Risk Management Measures, the Operational Guidelines for Prevention and Control of Legal Risks, the Guidelines for compliance operations in overseas projects.

The Company continued to pay attention to related transactions, improper market behaviours, and disclosure of securities rights, constantly improved the corporate long-term working mechanisms for anti-laundering and anti-commercial bribery, so as to lead its smooth operation. The Company provided timely compliance advice and legal support for affairs relating to laws and litigation in major decision-making, emergencies, and public-events, to maintain the company's market reputation and shaped a good image of "being recognized by employees, pursued by managers, satisfied by regulators, and trusted by investors".

Review for Legal Risk Prevention and Control Contract, the Implementing Rules for Legal Risk Management, the Contract Management Measures, and the Contract Review Guidelines, sorted out internal control risk lists, systematically identified major risk factors in various areas, and actively conducted risk and internal control inspection and evaluation to effectively prevent and control risks and reduce the negative effects of risks. During the reporting period, the corporate headquarters, ten subsidiaries and one branch of the company established comprehensive risk management systems and formed a comprehensive risk information base.

At the same time, in order to strengthen the prevention and control of legal risks of overseas major engineering projects, The Company continuously improved its risk management system for overseas projects, updated and issued related systems such as the Measures for Management and Control of Overseas Projects, and the Implementing Rules for Risk Management in Market Development of Overseas Projects, strengthened legal review and the review of commercial terms of project contracts, continued to implement the working system of follow-up by special person, seriously followed up major risks arising from project implementation, and timely participated in coordinating and resolving contractual disputes. At the same time, The Company also actively carried out overseas project risk management training, organized overseas project risk management activities, and publicized project risk knowledge, enhanced employees' risk awareness. During the reporting period, The Company successively conducted the training of overseas project risk management system for our subsidiaries for five times, completed the risk review in risk assessment and quotation phases for tens of large projects.

Internal Audit

Taking "preventing risks, promoting management, and increasing value" as the goal for long. The Company actively gave play to the audit's role of "management, diagnosis, supervision, and service", established an audit layermanagement system of "two levels, dual management, and hierarchical responsibility", created corporate audit management system, actively carried out special audits aiming at the key aspects of corporate management, timely diagnosed operating risks and financial risks of the company, and promoted the company to improve operation and management practices, effectively prevented and controlled risks, and enhanced the corporate sustainable and healthy development ability in all dimensions. During the reporting period, The Company directly implemented eight audit supervisions and led audit departments of subsidiaries and branches to implement 62 audit supervisions.

The Company also paid great attention to the audit management of overseas institutions and projects, and revealed the problems and risks in projects from such links as

Internal Control System

The Company actively established sound internal control management rules and improved its internal control management system. The Company formulated the SEG Internal Control Manual in accordance with the requirements of the Company Law of the People's Republic of China, the Securities Law of the People's Republic of China, the Accounting Law, the Stock Listing Rules of the Hong Kong Stock Exchange, the Basic Specifications for Internal Control of Enterprises, the Guidelines for the Application of Internal Control of Enterprises, the Guidelines for the Evaluation of Internal Control of Enterprises, and other relevant laws and regulations. The SEG Internal Control Manual includes six parts, namely general provisions, company-level control, businesslevel control, authority guidance, inspection evaluation and assessment methods, and supplementary provisions. The business-level control, including 58 internal control matrices and covering 23 categories. The SEG Internal Manual has

tender quotations, contract signing, project implementation, and subcontract management, effectively reduced the company's operational risks and loss of benefits.

During the reporting period The Company directly implemented audit supervisions 8 items Leading audit departments of subsidiaries and branches to implement audit supervisions 6 2 items

been conducive to preventing operational and management corporate risks, ensured continuous advancement of the company's development strategy.



Anti-Corruption

The Company strictly abided by Criminal Law of the People's Republic of China, Law of the People's Republic of China on Anti-Unfair Competition, The Company Law of the People's Republic of China, SAIC Provisional Regulations on the prohibition of commercial bribery and other laws and regulations, thoroughly implemented the relevant requirements of national anti-corruption, conscientiously carried out our anti-corruption responsibility, and built a prevention and control system for integrity risks through such methods as standardizing management over organization, reforming supervision system and mechanism, deepening system construction and strengthening education and guidance, so that achieved good results in anti-corruption work. During the reporting period, The Company did not engage in any corruption litigation.



The Company established the SEG supervision committee to reinforce supervision and coordination, enhanced the effectiveness of supervision, thereby achieved full coverage of the supervision over the performance of duties by various organizations and all the staff.

The Company laid emphasis on strengthening the construction of anti-corruption system, revised and perfected such systems as the Implementing Rules for the Entity Responsibilities of the Party Committee implementing the Construction of honest in the Party and Clean Governance, the Implementing Measures for the Responsibility System for the Construction of honest in the Party and Clean Governance, the Implementing Measures for Honest Interview of Clean Governance, the Provisions on Efficiency Supervision, the Implementing Measures for Carrying out Three Important and One Greatness Policymaking System", the Measures for Signing Undertakings of Practice of Integrity, the Rules of Procedure for the Discipline Inspection Commission of the Party Committee of Sinopec Engineering (Group) Co., Ltd. and the Working Rules of the Supervision Committee of Sinopec Engineering (Group) Co., Ltd., and constantly improved the weakness in these systems, so as to guarantee a unified and well-organized anti-corruption work with long-term effectiveness and give better play to the role of such systems in preventing corruption.

[•] During the reporting period



The Company held

anti-corruption education activities

Signed more than 1,300 letters of responsibility for integrity construction

During the reporting period, the Company organized all employees to sign the Undertakings of Practice of Integrity and required employees to abide by various provisions of integrity practice on a voluntary basis and consciously safeguard the corporate good image to the outside; the Company held 989 educational activities in terms of combating corruption and upholding integrity in various forms and signed more than 1,300 letters of responsibility for integrity construction.



Corporate Social Responsibility Management

- · Concepts of CSR
- · CSR Boosting
- · Identification of Material Issues
- · Communications with Stakeholders



Social responsibility management is an important guarantee for smoothing the progress of corporate social responsibility practice. We have been adhering to the concept of sustainable development for "building a better world", established an organization system of social responsibility management, facilitated the communication among stakeholder, identified important issues of sustainable development, set up a clear goal, and promoted social responsibility practices on an overall basis, so as to achieve such targets as giving returns to shareholders, serving clients, caring for employees, cooperating with partners, green development and making contributions to the society, and contributed to the national development, social harmony and friendly environment.

Concepts of CSR

The Company insisted on taking the human beings' longing for a better life as the driving force and direction of our development, attached great importance to our mission of "Better energy for better living, building and sharing SEG good community", and put the concepts of CSR into corporate decision-making and operation, seriously fulfilled economic, social and environmental responsibilities, responded to the demands of stakeholders, including government, shareholders, employees, clients, partners, environment, communities and the public and so on, so as to achieve the winwin development among the Company and our stakeholders, earned recognition and trust of our stakeholders and built corporate brand image as a responsible enterprise.



CSR Boosting

The Company paid high attention to the management of corporate social responsibilities. By standardizing CSR management structure, clarifying the responsibility of different organization, we formed a CSR boosting mechanism of upper and lower linkage, and promoted to put the concepts of CSR into the corporate decision-making and business operations in a more effective way, so as to optimized the CSR management process and enhanced the professional capacity for corporate social responsibility management.

The Company established a leading group for boosting social responsibility work; the corporate senior management was responsible for deliberating and making decisions on major issues concerning corporate social responsibilities and promoting the integration of social responsibility concepts and the corporate development strategies and operation management. The Administrative Department took the lead in organizing and coordinating the relevant departments and agencies to carry out social responsibility work and promoted the implementation of material issues of social responsibilities. All departments of the corporate headquarters and the subsidiaries were responsible to carrying out social responsibility practices within relevant working scopes and promoting the improvement of social responsibility performance.



Deliberating and making decisions on corporate major issues concerning our social responsibilities, and formulating CSR concepts and strategic plans.

Leading department

Organizing and coordinating all relevant departments and agencies to carry out social responsibility work and promoting the implementation of major issues of social responsibilities.

All department of the corporate headquarters and subsidiaries.

Being responsible for carrying out social responsibility practices within their respective working scopes.

Corporate Social Responsibility Promotion Mechanism

Identification of Material Issues

The Company, hanging around our own characteristics of sustainable development, complying with the CSR disclosure requirements of domestic and overseas social responsibility standards and guidelines, and combining with the demands and expectations of stakeholders, teased out seven social responsibility material issues including operating in good faith and in accordance with the law; prioritizing life safety and conducting safe development; providing high-quality services and creating outstanding values; Working Together with Partners and Achieve Win-Win Cooperation; upholding the people-oriented principle and caring for employees; devoting to environmental protection and realizing green development; making earnest efforts to promote public good and giving back to the society.



Communications with Stakeholders

Gaining the recognition and trust of stakeholders is the source to realize the corporate sustainable development. The Company paid attention to the communications with our stakeholders, identified their requirements, and utilized various channels to respond stakeholders in time. The Company adopted two methods both real-time communications and regular communications to smooth stakeholders communication channels and achieve transparent management, so that stakeholders could know the corporate social responsibility activities at any time. Meanwhile, accepting stakeholders supervision from.



