



2014

Sustainable Development Report

SINOPEC ENGINEERING (GROUP) CO., LTD.



Introduction

Dear readers:

This report is the second sustainable development report issued by SINOPEC Engineering (Group) Co., Ltd. (SEG) after being an H share company listed in the main board of Hong Kong. Centering on the target of becoming a world-class engineering company, the report focuses on SEG's development mode, technological innovation strategy and major CSR tasks, and consists of five parts, including Technological Innovation for eco-friendly development, constructing eco-friendly projects, quality and safety, care for employees to promote common development, and participation in public welfare programs to contribute more to social development, which systematically introduce SEG's sustainable development concept and detailed activities in performance of CSR in 2014.

In 2014, SEG actively promotes the strategy of energy and chemical-oriented, innovation-driven, globalization-targeted and value-focused, positions itself as an integrated project contractor and technology licensor for domestic and overseas refining and petrochemical engineering market, and positively undertakes tasks such as oil quality upgrade, promotion of exploitation and utilization of natural gas, and development of new coal-based chemistry. Besides, SEG puts emphasis on benefiting shareholders, serving customers, caring for employees, cooperating with partners, and contribution to the society, and takes the economic responsibility for promotion of sustainable and healthy economic development and the social responsibility for fulfillment of green, low-carbon development.



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Chairman
Zhang Jianhua

Chairman's Speech

Dear Friends:

Thanks to your trust and care, SEG managed to achieve greatly though the market was not optimistic as it had been expected in 2014. So I hereby extend, on behalf of the BOD and all staff of SEG, my heartfelt thanks to our friends in all walks of the society for their concern and support to us.

In 2014, the global economies slowed down its rate of growth and were sluggish while the new economies also decelerated its pace of growth on the whole. The Chinese economy still grew steady as evidenced by a rate of 7.4% for its GDP. In 2nd half of 2014, the energy and chemical sector had to rise up to a serious challenge due to the global imbalance between supply and demand of crude oil and slump of the oil price in international market, which has brought enormous impact upon the company's external environment. To cope positively with such an adverse and changing situation and seek further development of the company with the international and domestic market changes, the BOD and corporate management were determined to build the company into one of the first-class engineering enterprises in the world and have established various strategies to seek its worldwide development for this energy and chemical industries by being technically creative and stressing on values. The corporate management have established and implemented various programs and measures to realize its target and strategy. It exerted efforts to tap out constantly advantage through integration, speed up its pace in reform and shift of its way of development and focus on technical innovations, thus paving a good way for long-term development of SEG business.

In 2014, the company management took the lead in working with corporate employees to cope initiatively with the market changes and integrate advantages and resources as required for corporate market development. They intensified their efforts in publicity and popularization, improved fined management across the company and process control for various projects to maintain steady development of all corporate businesses. In 2014, the value of new contracts concluded by the company hit 60.7 billion RMB yuan, while that for contracts yet to be closed out by end of 2014 hit 103.922 billion RMB yuan. The company fulfilled with due care and diligence its corporate responsibility to various communities and

was active in development, promotion and application of new technologies on environmental protection and energy conservation. It participated initiatively in programs for "Clean Water and Blue Sky" and "Efficient Energy Consumption" launched by Sinopec and construction of projects for environmental protection and energy conservation. It implemented comprehensively the QHSE (quality, health, safety and environment) program across the company, adhered to being people centered and fully devoted to career development of its employees aiming to promote sustainable development of the corporate business.

In 2015, we will continue to accelerate our pace to build the company into one of the first class engineering enterprises in the world through new initiatives in reform and exploration for new fields and modes of business operations. By focusing on benefits, intensifying reforms and management and optimizing resources, we will work vigorously to expand our shares in the international and domestic market, organize carefully our production and operations, improve our comprehensive control over risks and promote consecutively technical innovation. We are resolute in improving our level of governance so as to make the company into an integrated project contractor and technical licensor in the refining and chemical markets both at home and abroad. Under the guidance of our vision and strategies, we will cultivate and consecutively enhance our core competitiveness in providing "One-Stop and Packaged Solution" while focusing on impact upon economy, society, environment, resources and culture from enterprise operation, guiding enterprise to upgrade sustainably its capability to create values and core competitiveness and fulfilling comprehensively its social obligations.

Looking into the year of 2015, my friends, we are confident in making even greater progresses for our businesses in the course of our reform and development with support of the whole society and guidance of the management and concerted efforts of employees. We wish sincerely you to stay and work hand-in-hand with us to create a better future for both you and us!

Zhang Jianhua
Chairman

Beijing, China Mar 30, 2015

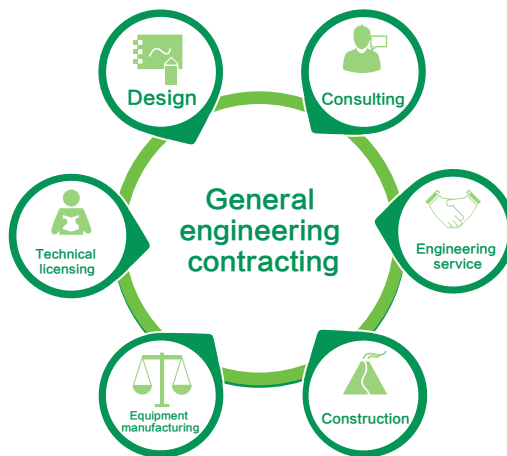
Chapter I About us





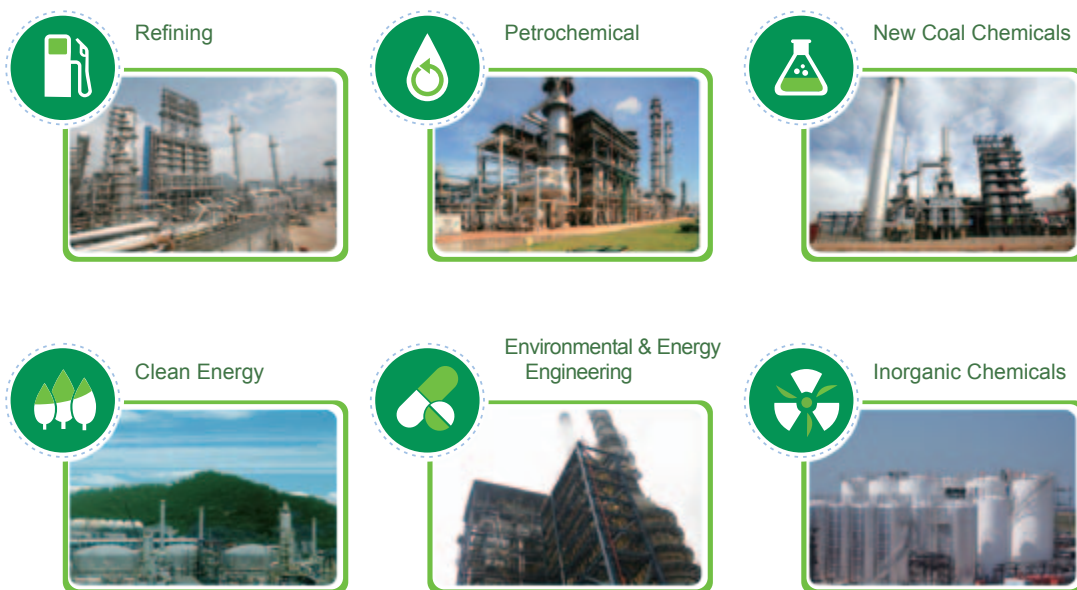
1.1 Company Profile

In 2012, SINOPEC Engineering (Group) Co., Ltd. (“SEG” or “we”) was restructured as China’s largest and most long-standing company with the best execution in refinery, petrochemicals and new coal-chemical industry in China. Based upon our experience accumulated over the past 60 years and our continuous technology innovation, SEG has completed a series of unprecedented milestones and landmark projects in China in designing and constructing complicated and mega-size refining, petrochemical and new coal-chemical projects, including China’s first 10 million tons class single-serie refinery project, the first one million tons ethylene project and the first 12 billion cubic meters per year high-sulfur natural gas purification plant project, and the first industrialised direct coal-to-liquefaction project in the world. We have gradually grown into a market leader in refinery, petrochemicals and new coal-chemical industry both in China and in the world. Our integrated business chain covers the design, consultancy and technology licensing, engineering, procurement and construction (“EPC”) contracting, construction, equipment manufacturing and transport operations in refinery, petrochemicals, new coal-chemical industry, clean energy, inorganic chemicals, pharmaceutical chemicals, environmental engineering, energy-saving engineering and other fields. We can provide customers with one-stop solutions in preliminary consultation, engineering design, EPC, procurement, construction, project management, financing assistance, commissioning and start-up services to meet various needs of different customers.



In 2013, Moody assigned a first-time issuer rating of A2 to SEG with a stable ratings outlook, which is the one of the highest ratings for engineering companies in the world.

In 2014, SEG ranked the third in the world in terms of total sales revenue among the oil refining and relating business companies in global oil-and-gas-related industries. SEG ranked the 51st in the world among the top 250 global contractors ranked by ENR and the 39th in the world among the top 150 global engineering design companies ranked by The Engineering News-Record (“ENR”).

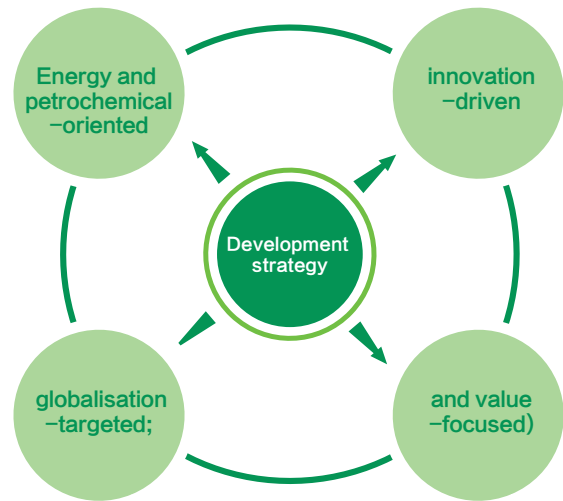


Engineering services covering extensive industries

1.2 Development Strategy, Vision, Mission, Core Values

- **Development strategies**
Energy and petrochemical-oriented; innovation-driven; globalisation-targeted; and value-focused

- **Vision**
To build a world-class engineering company



Strategic objective

Strive to become a world-class global engineering company

The central graphic features a world map with a dark green banner across the top containing the text 'Strategic objective' and 'Strive to become a world-class global engineering company'. Below the banner are three square images: the left one shows a tall industrial tower under construction with a crane; the middle one shows several large, cylindrical storage tanks; the right one shows a crane lifting a large, complex industrial component.

- **Mission**
SINOPEC fights for the a quality of life; builds SEG as a better place and shares it with you

- **Core values**
People-oriented; integrity; tolerance; professional enthusiasm; innovation; and win-win

1.3 CSR Management System

In 2014, SEG further enhanced its corporate social responsibility and sustainable development concepts, established a CSR management system in consistent with the company's development strategies, promoted the full integration of CSR management into enterprise production and operation, drove the sustainable development of both production management and ecological civilisation, and promoted a harmonious mutual development of both the enterprise and the stakeholders in economic, social and environmental respects.



SEG established a dedicated CSR lead team, hired professional external CSR experts to be our advisors, and kept in close touch with Sinopec Group's CSR department. The lead team and the advisors are responsible for studying CSR policies, governance, strategies and plans and providing suggestions related to the above to the board of directors of SEG (the "Board"). They are also responsible for formulating SEG's annual CSR plan (including safety, environmental protection, green and low-carbon development and donation) and reporting the same to the Board. They are further responsible for gathering and instructing relevant subsidiaries to execute their CSR, formulating SEG's annual sustainable development reports (CSR reports), and proposing them to the Board for its review. Our management approach ensures that our CSR and sustainable development are implemented throughout our routine work.



1.4 Main Financial Data

Total revenue was **49.346** billion, representing **13.3%** of increase by comparison to last year.

Total assets was **52.085** billion.

Profit attributable to shareholders based on Chinese Financial Report was **3.490** billion.

Annual dividend distributed for the year was **0.312** RMB/ Share.

Basic earnings per share was **0.79** RMB.

Social donations made by the group amounted **0.462** million.



1.5 Stakeholders

We place a high priority on communications with our stakeholders. We listen to their opinions through open and transparent communication systems and take into account their opinions when formulating and executing our strategies, policies and plans. We convey our understanding of sustainable development through site visits, discussions and other appropriate means of communication and effective actions. The trust and support from our stakeholders have become an inexhaustible force to drive our sustainable development. Our stakeholders include government authorities, employees, shareholders, customers, business partners, suppliers and sub-contractors, financial institutions, the media, communities as well as the public and non-governmental organisations. We hope to continue improving our communication and collaboration with our stakeholders to jointly drive the harmonious development of economy, environment and society.



SEG attaches great importance to information disclosure, communication with investors, maintaining the communication channels with its investors open and continuously increasing the transparency, focusing on investors' returns and positively safeguarding investors' interests.

In 2013, to ensure continuity and stability of the corporate policy governing dividend distribution and to protect interests of shareholders in a practical way, SEG amended its articles of association with a view to further optimise its policy on dividend distribution. To balance shareholder's returns and the future development of SEG, the Board plans to pay RMB1.382 billion as dividend in cash for the year 2014 (the final dividend shall not be paid until it is approved by the annual general meeting for the year 2014). Based on the total number of shares as at 31 December 2014 which is 4,428,000,000, SEG plans to pay dividend of RMB0.312 per share (including applicable tax) to all shareholders.



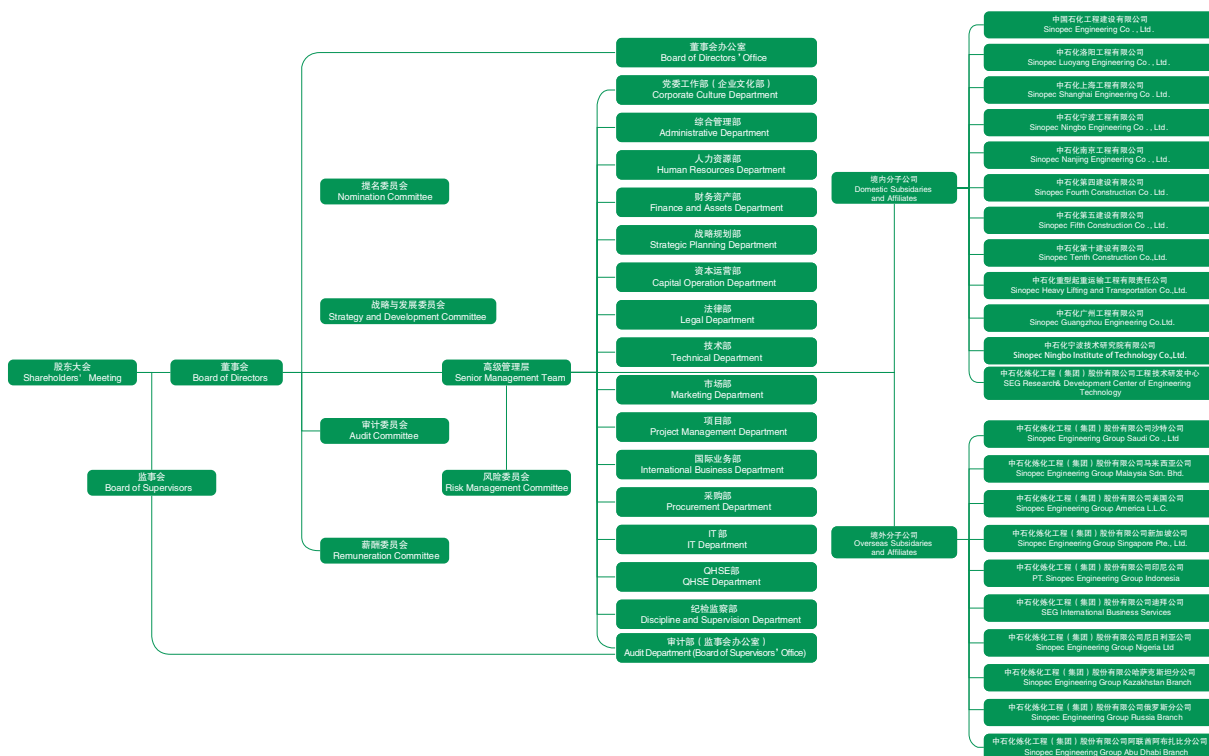
1.6 Corporate Governance

We devote ourselves to building a world-class engineering company, for which sound corporate governance is a significant cornerstone. The sustained improvement of corporate governance structure will lay a solid foundation for us to reach our development targets. We will continuously upgrade our level of corporate governance, regulate our operations, intensify internal control and risk management, and improve our corporate capability of scientific decision-making and risk mitigation.

Based upon the actual conditions of SEG and in accordance with the requirements under relevant domestic and foreign laws and regulations, we perform corporate governance strictly in accordance with the Rules of Procedure of the General Meetings of Shareholders, the Rules of Procedure of the Board of Directors and the Rules of Procedure of the Supervisory Committee and other rules and policies. The general meetings of shareholders, the Board, the special Board committees, the supervisory committee and the chief executives perform their duties diligently, operate orderly and voluntarily submit themselves to the supervision of parties in the capital markets as well as the public. Directors,



supervisors and other senior management members conscientiously attended orientation training sessions and follow-up training sessions. Independent directors take an active role in enterprise management and have intensified their communication with the chairman of the Board, the management, the external auditors and the internal auditing department. They conducted in-depth investigation and research on the subsidiaries and advised on corporate development. In 2014, SEG convened one general meeting of shareholders, four Board meetings .