Demands of Stakeholders and Responses

Stakeholders	Expectations and demands	Communications and responses
Government	 Serving national development strategies Abiding by laws and disciplines Maintenance and appreciation of state-owned assets Paying taxes in accordance with relevant law 	 Actively implementing national development strategies Conducting legal and compliance management and achieving steady business growth Continuous increase in the amount of tax payment
Industrial partners	 Integrity and Keeping an appointment Risk prevention and control Win-Win Cooperation 	 Seriously implementing the contract Strengthening operational risk management Strengthening strategic cooperation
Shareholders	 Satisfactory return on earnings Strict risk control Good performance in credit rating Smooth communication of information 	 Steady operation to improve business performance Standardizing corporate governance legal operation Advancing investor relations management Sounding and timely information communication
Clients	 Integrity and Keeping an appointment Transparent information Privacy protection Excellent products High-quality services 	 Propaganda activities Client service hotline Questionnaire survey Communication through the official website, micro-blog and WeChat
Employees	 Protection of employees' rights and interests Growing together Compensation and welfare protection Health and safety Caring for employee 	 Fair employment policies Perfect compensation incentive mechanism Comprehensive staff training Multiple career development platforms Healthy working environment Considerate humanistic care
C Supply chain	 Win-Win cooperation Seeking for common development Resource sharing 	 Good cooperative relations Smooth communication channels Seriously implementing the cooperation agreements Sharing of prospective studies
Environment	 Environmental protection Emission of greenhouse gases Waste discharge Effective use of resources Protection of natural resources 	 Strengthening management over energy conservation and emission reduction Innovating technologies for environmental protection Implementation of green office
Communities	 Stimulating local economic development Infrastructure construction Promoting employment Public welfare and charity Community participation 	 Community support and guidance Communication activities for communities Poverty alleviation Charitable donations Volunteer activities
The public and medias	 Open and transparent corporate information Maintaining good public relations 	 Actively carrying out news reports and publicity Providing effective channels for communications with the public and media
NGOs	 Supporting for and cooperating with NGOs Harmonious and cooperative relationship 	 Supporting for NGOs' activities Strengthening communications with NGOs



Prioritizing Life Safety and Conducting Safe Development

- · Safe Production
- · Safety Education and Communication
- · Safety of Overseas Operation



Adhering to the management concept of "Safety is above all, and human life is the most precious," the Company, kept its mission firmly in mind and committed to the business development. Meanwhile, we paid full attention to the safety issues in engineering project operations including design, construction, delivery and after-sales. We formed a solid foundation for management, built a safety management system, reinforced risk management, delivered trainings and promotions on safety education, fulfilled corporate responsibilities, and created a safe environment, to achieve an organic development.

Safe Production

Safe production is the foundation for the sustainable development of a company. The Company strictly complied with 'Work Safety Law of the People's Republic of China', carried out the general requirements on "integrated management and collective control", benchmarked against global best practices, and formed a solid foundation for management by improving the management system with the combination of quality and safety, raised the level of risk prevention and control, promoted standardization on safety management, and implemented safety inspections, in order to commit itself to promote a long-term mechanism of safe production and improve the overall management of production safety.

Safety Management System

The Company strictly complied with the safety laws and regulations of the State and the local governments where its businesses operated, and established a relatively complete safety management system regarding organization, system, role and responsibility, standardization and contingency management to ensure a fundamental safety of the engineering projects. Within the reporting period, the Company's total investment in production safety amounted to 58,967,800 yuan. There was one serious safety accident and the safe man hours was 198. The production safety was overall under control.

The Company draw attentions to safety management standardization and built a top-down organizational structure accordingly. We set up a QHSE Management Committee and an Emergency Command Center in its board of directors, as well as a Quality and Safety Department in the Company, in order to clearly define the roles and responsibilities on QHSE across all levels of the headquarters and of the Company's subsidiaries.

According to the Guiding Opinions on the Standard Settingup of Specialized Safety Sub-committees by Headquarter, all the subsidiaries formed in total 42 professional

Safe production promotion



sub-committees with focusing on project production, construction technology, engineering design, materials and equipment, administration and logistics, and overseas public safety, and in accordance, established management measures basing on their own operations. During the reporting period, that is, in 2017, the formed sub-committees carried out 17 professional trainings, organized 35 safety inspections, reviewed 12 safety procedures, and provided guidance on 6 risk identification and assessment works, which for sure is a step further to a more professional safety management.

In order to clearly define roles and responsible, the Company revised and optimised the system of HSE accountability, encouraged the leadership to take the lead, established and implemented a comprehensive system connected by individual responsible safety contact points, to effectively implement the safety accountability system. During the reporting period, the leaders of Headquarters answered to 2 major safety risks items, supervised 23 safety activities at the safety contact points, organised 2 conferences on production safety, and organized and participated in 6 safety inspections. The main leaders of the subsidiaries hosted over 50 monthly safety meetings, organized conferences and delivered trainings on production safety for 10 times, answered to 19 major safety risks items, supervised 49 safety activities at the safety contact points, and organized and participated in 12 full safety inspections. Secondary organisations hosted the monthly safety meetings, organized and participated in the weekly joint safety inspections.

In order to further improve contingency management and strengthen relevant capability of Headquarter and its subsidiaries, the Company established a complete emergency management system, standardized roles and responsibilities, set up emergency disposal cards for key positions and identified management responsibilities; We carried out risk assessments, prepared nine emergency plans matching with assessed scenarios, organized relevant trainings, rehearsed drills and reviewed the assessments accordingly, to ensure an effective management of the major risks. All subsidiaries carried out a full emergency drill every year, and Project Management Department conducted a quarterly emergency drill according to the actual situation. The Company further the standardization of HSE management by specifying requirements, planning ahead, coordinating resources and implementing fully. The Company also actively encouraged all its subsidiaries to standardize HSE management in new projects, basing on the requirements of HSE standardization for engineering project, to raise the level of safety management.

Case

Standardization Management Implemented by SEG subsidiaries

1. Information standardization:

Sinopec Ningbo Engineering Co., Ltd. invested more than CNY3 million in the construction of a camera surveillance integrated system for production and command in its office building and invested 680,000 yuan in the project with Zhong'an United Coal Chemical Co., Ltd. to allocate fixed and portable monitoring equipment and set special monitoring posts, so as to strive to promote camera surveillance; Sinopec Fifth Construction Co., Ltd. developed and applied the "Safety Eye" regulatory platform and a mobile phone emergency command APP platform, to improve the efficiency of safety management.

2. Safety operation rules standardization:

• The Company initiated the implementation of the Standard Manual for the Safe Operating Rules of Engineering Projects, and all its subsidiaries promptly carried out the communication, training and implementation of the document. Besides, the subsidiaries visualised these operation rules to make them easier to be learned and understood, especially for the operators to perform accordingly, which eventually formed a foundation for achieving the standardization of the operations.

3. Construction management Modularization:

In Sinopec Ningbo Engineering Co., Ltd.'s project with Zhong'an United Coal Chemical Co., Ltd., starting from the design optimization, the modularization installation and hard isolation protection of frame steel structure were actively planned and implemented, to effectively reduce the risk in working aloft; in Sinopec Tenth Construction Co., Ltd.'s Yan'an project, factory-based prefabrication was enhanced and priority was given to the installation of staircases and labour protection facilities, so that reduce the frequency of cross-operations during aloft work.

Prevention and Control of Safety Risks

The Company placed importance on taking preventative and control measures to avoid safety risks happening. By establishing a risk management system, we improved the level of prevention and control of safety risks and minimized its possibility of occurrence. The Company also formed the management measures for risk identification and assessment, aligned the identification methods and assessment criteria, established a mechanism of regular reviews, and required related departments and subsidiaries to conduct monthly, quarterly and semi-annual risk identification and assessment.

At the same time, in order to clarify the management responsibilities across all levels, the Company established a relatively comprehensive management and control mechanism by risk grading, which differentiate the responsibilities in three organisational levels including Headquarter, subsidiaries and secondary entities and the Project Management Department, and formulated specific measures for management and control. Meanwhile, the Company continuously identified and assessed new risks and implemented agile management accordingly, in order to eliminate the risks and potential dangers before they developed into accidents and to ensure that the risks are controllable.

In addition, the Company also kept improving its capability of design safety management, and released the Management Manual on Intrinsic Safety of Engineering Design, which covers 15 standardized documents in order to standardize the design safety management. At the same time, the Company promoted all its subsidiaries to strengthen the design safety management, to achieve a crucial transformation from resultdriven to process-driven management and control.

Within the reporting period, the Company conducted major safety risk identification and assessment twice, identifying 103 major risks at the subsidiary level, 6 major risks at the corporate level, of which 2 were escalated to the Sinopec Group level, to ensure that all the risks were controlled in an effective manner. The Company had 109 risk operations at especially large scale, of which 102 were completed safely and the remaining 7 were still in progress. There were 6 major risk operations at the corporate level were safely closed at the end of 2017.

SEG subsidiaries Promoted Intrinsic Safety Management

Case

- Sinopec Luoyang Engineering Co., Ltd. established and designed a "Case Base" for safety issues, which gave outstanding warnings and had distinctive features;
- Sinopec Shanghai Engineering Co., Ltd., on the basis of the safety design and research in the practice and implementation of its overseas projects, preliminarily established a process safety design system that is both in line with international practice and the actual situation;
- · Sinopec Ningbo Engineering Co., Ltd. successfully completed the installation of offshore trusses through efficient organization and management;
- In the cross-river pipeline sinking works, Sinopec Tenth Construction Co., Ltd. also achieved the smooth progress of a major corporate-level risk project by virtue of its perfect intrinsic management measures, and constantly improved the ability of risk prevention and control at the source through in-depth design of intrinsic safety work.

Implementation of Safety Production Activities

The Company actively implemented safety inspection activities, outlined detailed guidelines for quality and safety inspections, and conducted inspections on subsidiaries and projects basing on their business activities and control procedures, focusing on issues, measuring in terms of major projects, annual inspections and random visits. Focusing on both details and overall pictures, we promoted an effective implementation of the quality and safety management and safeguarded smooth operations of projects. At the same time, the Company also published the Guiding Opinions on the Safety Construction of Refining and Chemical Engineering to Sub-contractors to promote its subsidiaries to implement safety management on sub-contracted projects, so that those projects can be managed in a safe and smooth manner. The Company actively implemented the relevant requirements of the State regarding making good performance in antiterrorism prevention and safety protection during the period of the 19th CPC National Congress, made plans in advance, and carefully deployed security work to safeguard the administrative territorials. All subsidiaries strengthened the linkage with local governments as well as co-operations with polices and law enforcement agencies, actively carried out joint patrols, protection and administration with the public security organs and judicial organs, provided the necessary protective equipment in accordance to the requirements of the local governments, and implemented hierarchical management, to avoid public safety incidents, to increase the level of public safety management and to drive the creation of a stable and harmonious society.

Safety Education and Communication

Safety education and communication is an important way to raise employees' awareness on safety issues. In line with its actual practice of safe production, the Company adopted different methods and integrated features to carry out diverse trainings and communication activities. It is committed to communicate relevant knowledge and experience of safety risk and protection to employees and to encourage them to establish safety production awareness in their daily work, to increase the level of safety management and risk management in production.

Safety Trainings

The Company adopted an "online plus offline" approach which applied to all kinds of groups. In particular, the simulation training and visual training introduced delivered 'all-in-one' safety knowledge communication to employees at multiple levels. Within the reporting period, The Company trained 9,105 employees, including safety management manuals, delivered trainings on safety inspection and management, and evidence collection on three types of subcontractors, and 4,105 employees were trained. About 5,000 employees attended the simulation. In the meantime, the Company also produced 10 education videos on safety accidents, to raised employees safety awareness.



9.105 person-times



SEG subsidiaries actively carried out simulation trainings and visual trainings

- Sinopec Nanjing Engineering Co., Ltd. established a training base in the site of Zhong'an United Coal Chemical Co., Ltd. Project and set up 22 training items;
- · Sinopec Fifth Construction Co., Ltd. took the lead in establishing a training base with safety simulation and real operation in Guangzhou;
- Sinopec Tenth Construction Co., Ltd. deployed impact and crash experience training facilities at the construction sites and conducted simulation trainings, so as to reinforce employees' concept of safe production and improve the overall safety production capacity of the Company through such innovative training modes.



▲ Safety Practice Training for Operation Personnel

Safety Communication Activities

The Company carried out various communication activities to raise their awareness of production safety and abilities to deal with hazards. Within the reporting period, The Company organized 303 safety education activities, created a cultural of safe production in the whole Company. Thanks to the communication activities and drill practices, the staff formed a safety mind-set, so safety management was well implemented.

Safety of Overseas Operation

Safeguarding the overseas operation is a key factor in promoting the sustainable development of the overseas businesses of the Company. While constantly developing its international businesses, we strictly complied with the laws and regulations on safety management in the territory of operation, paid attention to the safety of overseas operation, and built a risk control and early warning system for overseas projects, to gradually improve the ability to prevent and control overseas operational risks.

Overseas HSSE Management

The Company has issued six management policies including the Administrative Provisions on Overseas Public Safety, the Administrative Provisions on the HSSE of Overseas Project Subcontractors, the Administrative Provisions on the Training of Overseas Public Safety, the Administrative Provisions on Overseas HSE, the Administrative Measures for the Evaluation and Review on Risks of Overseas Public Safety and the Administrative Provisions on the Health of Overseas Employees, and the Emergency Response Plan for Overseas Emergencies, established a complete overseas HSSE management system, set up the organization, identified responsibilities, improved pre-departure education and training, and regularly carried out supervision, inspection and auditing, which effectively managed the risk of overseas HSSE. During the reporting period, the project in Malaysian won the Best Contractor Award, and was awarded with 8 million man hours.

Meanwhile, the Company also valued the promotion of ongoing risk evaluations on overseas projects to ensure the security of project assets and staff's life. For the groups going abroad to high-risk countries in short-term period, an assessment on public safety risk will be conducted to ensure "no dispatch without assessment", which safeguarded the staff's life at the source.

The project in Malaysian won the Best Contractor Awa



The project in Malaysian won the Best Contractor Award Million man hours

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Providing High-quality Services and Creating Outstanding Values

- · High-quality Products and Services
- · Innovating Technological Development
- · Expansion of Overseas Business



The quality of products and services is the root of a Company. The Company has always been adhering to the "quality first, high-quality service, people oriented" concept, and continuously improved the quality management of services, strived to satisfy the stakeholders, constantly improved the quality of products and services, vigorously promoted technology innovation, continuously expended overseas markets, struggled courageously, kept advancing in spite of difficulties, utilized its advantages, fulfilled its responsibilities, and committed to create greater values for domestic and foreign partners, as well as for a wider international society.

High-quality Products and Services

The Company, based on its mission of 'providing high-quality products and services to its clients' has been developing the market in a responsible manner, strictly complying with the Product Quality Law of the People's Republic of China and other laws and regulations, as well as local laws and regulations in the territory of its operations, committing to maintain high quality standard, strengthening the quality management system, strictly controlling the process quality, nurturing "branded" products, continuous improving service quality, in order to build the trust with clients and establish a responsible corporate image.

Responsible Market Development

The Company has been adhering to implementing the national development strategy regarding ecological civilization construction, continuously promoting the "green, circular and low-carbon" development concepts, focusing on fulfilling social and environmental responsibilities, strictly aligning with four major development strategies on "resource integration, innovation driving, global development and value focusing", integrating our own technological advantages, cooperating with well-known domestic and foreign technology patent owners, actively developing new businesses, new markets and new models while consolidating its existing businesses, vigorously expending markets in environment protection, energy efficiency and new energy fields, and conducting business in a responsible manner, in order to achieve green development. During the reporting period, the amount of contracts signed on environmental protection business is 1.234 billion yuan, mainly contributed by flue gas desulphurization and denitrification projects; the amount of contracts signed on

Delivery of Quality Projects

The Company has always been setting 'delivering high-quality projects' and 'maintaining "stable and excellent" operation of devices' as the Company's competitive advantages. In terms of a construction project life cycle, from design, procurement, construction to transportation. Through defining the organizational role and responsibilities, establishing the project management system, optimizing the project management procedures, improving project resource allocation and strengthening organizational warranty, the project process was monitored, an advanced project management system was built and a project quality management system was improved, so that the delivery quality of each project was guaranteed, a good brand image and market reputation of the Company were established, and accordingly its competitiveness in the global market was constantly improved.

The Company built and continuously optimized the layered project management system to achieve delicacy management on projects; benchmarked against the best practices in Europe and America on the engineering project management methods, initiated a management guidelines drafted for international projects, promoted the standardization of project management in the Company, and enhanced full capability of project management; enforced a strict management, tightened the control on the design quality, published the "Manual on energy-saving business is approximately 36.74 million yuan, mainly contributed by energy-saving renovation projects.

During the reporting period



The amount of contracts signed on environmental protection business CNY 12.34 one hundred million yuan

The amount of contracts signed on energy-saving business CNY 36.74 million yuan

the Frequently Asked Questions of Design" involving 631 cases of design problems in 22 fields, to effectively avoided the recurrence of similar problems and to comprehensively improve the design competencies; effectively promoted the cost reduction benefit from the design stage, to avoid design surplus meanwhile maintaining quality standards; Implemented integrated management on subcontractors, released a subcontracting management system of the Company, to ensure the quality and safety control of subcontracted projects; Established a three-tiered quality management structure with dedicated full-time personnel and standardized roles and responsibilities to ensure quality management improvement at an organizational level; actively implemented quality inspections and testing activities, established a reporting mechanism on quality control, conducted quality inspections on all processes, all used materials, assembled parts and finished products, etc. The Company carried out daily inspections to detect and solve quality problems.

During the reporting period, the Company has successfully completed 379 projects. The three projects contracted by 8 subsidiaries have won the National High-quality Engineering Gold Award. The eight projects have won the National Highquality Project Award. No major quality accidents happened.