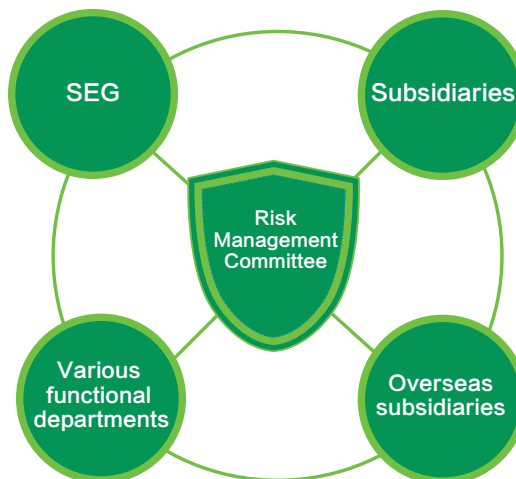


1.7 Operation in accordance with the law

We have always taken “operation in accordance with the law” as the lifeline of our sustainable development. With the goal of “ensuring lawful operation and corporate governance and operating in good faith” and the guarantee of improving lawful operation and risk management, we ensure compliance with laws and regulations and provide robust legal support and guarantee for building a world-class engineering company.

• Compliance and Risk Management

We attach great importance to corporate risk management. The Board, being the highest decision-making organisation for comprehensive risk management, is responsible for the completeness and effectiveness of SEG’s comprehensive risk management system. SEG has set up a risk management committee to form a network-based organisation system for general risk management consisting of SEG, its domestic subsidiaries and overseas subsidiaries and the managements with corporate functions of various levels. The Legal Department is responsible for the overall corporate risk management of SEG. By launching various risk management enhancing programmes, SEG has preliminarily achieved the management goal to “cover all businesses and to monitor all processes”.



◦ Compliance management

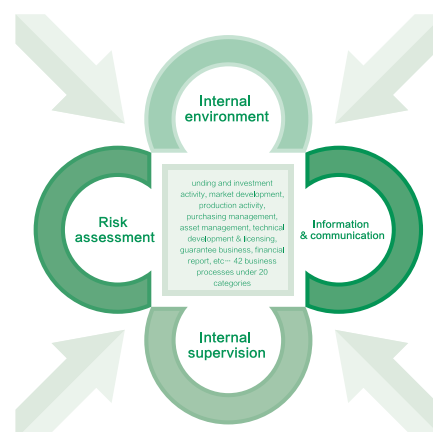
Management system:
To uphold our operation philosophy that “compliance is the lifeline of a listed company”, we have compiled the Procedure for Compliance Management of SINOPEC Engineering (Group) Co., Ltd., which stipulates that the Board is the highest decision-making organisation and the President is the chief person accountable for compliance management. By relying upon the functions of the general legal counsel and the existing legal organisations, we have set up a compliance management system based on the “Chief Officials Accountability System.”

Review and reporting:
Based upon our internal control systems on various aspects such as authorisation management, contract management, dispute resolution and information disclosure, we are actively engaged in explorations of new market and businesses. To honour our commitments to shareholders and investors, we have implemented a compliance review mechanism covering the entire process of our major business lines.

Compliance culture:
We pay close attention to the changes in capital markets and regulatory environment, and have streamlined our internal control procedures and management regime, and established a long-term mechanism for anti-money laundering and anti-commercial bribery. We have formulated a Compliance Manual to promote among our staff the culture of compliance in all respects and by all staff. By launching trainings on specific topics such as corporate governance, information disclosure, connected transactions, asset management, procurement tendering, environmental protection, work safety, anti-corruption and anti-commercial bribery, we have kicked off the comprehensive development of our compliance culture to cultivate a corporate culture recognised by employees, pursued by managers, accepted by regulatory authorities and trusted by investors.

• Internal Control System

We have established an internal control system which complies with regulations for listed companies and covers 42 business processes in 20 major categories, including internal environment, risk evaluation, information and communication and internal supervision, as well as funding, investment, market development, production, procurement management, assets management, technology development and licensing, security business, financial reporting, legal affairs management, overall budget development, connected transactions management, tax management, human resources management, QHSE management (quality, health, safety and environment management), quality management, information resources management, information system management, information disclosure and internal audit, etc.



• Enhanced Supervision of Audit

Oriented by risk control and aiming at value addition, we focus closely on key links and businesses with high risk exposure in our operations, and vigorously implement special audit while intensively conducting regular audits. We bring into full play the unique role of internal audit in intensifying internal control, risk mitigation and accomplishment of corporate strategy to promote the sustainable and healthy development of SEG.

The audit committee of the Board reviews the independence and objectivity of the independent auditors and the effectiveness of the audit process in accordance with professional standards, discusses the nature and scope of the audit with independent auditors before the audit procedures begins, discusses on a regular basis with the Board, the senior management and the independent auditors about SEG's the financial reports, and conducts

comprehensive examination on SEG's financial policies, internal audit system, internal control system and risk management system. SEG's supervisory committee has been intensifying the supervision over the major corporate decision-making process and business operations, and the implementation of decision-making rules as well as the implementation of them, which has facilitated the scientific and legal decision-making, as well as the effective improvement of the corporate management and performance of SEG.

SEG views external supervision as an important means to promote its operational compliance and anti-corruption practice. We work closely with governmental supervisory organisations and external auditors to comprehensively identify problems and meticulously making rectifications, so as to keep improving our business management and risk management.

• Anti-corruption

SEG organised 255 anti-corruption educational activities in 2014, with a total of 34,348 participants, among which 2,636 people have signed the Letter of Commitment for Integrity.

	Number of sessions of Anti-corruption educational activities	Number of attendees of anti-corruption education activities	Number of people signing the Letter of Commitment for Integrity
SINPOEC Engineering (Group) Co., Ltd	88	762	33
SINOPEC Engineering Incorporation	12	4,071	126
Luoyang Petrochemical Engineering Co., Ltd	39	2,222	153
SINOPEC Shanghai Engineering Co., Ltd.	5	400	94
SINOPEC Ningbo Engineering Co., Ltd.	66	3,579	333
SINOPEC Nanjing Engineering Co., Ltd.	75	9,892	325
SINOPEC Fourth Construction Co., Ltd.	32	3,020	302
SINOPEC Fifth Construction Co., Ltd.	11	6,123	402
SINOPEC Tenth Construction Co., Ltd.	7	4,279	868
Total	255	34,348	2,636

Chapter 2 Technology Innovation to Lead Green Development

Climate change is a global issue that all human beings are confronting. As a responsible engineering company, we believe we are obliged to promote green development in petrochemical industry by pursuing business development through technology innovation, so as to provide our customers with a series of services for green development, including energy mix optimisation, low-carbon energy development and utilisation, and energy saving and consumption reducing services. It is our responsibility and mission to promote green, low-carbon, healthy and sustainable industrial development by means of new technologies.





2.1 Achieving Development by means of technology Innovation to Realise Clear Water and Blue Sky

Green and low-carbon development is an important strategy for our business development. We have been committed to continual technology innovation and application, and design for and provide to customers with advanced production plants that could reduce consumption in production process, reduce emission of greenhouse gases and do less harm to the environment. We also provide society with advanced production plants that are green and low-carbon, clean and environmental-friendly, safe and non-polluting.

Through source control, process control and near-zero emission, we provide society with excellent green design concepts of which we strive for perfection. We tailor-make high value-added and best processing plan for efficient and effective use of energy, and achieve a green, healthy and sustainable development by means of innovation technologies.

Source control: Use clean energy to ensure the green nature of petrochemical development.

Energy mix is the composition of various primary and secondary energies and their proportions in the total energy production or total consumption. Energy mix directly impacts the final energy consumption by economic sectors. Adjustment of energy mix is therefore one of the primary tasks for energy development in China. Adjustment of energy mix is a significant development opportunity as well as a technology challenge for the green development of the petrochemical industry.

Continuous Perfection of Utilisation Technology for Methane (CH₄)-based Clean Energy

With the increasing social demand for clean energy, people's awareness of CH₄-based clean energy such as shale gas and natural gas increases rapidly. In particular, the horizontal drilling and fracturing technologies continue to improve, and there has been an upsurge in shale gas exploration and development. The United States is the first country in the world which engaged in the research, exploration and development of shale gas resources. The "Shale Gas Revolution" of the United States has shaken the pricing structure in the global liquefied natural gas ("LNG") market and in turn changed the global energy landscape.

Exploitation and utilisation of CH₄-based clean energy, such as shale gas and natural gas, represent the new energy development direction in the 21st century and is one of the important areas on which SEG focuses. Technology for exploitation and utilisation of such energy is not only the driving force of low-carbon economic strategic development, but also provides us with an important opportunity of and means to clean development and fulfilment of green, eco-friendly philosophy. In order to achieve green development in chemical engineering industry in China, we have been focusing on technology investment and development in clean energy and made some gratifying achievements in recent years.

Development of technology package of LNG: After years of research, engineering development and practical application of technology package for LNG receiving stations, we have accumulated experience in the design and construction of cryogenic tanks. In addition, we have undertaken the design of several large-scale projects for LNG receiving stations in Qingdao and Tianjin. Now we have both the capacity for and performance in providing one-stop service including the technology, design, construction and production material control (PMC) management for LNG receiving stations.

CASE



Liquid phase circulation hydrogenation project

Technology development and industry application of diesel liquid phase cyclic hydrogenation: In 2013, Jiujiang 1.5 million tons per annum ("Mtpa") diesel liquid phase cyclic hydrogenation industrial test, Shijiazhuang branch 2.6 Mtpa continuous liquid phase diesel hydrogenation unit, Zhanjiang Dongxing 2 Mtpa diesel liquid phase cyclic hydrogenation industrial test and Anqing Branch 2.2 Mtpa liquid phase diesel hydrogenation unit have been started or put into operation, during which various studies have been done. The results of industrial application show that products produced by the new liquid phase cyclic hydrogenation technology can achieve clean diesel that meets the National Standards IV or even V. The units require low investment expenditure and operation expenses, and could operate safely and reliably. Development of this technology package supports the upgrade of SINOPEC's product quality.