The three projects having won the National High-quality Engineering Gold Award

- · Huangdao National Petroleum Reserves Water-Sealed Underground Rock Caverns Project
- · 800,000 Tons/Year Ethylene and Supporting Works of Sinopec Wuhan
- · Phase I of CNOOC Zhuhai LNG Project

The eight projects having won the National High-quality Project Award

- · Lanzhou National Oil Reserve Base Project
- Expansion Project of 800,000 Tons/year Ethylene Project of Fushun Petrochemical Branch of PetroChina Company Limited
- · Shenhua Shaanxi Methanol Downstream Processing Project
- · Yulin-Jinan Gas Pipeline Project
- 70,000 Nm3/h Coke Oven Gas Making of Liquefied Natural Gas Project of Shandong Zaozhuang Xueneng Natural Gas Co., Ltd.
- · 1000 Kt Tons/Year P-xylene Aromatics Complex Unit and Supporting Works
- · Urumchi Petrochemical Branch of PetroChina Company Limited
- Phase II of Oil Quality Upgrading of Wuhan Branch, Sinopec Sinochem Quanzhou 12 Million Tons/Year Oil Refinery Project



▲ Sinopec Fourth Construction Co., Ltd. wins the First Prize of Excellent Welding Engineering



▲ Sinopec Tenth Construction Co., Ltd. wins the National High-quality Engineering Gold Award



Luoyang Petrochemical Engineering Corporation Ltd. wins the National High-quality Project Award

Case

SEG Undertaking of Major Project Construction

- The Tianjin LNG Project and the National "13th Five-Year" Key Project are of great significance for optimizing the energy structure in the Circum-Bohai Sea Region and for ensuring the safety and stability of natural gas supply in the Beijing-Tianjin regions. The Company was responsible for the construction of EPC for all its major installations. The various installations of the project were delivered in succession in 2017, which ensured the realization of the liquefied natural gas carrier in January 2018.
- Zhongtian Hechuang Project is currently the world's largest coal-to-olefins project, and uses the S-MTO technology developed by our Company in cooperation with Sinopec. The Company is responsible for the construction of EPC for all its major installations. The project has been fully put into operation in 2017.
- CNOOC Huizhou Refinery Phase II, located in Daya Bay Petrochemical Industry Base, one of the national seven major petrochemical industrial bases, is currently the largest refining and chemical integration project under construction in China. The Company undertakes the design and construction of ethylene, EO/EG, catalytic reforming and other major installations, and the project is currently in the ending stage.

Improving High-quality Services

The Company has been committing to the business credo of client first, always considering client's demand as its responsibility. An efficient communication mechanism among our Headquarter, group companies and project owners was established. And such effective communication helped us to constantly improve the quality of services and allow us to grow together with our clients.

In terms of the design, project contracting, construction and other operations, the Company actively conducted quality certification, assessments and evaluations as well as engaging clients, by reviewing their complaints to improve client satisfaction.

The Company also actively have been complying with the

confidentiality and privacy protection policies. The corporate security office promoted client privacy protection work. During the reporting period, all employees have signed a confidentiality agreement, and all confidential client information was saved by the employees in charge of those projects.

The Company have been paying high attention to the advertisements and labels use. The Company have been committing that when employees communicate with clients, they must provide accurate and real service information. The Company and our subsidiaries conscientiously implemented the VI manual and use instructions, followed the scope of brand and label use, and promoted the corporate brand construction.

Innovating Technological Development

Innovation is the cornerstone of the survival and development of an enterprise. The Company closely followed the requirements of the development of the times, the directions given by the market and in the combination with the development needs of the state and the industry, it decided to promote technology innovation, and had achieved remarkable results, which made positive contributions to the sustainable development of the Company and the industry.

Promoting Technological Innovation

The Company followed the requirements of the Guiding Opinions on Scientific and Technological Work, the Development Plan for the "13th Five-year Plan" for Technical Work (2016 to 2020) and other government documents, and basing on its overall strategy of "energy-oriented, innovation driven, Global Development, value focusing", continued to set more challenging goals, and actively supported major national science and technology projects, undertook key scientific and technological projects entrusted by Sinopec Group Corporation, studied specialization topics, and promoted the development of the industry. We continued to strengthen the cooperation with Sinopec Research Institute, and actively pushed forward the transformation and industrialization of scientific research achievements. During the reporting period, the two projects, "Development and Application of the Integrated Large-scale Coal-to-oil Products/Olefin Technology"

Strengthening the Protection of Intellectual Property

In order to protect the Company's legal intellectual property rights, we issued the Administrative Measures for the Patent of Sinopec Engineering (Group) Co., Ltd., the Administrative Measures for the Protection of Intellectual Property Rights of Sinopec Engineering (Group) Co., Ltd., the Administrative Measures for Proprietary Technologies of Sinopec Engineering (Group) Co., Ltd., the Administrative Measures for the Division of Level and Compensation Fee of Confidential Technical Staff in Sinopec Engineering (Group) Co., Ltd., the Administrative Measures for the Technical Confidentiality Agreement of Sinopec Engineering (Group) Co., Ltd. and other process/ and "Whole process of High-efficiency Methanol to Olefins Technology", won the First Prize of National Scientific and Technological Progress in 2017 which was awarded by the National Science and Technology Awards Conference.

In order to meet the standard requirements of overseas business operations, the Company actively made use of "Company Standard Management" and "CN Standard Inquiry Service" platforms, promoted the use of "International Standard Database", conducted reviews on professional standards of manufacturing process, and identified the gaps in its current operations to achieve a successful development. Within the reporting period, the Company investment in the technical research and development 10.03 one hundred million yuan, owned the number of SEG technical research and development projects 677.

policy documents to protect the Company's patents and proprietary technologies, raise awareness of technical staff on confidentiality, so that the Company's intellectual property rights is free from the from infringement.

Within the reporting period, the Company owned a total of 2,504 valid patents including 1,070 invention patents in China. In 2017, the Company filed 466 applications for new patents, including 244 invention patents and among which, 312 patents were granted, and owned the number of quantity of new software copyright 1.



Expansion of Overseas Business

In the context of building the "Belt and Road", the Company continuously implemented its internationalization strategy by using its professional strengths and working together with international partners in order to develop the global market, to achieve global sustainable development and to exert its brand influence around the globe.

Overseas Business Development

Responding to the national "Belt and Road" strategy actively, the Company focused on developing markets along the "Belt and Road". By using its advantages in industry value chain collaboration and promoting advanced engineering technologies and management concepts, it provided clients with a "one-stop solution" including technical consultancy, feasibility study, financing arrangement and project management, which would develop the economy and comprehensive national strength of the countries along the "Belt and Road", meanwhile enhance the Company's international brand and social reputation. Within the reporting period, the Company signed 34 overseas contracts with the total value of USD1.493 billion. Projects in 9 countries and regions along the "Belt and Road" such as Iran, Saudi Arabia, Kuwait, Russia, Brunei, Malaysia, Thailand, Singapore and Nigeria.

Case

<image>

SEG actively promotes market development along the "Belt and Road"

The first aromatic hydrocarbon project unit of Atyrau Refinery in Kazakhstan (finished diesel tank field) was completed and put into operation.

In recent years, SEG has made remarkable achievements in support of the national "Belt and Road" initiative and has created a new name card of national refinery chemical engineering technology.

In Kazakhstan, the catalytic cracking unit (CCU) of oil deep-processing project undertaken by SEG came into operation on December 15, 2017. Upon completion of construction, the Atyrau Refinery would be one in Kazakhstan that embraces a variety of petrochemicals with highest quality. This was the first-time export of

refinery chemical engineering technology by a Chinese enterprise to the Central Asian market, as it contributed to long-term cooperation, friendship and economic development between China and Kazakhstan.

In Malaysia, the Company also implemented the national "Belt and Road" strategy by complying with local laws and regulations, optimizing internal controls and expanding its business in an active and steady manner. At the end of 2017, our Malaysian Company completed 2 EPCC projects with a total contract value of USD1.515 billion.


Working Together with Partners and Achieving Win-Win Cooperation

- Promoting Supply Chain to Fulfil Social Responsibilities
- · Management of Subcontractors



The Company has been focusing on the sustainable development of value chain based on the value ideas of mutual respect, better communication and win-win cooperation. Through enhancing supply chain management, optimizing responsibility procurement processes and facilitating supply chain responsibilities, the Company joined hands with supply chain partners for common fulfilment of their social responsibilities so as to achieve win-win cooperation and create a shared ecological community.

Promoting Supply Chain to Fulfil Social Responsibilities

Supply chain is one of the important interested parties of the Company's sustainability. Based on information technology, the Company actively integrated our sustainability into supply chain management with the aim to innovate informationbased procurement mode, build supplier information management platform, perform overall management and supervision of supply chain, promote suppliers' growth, supervise performance of social responsibilities in supply chain, and work together with suppliers to "go global".

Procurement through Diverse Channels

By adhering to the fair, just and open principle and based on modern management of procurement information technology, the Company urged the utilization of the on-line procurement management platform, carried out electronic bidding operation management and adopted real-time queries of procurement information and progress to achieve on-line procurement management and increase transparency.

To strictly fulfill local procurement responsibility in line with the SEG's Agreement for Procurement Services of Overseas Projects, the Company urged global suppliers with good reputation to execute the procurement agreement for overseas projects in order to normalize overseas projects procurement management and avoid procurement risks. In the reporting period, the Company entered into such agreement with 27 well-reputed global suppliers who were expected to provide services for overseas projects. Currently, the agreement has already been applied in the Saudi Arabia project by Sinopec Ningbo Engineering Co., Ltd. and the Malaysia project by Sinopec Shanghai Engineering Co., Ltd.

Management of Suppliers

In accordance with the SEG's global supply resources management system, the Company developed the E&E supply resources management module and the registered supplier management module applicable to outside the SEG system and overseas projects, and thus created a united supply resource integration network throughout SEG, which covered projects both inside and outside of SEG system and overseas projects. In addition, the Company put in place review procedures of supplier access depending on nature of each project in order to perform star-level management of suppliers, by which illegal suppliers were degraded, suspended and disqualified on the platform. In the reporting period, the Company developed cooperation with 2,541 suppliers through the supply resource network, 653 E&E suppliers and 103 registered suppliers.

Furthermore, the Company created a visualized material manufacturing quality supervision platform ("MSP" platform) that covered 8 categories of materials, including container, heat exchanger, pump machine, electrical appliance and



▲ SEG signed a cooperation agreement with ExxonMobil



SEG signed an MOU with EMCL



▲ SEG signed an MOU with Shell





Cooperation with



valves. This platform could realize whole-process management of material manufacturing process to ensure traceability of engineering materials in full life circle and effective control of manufacturing quality. It would be practicable that contractors, suppliers (manufacturers) and project owners could share and co-manage their process control plan, inspection plan

Growth of Supply Chain

In response to the national "Belt and Road" initiative, the Company provided substantial support for suppliers to "go global". Collaborating with excellent domestic suppliers, the Company organized discussion and compilation of the Data Template for Domestic Manufacturers to Adapt to International Development. Based on this document, the Company directed Chinese suppliers to communicate with overseas owners so that they could be listed as qualified suppliers of foreign owners. This action aimed to promote cooperation between suppliers and the Company in overseas projects, enhance SEG's adaptability and competence for supply chain in overseas projects and facilitate common growth of supply chain. In the reporting period, the Company created 2 template versions of static equipment and valves, and built a good cooperation mechanism with excellent domestic suppliers.

and delivery documents through this platform aiming to form

a good ecology with the cooperative joint management from

engineering materials participants. Visualized "real-time"

control of key steps in material manufacturing process would

facilitate optimization of decision-making management and

help improve the efficiency and capability of management.

Management of Subcontractors

Management of subcontractors is essential to the Company's sustainable development, as the team of subcontractors has become the main supplementary force to engineering project construction of the Company. An integrated management mode was adopted by the Company for subcontractors management which improved the subcontractor access and quit mechanism, created the qualified subcontractor resource library, normalized subcontracting procedures, perfected subcontractor management systems, kept subcontract projects security as well as operations steady, and urged subcontractors to fulfil social responsibilities.

The Company strengthened the subcontractors management and urged subcontractors to perform their duties through four main aspects, including the subcontractors resource library, engineering subcontract as well as contract out of project, project subcontracting field management and the evaluation of subcontractors. By subcontracting projects, the Company fulfilled corporate social responsibilities to stimulate local economic growth and employment by state-owned enterprises. During construction peak in 2017, there were 44,000 persons involving in construction projects of the Company.

Admittance of subcontractors	Subcontractors selection	Engineering subcontracting	Project subcontracting field management
The Company exercised strict scrutiny on the business permit, scope, service capability and credit standing of all subcontractors; gave priority to those with high expertise and outstanding performance; and conducted dynamic examination on all subcontractors.	All subcontractor resources were collected and consolidated from all subsidiaries and affiliates to create a resource library available inside the Company. This action aimed to increased cultivation of strategic subcontractors, and ensured quality of subcontracted projects under control.	Established standard and law- based work procedures for project subcontracting and subcontractor selection.	A standardized management system designed for management of subcontractor's personnel entry, technology, HSE, quality, progress, cost control, materials, equipment and stable workforce.



Upholding the People-Oriented Principle and Caring for Employees

- Safeguarding Employee's Rights and Interests
- Taking Care of Employees'
 Occupational Health
- · Supporting Employees' Development
- · More Care for Employees
- · Legal Overseas Employment



Employees are our precious resources. Conforming to the strategy of "strengthening the Company through improving the talents", we made efforts to safeguard our employees' rights and interests, took care of their occupational health, established a sound occupational development system and training program, and helped employees in difficulties. We also held various recreational and sports activities and hired overseas employees according to the rules to integrate different culture. We know that employees should grow up with the Company together, so we respect them, care them, cherish them and help them achieve their goals, thus establishing a harmonious and win-win labor relationship and cherishing the growth and development of employees.

Safeguarding Employee's Rights and Interests

Conforming to the Labor Law of the People's Republic of China, the Labor Contract Law of the People's Republic of China and the Social Insurance Law of the People's Republic of China and other laws and rules as well as those local ones, we promoted equity between employees and improved the protection system of labor's rights and interests and helped them receive their deserved payments equally. We also promoted democratic management by conducting relevant activities to encourage them in the decision-making, thus establishing an equal, democratic, harmonious and sound working environment.

Equal Employment

We developed a medium and long term human resources development plan, set up an all-in-one management system of benchmark jobs and standardized the selection and appointment of talents according to the job requirements of the Company. To be fair and open, we recruited, selected, appointed, promoted and paid our employees, regardless of race, color, nationality, belief, age, gender and education background.

Following the international, the national and local criterions, regulations and rules on preventing the use of child labour and forced labour, we have never employed children or forced others. We conducted eight-hour working day and the system of overtime work and compensatory time off to eliminate forced labour.

During the reporting period, the Company had about 19,000 employees, with female employees accounting for 26.6% and national minorities 2.66%. 1.49% of our female employees were in middle-level and higher management positions. All of our labour contracts were signed and all contract employees participated in the labour union organization.

Total employees

1.9 ten thousand persons





We encouraged motivation, competition and fairness. With the philosophy of "paying for value, position and performance", we paid competitive salaries in line with the market. Consequently, we paid high attention to the performance and made a medium and long term incentive plan for major employees. In this way, we established a win-win working environment shared by both the Company and employees. We encouraged them to make profits, and in turn, they shared the fruits with us.

We improved the welfare system actively. Except for endowment insurance, medical insurance, unemployment insurance, industrial injury insurance, maternity insurance and housing accumulation funds, we also provided our employees with annuity, supplementary medical insurance, recovery subsidy, only-child allowance, high temperature subsidy and other welfares. For employees in special circumstances,









we offered different benefits such as purchasing personal accident insurance for those working abroad and providing assistance for impoverished ones. Additionally, we respected their rights of having holidays. Employees are entitled to enjoy all statutory holidays, and marriage leave, funeral leave, maternity leave, late childbirth leave, breastfeeding leave and other paid leaves.

The legitimate rights and interests of female employees are valued by us. Therefore, we established a committee of female workers to ensure the implementation of the rules on maternity leave, breastfeeding leave and regular physical examination, took care of their physical and mental health and occupational development and constantly improved their working environment and conditions.

Taking Care of Employees' Occupational Health

To take care of employees' occupational health is a major responsibility of the Company. Strictly conforming to the Law of the People's Republic of China on Safety in Production, the Law of the People's Republic of China on the Prevention and Control of Occupational Diseases and other laws and regulations, and the philosophy of Health and Safety First, we endeavoured to improve the management of employee's occupational health, enhanced employees the awareness of occupational health and established a sound working environment for employees. Hence, we can improve their physical and mental health and help them be healthy and positive.

Employees' Occupational Health

Based on the occupational health appraisal, we made the Improved Plan of Occupational Health Work, hence we further improved the management system in five aspects, namely, basic management of occupational health, management of detecting causes of occupational diseases, management of monitoring occupational health, management of occupational health in construction projects and management of occupational health in general contract projects. Consequently, we improved the management of physical examination, articles for labour protection and asbestos products. Through preventing and avoiding the potential hazard caused to employees, we strengthened our management and period, we found no factor causing occupational diseases out of limits.

For issues on employees' mental health, we established the Employee Assistance Program (EAP). Through the internet, WeChat and other platforms, we were closer to our employees, and helped them deal with their mental problems and work and live positively and actively.

Supporting Employees' Development

Employees and the Company are closely related and share weal or woe together. We satisfied our employees' requirements while improving ourselves. Through a multi-level and multi-faced training system to enrich their knowledge and experience and improve their comprehensive qualities in order to meet the changeable market and the long-term development of the Company. Meanwhile, in order to build a quality talent team, we constantly improved the promotion mechanism, provided a fair and justice platform for talents, enhanced their sense of being a master and motivated them to realize the value of themselves, positions and the society.

Training Employees

We constantly made more investment in staff training and established the Education and Training Management Committee to follow the development of operation and business and improve employees' abilities and qualities. Aiming at satisfying the requirements of positions and the actual needs of employees, we offered trainings with different levels and paid attention to the major part and practice. Employees may choose full-time study or distance training to take courses including new employee training, management training, professional skills improvement training, training for obtaining qualification and certificates and other trainings. We will make efforts to guarantee their rights for constant learning and improve their theoretical and business techniques to meet the requirements of the Company.

During the reporting period, we totally injected 32.33 million yuan and offered trainings to 33,900 employees, including

4,300 managers, 25,000 professionals and 4,500 skilled operation personnel. By the end of 2017, 4,688 employees are qualified to engage in jobs requiring advanced or higher professional skills, occupying 24.95% of the total workforce.



Employee Promotion

We provided various channels for employees to get promotion. We improved the promotion routes, so employees can be promoted in different ways; we established a unified and sound mechanism for positional titles evaluation and recommendation to provide standards for employee promotion; and we held many competitions for employees in different business and positions to develop their potentials. Thanks to these measures, an occupational environment for everyone to do what they could do and get the suitable position has been established. All of these provided talent and intelligence support for us to build a world-class engineering company.



As an engineering construction company, we provided three promotion routes for employees: management, professional technique and skilled operation. Since project managers have been included into the promotion route, employees can be promoted in original department as well as other departments.

We established the Review Committee of Qualifications for Advanced Professional Technique Positions and the Review and Recommendation Committee of Qualification for Professorial Technique Positions. Through creative appraisal ways and informatization review system, we improved our efficiency and the quality of appraisal and recommendation. We also provided standards and laid a solid foundation for the usage, flow, cultivation and selection of talents.

We held many competitions involved by employees from different departments and positions to establish a platform for them to show their abilities. Everyone in the Company loved to learn techniques and skills and made more contributions to the Company. These activities provided opportunities for talents to stand out and also played an important role in finding, developing and motivating talents.