Achieving resource-saving development through the exploitation and utilisation of biomass energy

Exploitation and utilisation of biomass energy are also important subjects on which SEC has been focusing in recent years. We have achieved preliminary success in the development of process package of biodiesel, a project that we participated in, and the basic engineering design will commence shortly.

We have made remarkable progress in the research and development on process and technology for 100 kilo tons per annum biodiesel SRCA-II project in Zhenjiang, Jiangsu. Through such experiment, we plan to use special process to continuously turn waste oil spent grease into high-quality biodiesel, thus achieving the goal of resource-saving development through the recycling of wastes.

Technology for utilising conventional energy in a clean and efficient way

Conventional energy will still play an important role in China's economy development in the near future. Therefore, while exploring new energy, we will also use our own series of technology package to optimise efficient utilisation of conventional energy and produce clean fuel and high-value-added products for the benefits of all the whole society.

Demonstration of latest technologies:

- RSDS-III is a technology which uses new catalysts and proprietary process to produce gasoline that meets the EURO-5 emission standard
- Ultra-deep hydrodesulfurisation technology for diesel (RTS): This technology allows technology upgrade of existing diesel production plant so as to produce diesel that meets the National Standard V

Technology development of high-value-added products:

- Industrial technology development of high-pressure XLPE insulated materials: The technology helps produce special high-end cable materials.
- Technology package development of gas-phase polythene: The technology helps produce new grade of high-end polythene products.



Technology package development of gas-phase polythene: The technology helps produce new grade of high-end polythene products.

2.2 Improving process control and designing and constructing green and eco-friendly projects with high-quality

Through the perfect integration of continuing technology innovation and fine design, we have taken as our corporate mission and responsibility the design and construction of environment-friendly green plant with high efficiency and low power consumption, attached great importance to environmental protection and implemented whole-process green management. We are committed to being a green design advocate, green technology developer, green project builder undertaker and green office practitioner. As a result, we have followed the green low-carbon concept in the whole process of planning and design, procurement and construction, completion and service, explored new paths in industry development and promoted the industry to take a low-carbon and environment-friendly path.

2.3 Continuously expanding environmental protection services to fulfil our social responsibility to preserve Clear Water and Blue Sky

We make every effort to provide clients with a series of special services from engineering design to construction and the technology research for the treatment of wastes. In the meanwhile, we are making increasing efforts in research and development of environmental protection. China has imposed stricter environmental protection requirements on industrial environmental protection, and has enacted new laws and measures to encourage enterprises to increase investment in environmental protection. On 24 April 2014, the amended Environmental Protection Law of the People's Republic of China was adopted at the 8th Meeting of the Standing Committee of the National People's Congress. On 16 May 2014, the National Development and Reform Commission, National Energy Administration, and Ministry of Environmental Protection of the People's Republic of China jointly published the Work Plan on Strengthening Air Pollution Prevention and Control for Energy Industry. On 1 July 2014, the Pollutant Discharge Standard for Petroleum Refining Industry came into effect. In August 2014, the General Office of the State Council issued the Guidelines on Further Promoting Compensated Use and Trading of Emission Rights. On 19 November 2014, the General Office of the State Council issued the Energy Development Strategy Action Plan (2014-2020).

As a leading refining and petrochemical engineering company in China, SEG boasts over sixty years of experience and good reputation. In addition to continually providing quality service in the conventional petrochemical sector for clients, SEG also adapts itself to national energy strategy and environmental protection requirements, promotes business in new coal-based chemistry, energy conservation, environmental protection and new energy, introduces to the market its proprietary technologies, enters into strategic collaboration with world-renowned technology licensors, and presents integrated solutions in new coal-based chemistry, treatment of waste gas, waste water and solid wastes, LNG, and bio-energy to customers. In response to the "Clean Water and Blue Sky" Project and the "Energy Efficiency Doubling" Programme of Sinopec Group, SEG is searching for partners in energy management contracting and environmental protection management contracting, so as to provide energy conservation diagnosis and optimisation services to customers.





Wastewater Treatment

Comprehensive technology for wastewater treatment: The comprehensive wastewater control project for its treatment technology research of NCIC reached the mechanical completion stage in June 2013 and the trial operation stage in August 2013. The trial operation shows that, with economical and reasonable investment and operational cost and through measures such as technology transformation, overall planning and optimisation, NCIC has achieved all wastewater emission indexes better than the applicable emission standards. This project provides a technology source and engineering example for various complicated waste water treatment projects, and it is the technology base on which the sustainable development strategy for low-carbon and green petrochemical industry can be realised.



2.4 Continuously adopting new technology and achieving green construction

In the process of construction, we have continuously promoted the application of new techniques and technologies for engineering construction, optimised organisational structure for construction and minimised the harm to the environment brought by construction activities. We have developed special harmless welding technology to achieve zero emission of harmful gas generated in the process of welding. Moreover, we use new waterjet cutting process for metal to achieve green construction.

Additionally, we continuously improve the construction management. Effective measures of dust prevention and suppression are adopted at construction sites. The emissions from onsite vehicles, machinery and equipment, as well as pollutions from dust, noise and waste during transportation are also under control. Standard workshop of prefabrication is built for project construction, where noise reduction barrier is set. SEG would refrain from construction at night and using equipment that would make noises so as to reduce noise pollution. In addition, dust removal facilities are provided to reduce dust pollution from sand-blasting and anti-corrosion activities. We have been improving the efficiency of energy utilisation during construction, saving energy, formulating energy-saving measures, using energy-efficient equipment and products, optimising construction process, and making full use of clean and renewable energy. We have also adopted effective measures to supervise and promote the reasonable and economical use of materials, recycle and reuse surplus materials as much as possible, and minimise the consumption of materials and resources during construction.

2.5 Winning extensive recognition by technological innovation and development

We were granted 46 awards for scientific and technology advancement by provincial and ministerial authorities in 2014, including one special -place award, five first-place awards, six second-place awards, and five third-place awards.

At the 2014 National Science and Technology Awards Conference, the "methanol-to-olefin (DMTO)" technology project engaged and developed by the Group was awarded the first prize for national technical invention; the "Design, Manufacturing and Maintenance of Important Pressure Vessel under Extreme Conditions" engaged by the Group was awarded the first prize for the national scientific and technological progress; the "Research, Development and Application of New Technology on Emission-Reduction of Fine Particulate Pollutants in Major Chemical Engineering Equipment" engaged by the Group was awarded the second prize for national technical invention; the "Technical Innovation and Industrial Application of Full High Efficiency Processing of Peracid Heavy Crude Oil" engaged by the Group was awarded the second prize for national scientific and technological progress. 17 scientific research and development achievements in which the Group participated in were awarded the 2013 Science and Technology Progress the Award by Sinopec Group. Sinopec Ningbo and Tenth Construction Co., Ltd. were awarded Advanced Enterprise of Scientific and Technical Innovation by China Association of Construction Enterprise Management.

Chapter 3 Construction of Green Engineering



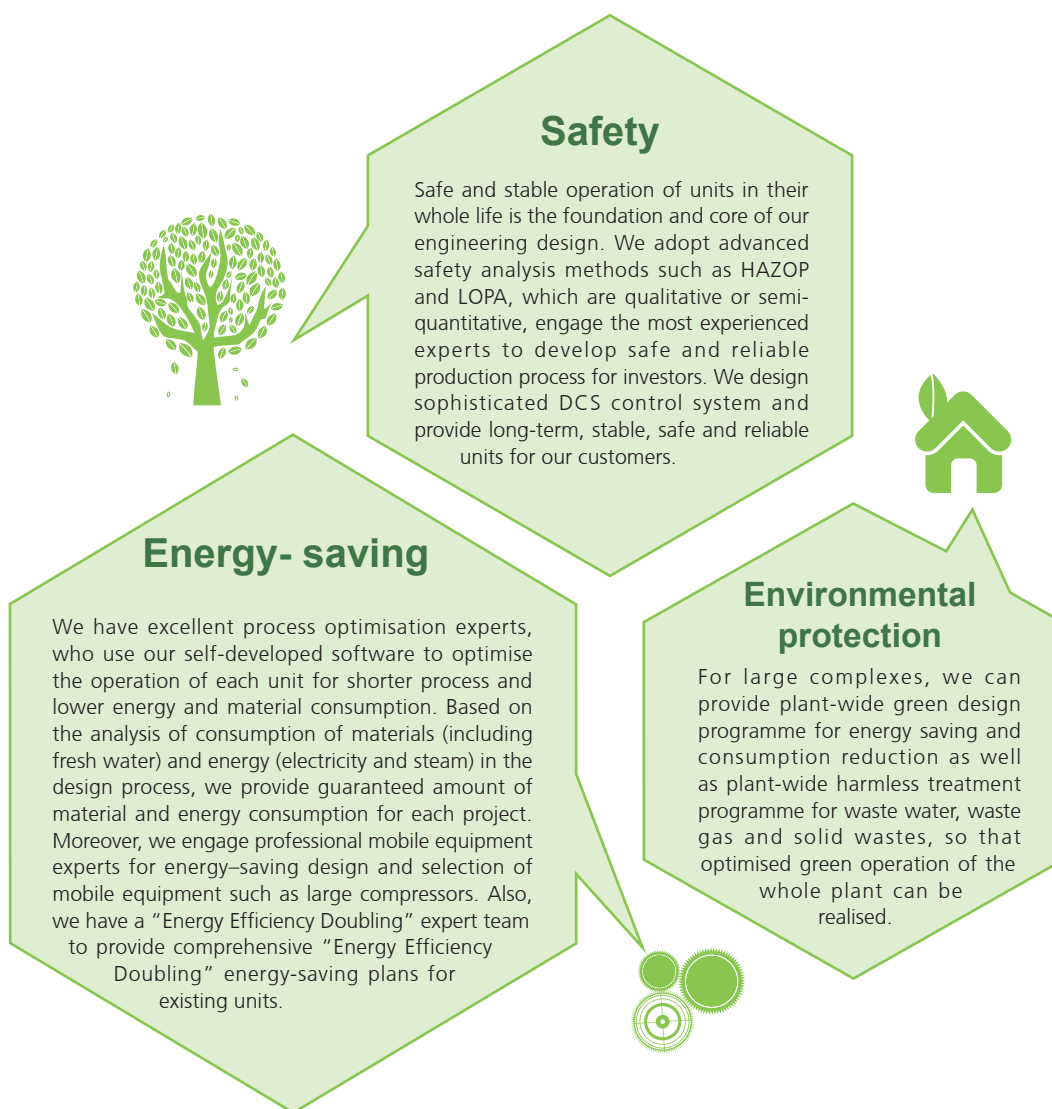


3.1 Applying green concept at design stage

We are committed to being a green design advocate, green technology developer, green project builder and green office practitioner, and take it as our mission and responsibility to design and construct low-energy-consumption, high-efficiency, and eco-friendly green factories. We will carry out environmental impact assessment before project planning, analyse, estimate and assess the possible influences on air, water, geology, and community etc. after project implementation, propose measures and countermeasures to prevent and control pollution. By incorporating the 3R green design principles (pollution reduction, energy consumption reduction, and material recycling) in engineering designs, we manage to embody the green low-carbon concept in the whole design process. By exploring new paths for business development, we strive to make due contribution in leading the industry towards a low-carbon and green future.

- Overall solutions being the base of green projects

Safety, energy efficiency, and environmental protection are three cornerstones for green engineering designs. We design utilities and infrastructures for each and every customer according to the hydrological and climate conditions at each project location, and recommend safe, reliable, advanced, and eco-friendly production process and technologies to investors according to customers’ requirements and market conditions. Basing on the following three principles, we provide green design blueprints for each project, and construct energy-saving, green plants for each customer.



3.2 Ensuring implementation of energy-saving eco-friendly projects and fulfilling the social responsibility “Clear Water and Blue Sky”

As a large international engineering company and listed central enterprise, SEG attaches great importance to social responsibilities, and make it its own missions to pursue scientific, green and win-win development. With over sixty years of experience in the industry, SEG keeps researching and developing advanced technologies, optimising processes and improving project management, so as to provide a full range of engineering services from engineering consultation to design, construction, procurement, commissioning and maintenance in a safer, more eco-friendly and efficient manner, and to present high-quality projects for the clients and the society as well.

In 2014, in response to the national energy strategy and environmental demand, SEG fully engaged in such fields as energy saving, new energy and new coal-to-chemical industry engineering environmental protection, by providing integrated solutions to zero sewage emission, waste gas treatment, soil remediation, LNG and bio-energy, as well as energy saving diagnosis and optimisation service, thus fully supporting the implementation of energy saving projects. In 2014, SEG made many achievements in waste water, waste gas and solid wastes treatment and unit energy saving and optimisation projects, which was an important part in the realisation of Sinopec Group’s “Clear Water and Blue Sky” project and “Energy Efficiency Doubling” programme.

Take SINOPEC Ningbo as an example, in 2014, it finished 32 specific engineering design tasks of Sinopec Group’s “Clean Water and Blue Sky” Project, including 22 sets of catalyst flue gas DeSO_x and DeNO_x units and 10 projects of 35 boiler flue gas DeSO_x and DeNO_x units, which, after being built and put into operation, will reduce 43,569 tons of NO_x, 88,422 tons of SO₂ and 7,479 tons of dust per year. Energy saving projects in 2014 achieve coverage of the whole industry chain including catalytic cracking, delayed coking, cracking furnace transformation, ethylene energy conservation technology, aromatic, crude distillation and PTA refinery.

In order to better support the development of the national environmental protection industry, SEG also actively helps refinery and chemical engineering enterprises to carry out environmental protection and energy-saving projects, for example, the fertiliser flue gas DeSO_x project in Hubei and the sludge drying project of SINOPEC Jiujiang Company, through such new commercial modes as environment management contracting and energy management contracting. In addition, polluted soil treatment and remediation projects are in progress, where low-temperature desorption, high-temperature thermal desorption and low-temperature thermal desorption remediation technologies are mainly used.



Sulfur recycling complex of Shengli Petrochemical Plant

The sulfur recycling complex of Shengli Petrochemical Plant undertaken by SEG as an EPC contractor has successfully passed the feeding and commissioning staged and produced satisfactory sulfur products. After being put into operation, the complex will reach an annual production of 15,000 tons and can process 15,900 tons of acid gas per year, accounting for a reduction of 30% of emission of SO₂, which can satisfy the demand of environmental protection for a processing capacity of 5.5 million tons per annum (“Mpta”) after the plant is expanded. This can also improve the atmospheric environment nearby and in turn increase productivity but not pollution.





Zhenhai 1.8Mtpa DeSO_x and DeNO_x project

The heavy oil catalyst flue gas DeSO_x and DeNO_x unit of SINOPEC Zhenhai Refining & Chemical Company ("ZRCC") designed by SEG has successfully passed the feeding and commissioning phases and achieved the emission achieved thereof is better than the latest national standard. After being put into operation, ZRCC's heavy oil catalyst flue gas DeSO_x and DeNO_x unit will reach a processing capacity of 190,000 Nm³ per hour and a reduction of emission of 1,479 tons of SO₂, 206 tons of NO_x and 867 tons of dust, accounting for a reduction of 95% for SO₂, 80% for NO_x and 92% for dust, [as compared to those of the same period last year]. Therefore, this can meet the nation's environment-related requirements that become more and more stringent, and improve the atmospheric environment nearby to achieve the purpose of emission reduction.



3.3 Encouraging environmental protection concept and achieving green construction

We integrate low-carbon economy and green economy concepts into the whole process of construction and adhere to the principle of “Control-Reduction-Recycling”. Through actively promoting the application of new techniques and technologies for engineering construction and optimising organisational structure for construction, we have minimised the harm to the environment brought by construction activities. We have developed special harmless welding technology to achieve zero emission of harmful gas generated in the process of welding. Moreover, we use new waterjet cutting process for metal to achieve green construction.

At the construction sites, we infuse the awareness of environmental protection into each management detail. Effective measures of dust prevention and suppression are adopted at construction sites. The emissions from onsite vehicles, machinery and equipment, as well as pollutions from dust, noise and waste during transportation are also under control. Standard workshop of prefabrication is built for project construction, where noise reduction barrier is set. SEG would refrain from construction at night and using equipment that would make noises so as to reduce noise pollution. In addition, dust removal facilities are provided to reduce dust pollution from sand-blasting and anti-corrosion activities. We have been improving the efficiency of energy utilisation during construction, saving energy, formulating energy-saving measures, using energy-efficient equipment and products, optimising construction process, and making full use of clean and renewable energy. We have also adopted effective measures to supervise and promote the reasonable and economical use of materials, recycle and reuse surplus materials as much as possible, and minimise the consumption of materials and resources during construction. In the process of construction, we put emphasis on the protection of biodiversity and recovery of the original ecosystem, and try our utmost to achieve fusion of construction and nature.



Chapter 4 Quality and Safety

To build a world-class engineering company is the strategic objective of SEG, under which quality and safety are the two most crucial factors. SEG always values engineering quality as the lifeline and that safety responsibility outweighs everything.

Following the guiding principle of “always keeping one step ahead with premium quality” and through rigorous quality control, we ensure that every aspect of the project is in compliance with applicable standards. Adhering to the policy of “whoever in charge shall be responsible”, SEG has established a quality, health, safety and environment (QHSE) management system that is implemented throughout the process of operation and production, in order to assure the intrinsic safety of the project and the well-being and safety of customers and employees.





4.1 QHSE Management System

SEG's Board has founded the QHSE Management Committee as well as the Emergency Response Command Centre of SEG. QHSE Management Department is set up as an organisation within SEG and the QHSE management responsibilities of all subsidiaries on various levels have been defined.

SEG keeps improving the quality, health, safety and environmental protection systems, and has established a total of 84 procedures of management practices and 84 associated rules for implementation which cover danger identification and risk assessment, quality management, occupational health management, energy saving and environmental protection, emergency management, incident and hidden danger management, QHSE management of construction projects, QHSE management of contractors and QHSE management of overseas project, etc. These procedures and rules for implementation have greatly promoted the QHSE-related work in a more systematic, organised, standardised and normalised manner.

SEG has been following the management philosophy of "safety comes first and life is paramount", and proactively exploring the use of information technology to realise the "integrated management and centralised control", so as to gradually facilitate the combination of QHSE-related work with information system.

SEG attaches great importance to production safety, especially the quality and safety management of EPC projects. The QHSE supervisory team has made a number of site visits to eliminate safety and quality danger. In 2014, SEG successively carried out overall safety and quality inspections on a total of 12 project management offices and one base unit including those of the Sichuan Yuanba project, Zhongtian Hechuang chemical project, Sinopec Tianjin LNG Project, tank zone project of the Tianjin State Petroleum Reserve Base, oil product quality upgrading project of Sinopec Jiujiang Company, SEG R&D center, etc., which helped the safe and smooth operation of the projects.



Running of the QHSE management system is shown as below chart:

4.2 Stringent Quality Control to Build High Quality Projects

SEG adheres to the philosophy of integrity, regulation and the concept of scientific development, and acts with all staff participation, implementation of responsibilities, good process control, continuous improvement, and serving user's quality requirements. SEG strives to continuously improve its system, optimise its mechanisms and enhance onsite management. With comprehensive quality control, quality management departments are established in subsidiaries, and engineering projects are equipped with special quality management personnel. SEG's quality management function is staffed with 1,800 full-time employees. In the subsidiaries, project quality management team is organised for each project to carry out quality activities and special training programmes for full-time quality management staff, general staffs and new employees, so as to improve their quality awareness and capability.

In 2014, SEG fully carried out the programme of "standardised design, advanced process design; standardised procurement of high quality products; modular construction of high quality projects". Regarding the design of each project as a work of art, SEG works out the most reasonable process and layout through three-level optimisation and four-level approval.

Regarding every construction site management as a system, SEG has launched a series of standardised activities of construction site compliance and sample construction, meticulously implemented the policy of mandatory inspection of the "first piece", exercised rigorous control over quality, and strictly implemented the standards construction. Through intensified management and process control, SEG is standing at a high starting point, aiming at a high level and insisting on high standards. It will continuously improve construction quality and make every effort to build every project into a world-class petrochemical unit.

In 2014, we designed, constructed and put into operation more than 80 petrochemical plants of all kinds, of which more than 30 EPC petrochemical and coal-chemical projects had successful test commissioning. Six projects, including the 10 Mpta refinery PetroChina Guangxi Petrochemical, the 1.4 Mpta continuous reforming-disproportion complex unit and auxiliary systems of Liaoyang Petrochemical Branch, designed by us, received the National Quality Engineering Awards. Over 30 projects, including Yulin-Jinan Gas Pipeline project and second combination unit and associated systems of Shanghai Petrochemical Refinery Revamping project, received provincial and ministerial-level quality engineering awards. Four projects, including the 1 Mpta ethylene and associated 0.45 Mpta polypropylene on EPC projects of Tianjin Petrochemical, won gold or silver awards for National EPC Projects or bronze medal of for Project Management Award for national EPC general contracting projects. Three projects for coal (coke)-to-hydrogen project welding works of Sinopec Maoming Branch, won the first prizes of National Excellent Welding Engineering Award. Three projects, including the 2 Mpta high-pressure hydrogenation cracking project of Sinopec Yangzi Petrochemical, won the National Excellent Welding Engineering Award. Five projects including large lifting & hoisting general contracting of Sinopec Shanghai Petrochemical Refinery Revamping Expansion won the Award of Outstanding Heavy Lifting Performance.



4.3 Safety and Risk Control

Refinery engineering is a high-risk industry, so we always regard safety as the lifeline of enterprise development, keeping in mind safety management all the time, and have created a safety culture with “I want safety” as its core. By focusing on the construction of safety management system, improving the safety management system, implementing the safety management responsibility and increasing the efforts for investigation and control of safety danger, we have steadily promoted the establishment of the emergency management system, striving for first-class work quality and safety management.

● Production safety

In 2014, except for one accident where one person from the sub-contractor's team died on 18 December, 2014 of falling from height in the Anqing project undertaken by the Fifth Construction Co., other domestic projects all went smoothly with no record of safety, environment or occupational health accident. As at 18 December 2014, SEG achieved a total of 284 million safety labour-hours, and from 19 December to 31 December 2014, it achieved 9.88 million safety labour-hours. The lost time injury rate of the whole year (number of the injured per million labour-hour) was 0.0016 and the recordable event rate (number of the injured per million labour-hour) was 0.0288.



Case of field emergency drill

● Implementation of safety responsibility system

On one hand, the Company sorted out 127 QHSE-related rules and regulations from the 193 systems and regulations set forth by the Safety Supervision Department and Energy and Environment Department of Sinopec Group. In view of the actual needs of its system building, SEG timely sorted out the HSE systems to be formulated and amended, improved the system building and solidified the foundation for performing HSE management. On the other hand, pursuant to the principle “Double Responsibility in One Post and Paired Responsibility of Party and Management” and “Whoever is in Charge Shall Bear the Responsibility”, SEG detailed the HSE responsibilities of each member of the management and the safety responsibility system of the Company's functional departments. In addition, at the beginning of every year, the Company would sign HSE Responsibility Commitment Letter with all of its subsidiaries and pass the quota allocated by Sinopec Group to on to the subsidiaries.



Awarded by client HSE team prize for 1 million safety hours and excellent project manager prize

● Safety emergency management

Taking the lessons in emergency incident reporting and handling as exposed in the Qingdao explosion accident, SEG investigated into problems existing in formulation of emergency plan, drill and review of emergencies, and held emergency management seminars to enhance development level of response plan and emergency management ability of the personnel concerned. SEG also revised the comprehensive emergency response plans and emergency management rules, and, in light of the principles of “One Case One Plan” and “One Finding One Tackle”, amended and made complete nine special response plans to improve the response plans so that they are comprehensive inclusiveness and scientific.



Carried out “Selection of HSE Stars”, “Safety Theme Weekly Meeting” and “Award for Identification of Potential Risks” to award outstanding staffs.

SEG organised the subsidiaries to carry out special emergency drills specifically in consideration of their projects' respective cycles, and examined and improved the practicality, pertinence and operability of the emergency response plans, so as to enhance the practical abilities of all sorts of personnel to cope with emergency.

- **Identification, tracking and rectification of hidden dangers**

In accordance with the principle of "focusing on key points, making hierarchical supervision and tracking the whole process", SEG made 5 overall inspections to strengthen the identification and management of potential risks. After the 11.22 accident, SEG examined hidden dangers and assessed and rated the hidden danger management projects reported by its subsidiaries. It set 11 hidden danger management projects at the company level, the responsible principals at all levels for the dangers to be identified, and the requirements for rectification. It also provided a fund plan of RMB 39.15 million for the work above.

- **Safety Supervision**

SEG carries out extensive onsite HSE inspections, investigates into any problem existing in the worksite HSE management, and maintains frequent and specialised safety inspections. Meanwhile, by way of "Looking Back", SEG examines the improvements on the findings and enhancement of safety-related work.

- **Management over occupational health and labour protection**

Efforts were made to: 1. enhance public awareness of occupational disease prevention and control by organising the staff to actively take part in the "National Knowledge Contest for Prevention and Control of Occupational Disease", for the purpose of disseminating the knowledge of prevention and control of occupational disease; 2. organise and launch overall inspection activities over the management of labour protection equipment. Learning from the "April 7" accident where the contractor for Tahe Refinery & Chemical was poisoned, SEG launched a comprehensive inspection on supervision over the quality of labour protection equipment, occupational hygiene prevention facilities, emergency management, safety protection training, etc., with a focus on the examination of sub-contractors' labour protection equipment.

- **Safety management informatisation**

1. Under SEG's overall plan for launching strategic management design, the HSSE working group was established, the principle and framework for building HSSE information system focusing on process management complemented with by information statistics were put forward, the demand package for 2 systems, HSE management and overseas public safety, were successfully developed, and the management requirements and construction plan of all modules were set forth. 2. The OSHA statistics rolled out in all-round manner saw a smooth progress, accumulating experiential data for improving safety management and safeguarding safety and health of the staff.



- Contractor's safety management

According to unified plan of the [Group], in order to cope with the inadequate understanding of and less competence on safety management by the sub-contractors' management, SEG has planned on the yearly safety training work on the person-in-charge, project managers and full-time safety officers of the sub-contractors, and organised multiple seminars at SINOPEC Ningbo, SINOPEC Nanjing, Fourth Construction Co., and Fifth Construction Co. In the meantime, SEG also brought trainings to project worksites for the sub-contractors, including those of the Tianjin LNG Project, Yuanba Project, Jiujiang Project, Zhongtian Hechuang Project, and Ningmei Project. A total of 24 seminars for three categories of personnel of the sub-contractors and 2,372 people received training and examinations.

Actively share safety management achievements: 1. By exploiting the experience of tackling hidden troubles of power distribution box on construction sites, the "Technical Code for Safety of Temporary Power Distribution Box in Petroleum and Chemical Project" was compiled through setting the Ningbo station as the model for others. The code was approved for setting up by the Ministry of Industry and Information Technology in 2013, and the final draft review was completed in August 2014. It further standardises the safety, technology and management of temporary power distribution box on construction site, capable of efficiently reducing accident of temporary electricity on construction sites. 2. Through summarising the HSE practices in overseas projects, SEG has completed the compilation, review, editing and publication of the training book "HSE Management Practices in Overseas Refinery and Chemical Projects", which affords theoretical support for the quick understanding by overseas projects' personnel of the HSE management requirements of overseas projects.

4.4 Overseas Public Safety Management

- Training of outgoing personnel

1. SEG strictly implemented the policy of "No Training, or No Dispatch" and organised outbound personnel to attend beforehand overseas public safety management training as organised by the Foreign Affairs Bureau of Sinopec Group 2. SEG archives training records, sorts out personnel who have attended overseas public safety management training in the past few years as well as with timeline for training, keeps the effectiveness of the training records, and ensures the smooth handling of procedures for going abroad, which guarantees the smooth progress in construction and operation.



- **Precaution against overseas project execution risks:**

1. SEG strengthened risk management on overseas public safety risks. According to the “Management Measures over Overseas Public Safety” newly published by Sinopec Group, the Company organised the subsidiary to investigate into the dynamic evaluations of the overseas projects in progress, requesting those subsidiaries absent from reporting dynamics of overseas project to rectify problems, and established and maintained the risk evaluation and emergency response management archive. SEG, responding to the requirements of “no contract signing and no personnel despatch before evaluation is made” for overseas project, completed the evaluation reports of the projects and reported to the Foreign Affairs Bureau for filing. 2. SEG actively takes part in the overseas public safety management activities organised by the Foreign Affairs Bureau, makes constructive comments with respect to security personnel staffing and maritime public safety standards, and ensures that Sinopec Group’s systems and regulations are well suited for the characteristics of refinery and chemical projects. SEG also actively take part in the compilation of the “Sinopec Code for Auditing Overseas Public Safety” 3. SEG organises the experts inside and outside Sinopec Group for formulating “Sinopec Standards for Overseas Public Safety Training” and “Sinopec Guide to Security Provisions and Security Personnel Staffing for Overseas Public Safety” so as to further standardise and strengthen the overseas public safety management efforts.



- **Health of overseas staff:**

1. SEG organised SEG Kazakhstan Branch and SEG Saudi Arabia Branch to conduct investigative study on health management demands of overseas staff in conjunction with the International SOS, and establish and maintain the archive for overseas staff’s health management. 2. SEG took measures to make more efforts to guard against epidemics. Responding to the rampant “Ebola Virus” and “Coronary Virus of Middle East Respiratory System Syndrome”, SEG timely issued official documents and hammered out the precautionary measures, to ensure the health and safety of the staff coming to and going from the affected areas as well as those in the affected areas.



Chapter 5 Care for Employees to Promote Common Development

“People-oriented” is an underpinning force that drives SEG’s sustainable development. It is our firm belief that employees are the most valuable resources and fortune of the company. Adhering to the “people-oriented” concept, we have earnestly fulfilled our obligations to employees and spared no effort in improving their working environment. We provide our employees with platform of career development, care for their occupational health, facilitate the localisation of foreign employees and promote the integration of diversified cultures and strive to achieve common development for both the employees and the enterprise.





5.1 Employee-centric Principle

We have always put people first and think of employees as our most valuable resources and fortune. We have set up a mechanism for hiring, training, utilising and incentivising employees. We advocate the ideas of respecting, caring for and treating our employees well and strictly comply with laws and regulations in various countries. We care for and value employees' interests and have provided them with a platform to promote their comprehensive development in order to foster a harmonious relationship between our employees and us.

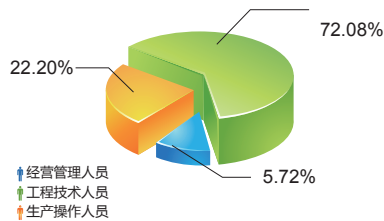
As at 31 December 2014, SEG record had 18,900 employees with an average age of 41 years old. Strictly observing the Labor Contract Law of the People's Republic of China, and pursuant to the principles of "equality, voluntariness and mutual agreement", we enter into labour contracts with our employees in writing, reaching a 100% labour contract signing ratio. We also provide our employees with the "5 Insurances and 1 Provident Fund" social security system, namely, the insurance coverage for pension, medical insurance, unemployment insurance, work-related injury insurance and maternity insurance, and housing fund, with 100% social insurance coverage. We organise employees for health check on a yearly basis, with 100% coverage of employee physical examination of 100%. In addition, we also formulated a corporate pension system as a long-term incentive for our employees, which constitutes an addition to our employees' pension system.

We strictly observe local laws, regulations and policies where the [projects/subsidiaries] are located, and we try to establish a harmonious and stable employment relationship by treating all employees equally and regulating labour management. Any discrimination in race, colour of skin, nationality, language, ethnicity, belief, physical disability and political group is banned in our recruitment, selection, employee development, payroll and welfare, and employment contract. Our minority employees account for 2.95% of the total. All of our direct subsidiary have signed labour contract with their employees on the principle of "equality, willingness and mutual consultation". Conclusion of labour contracts in our company hit a rate of 100%.

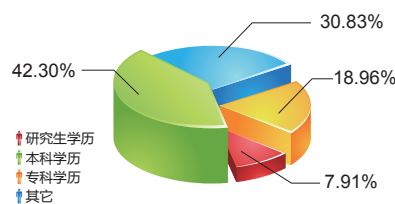
Efforts are made to improve the level of personnel management, intensify cultivation of talents and diversify career development for talents on various levels. We pay more attention to cultivating younger generations and setting up a regular training mechanism for key staff and the management of intermediate level. We have launched various training programmes for responsible principals to comprehensively upgrade their competence, and have optimised the quantified assessment procedure for the promotion of those with intermediate and advanced technical titles.

Performance assessment in SEG follows the principle of "category and level-based, performance oriented, objective and just, closed loop management, and combination of incentive and constraint". To enhance effect of the incentive and constraint mechanism, performance assessment is usually linked with personal salary, incentive annuity, status of post readjustment, training and development, advanced and outstanding statutes granted and renewal of employment contracts.

Staff configuration by type is as below



Staff's education structure is as below



CASE

Democratic management and oversight

We persevere in maintaining employees' democratic rights, give play to their role in conducting democratic management and supervision so as to create an impartial, democratic, pragmatic and harmonious atmosphere in the company. We have our employees informed of the corporate development and have them involved in enterprise management through means such as employee representative meetings for them to safeguard their rights to information and supervision.

5.2 Caring for Employees' Occupational Health

We live up to the requirements under the Law of Occupational Disease Prevention and Treatment of the People's Republic of China. We attach great importance to occupational health management and insist on putting life, safety and the well-being of employees first. We closely monitor the changes in state policies regarding ongoing projects, workplace and occupational health supervision and protection, highlight the identification, analysis and control of occupational hazards at worksites, emphasise improvement of construction environment, and have taken positive measures to maintain employees' physical health. Efforts were made in 2014 to improve and implement various regulations governing employee's physical check-up, health records, recuperation and vacations. In 2014, occupational health check-up for our employees reached a rate of 100% and the rate for monitoring occupational hazard factors in workplace was over 95%.

5.3 Safeguarding Interests of Female Employees

Our female employees are with different posts on different levels, accounting for 27% of our total staff. We strictly observe laws and regulations governing protection for female workers to safeguard their interests at root. Female employee commissions have been established in labour unions of various levels to resolve issues they may encounter in work and life. We have made consecutive efforts to improve the working environment and conditions for female employees and implemented the systems governing their leave during pregnancy, maternity and nursing period and regular physical check-ups, providing special care to the physical and mental health of female employees.



5.4 Building a Harmonious Enterprise and Caring for Employees' Lives in All Respects

We care for employees' lives and strive to study and resolve their actual concerns to improve their working and living environment and living standard. We enrich employees' life by holding singing contests, table tennis competitions and other recreational and sports activities that are good for their body and mind. Our labour union takes caring for and safeguarding employees' interest as one of its main functions and fulfils its obligations earnestly. Special study has been conducted for codes and standards governing visit to employees on their birthdays and festivals and when they fall ill. We adhere to the practice of visiting employees on their birthdays or hospitalisation due to illness and female employees when they give birth and on Women's Day.





Enhance consciousness of integrity through recreational and sports activities

Our labour union organised our “I Am the No.1” badminton match and the initial “Hiking Season” activity. Through grass-root recreational and sports activities, we provide a platform to intensify communications, understanding and integration between SEG and various subsidiaries, so as to enhance solidarity across the company. Those activities received high praises.



Chapter 6 Participate in Public Welfare Programmes to Contribute to Social Development

Companies and the society are interdependent to promote mutual growth. While pursuing sound financial performance, SEG has paid close attention to people's livelihood and social progress by actively participating in public welfare programmes, fulfilling its responsibilities and obligations as a "corporate citizen" and making efforts to hire locals to boost local economy.





6.1 Poverty alleviation

By helping the poor, we can bring hope and light the future for them. In 2014, we emphasised the improvement of our social value while striving for better financial performance. Following the guidance of labour unions, SEG and its subsidiaries carried out and participated in many effective programmes for public welfare taking into account the local conditions. When providing relief to areas stricken by earthquake, flood and drought, we spared no effort and actively provided relief to people in those areas. We donated a total amount of RMB462 thousand in 2014.

CASE

SEI devotes love to a poverty-stricken primary school in Yushu County, Qinghai Province

Nangqian County of Yushu Zang Nationality Autonomous Prefecture of Qinghai Province is a state-level poverty country, located in the hinterland of Qinghai-Tibet Plateau, where people live a hard life and it is even harder for students to get educated. SEI organised its staff to make the donations. "Help the Difficult, Be Benevolent and Doing Good Deeds" is a traditional virtue of Chinese people and is also the heritage of good morality of the whole Sinopec staff. Carrying forward the virtue as a portion of its corporate culture, we encourage our staff to regard donation as an experience of giving love and self-improvement, and to devote their love.



CASE

An employee of the Fifth Construction Co. aids impoverished students for 12 years.

"The greatest benevolence is like water, the highest virtue tolerates all". Wang Tao, an engineer with project management division of the Fifth Construction Co., financially aided 9 children to get education again, as well as 7 children in poverty-stricken mountainous areas nationwide, in 12 years. He also appeared on the scene of Wenchuan Earthquake and Yushu Earthquake to offer his help. He has a wish which is to help set up a small library in Dingjiaying Primary School, to offer the children there a broader vision of the outside world.



6.2 Serving Youth Olympic Games in Nanjing

The 2014 Youth Olympic Games commenced at 20:00 pm on 16 August 2014 in Nanjing, China, another significant Olympic game event held in China after the Beijing Olympic Games. It was the first Youth Olympic Games and the second Olympic games held in China. On the evening of 16 August 2014, in the prologue “Dream-building Tower” of the opening ceremony, SINOPEC Nanjing was the only builder for crane-related programming in the programme show. The thrilling show by the 120 Kungfu men at the high structure proved to be a fantastic surprise for the whole world.

To ensure the qualified presentation of the programmes, the hoisting group of SINOPEC Nanjing went many times to the venue to assist in selection of the crane access and final positioning, surveying of the working radius, and review of the hoisting load rate. In particular, they provided fruitful technical supports to the safety of man loading at height and road surface protection, etc., as well as planned the man and machine safety, which laid a solid foundation for the smooth and successful performance of the programmes, and made its contribution to the opening ceremony of the Youth Olympic Games.



In addition, SINOPEC Nanjing actively organised volunteers to take part in the Youth Olympic Volunteers activities, and selected 4 representatives to participate in the volunteers activities in the youth Olympic cultural and education gymnasium and the traffic operation centre to act respectively as the financial controller of the culture and education gymnasiums, deputy manager of comprehensive affairs, deputy manager of model athletes and deputy manager of the traffic operation centre. Because of their outstanding performance, Fan Shijiang and Hu Tingting, volunteers of SINOPEC Nanjing were respectively awarded with the title “Star of Villagers” and “Star of Cultural and Education” of the Youth Olympic Village.

6.3 Establishing Harmonious Community

We have designed, built and served engineering projects across the world, thus establishing many corporate communities and project bases here and there. Following the concept of “local integration, mutual development and win-win collaboration”, we have been making efforts to promote community development to achieve social harmony based on long-term mechanism of mutual interaction and joint efforts. To promote community culture, in 2014, we and our subsidiaries carried out a variety of cultural activities to build a happy, safe and harmonious community for our staff. We established community senior citizen associations, universities for the elderly, art troupes, calligraphy and painting associations, folk dance groups and various cultural and sports teams, so as to diversify people’s lives by offering frequent activities and matches. By organising morality lectures, calligraphy and painting exhibitions and photography exhibitions, the universities for the elderly cultivated people’s artistic tastes; through performances based on real-life incidents, community art troupes promoted harmonious neighbourhood and beauty in life. In addition, communities also carried out a lot of activities to care for the elderly, handicapped and impoverished. These colourful activities boosted people’s happiness in life and our reputation in communities.

CASE

The Tenth Construction Co., held a chorus concert to celebrate the National Day.

The whole concert was completely performed by the retiree of the company. They staged a wonderful concert which lighted the passion of the audience.



6.4 Creating Job Opportunities to Promote Local Development

Striving to become an integrated, international and differentiated world-class engineering company, we have designed, constructed and served many engineering projects throughout the world. Except for a few dispatched managers and technical teams, we hire and develop local talents. We also hire contractors or sub-contractors in non-core processes or constructions for engineering designs. Currently, we have more than 800 registered sub-contractors. Through sub-contracting, we will generate contract value of over 10 billion yuan and directly or indirectly provide job opportunities for engineering design, construction technology and construction work, etc.

Overseas employees form an important part of our staff and support our strategy for international development. We focus on their career development, business training and health and safety, and strive to implement “international talents and local staffing”. Many of our overseas staff have become an important part of our team and are playing a more and more important role in our international operations.



Through training for local staff and collaboration with sub-contractors, we have instilled our stringent quality control and green and low carbon concepts into the mind of each employee, thus promoting staff' personal development and improving sub-contractors' management and competitiveness. Meanwhile, we have promoted local economic growth and are fully acknowledged and respected by local governments, communities, media and partners.



6.5 International Corporate Citizenship



As a large engineering company with international operations, we are quite aware that we should not only shoulder national responsibilities, but also undertake more international responsibilities. While undertaking more and more overseas engineering projects, we have focused on our international corporate citizenship and taken expansion and implementation overseas businesses as an inevitable path to building a “highly responsible and highly respected” world-class engineering company. Following the concept of “harmony and all-win”, we have been working closely with overseas clients, local governments, communities and media to become well acknowledged and approved by local societies.



We have been following important strategic concept of green and low-carbon development. While expanding and implementing overseas projects, we have not only taken the initiative to understand environmental protection policies in the host country, but also recommended to owners our environmental protection technologies and innovative processes so as to protect local environment. In implementing large refining projects in countries like Saudi Arabia, we insisted on operation in accordance with laws and in good faith, showed full respect to Islamic culture and customs, actively communicated with local staff, and earnestly fulfilled CSR as an international company. In Kazakhstan, we carried out training, discussion, communication and social activities with local staff, and organised such public welfare activities as caring for the elderly with no kinship or with disabilities, winning us full acknowledgements from the project owner, the local government and community.



Chapter 7 Prospect of 2015

2015, we would further drive innovation and advance the industrial upgrading and transformation. We will, taking advantage of our technological advantages and engineering construction strength, strengthen collaboration with renowned universities and colleges at home and abroad as well as with technology patent licensors, endeavour to blaze out new business territory in specialty coal chemical industrial chain, energy saving and expansion, environmental protection, and natural gas, etc.. We will constantly update our



business patterns, expand domestic and overseas markets, earnestly organise production and management, strengthen overall risk control, and continuously push forward the reforms and innovation, so as to gain a quick and healthy development for us. We vow to save investment for clients and create even greater profit returns for our investors. Meanwhile, we will make even greater efforts to protect environment and promote efficient and cyclic utilisation of resources, thus making contribution to building a beautiful environment and realising harmonious development of business, economy, society and environment. We will work together with other sectors of the society to build a green, low carbon and beautiful homeland!



Reporting entity

SINOPEC ENGINEERING (GROUP) CO., LTD. referred to as “SEG” or the “Company” in the report, and its subsidiaries (branches); they are referred to as “SEG”, “Group”, “Company” and “we”.

Time frame:

January 1 – December 31, 2014, with some parts extending beyond this timeframe.

References:

- (1) HKEX’s Environment, Social and Governance Reporting Guide
 - (2) Guideline for SOEs to Fulfilling Their CSR promulgated by State-owned Assets Supervision and Administration Commission
 - (3) Guideline for Preparing CSR in China (CASS-CSR2.0) released by CSR Center of Economics Department of Chinese Academy of Social Sciences
 - (4) Guideline for Preparing Sustainable Development Reports (GRIG3.1) released by Global Reporting Initiative
- * This report has not covered all relevant indicators.

Data clarification:

The data on business operation and financials contained in this report mainly come from the annual report of 2014. If any deviation, the annual report shall prevail. For the electronic version of this report, please visit www.segroup.cn. This report will also be submitted to HKSE and published on its website.

Disclaimer

This report contains some prospective statements. Except historical facts, all the statements about future or possible incidents (including but not limited to assumptions, targets, estimates and business plans) shall fall under the category of prospective statements. Owing to the impact of some changing factors, the future development or tendency of the facts are likely to be different with the prospective statements. The prospective statements contained herein were made in March 2015. SEG shall not be liable or obliged to revise these prospective statements.

Company information

Official name in Chinese

中石化炼化工程（集团）股份有限公司

Name in English

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Listing place, stock abbreviation and stock code

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Stock abbreviation: SINOPEC SEG Group
Stock code: 2386.HK

Registered No. of license of business corporation

10000000041054
Tax registration No.
110105710934908
Organization code
71093490-8

Internet website publishing this report

Designated website by HKSE Limited (hereinafter abbreviated as HKSE):
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Company website:

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