More Care for Employees

The Company are concerned about our employees and would like to assist those in difficulties. We visited them and gave them financial support to extend our regards. Many of them have overcome the difficulties and be positive again with a sense of happiness and belonging. To enrich their material and cultural life, we held colorful activities to show their talents and create value in a happy and comfortable environment.

Assistance to Employees

According to the Regulation on Assistance Work of Sinopec Engineering, we improved the assistance mechanism, established sound records and visited those in grass roots. By taking targeted measures to help people lift themselves out of poverty actively, the Company, together with other employees, helped them overcome the difficulties and be positive to the life. During the reporting period, we visited those in hospital, and expressed our sympathy for the bereaved. They derived comfort from these concerning activities.

Recreational and Sports Activities

With the philosophy of "healthy life, happy work", we held various activities, such as organizing interesting groups, holding recreational and sports activities and participating in the directly trade unions of the Group, enriching their spare time and establishing a platform for employees at all levels to exchange ideas and know each other. Consequently, we established a united team for everyone to show their talents and energy.



The 1st Awards Ceremony of the Staff Painting and Calligraphy Work Exhibition.



The 2nd "Chaoyang Cup" Staff Volleyball Match



Basketball Match



Mountain Climbing

Legal Overseas Employment

Overseas employees, an important part of our team, is the support of our international development. Fully fulfilling the responsibilities, we guaranteed the rights and interests of them, took care of their occupational health and tried our best to employ foreigners and natives. We respected their own culture and motivated them to make contributions to the overseas business of the Company and shared the fruit together with us.

Local Employment

In our overseas projects, we made efforts to employ native people to strengthen the communication with the local

government and embassies, attracted more native talents and created more jobs for areas where our subsidiaries locate.

Case

More natives involved in overseas projects

- The Saudi Company is the biggest outbound subsidiary of Sinopec Engineering (Group) Co., Ltd. In some international projects, we recruited Saudi people through the job fairs held by local chamber of commerce and other organizations, recommendation of the embassy and HRDF. By the end of 2017, the Saudi Company has owned 1,036 Saudi employees, and 456 of them are new, thus creating more jobs for Saudi people.
- In the project of the Malaysia Company, we also actively promoted this strategy to employ native people. In 2017, over 1,300 labors from Malay and Southeast Asia countries along the Belt and Road were employed, which hit a record high.

Health of Overseas Employees

We paid high attention to overseas employees' health. An allround health monitoring management system covering four phases, before going abroad, on the way to foreign countries, working in foreign countries, and after returning home, has been established. We organized them to do physical examination regularly to avoid risks when works abroad, thus creating a responsible image in foreign countries.



Devoting to Environmental Protection and Realizing Green Development

- Energy Conservation and Emission Reduction
- · Effective Utilization of Resources
- Protection of Ecological and Natural Resources
- Low Carbon and Environmental Protection Activities



The SEG, a responsible engineering company of energy and chemical industry, with the philosophy of "green and low carbon", paid high attention to environmental protection. We conducted energy conservation and emission reduction management in all of our productive process, improved the energy efficiency, protected ecological and natural resources to achieve green development and create an image of an environment-friendly and green company.

Energy Conservation and Emission Reduction

Conforming to the Environmental Protection Law of the People's Republic of China, Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution, Law of the People's Republic of China on the Prevention and Control of Water Pollution, Law of the People's Republic of China on the Prevention and Control of Solid Waste Pollution, Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution on the Prevention and Control of Solid Waste Pollution, Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution, and control of Solid Waste Pollution, Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution, and other national laws and local regulations, as well as the local laws and rules relating to the environment in the countries where our projects locate, we actively established and improve the management system of energy conservation and environmental protection, and we strived to promote green design, develop green technology, established green engineering and reduced pollution and emission to build an international green company. During the reporting period, we have never been sued or punished in violation of the environment.

Green Design

We have been pursuing the philosophy of green projects, make energy conserving and environment-friendly plans for clients according to the different temperature, humidity and landform of different locations at the design stage, and supported the plans with engineering facilities with low energy consumption and then, based on the international advanced technology and the practice of the same kind facilities both at home and abroad, we designed projects that were suitable and green for clients.



Green Construction

We have been pursuing low carbon and green economy in construction and insist on the environmental friendly route of "control-reduction-recycling". During the construction, guided by the requirements of green construction, we strictly controlled the processes and remember to protect the environment in every detail. Hence, we maximized the economic and ecological efficiency.



 We tried our best to reduce dust, waste gas, noise, pollution of light, water and soil by watering to reduce dust, manufacturing large equipment in professional factories, conducting modular construction, cleaning professionally and reducing outdoor weld, polish, anti-corrosion work.

- We regularly inspected the storage and usage of the radioactive sources and hazardous chemicals in the construction site of the engineering project and strictly supervised the radial work and the disposal of hazardous chemicals to avoid the environment pollution.
 We reduced the noise pollution by setting noise barriers and noise reduction facilities and reduced night work and the use of noisy equipment.
- · We also took effective measures to economize on materials and recycle the refuses as much as we can to reduce consumption.

Emissions Performance

Guided by the philosophy of green and environmental protection, in the whole life cycle of the operation, we have been following the principle of "minimization" from the very beginning. We chose "green manufacturing technique" which satisfies the requirements of energy conservation and environment protection, purchased "green raw materials and equipment" which met the environmental protection standards, and reduced the greenhouse gas and wasted to lower the consumption of raw materials.

We paid attention to the disposal of the "three wastes" and treat solid and hazardous wastes according to the rules. All subsidiaries are required to contact with the owners to recycle and disposed the wastes at the site and precast yards or asked a qualified third party to deal with them.

The Company mainly provide the service of project's design and consultation. Mainly projects adopt to whole outsourcing method. In the course of construction, all emissions mainly have been disposed of the owners, so that our emissions, including GHG and other emissions is lower. In the future, we will continue to strengthen emission management to reduce various emission. During the reporting period, emissions performance were as follows:

Туре	Unit	Data
Greenhouse gas emissions in total	TCO ₂ e	109,586.78
Intensity of greenhouse gas emission	TCO ₂ e/100 million yuan	302.66
Sulfur dioxide emissions in total	Ton	23.79
Nitrous oxides emissions in total	Ton	418.16
Total hazardous waste produced	Ton	118.34
Intensity of total hazardous waste produced	Ton/100 million yuan	0.33
Treatment rate of total hazardous waste	%	100%
Total non-hazardous waste produced	Ton	59,260.86
Intensity of total non-hazardous waste produced	Ton/100 million yuan	163.67
Treatment rate of total non-hazardous waste	%	100%
Total sewage produced	Ton	621,782.98
Intensity of total sewage produced	Ton/100 million yuan	1,717.25

Note: The Company will standardize the calibre and standard of data statistics while constantly improving the environmental management system.

Effective Utilization of Resources

Effective utilization of resources was an important aspect for the Company to carry out environmental responsibility. Guided by the national environmental protection plan, we took full advantage of our whole industrial chain to develop and applied new energy, technology and equipment while offering services of the plan, design, consultation, construction and debugging of the petrochemical engineering. We made efforts to conduct green projects to save water and power and reduced energy consumption. Meanwhile, we encouraged green office, achieve effective utilization of resources by implementing a series of green office activities.

Energy Conservation and Consumption Reduction

We fulfilled the responsibility of energy conservation and environmental protection actively while providing quality products, encourage the development and application of new technology to save energy, and succeeded in purchasing the energy saving center. We strived for a green company by improving management system of energy and water saving, establishing supervisory management mechanism of energy conservation and consumption reduction, upgrading and transforming the equipment, training employees and promoting the effective utilization of resources.



Saving water during the operation of the projects

For these overseas projects, SEG engineering company advocated water saving concept and made efforts to recycle the water resources. In Saudi Arabia, all groundwater we were used transported to the third party to treat and then discharge qualified water to the nature. The water used to test the pressure has been recycled from the beginning to the end of the test, thus totally reducing over 90% of the water usage.

Green Office

We have been advocating green office, improve our daily management and integrate the philosophy of low-carbon and environmental protection into employees' daily life to enhance their awareness of energy saving and cultivated good habits by establishing energy-conservation office reconstruction, implementing paperless office, managed office cars and restrained employees' behaviors. Consequently, we strive to build green and energy saving office.



\cdot Rebuilding the office area to save energy and reduce emission;

- Making rules of the utilization of lights in the office. Close all the lights when leaving office. Someone is put in charge to check the water and electricity facilities;
- Improving the OA system to build a paper-free office;
- · Improving the long distance meeting system and holding more videoconferences to increase efficiency while saving costs;

Main measures to implement green office management

- Purchasing less disposable goods while recommending durable ones;
 Setting recycling bins of toner cartridges, ink boxes and used batteries;
 - Managing the use of office cars. To increase the service efficiency and reduce the office cars, we propose that one car should be used by several people;

· Encouraging employees to take environment-friendly vehicles to and from work.

Energy Consumption Performance

We have been proposing low carbon development and increased the utilization rate of resources while reducing emissions. During the reporting period, the use of resources are as follows:

Туре	Unit	Data	Туре	Unit	Data
Diesel oil	Ton	17,488.17	Total energy consumption converting to standard coal	Tons of standard coal	39,524.42
Gasoline	Ton	4,114.92	Intensity of total energy consumption	Tons of standard coal/100 million yuan	109.16
Natural gas	Cubic meters	863,955.12	Total amount of water consumption	Ton	856,024.58
Net purchased electricity	Megawatt hour	55,050.51	Intensity of water consumption	Ton/100 million yuan	2,364.19

Protection of Ecological and Natural Resources

Since the national 13th Five-Year Plan has proposed that more efforts will be made to protect the environment. We strictly conformed to the Environmental Protection Law of the People's Republic of China and laws and regulations related to environment, took prevention and control measures after fully appraising the impacts of the projects under construction on the environment to protect the ecological and natural environment with responsible attitude and behaviors.

Protection of Ecological Resources

As an environment-friendly company, we fulfilled our responsibility during the construction of the projects, protect and improved the ecological environment along the projects based on our environmental assessment and paid attention to protect biodiversity. Additionally, as for our overseas branches, we proactively learned the local policies on environmental protection, strictly conformed to the local laws and regulations, applied advanced technology and technique, and we actively fulfilled the responsibility of protecting overseas environment, achieved green development, established a good image and strive to be popular in these countries.



- Making and following the implementation rules on dust and noise control and taking measures to control activities causing dust;
 Taking risk control measures to reduce the environmental risks of the projects. The environmental management institutions have been established to monitor and manage the environmental protection work at sites during the construction period;
- Stacking the building materials in order at construction sites, strengthening dust control management on materials and mounds;
 Classifying and disposing of solid wastes in accordance with the requirements of reduction, resource, harmlessness to avoid a secondary pollution.



Innovation of technology and protection of ecology

SEG had rich experience and practice in the treatment of oil refining or petrochemical sewage, treatment of degradationresistant sewage with much total nitrogen, recycle and zero emission of sewage with high salinity, treatment of waste lye, treatment of waste gas, VOCs comprehensive disposal, wastes incinerator etc. We adhered to the principle of water and energy saving, emission and consumption reduction and environmental protection. We always explored and applied efficient and energy saving sewage treatment technology and design without secondary pollution. In the projects of Hainan Petrochemical Company and Zhenhai Refining & Chemical Company, we applied optimized technology and process to increase the reuse rate of sewage with low salinity to more than 95% and the quality of treated water with high salinity was far better than the standard; the amount of sludge has reduced to below 10%; and malodorous gas has been effectively controlled. We gained great economic and social benefits and established a model in the industry.



Innovation of technology and remediation of soil

SEG paid attention to protect the soil. With the philosophy of "Remediate the soil and enjoy the lucid water and blue sky", we integrated all of our superior resources, took full advantage of integration, establish a technical integration platform of soil remediation business, and developed or integrated leading technology of soil remediation to make breakthrough in engineering project management, technology development and innovation and capital operation, thus restored the damaged soil to normal function and promote the sustainable development of the companies. The Fifth Construction Company, as a leading one in the industry of soil remediation, has finished 3 large remediation projects of polluted soil including the Jiaohuachang in Beijing in recent years.

Low Carbon and Environmental Protection Activities

As a responsible international oil refining and chemical engineering company, we paid attention to the image of environmental protection and were determined to be a leader, a participant, and a disseminator of environmental protection by actively publicizing low carbon and environmental knowledge, regularly carrying out environmental education for employees, leading the whole staff to participate in environmental protection activities, and promoting the concept of environmental protection to every aspect of work and life.

Training and Publicity

To popularize the philosophy of environmental protection and the awareness of green development, we carried out different courses for employees in different areas and positions, led them to participate in civic-minded activities, exchanged experience with partners in the same industry and emphasized the importance of energy conservation and emission reduction, effective utilization of resources and the protection of ecology and nature. Through the above activities, we enhanced our employees' awareness of environmental protection and motivated them to take part in this cause.

Case

Training employees on Environmental protection

In 2017, the Sinopec Nanjing Engineering & Construction Corporation held many staff trainings in environmental protection, including research and training in the temporary storage of hazardous wastes and the environmental monitoring center, training in designing the warehouse of radioactive source for petrochemical and chemical industry, registration training in environmental impact assessment engineers and the technological standards training in the Application and Issue of Pollutant Discharge Permits – Petrochemical Industry, etc.

- The ISF Project in Saudi Arabia held a training on environmental protection lasting half an hour with 200 employees participated.
- The Sulfuric Acid Plant in Saudi Arabia held for four times, totally taking 2 hours, with 490 employees participated.
- The Fujian Company held for eight times, totally costing 4 hours, with 380 employees participated.
- The Yan'an Energy and Chemical Project department held once, totally taking 2 hours, with 136 employees participated.
- The Transport & Storage Company held once, totally taking 1 hour, with 156 employees participated.



Making Earnest Efforts to Promote Public Good and Giving Back to the Society

- · Community Integration
- · Public Charity
- · Overseas Community Participation



With "sourcing from the society and contributing to the society" as the starting point and foothold, the Company enthusiastically served the community, carried out charitable activities in terms of poverty relief, donations for the education and disaster relief, and actively organized employees to participate in voluntary activities and public welfare actions. Meanwhile, the Company expanded the happy space for overseas communities by supporting the development of and providing services for overseas communities and initiating overseas donations for public interests, established a harmonious and win-win relationship with the society and achieved the unification of social benefits and economic benefits.

Community Integration

The Company insisted on the ideas of "integration into local communities, development by relying on their advantages and winwin cooperation", integrated our own development with the construction of the communities, strived to be a good corporate citizen to love, root in and serve the communities, was devoted to the construction of harmonious communities and promoted the development of the communities. The Company contributed our wisdom and power to the development of the communities by providing community services, sought welfare for community residents and made a happier life for them.

Community Services

Case

The Company actively organized employees to provide public welfare services, jointly hosted or participated in activities of social volunteer organizations, provided community residents with professional services in terms of law awareness publicity, health care, psychological counseling, troubleshooting of community safety hazards and repairs, handled concrete affairs for residents in a down-to-earth manner, solved issues in mental health, community safety and property management and offered more warmth and power in the communities.



SEG carried out legal publicity activities in the community in Zibo Base

On December 4th, in honour of the fourth National Constitution Day, SEG organized and carried out the Publicity Campaign of National Constitution Day for December 4th, 2017 and the National Legal Awareness Day in the community in Zibo Base, including legal consulting, issue of law dissemination handbooks and hanging slogans in the main road junctions inside the community. Although it was cold that day, the "Legal Consulting Desk" set before Aohua Supermarket attracted many community residents for consultation on common problems in daily life such as inheritance and sales of houses. Lawyers from Shandong Zhigong Law Firm and personnel from Legal Department of the Company answered questions from residents with great enthusiasm in the cold weather. During the activity, more than 300 handbooks of FAQ of Laws in Daily Life of Citizens were issued to the residents, enhanced the legal awareness of the residents in the community, improved their abilities to safeguard their legal rights in accordance with the law and their legal quality, and helped to create a good social atmosphere of consciously learning, knowing, observing and utilizing laws in the community.

Public Charity

The Company actively supported charitable causes, organized voluntary activities, cared for people in need, formed a charitable mechanism integrating poverty alleviation, donations for the education, and disaster relief, inherited and promoted the traditional virtues of the Chinese nation, namely, charitable and helping the poor, and contributed to the protection and improvement of people's livelihood, and realized the simultaneous growth of business operation and development, social development and humane care. During the reporting period, the Company accumulatively donated CNY473,000 yuan.

Poverty Alleviation

With the concept of "feed-back society", the Company forged forward on the path of enthusiastic charity. In terms of poverty alleviation and donations for education, the Company and subsidiaries organized and carried out various forms of assistance and donation activities in light of local conditions to provide financial supports for people in need and helped them get out of poverty. Meanwhile, the Company also cared for people suffering from natural disasters such as earthquakes, floods and droughts, took the initiative to shoulder social responsibilities and actively carried out supportive actions in a timely manner to provide loving care to people in the disaster areas and reduce their physical and psychological damage caused by natural disasters.

Volunteer Services

The Company promoted and advocated volunteerism, encouraged employees to participate in social volunteer activities, organized employees to carry out various voluntary activities such as services for the convenience of people, voluntary labor, unpaid blood donation, and caring for special groups, and contributed to building a harmonious society. During the reporting period, the Company had 1,200 volunteers, accumulatively serving voluntarily for 5,700 hours.

Case

SEG and owners jointly carried out young employees voluntary service activities

December 5th was the thirty-second International Volunteer Day. In order to promote the volunteer spirits of "dedication, friendship, mutual assistance, and progress", volunteers consisting of young employees from SEG carried out voluntary service activities at the Gaogiao Petrochemical Power Centre.

The voluntary activities were for all the participating units in the ultra-low emission renovation project. Among them, seven service activities such as haircuts, mobile phone stickers pasting, bicycle repairs, and ultrasonic cleaning made employees and constructors on the site delighted. By providing services for the convenience of people, young employees practiced social responsibilities and fully demonstrated the Company's enthusiasm for serving the communities.



Overseas Community Participation

As an international large-scale engineering enterprise, the Company also shouldered the mission of assuming international responsibilities while expanding overseas businesses. The Company attached great importance to the participation of overseas communities, continuously improved the overseas community participation mechanism and supporting policies, gave full play to our advantages in overseas operations, supported the development of overseas communities, participated in overseas charitable donations, actively established harmonious and win-win relationships with overseas communities, and promoted the comprehensive economic and social development of local communities.

Supporting Communities Development

By promoting localized procurement, raising taxed payable, disseminating advanced management concepts and technologies, and carrying out professional skills training, the Company provided basic guarantees for the economic development of local communities, promoted local employment and won recognition and praise from local communities. During the reporting period, the Company completed procurement of 61 sets of containers, more than 8,000 tons of steel structure and other materials in Kazakhstan, accumulatively paid taxes of USD 180 million in Kazakhstan, and accumulatively trained more than 2,700 person-times in Kazakhstan for employment. Meanwhile, the Company also actively paid attention to overseas public welfare, organized, carried out and participated in effective public welfare activities, and provided strong support for Kazakhstan World Expo, local veterans associations, orphanages, nursing homes, poor students, mothers of heroes, local community building and cultural exchange activities. During the reporting period, the Company accumulatively donated 500,000 Saudi Riyals and other materials to Saudi charity organizations and 25 Million KZT to Kazakhstan World Expo.



Prospects

In 2018, the world economy is overall in recovery, while the economic situation is still complicated. We will, as always, adhere to the beautiful vision of "creating a world-class engineering company", face with difficulties, seize opportunities, lay a solid foundation, highlight innovations, practice our responsibilities, constantly enhance core competitiveness and strive for the full and sustainable development of the Company.



Insisting on managing the enterprise according to the law and improving the system. The Company will further strengthen the compliance management, actively improve the risk and internal control management system, enhance the anti-corruption and the construction of a clean and honest administration and strive to establish a new pattern of corporate governance that is law-abiding, fair and honest.



Devoting great efforts to business development and constantly creating value. The Company will continue to exert advantages in the brand influence and integration, adhere to the green development strategy, further enhance scientific and technological innovation, optimize organization, production and resource allocation, open up domestic and overseas markets responsibly, make substantive breakthroughs in the project of "new national business card", and create greater value for the society while realizing the economic benefits of the enterprise.



Paying close attention to quality and safety, and promoting safe development. The Company will deepen the construction of a quality and safety management system, strengthen the management and control of safety risks in key projects, enhance the control of significant hidden risks, carry out special activities for quality improvement, create good quality, healthy and safe performance, and build a new pattern of operational safety management at home and abroad.



Strengthening supplier management and promoting win-win cooperation. The Company will improve and optimize the supply resource pools, promote group procurement, collaborative procurement and standardized procurement, strengthen material supply and quality risk management, establish and improve the Company's supply resource performance assessment and evaluation system, international procurement standards system and business operation processes, procedures and templates, select high-quality, responsible suppliers, and achieve win-win cooperation.



Strengthening energy conservation and emission reduction and making contributions to green development. The Company will adhere to the green development strategy, strengthen the management of energy conservation and emission reduction, and strive to reduce the impact of the Company's business development on the ecological environment, minimize the emission of "three wastes", and achieve a harmonious and unified economic growth and environmental protection.



Adhering to the people-oriented principle and innovating talent development. The Company will solidly promote key talent projects, protect the legitimate rights and interests of employees, build a growth platform, improve the working and living conditions for employees, and offer more fair benefits to employees through the development results of the Company.



Making earnest efforts to public welfare, and sincerely making contributions to the society. The Company will insist on making donations for education, poverty alleviation, disaster relief and carrying out employee volunteer activities, and through project development and construction, promote local employment and support local economic and social development.

2018 is the key year as a connecting link between the preceding and the following of the 13th Five-Year Plan. We will firmly establish and implement the "people-centered, responsible, honest, sophisticated, innovative and win-win" corporate values, solidify the confidence in development, bring together the wisdom of all parties, gather the full strength

of all staff, deepen technological innovation, promote steady development, constantly promote the construction of a worldclass engineering company and make active contributions to promoting the harmonious, steady and healthy development of the economy and the society.

Annex ESG Index

Level	Content	Section
Aspect A1: Emissions	General disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste. Note: Air emissions include NO _x , SO _x , and other pollutants regulated under national laws and regulations. Greenhouse gases include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride. Hazardous wastes are those defined by national regulations.	Energy Conservation and Emission Reduction
	KPI A1.1 The types of emissions and respective emissions data.	Emissions Performance
	KPI A1.2 Greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Emissions Performance
	KPI A1.3 Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Emissions Performance
	KPI A1.4 Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Emissions Performance
	KPI A1.5 Description of measures to mitigate emissions and results achieved.	Energy Conservation and Emission Reduction
	KPI A1.6 Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.	Energy Conservation and Emission Reduction
Aspect A2: Use of Resources	General disclosure Policies on the efficient use of resources, including energy, water and other raw materials. Note: Resources may be used in production, in storage, transportation, in buildings, electronic equipment, etc.	Effective Utilization of Resources
	KPI A2.1 Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	Energy Consumption Performance
	KPI A2.2 Water consumption in total and intensity (e.g. per unit of production volume, per facility).	Energy Consumption Performance
	KPI A2.3 Description of energy use efficiency initiatives and results achieved	Effective Utilization of Resources
	KPI A2.4 Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	Effective Utilization of Resources
	KPI A2.5 Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	Not Applicable

Aspect A3: The Environment and Natural Resources	General Disclosure Policies on minimising the issuer's significant impact on the environment and natural resources.	Protection of Ecological and Natural Resources
	KPI A3.1 Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	Protection of Ecological and Natural Resources
Aspect B1: Employment	General disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	P Safeguarding Employee's Rights and Interests Legal Overseas Employment
	KPI B1.1 Total workforce by gender, employment type, age group and geographical region.	Equal employment
	KPI B1.2 Employee turnover rate by gender, age group and geographical region.	Recommended disclosure, to be disclosed in the future
Aspect B2: Health and Safety	General disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards	Giving priority to life safety and Conducting safe development Employees' Occupational Health
	KPI B2.1 Number and rate of work-related fatalities	Recommended disclosure, to be disclosed in the future
	KPI B2.2 Lost days due to work injury.	Recommended disclosure, to be disclosed in the future
	KPI B2.3 Description of occupational health and safety measures adopted, how they are implemented and monitored.	Giving priority to life safety and Conducting safe development Employees' Occupational Health
Aspect B3: Development and Training	General disclosure Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities. Note: Training refers to vocational training. It may include internal and external courses paid by the employer.	Training employees
	KPI B3.1 The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	Training employees
	KPI B3.2 The average training hours completed per employee by gender and employee category.	Recommended disclosure, to be disclosed in the future
Aspect B4: Labour Standards	General disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour	Equal employment
	KPI B4.1 Description of measures to review employment practices to avoid child and forced labour.	Equal employment
	KPI B4.2 Description of steps taken to eliminate such practices when discovered.	Not applicable

Aspect B5: Supply Chain Management	General disclosure Policies on managing environmental and social risks of the supply chain.	Supplier management
	KPI B5.1 Number of suppliers by geographical region	Recommended disclosure, to be disclosed in the future
	KPI B5.2 Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	Promoting Supply Chain to Fulfil Social Responsibilities
Aspect B6: Product Responsibility	General disclosure Information on: (a) the policies; and	Giving priority to life safety and Conducting safe development
	 (a) the policies, and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress. 	Providing high-quality services and Creating outstanding values
	KPI B6.1 Percentage of total products sold or shipped subject to recalls for safety and health reasons.	Not applicable
	KPI B6.2 Number of products and service related complaints received and how they are dealt with.	High-quality products and services
	KPI B6.3 Description of practices relating to observing and protecting intellectual property rights.	Strengthening the protection of intellectual property
	KPI B6.4 Description of quality assurance process and recall procedures.	Delivery of quality project
	KPI B6.5 Description of consumer data protection and privacy policies, how they are implemented and monitored.	Recommended disclosure, to be disclosed in the future
Aspect B7: Anti- corruption	General disclosure Information on: (a) the policies; and (b) Compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	Anti-corruption
	KPI B7.1 Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	Anti-corruption
	KPI B7.2 Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	Anti-corruption
Aspect B8: Community Investment	General disclosure Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	Making earnest efforts to promote public good and Giving Back to the society
	KPI B8.1 Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	Making earnest efforts to promote public good and Giving Back to the society
	KPI B8.2 Resources contributed (e.g. money or time) to the focus area.	Making earnest efforts to promote public good and Giving Back to the society

Readers' Feedback Form

Thank you for reading 2017 Environmental, Social and Governance Report of the Company. In order to strengthen communication with you and other stakeholders and continuously improve the Company's performance of environmental and social responsibilities and preparation for the social responsibility report, we would like to hear your valuable opinions and suggestions. We sincerely look forward to your feedback in any of the following methods:

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Please offer your specific feedback:

1. Your overall assessment to the Report is:

○ Excellent ○ Good ○ Fair ○ Poor

2. How do you think of the clearness, accuracy and completeness of the information and data disclosed in the Report?

○ Excellent ○ Good ○ Fair ○ Poor

3. How do you think of the comprehensiveness of the economic responsibilities to be undertaken by the Company as reflected in the Report?

O Excellent O Good O Fair O Poor

4. How do you think of the comprehensiveness of the environment responsibilities to be undertaken by the Company as reflected in the Report?

○ Excellent ○ Good ○ Fair ○ Poor

5. How do you think of the comprehensiveness of the social responsibilities to be undertaken by the Company as reflected in the Report?

○ Excellent ○ Good ○ Fair ○ Poor

6. Do you think if the design and layout of the Report are convenient for reading?

○ Excellent ○ Good ○ Fair ○ Poor

7. What do you think in the Report needs revision most?

○ Governance ○ Safety ○ Service ○ Supply Chain ○ Employees ○ Environment ○ Society

8. The contents not disclosed in the Report that you hope to get to know are:

9. Your opinions and suggestions for the social responsibilities of the Company and the preparation of the report: