About This Report

Scope
This report covers the performance of China Petrochemical Corporation (referred to as "Sinopec," "the company" or "we" in this report) and its subsidiaries in economic growth, social responsibility and environmental protection.

Period
This report contains Sinopec’s Corporate Social Responsibility (CSR) performance from January 1, 2019, to December 31, 2019, with some content and data extending beyond this period to increase comparability.

Issue
Sinopec publishes a CSR report annually, and this is the company’s 13th CSR report.

Reference Standards
The United Nations Sustainable Development Goals (SDGs)
GRI Standards of Global Reporting Initiative (GRI)
Oil and Gas Industry Guidance on Voluntary Sustainability Reporting jointly developed by International Petroleum Industry Environmental Conservation Association (IPIECA) and American Petroleum Institute (API)
Guiding Opinions on Better Fulfilling Social Responsibilities of State-owned Enterprises issued by the State-owned Assets Supervision and Administration Commission of the State Council (SASAC)
Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises (CASS-CSR 4.0) - Petrochemical Industry developed by the Chinese Academy of Social Sciences (CASS)
China Corporate Social Responsibility Recommended Standard and Best Practice issued by China Business Council for Sustainable Development (CBCSD)

Sources of information
All the information and data used in this report come from official documents and statistics. Unless otherwise stated, the financial data in this report are presented in RMB.

Learn More
Read and learn more about our CSR policies and practices or download this report from our official website:
www.sinopecgroup.com

CSR Rating
Sinopec has received a five-star rating, the highest possible, from the Chinese Expert Committee on CSR Report Rating for nine consecutive years.
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We actively promoted energy transition to ensure national energy security and meet the people’s energy needs for a better life. Facing new changes in energy supply structure, Sinopec has made great efforts to advance revolution in energy production and consumption and build a low-carbon, energy-efficient energy system in a bid to serve sustained economic and social development. In 2019, Sinopec produced 35.13 million tons of crude oil and 29.6 billion cubic meters of natural gas at home, as well as 40.52 million tons of oil and gas equivalent abroad, and supplied 255 million tons of petroleum products and 85.81 million tons of chemical products for society. Construction of a supply, storage and marketing system for natural gas has been accelerated to ensure steady supply of natural gas as an environmentally-friendly heating source in winter. As Fuling Shale Gas Field achieved an annual production of 27 billion cubic meters of gas, the company’s capacity of geothermal heating reached 57 million square meters, replacing 1.14 million tons of standard coal and reducing 3.98 million tons of CO2 emissions on an annual basis. Efforts were also accelerated in the development of hydrogen energy, with a pumping station built to combine hydrogen-filling and retail sales of conventional fuels, the first of its kind in China. Meanwhile, Sinopec also endeavors to provide high-quality products and services for major national events.

We continued to pursue ecological civilization along the path of green development to cope with climate change. We adopt innovative and integrated management for energy saving, emissions reduction and carbon sequestration to contribute to ecological civilization construction and the building of a beautiful China. To continue implementing the “Green Enterprise Action Plan,” we launched measures to enhance green development capacities among our enterprises. We worked to constantly upgrade the quality of refined oil products and achieved supply of National VI grade petrol and diesel across the country by the end of the year. We continued to carry out the “energy efficiency improvement” campaign, which helped save 512,000 tons of standard coal. We have conducted verification and accounting of carbon emissions for nine years in a row, with continuous efforts made to promote the application of CO2 capture and oil repellent technologies and the recycling and utilization of methane. Our transaction volume in 2019 accumulated to 2.69 million tons of carbon dioxide equivalent weight, worth 64.93 million yuan, contributing to greenhouse gas emissions reduction with actual action. To fully implement the central government’s requirements on fighting pollution and protecting the ecological environment along the Yangtze and Yellow rivers, we focused on air pollution control, sewage treatment and solid waste management in key areas, aiming to safeguard our shared blue skies and green rivers.

We made all-out efforts to contribute to winning the battle against poverty. Aiming at the goal of “eliminating worries about food and clothing and guaranteeing compulsory education, basic medical care and housing,” Sinopec endeavored to lift people in impoverished areas out of poverty through multidimensional poverty relief efforts in industry development, consumption, employment, education, health care, relief assistance and infrastructure construction. By leveraging our advantages in political guidance, marketing channels, internal consumption and professional operation, we are exploring the establishment of a sustained consumption-based poverty alleviation model. In 2019, more than 100 subsidiaries of Sinopec played a part in poverty alleviation through consumption, purchasing agricultural products worth 56.99 million yuan from poverty-stricken areas and helping impoverished areas earn 283 million yuan by selling local products. Throughout the year, Sinopec provided pairing assistance to eight counties and 709 villages across the country by investing a poverty relief fund of 165 million yuan and dispatching 1,945 employees to help local governments tackle poverty. Among the targets of poverty relief work undertaken by Sinopec, Yuexi and Yingjiang counties in Anhui, Bange County in Tibet, Fenghuang and Luxi counties in Hunan, and Yuepuhu County in Xinjiang have eradicated poverty.

We share concerns with the government and society and strive to enhance people’s well-being and social harmony through charitable acts. After the COVID-19 broke out, President Xi Jinping stressed, “Go where there is epidemic, fight it till it perishes.” Staying true to our original mission as a central state-owned enterprise, Sinopec resolutely took on the social responsibility of curing the disease by coordinating our resources to offer capital and material supplies, maintain normal production and operation orders, and provide strong support for the fight against the epidemic—from ensuring oil and gas supply to producing meltblown fabric as the core material for surgical masks and offering living necessities at our Easy Joy convenience stores. In 2019, Sinopec paid taxes and fees totaling 312.2 billion yuan to serve economic and social development of the country. We make all-out efforts to contribute to winning the battle against poverty. Aiming at the goal of “eliminating worries about food and clothing and guaranteeing compulsory education, basic medical care and housing,” Sinopec endeavored to lift people in impoverished areas out of poverty through multidimensional poverty relief efforts in industry development, consumption, employment, education, health care, relief assistance and infrastructure construction. By leveraging our advantages in political guidance, marketing channels, internal consumption and professional operation, we are exploring the establishment of a sustained consumption-based poverty alleviation model. In 2019, more than 100 subsidiaries of Sinopec played a part in poverty alleviation through consumption, purchasing agricultural products worth 56.99 million yuan from poverty-stricken areas and helping impoverished areas earn 283 million yuan by selling local products. Throughout the year, Sinopec provided pairing assistance to eight counties and 709 villages across the country by investing a poverty relief fund of 165 million yuan and dispatching 1,945 employees to help local governments tackle poverty. Among the targets of poverty relief work undertaken by Sinopec, Yuexi and Yingjiang counties in Anhui, Bange County in Tibet, Fenghuang and Luxi counties in Hunan, and Yuepuhu County in Xinjiang have eradicated poverty.

We take an active part in social and public welfare undertakings, allowing our development achievements to benefit the ordinary people. Our “Sinopec Brightness” Lifetime Express has provided free surgeries for some 46,000 impoverished cataract patients over the past 16 years. Our “The Gas Station That Cares • A Better Road Home” charity program aimed at facilitating Spring Festival homecoming journeys has benefited 42 million migrant workers, including 3.2 million riding motorcycles home, for eight consecutive years. The “Sinopec Gas Stations of Love • Sanitation Workers’ Lounges” service has been launched at 2,260 petrol stations in 13 provinces, municipalities and autonomous regions across the country, bringing warmth and care to sanitation workers. Sinopec Public Open Day program has been carried out for nine years, serving as a bridge of communication between the company and the public.

We adhere to openness and cooperation while serving the Belt and Road Initiative as a responsible global corporate citizen. Riding the globalization wave and following the national trend of high-level opening-up, we accelerated our pace of “going global” and collaborated with 26 countries along the Belt and Road in investment and project construction. To achieve mutually beneficial and win-win outcomes, we helped Saudi Arabia, Russia, Kuwait, Iran, Venezuela and other countries transform from resource exporters to resource intensive processing bases, and built a number of classic joint ventures with our foreign partners including Yanbu Aramco Sinopec Refining Company (YASREF) Ltd. in Saudi Arabia, the project in collaboration with Russia’s largest petrochemical producer Sibur Holding, and the Al-Zour refinery project in Kuwait. To fulfill our responsibilities as a global corporate citizen, we pay taxes according to laws and regulations in host countries, adopt the strategies of localized workforce and local sourcing, adhere to international standards for health, safety and the environment (HSE), respect local traditions and cultures, take an active part in social and public welfare undertakings, launched “Silk Road Bookshelf” charity program in Saudi Arabia and joined the Alliance to End Plastic Waste (AEPW), with hopes to serve local social progress and environmental sustainability and create a better shared future for all.

As a new era dawns, Sinopec is poised to continue to forge ahead. Under the guidance of the Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era and following the new development concepts as guiding principles driving the company’s sustained development, we will make every effort to accelerate the building of a world-leading company specializing in clean energy and synthetic materials and make greater contributions to the goal of completing the building of a moderately prosperous society in all respects.

Chairman\'s Message

The year 2019 marked the 70th anniversary of the founding of the People’s Republic of China, as well as a vital year for Sinopec’s goal of advancing sustainable development across the board. Throughout the year, guided by the Xi Jinping Thought on Socialist Economy with Chinese Characteristics for a New Era and staying true to our original aspiration and mission of “loving the motherland and reviving China’s petrochemical industry” and “better energy for better living,” we actively performed our political, economic and social responsibilities, overcome various difficulties to pursue progress while ensuring stability, and successfully accomplished all the target tasks set for the year—a way we celebrate the 70th birthday of our motherland.

Zhang Yuzhuo
Chairman of the Board of Directors
China Petrochemical Corporation
About Us

China Petrochemical Corporation (Sinopec) is a super-large petroleum and petrochemical enterprise group established by the state in July 1998 on the basis of restructuring the former China Petroleum and Chemical Corporation. We are a state-owned shareholding company with authorized capital from the state.

The principal operations of Sinopec include the exploration, production, pipeline transportation and sale of petroleum and natural gas; oil refining and the production, sale, storage and transportation of petrochemicals, coal chemicals, chemical fiber, chemical fertilizers and other chemical products; the import and export of petroleum, natural gas, oil products, petrochemicals, and other chemicals and related goods and technologies; and research, development and application of related technologies and information. Headquartered in Beijing, Sinopec operates in 60 countries and regions, boasting a staff of 641,000 employees globally.

Sticking to our mission of providing "better energy for better living," Sinopec seeks sustainable development while actively practicing corporate social responsibility, with an aim to realize its vision of "building a world-leading company specializing in clean energy and synthetic materials."

2019

- 2nd on Fortune Global 500 list
- 4th globally in ethylene production capacity
- World leader in oil refining capacity
- 2nd globally in synthetic rubber production capacity
- World leader in aromatic hydrocarbon production capacity

Corporate Governance

- Board of Directors and Special Committees
  Formally established in April 2012, Sinopec’s Board of Directors, as the company’s top decision maker, is accountable to the State-owned Assets Supervision and Administration Commission (SASAC) of China’s State Council and accept the guidance and supervision of SASAC. Following the principles of protecting investors’ rights and interests and preserving and increasing the value of state-owned assets, it performs its duties according to legal procedures and Sinopec Constitution.
  The Board of Directors consists of eight members, including chairman, director (CEO), five outside directors and an employee director. Under the Board, there are five special committees, namely Strategy Committee, Nomination Committee, Remuneration and Assessment Committee, Audit and Risk Management Committee, and CSR Committee, providing consultation and advice for the Board.

- Law-based Governance
  Opinions of Sinopec on Strengthening Corporate Governance According to Law and Regulations and Measures for the Implementation of the Responsibilities of the Main Persons in Charge of Directly-owned Subsidiaries in Legal Construction have been put in place.
  A compliance risks control mechanism has been established and improved, with Sinopec Integrity Compliance Management Manual issued, meetings held to promote compliance management, and a Compliance Management System Construction Program rolled out.
  To maintain the effectiveness of the system and reduce burdens at the grassroots level, an evaluation of the effectiveness of the existing system was carried out. A total of 132 systems have been formulated and revised and 91 ineffective systems have been abolished at the headquarters level.
  Efforts were made to strengthen the responsibility system of the unit responsible for the case and the mechanism for the participation of the person in charge of the unit responsible for the case in the handling of major cases, fully implement the "one case, one policy" mechanism, and promote the work related to major case response. Major legal disputes left from the past have been effectively resolved, and risks of major foreign-related legal disputes have been effectively curbed.
Law and regulation compliance campaigns were carried out among all employees via Sinopec Remote Educational System.

Sinopec Group and many of its directly-owned subsidiaries including Zhongyuan Oilfield, Zhenhai Refining & Chemical Co., Ltd. and Sinopec Guangdong Oil Products Company have been cited as advanced units in law popularization by the Ministry of Justice and the Legal Knowledge Popularization Office.

Sinopec has taken an active part in the legislation of government institutions and put forward suggestions and advice in light of the realities of the industry and enterprises to express their demands.

The company organized various business competitions and conducted examinations and surveys on 12 directly-owned subsidiaries to reveal hidden problems and risks and improve internal control.

Internal control and risk management training for leadership personnel was included in the company’s key talent training program. Knowledge of internal control and risk management was also added to professional training programs for subsidiaries at all levels, especially among internal control and risk control managers.

Sinopec fully implements the guiding principles of General Secretary Xi Jinping’s important speeches on the prevention and resolution of major risks and the arrangements made by the State Council, with a deep understanding of the vital importance of preventing and defusing major risks.

The group company identified 33 major risks in eight aspects, separated responsibilities, defined targets and measures for risk prevention and management, and adopted effective approaches to prevent safety, environmental, quality and stability risks. No major accidents occurred throughout the year in safety, environmental protection, quality and network security.

Risk control meetings are held on a regular basis, work mechanisms on risk monitoring and early warning, reporting, inspection and supervision, and assessment and accountability have been established, and high-risk business control and key personnel management have been strengthened.

The group company established an audit committee to strengthen centralized and unified leadership of top management in auditing.

Audit departments at all levels carried out auditing activities in 992 projects in terms of economic responsibility, fixed asset investment, internal control, special projects and audit investigation, fully performing their supervision duties and delivering audit value.

Continuous efforts were made to promote in-depth integration of scientific and technological approaches and system construction and upgrade the development of business information openness systems in three phases, with an additional 36 categories of publicly available data and 60 new and improved problem screening items.

Data in such business systems as contract system, engineering construction system and material procurement system have been incorporated to advance data sharing, improve effectiveness of big data-based supervision, and create an open, transparent business environment.

Throughout 2019, the company’s business information openness system disclosed nearly 4.63 million pieces of information, involving more than US$64.8 billion and 2.64 trillion yuan of contract value.

| Rate of legal review for the Company’s rules and regulations, economic contracts and significant decisions (%) |
| :---: | :---: | :---: |
| 2017 | 100 | 2018 | 100 | 2019 | 100 |

Risk Management

Internal Audit

Business Openness
Advancing Targeted Poverty Alleviation and Sparing No Effort to Assist in the Battle Against Poverty

Since its founding in 1988, Sinopec has faithfully implemented the state policies and guidance on poverty alleviation and development in an attempt to fulfill its political and social responsibilities as a centrally administered state-owned enterprise. Leveraging its advantages in corporate brand, channels, resources and talents and aiming at the goal of "eliminating worries about food and clothing and guaranteeing compulsory education, basic medical care and housing," the company has taken multiple measures to assist in the national campaign against poverty.

In 2019, Sinopec headquarters provided pairing assistance to eight poverty-stricken counties across the country, investing a poverty relief fund of 165 million yuan. Among the targets of poverty relief work undertaken by Sinopec, Yueshi and Yingshang counties in Anhui, Bange County in Tibet, Fenghuang and Luxi counties in Hunan, and Yuepuhu County in Xinjiang have been lifted out of poverty. Meanwhile, 67 directly-owned subsidiaries of Sinopec undertook poverty alleviation tasks for 709 villages and dispatched 1,945 employees to help local governments tackle poverty.

Poverty-stricken Areas under Pairing Assistance from Sinopec Headquarters

- **Headquarters’ total investment in pairing assistance and targeted poverty alleviation**: 165 million yuan
- **Local beneficiaries**: 114,000 people of 57,000 households
- **Subsidiaries’ investment in poverty relief**: 66 million yuan
- **System-wide poverty alleviation projects**: 709
- **Local beneficiaries**: 230,000 households

Sinopec Models of Targeted Poverty Alleviation

- Poverty Alleviation through Education
- Poverty Alleviation through Infrastructure Construction
- Poverty Alleviation through Employment
- Poverty Alleviation through Health Care
- Poverty Alleviation through Science and Technology
- Ecological Poverty Alleviation
- Industrial Poverty Alleviation
Improving Livelihood by Consumption-led Poverty Alleviation

After the General Office of the State Council issued the Guiding Opinions on Deepening Consumption-led Poverty Alleviation to Help Win the Battle against Poverty in December 2018, Sinopec attached great importance to the document and specially held a meeting to study and deploy the work of poverty alleviation through consumption. The meeting clearly defined strategies of "leveraging Sinopec’s advantages in internal consumption, channels and platforms, and professional operation to make consumption-led poverty alleviation an important drive for targeted poverty eradication." The company accordingly formulated and issued a Sinopec Implementation Plan on Deepening Consumption-led Poverty Alleviation to Help Win the Battle against Poverty to focus on solving a series of difficulties existing in production, supply and marketing in their work of consumption-led poverty alleviation, so as to make positive contributions to helping impoverished rural people increase production and income and shake off poverty.

Through exploration, practice and innovation, Sinopec works to help poverty-stricken areas build channels between fields and markets, dock with the sales mechanism of market, and establish a long-lasting consumption-led poverty alleviation model. With channel-based, lasting poverty alleviation as the main approach, and its self-owned Ease Joy convenience stores and relevant social channels: poverty alleviation products marketing campaigns; e-commerce channels: 7 online marketing platform; self-owned channels: 27,000 Easy Joy convenience stores; helping poverty-stricken areas develop characteristic industries facilitating marketing channels; building industrial brands; and professional operation to make consumption-led poverty alleviation an important drive for targeted poverty eradication.

Cultivating Quality Products through Industrial Development

Developing industries and cultivate competitive products are the fundamentals of consumption-led poverty alleviation. In light of local climate and natural resources of poor counties under its pairing assistance, Sinopec endeavors to develop industries such as planting, breeding, processing, culture and tourism to cultivate high-quality products and establish a long-term market-oriented poverty-relief mechanism.

Plantation Industry: Cultivating Special Agricultural Products

Demonstration planting of quinoa and sweet sorghum in Qiaokou Village of Dashu Township and Bulenggou Village of Gaoshan Township, Dongxiang County, Gansu Province; Peach orchards in Shanjiang Town, Fenghuang County, Hunan Province; Strawberry and grape plantations of Qingcao Yunfeng Cooperative in Pushi Town, Luxi County, Hunan Province; Kiwi Farming Cooperative in Luxi County, Hunan Province; Mulberry fungus planting base in Yuxi County, Anhui Province; Green Source Family Farm in Yingshang County, Anhui Province; Gorgon fruit and dicotyledonous mushroom planting bases in Yingshang County, Anhui Province.

Breeding Industry: Raising Livestock and Poultry

Breeding Cooperative of Bulenggou Village in Gaoshan Township, Dongxiang County, Gansu Province; Alpine ecological cattle and sheep farm in Bangze County, Tibet Autonomous Region; Kalpin Sheep Farm in Kalpin County, Xingjiang Uygur Autonomous Region; Pearl mussel farm in Yingshang County, Anhui Province; Pig farm in Zhuanzhenbao Village, Qinghai Province.

Processing Industry: Building Beverage Brands

“Longshang Huaniu” apple juice products, Guansu Province; “Easy Joy-Zhuoma Spring” drinking water, Tibet Autonomous Region.

Cultural Industry: Cultivating Creative Cultural Products

“Window of Fenghuang” batik craft training base, Hunan Province; Paper cutting craft, Yuxi County, Anhui Province; Dongxiang ethnic embroidery, Dongxiang County, Gansu Province; Wool spinning and rolling techniques, Dongxiang County, Gansu Province.

Tourism: Presenting Agritainment Programs

Characteristic countryside B&B projects in Fenghuang and Luxi counties, Hunan Province, and Dongxiang County, Gansu Province.
Sinopac joined hands with Tibet Plateau Natural Water Co., Ltd. to foster the natural glacial water brand “Easy Joy- Zhuoma Spring.” Through giving full use of its Easy Joy convenience store network, Sinopac has enabled the brand to go beyond the plateau to the world. At present, “Easy Joy- Zhuoma Spring” has become the leading brand of Tibet’s water industry. In 2019, the business achieved tax revenues of 32.13 million yuan and created nearly 500 jobs in Tibet.

Sinopac Northwest Oilfield helped Kalpin County, Xinjiang, reduce poverty by developing sheep farming, launching “Kalpin mutton on table” poverty alleviation project, creating new marketing models, and establishing cooperatives to expand mutton sales channels. These efforts have increased income of 223,000 yuan for local poor households, about 1,392 yuan for each household on average.

Sinopac helped Fenghuang County cultivate “Miliang No. 1” kiwi fruits, and in 2019 got geographical indication (GI) for “Fenghuang kiwi.” In 2019, the project was launched in Lahao Village, which is adjacent to the ancient town of Fenghuang in Hunan Province. According to plans, the project will comprise 13 buildings for bed and breakfast (B&B) homes and creators’ centers to attract tourists visiting the ancient town of Fenghuang, and will adopt a cooperative equity mechanism that operates on a benefit- and risk-sharing footing and allows poor households to receive dividends after the completion of the project. Dubbed as one of China’s “Hundred Most Beautiful Rural B&Bs,” the project has started taking online reservations.

Sinopac Northwest Oilfield has invested 10 million yuan to launch a poverty alleviation project in Lahao Village, which is adjacent to the ancient town of Fenghuang in Hunan Province. According to plans, the project will comprise 13 buildings for bed and breakfast (B&B) homes and creators’ centers to attract tourists visiting the ancient town of Fenghuang, and will adopt a cooperative equity mechanism that operates on a benefit- and risk-sharing footing and allows poor households to receive dividends after the completion of the project. Dubbed as one of China’s “Hundred Most Beautiful Rural B&Bs,” the project has started taking online reservations.

Sinopac has made continuous efforts to protect and promote the Miao batik, a world-famous intangible cultural heritage based in western Hunan Province. We established a batik training base in the ancient town of Fenghuang to help local poor women get out of poverty and become rich, which enables mothers to work in their hometown instead of looking for jobs in cities, so that they can take care of their children. And thanks to Sinopac’s Easy Joy platforms, batik handicraft products by Miao villagers living in deep mountains are channeled to market.

After buying a stake in Tianshui Great Wall Fruit Juice Group based in Tianshui, Gansu Province, Sinopac incorporated quality management to promote the “Longshang Huaniu” apple juice series products to markets nationwide, increasing incomes for 360,000 fruit farmers in poor areas.

Sinopac Northwest Oilfield helped Kalpin County These efforts have increased income of 223,000 yuan

Sinopac has invested 10 million yuan to launch a poverty alleviation project in Lahao Village

Sinopac's Shengda Supermarket and other platforms signed direct supply agreements with some poor counties on targeted procurement of their agricultural products.

Sinopac employees are mobilized to actively buy poverty alleviation farm products as a way of sharing the task of poverty alleviation.

The key to industrial poverty alleviation lies in consumption-led poverty alleviation, which is aimed at channeling products from poor areas to the tables of urban residents so as to transform productivity into consumption and ultimately lift people in poor areas out of poverty. Sinopac is giving full play to its advantages in internal consumption, platforms and channels to address the existing difficulties in marketing poverty alleviation products and achieve sustainable poverty alleviation.

The Communist Youth League committee of Sinopac organized creativity contests themed on consumption-led poverty alleviation to foster an atmosphere of “everyone involved in poverty relief through consumption” and form a joint effort in poverty alleviation.

Self-owned channels: specialty farm products from 832 poverty-stricken counties in Xinjiang, Tibet, Gansu, Qinghai and other areas now available at 27,000 Easy Joy convenience stores across the country as well as other brick-and-mortar stores such as Shengda Supermarket and Lanzhou Jizhen’s Gansu experience store

Social channels: collaborating with local governments and companies to expand marketing channels by organizing promotional campaigns for poverty alleviation products

E-commerce channels: Sinopac CSR Report press release & consumption-led poverty alleviation promotional meeting held alongside 7 online marketing platforms launched for expanding marketing of poverty alleviation products
Adding Value through Quality Improvement

Branding is an important way to improve the market recognition and competitiveness of poverty alleviation products. Sinopec uses its management expertise and brand advantages to improve local farming infrastructure and capacity and brand agricultural products with Sinopec’s public welfare logo and Easy Joy logo to take poverty alleviation products to the path of brand building. So far, a number of Sinopec’s self-owned brands cultivated in targeted poverty alleviation areas, including Dongxiang quinoa, Fenghuang kiwi fruit, Yueshi mulberry fungus, Yingshang Balihe roast duck eggs, Xinjiang “Sunshine Bazaar” dried fruits, Qinghai yak jerky, and “Easy Joy-Zhuoma Spring” from Tibet have entered the market.

Case: Dongxiang Quinoa – From Field to Table

Quinoa is a highly nutritional crop native to South America. The Bulenggou Valley in Dongxiang Autonomous County features high altitude, cold climate, drought, insufficient rainfall and infertile soil, which hinder local poor population from improving their living quality through conventional agricultural production but provide favorable conditions for quinoa growth. In order to accelerate the pace of lifting local impoverished villagers out of poverty, Sinopec teamed up with the Gansu Provincial Academy of Agricultural Sciences and the local government to establish a pilot quinoa planting base in 2018, which has borne fruit.

In 2019, Sinopec strengthened cooperation with the partners by enhancing quinoa cultivation training and improving planting mechanization. The total area of quinoa planted in five townships in the Bulenggou Valley as well as Longquan Township in Dongxiang County has rapidly increased from 20 mu (1.3 hectares) to more than 4,000 mu (267 hectares), with an estimated total production of 490 tons. The “Longli No. 1” cultivated in Dongxiang is the first quinoa variety to be officially recognized and registered in China, which can rival the variety grown in South America in terms of taste, purity, yield and nutrition.

Thanks to the assistance from Sinopec, 220 households in six villages planted a total of 927 mu (61.8 hectares) of quinoa, with all of their crops ripe for harvest and expected to bring an average income of 9,600 yuan to each household, about 1,846 yuan per capita, much higher than planting traditional crops such as potato and corn.
In light of local actual conditions, Sinopec has developed a multi-dimensional poverty alleviation model covering employment, health, education, infrastructure construction, and relief and aid to help people in its targeted poverty alleviation areas shake off poverty and lead a better life. In addition, the company has strengthened targeted assistance to minority-inhabited areas and areas in deep poverty and sent selected high-caliber personnel to poverty-stricken areas to help local economic development, which has won wide acclaim from local officials and residents alike, demonstrating Sinopec’s sterling image as a responsible enterprise.

Reducing Poverty through Employment

Sinopec combines assistance with independent development approaches in poverty alleviation, striving to stimulate the endogenous drive for reducing poverty by offering employment for poor population. We have organized job fairs in Dongxiang, Yingshang and Zeku counties, providing more than 200 jobs, and rolled out training programs and career planning for new employees, in an attempt to achieve the goal of “one person in employment, whole family out of poverty.” To date, many of 44 employees from poor areas recruited by Sinopec Great Wall Energy and Chemical Co., Ltd. have been promoted to key positions.

Reducing Poverty through Education

Education access plays a vital role in poverty alleviation. Allowing children in poor areas to receive adequate education, an important way to stop poverty from being passed on to the next generation, remains a major task in poverty alleviation and development. Sinopec takes poverty alleviation through high-quality education as an important measure to enhance the self-development ability of the poor people and helps education development in impoverished areas by establishing scholarships to subsidize poor students to pursue education, providing training for teachers in impoverished areas, building schools and supporting facilities, and donating teaching and learning supplies. In 2019, Sinopec granted a total of 1.09 million yuan in scholarships to subsidize 2,053 students in need.

Sinopec established a “Spring Bud Class” for senior high school female students at No.1 Nationality Middle School in Zeku County, Qinghai Province, to address the relatively low enrollment rate of school-age girls in the county, especially in senior high schools.

Sinopec “Brightness” Lifeline Express, a charitable program, has donated 180 million yuan in total over the past 16 years to offer ophthalmic medical services for nearly 45,000 cataract patients in poverty, bringing them brightness and hope. In collaboration with Beijing You Mai Charity Foundation, Sinopec has promoted telemedicine projects in Gansu, Xinjiang and other regions, with 534 cases consulted and more than 5,000 medical professionals trained. The company’s medical department has sent personnel to poor counties to carry out voluntary consultations, donate medicines and medical equipment, and conduct physical check-ups for local villagers. The company has also donated a batch of much-needed medical equipment to hospitals in Yuepuhu and Bangie counties to improve local medical capabilities.

Luxi Petrochemical Middle School in Luxi County, Hunan Province offers a training course on local paper cutting as “intangible cultural heritage” to promote traditional culture and enrich students’ cultural life on campus.

Reducing Poverty through Health Care

Health care is an important part of the effort against poverty. Sinopec has actively responded to the national call to reduce poverty through health care. Sinopec “Brightness” Lifeline Express, a charitable program, has donated 180 million yuan in total over the past 16 years to offer ophthalmic medical services for nearly 45,000 cataract patients in poverty, bringing them brightness and hope. In collaboration with Beijing You Mai Charity Foundation, Sinopec has promoted telemedicine projects in Gansu, Xinjiang and other regions, with 534 cases consulted and more than 5,000 medical professionals trained. The company’s medical department has sent personnel to poor counties to carry out voluntary consultations, donate medicines and medical equipment, and conduct physical check-ups for local villagers. The company has also donated a batch of much-needed medical equipment to hospitals in Yuepuhu and Bangie counties to improve local medical capabilities.

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Offer ophthalmic medical services for nearly 45,000 cataract patients in poverty
Reducing Poverty through Infrastructure Development

Sound infrastructure development is the prerequisite for poverty alleviation in poor areas. Sinopec has successfully solved problems related to housing, transportation, drinking water and electricity and helped construct beautiful countryside by carrying out infrastructure projects such as road construction, lighting, water supply renovation, dilapidated house renovation and relocation. In 2019, Sinopec carried out a water supply project in a relocation site in Zekog County, Qinghai Province, and conducted a safe drinking water campaign in the Bulenggou Valley in Dongxiang County, Gansu Province.

Improving Livelihood through Relief Aid

Sinopec is actively committed to poverty alleviation through direct relief in a way like “blood transfusion.” Through measures such as providing aid to poverty-ridden families and building nursing homes, it reinforces the role of minimum living standard guarantee and strives to improve people’s livelihood. In 2019, Sinopec continued to build Yanggang Nursing Home in Nanxun Town, Yingshang County, Anhui Province, and implement the “Same Boat” emergency relief program in Yuexi County, Anhui Province, which aided 290 local residents in extreme poverty.

Strengthening Communication for the Greater Good

In 2019, Sinopec released its first Report on Poverty Alleviation through Consumption, which comprehensively illustrates the company’s practice and result of poverty alleviation through consumption, demonstrating its social responsibility.

Sinopec’s efforts in targeted poverty alleviation have been praised and recognized by all sectors of society. Its practice of focusing on consumption-led poverty alleviation and making all-out efforts to eradicate poverty was included by the State Council Leading Group of Poverty Alleviation and Development in 50 Typical Cases of Targeted Poverty Alleviation by Chinese Enterprises (2019), ranking the first among comprehensive cases, and was included by the Chinese Academy of Social Sciences (CASS) in the Research Report on Poverty Alleviation by Chinese Enterprises (2019), winning the title of “Excellent Case of Enterprise Poverty Alleviation.” The company also won the National Award for Organizational Innovation in Poverty Alleviation, and its targeted poverty alleviation work with Xinjiang enterprises was rated as the best by the Poverty Alleviation and Development Leading Group of Xinjiang Uygur Autonomous Region. At the 2019 National Conference on Poverty Alleviation Cooperation between East and West China and the Conference on Promoting Targeted Poverty Alleviation byCentrally-administered Institutions, Sinopec shared its experience in poverty alleviation as the only representative of central state-owned enterprises, receiving good response from all sectors of society. We have been rated as “excellent” in the assessment of targeted poverty alleviation work among central state-owned enterprises for three consecutive years from 2017 to 2019.
Meeting People’s Needs for Energy and Chemicals

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Securing Supply of Energy and Chemicals

With the progress of the times and the advancement of technology, the energy supply landscape is undergoing profound changes. Sinopec has actively accelerated the revolution of energy production and consumption, and striven to build a clean, low-carbon, safe and high-efficiency energy system.

In 2019, Sinopec increased investment in oil and gas exploration and strengthened high-quality exploration of resources and returns to guarantee the supply of crude oil and natural gas; pushed forward the transformation of oil refining towards "chemical + clean fuel" and insisted on the development of "basic + high-end" chemical products to enhance the ratio of high-end, high-performance products; and further explored fields like non-conventional energy, new energy and new material to achieve diversified energy supply and inject new momentum into sustainable economic and social development.

**Supply of Conventional Oil and Gas Energy and Chemicals**

Sinopec has actively promoted supply-side structural reform and adjusted growth mode and industrial structure to secure the supply of conventional energy like oil and natural gas, as well as petroleum and chemical products, to meet the needs of economic and social development.

**Case: Sinopec Realizes 10 Major Breakthroughs in Oil and Gas Exploration, Injecting Momentum into Economic and Social Development**

In 2019, Sinopec fully implemented the "Four Revolutions and One Cooperation" strategy on energy security and a series of important instructions put forward by Chinese President Xi Jinping, also general secretary of the CPC Central Committee, and rigorously strengthened oil and gas exploration. We completed a series of achievements including "one major breakthrough, four important breakthroughs, 10 new breakthroughs, 15 commercial developments, and five promising prospects," added two 100 million-ton oil storage facilities and six 100 billion-cubic meter natural gas storage facilities, and formed four integrated zones with discovered oil reserve of more than 10 million tons each and four integrated zones with discovered natural gas reserve of more than 30 billion cubic meters. Compared with the figures of the previous year, the incremental discovered reserves of oil and natural gas increased by 24 percent and 70 percent, respectively, over-fulfilling the 2019 targets of oil and natural gas discoveries. Sinopec has seen a good start in its Seven-Year Action Plan, making positive contributions to enhancing China's oil and gas self-sufficiency and guaranteeing the country's energy security.

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In 2019, Sinopac continued to accelerate the construction of its major oil refining projects. The completion of Phase I of Zhongke Refinery & Petroleum Co., Ltd. (ZRRC), the oil refining project with an annual output capacity of 10 million tons and the ethylene project with an annual output capacity of 800,000 tons as well as supplementary engineering projects were significant for accelerating the construction of the Mazhnan base and optimizing the oil refining structure. Guili Oil Refining’s integrated ethylene facility with an annual output capacity of 800,000 tons began construction, which will help form a petroleum and chemical industrial cluster that eyes domestic and Southeast Asian markets and integrates upstream and downstream industries. The Zhong’an petrochemical project completed trial operation, filling in the gaps of Anhui Province lacking large polyolefin industrial enterprises. The No.2 PX facility of Hainan Refining & Chemical Co., Ltd. was officially put into operation, which helped filling the void of aromatic hydrocarbon raw materials in China. At present, the Zhenhai new integrated project, Guili integrated oil refining project and Shanghai SECCO project continue progressing.

**Case: Accelerating High-quality Development of Oil Refining Projects and Boosting Structural Optimization and Upgrading**

In November 2019, Yizheng Chemical Fibre Co., Ltd.’s 1,000-ton para-aramid fiber industrialization demonstration facility technology passed Sinopec’s authentication. Experts believe the success will have a significant influence on the development of China’s para-aramid fiber industry. In the past 16 years, this project has gone through a process from lab testing, pilot trial and industrialized production, breaking foreign blockade and monopoly. The achievement broke technology embargo of foreign projects. Over the past 16 years, this project has gone through a process from lab testing, pilot trial and industrialized production, breaking foreign blockade and monopoly. The achievement broke technology embargo of foreign projects. Over the past 16 years, this project has gone through a process from lab testing, pilot trial and industrialized production, breaking foreign blockade and monopoly. The achievement broke technology embargo of foreign projects.

**Case: 16 Years of Efforts to Develop “Golden Silk,” Breaking Foreign Blockade and Monopoly**

Para-aramid fiber is a kind of high-tech, expensive fiber featuring golden color, hence its nickname “golden silk.” Due to its ultrahigh tenacity, high modulus, thermo-stability, acid and alkali resistance and less weight, this fiber is widely used in both military and civilian industries as a strategic material for building a strong country and army. Para-aramid fiber products are mainly used in fields like optical fibers and cables, ropes and webbings, framework materials, composite materials, friction and sealing materials, textile, and ballistic protective clothing.

Along with the development of China’s military and defense industry and national economy, its demand for high-performance fibers continues growing. The prices of such products have been surging up in the international market. In the past, high-performance fibers applied in China’s military and defense industry faced difficulties in obtaining raw materials and machinery, causing a lack of independence in the key technology. The Zhong’an coal chemical project completed trial operation, filling in the gaps of Anhui Province lacking large polyolefin industrial enterprises. The No.2 PX facility of Hainan Refining & Chemical Co., Ltd. was officially put into operation, which helped filling the void of aromatic hydrocarbon raw materials in China. At present, the Zhenhai new integrated project, Guili integrated oil refining project and Shanghai SECCO project continue progressing. The Zhong’an petrochemical project completed trial operation, filling in the gaps of Anhui Province lacking large polyolefin industrial enterprises. The No.2 PX facility of Hainan Refining & Chemical Co., Ltd. was officially put into operation, which helped filling the void of aromatic hydrocarbon raw materials in China. At present, the Zhenhai new integrated project, Guili integrated oil refining project and Shanghai SECCO project continue progressing.

**Case: Successful Development of Food-grade Lubricants**

Since it launched food-grade lubricant research in 2005, Sinopac Lubricant Company has developed six food-grade lubricant products, which have earned the NSF HI accreditation of the U.S. National Sanitation Foundation and the WRAS (Water Research Advisory Scheme) approval and been widely used in food machinery manufacturing, China’s South-to-North Water Diversion Project, etc.

**Case: China’s First Integrated Energy Supply Station Begins Operation**

In January 2019, the renovated Sinopac Dudang gas station in Xinhua District, Hangzhou, reopened. As China’s first integrated energy supply station, it combines gas and natural gas supply, charging services, and shopping. The station allows eight electric cars to charge at the same time. Since its reopening, the station daily offers charging services for about 130 cars, supplying electricity of nearly 1,700 kWh per day.

**Case: Sinopac Strength in Daxing Airport**

In September 2019, Beijing Daxing International Airport officially began operation. As a main force in the construction of the airport, Sinopac made great contributions to the national key project in terms of oil pipeline construction, asphalt and jet fuel supply, etc. The Donghai #70 asphalt was successfully produced by Sinopec Qilu Petrochemical Company and was used to pave the expressway linking to Daxing International Airport as well as the north line of the Airport Expressway and roads in the airport. Donghai asphalt leads its peers across the world in terms of crack resistance, slipperiness resistance, noise reduction and rut resistance. Sinopec Shengli Petroleum Engineering Co., Ltd. was responsible for the Section 01 of the airport’s oil pipeline system. The section, with a length of 69.958 kilometers, was in charge of the entire pipeline project, and it can transport 12 million tons of oil per year. Sinopac Zhong’an Refinery responsible for supplying fuel for the airport’s international maiden flight delivered 40,000 tons of jet fuel to the jet fuel storage tank in the airport as scheduled, and guarantees the supply of fuel jet for international flights. The Dongduan gas station of Sinopac Beijing Oil Products Company is the nearest gas station to Beijing Daxing International Airport. To better serve the new airport, Sinopac Beijing Oil Products Company renovated and upgraded the gas station. After renovation, it covers a land area of 1,400 square meters and is equipped with four fuel dispensers with a total of 16 nozzles and a convenience store offering more than 600 kinds of commodities.
Supply of Nonconventional Energy and New Energy

Sinopec has been actively developing new energy such as shale gas, coalbed methane, hydrogen energy and geothermal energy, promoting the use of biomass energy such as biofuel, biodiesel and low-sulfur fuel oil for ships, and pushing forward the R&D of coal chemical resources, with an aim to build a diversified energy supply system. Sinopec Capital Co., Ltd. has made effective investment in the four realms of new energy, new material, energy conservation & environmental protection and high-end intelligent manufacturing. In 2019 alone, its investment exceeded 1 billion yuan.

Shale gas
The cumulative discovered reserve of the Fuling Shale Gas Field has reached 600.8 billion cubic meters.

Coalbed methane
The Yanchuan South Coalbed Methane Field annually produces 360 million cubic meters of gas.

Geothermal energy
Sinopec’s heat supply capacity has reached 57 million cubic meters.

Hydrogen energy
Sinopec built China’s first oil & hydrogen joint station, with an annual hydrogen output capacity of about 3 million tons.

Solar energy
Sinopec has developed photovoltaic power projects with total installed capacity of 289.39 MW, generating a total of 310 million kWh per year.

Biodiesel
Sinopec built the B5 biodiesel blending base, with more than 200 distribution stations across the city of Shanghai.

Low-sulphur fuel oil for ships
The Sinopec global ship fuel oil center has begun to comprehensively supply low-sulphur fuel oil for ships both at home and abroad, with an annual output of 598,000 tons.

Coal chemicals
The Zhong’an coal chemicals project has begun test run, getting ready for all-out production.

Charging (battery replacing) stations and power battery
Sinopec has put into operation 28 charging stations with 188 charging piles, supplying more than 6.2 million kWh of electricity for electric vehicles in 2019.

Case: Sinopec Discovers a Shale Gas Field with a Proven Reserve of More Than 100 Billion Cubic Meters in Sichuan

In November 2019, the application for the right to “explore Weirong Shale Gas Field in Sichuan Basin, Sichuan Province,” submitted by Sinopec Southwest Oil & Gas Company, was approved by the Ministry of Natural Resources, and the company obtained the mining permit. The mining permit involves about 144 square kilometers of Weirong Shale Gas Field, with a valid period of 20 years. This is the second shale gas mining permit earned by Sinopec after the mining permit for the Jiaoshiba section of Fuling Shale Gas Field. The Phase I project of Weirong Shale Gas Field, with an annual output capacity of 1 billion cubic meter, is progressing steadily, of which the two wells of the Wuye 23 platform daily produce 313,000 and 253,000 cubic meters of natural gas, respectively, both higher than expected. This testifies to the promising prospects of the exploration of Weirong Shale Gas Field.

Case: Accelerating the Exploration and Utilization of Geothermal Energy through the Xiongxian Model

Geothermal energy is a kind of clean, renewable energy hidden underground. China abounds in geothermal energy resources, accounting for one sixth of the world’s total. Therefore, the country has a huge potential in geothermal energy exploration and utilization. Since 2009, Sinopec has been actively promoting the exploration and utilization of geothermal energy resources in Xiongxian County. To date, it has developed into China’s largest enterprise in the exploration and utilization of conventional geothermal energy. Moreover, the company has forged a Xiongxian Model featuring “government-enterprise cooperation, market-oriented operation, unified development, advanced technology, environmental friendliness, and benefits for the people.” Through the method of “utilizing geothermal energy while returning water back into the ground,” the company has achieved sustainable utilization of geothermal energy and maintained the balance and safety of the underground environment.

In 2019, under the guidance of the Xiongxian Model, Sinopec actively supplied clean heat for people in northern China, with the focus on constructing “2+26” “smokeless cities” through promoting geothermal heat supply. So far, its geothermal heat supply service has covered such provinces as Hebei, Shaanxi, Henan, and Shandong. The company annually supplies geothermal heat of 57 million cubic meters, which can replace 1.61 million tons of standard coal and reduce carbon emissions by 3.98 million tons. By 2025, its annual geothermal heat supply capacity will exceed 120 million cubic meters.
Case: Building Oil & Hydrogen Joint Stations and Prioritizing Hydrogen Energy Supply

A common element in the world, hydrogen features high calorific value and produces only water when burned. As the cleanest energy in the world, it is hailed as the secondary energy with the greatest prospect in the 21st century. Hydrogen energy is witnessing rapid development globally, and Sinopec has also dived into the industry by carrying forward exploration in fields like hydrogen stations, hydrogen production technology, hydrogen fuel cells, and hydrogen storage materials.

2019 marked an important year for Sinopec’s hydrogen energy development. That year, Sinopec adopted the new strategy of “integrating oil, hydrogen and electricity” and built five hydrogen stations based on the existing gas stations. On July 1, 2019, China’s first oil & hydrogen joint station, Sinopec Foshan Zhongkang Oil & Hydrogen Joint Station, was completed. It is the country’s first station integrating oil, hydrogen and electricity supply as well as convenience store service. The Zhongkang Oil & Hydrogen Joint Station is capable of supplying 500 kilograms of hydrogen, mainly serving nearby hydrogen-fueled buses and logistics convey.

As a strategic partner of the 2022 Beijing Winter Olympics, Sinopec will be responsible for hydrogen supply, hydrogen refueling and hydrogen station operation for hydrogen fuel cell vehicles during the Winter Olympics in Beijing and Zhangjiakou. At present, construction of hydrogen stations is accelerating in the two cities. Meanwhile, Sinopec has participated in Beijing public transportation authority’s project to promote hydrogen fuel cell vehicles. In the Yangtze River Delta, Sinopec participated in the construction of oil & hydrogen joint stations in Shanghai. In November 2019, two such stations were put into operation in Shanghai as the first cooperation project between Sinopec and France’s Air Liquide to develop hydrogen energy in China. Sinopec Shantong Oil & Hydrogen Station in Jiashan County of Jiaxing City, the first comprehensive energy station integrating oil and hydrogen supply in Zhejiang Province, was completed. Moreover, Sinopec has planned to establish a hydrogen energy company dedicated to hydrogen technology R&D and infrastructure network construction and introduce world-leading hydrogen energy companies as its strategic investors to jointly build a hydrogen energy industrial chain and economic ecosystem.

Global Energy Supply

By the end of 2019, Sinopec had set up 328 overseas branches in 60 countries and regions around the world, providing energy and resource support for local economic and social development.

<table>
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<tr>
<th>Sector</th>
<th>Worldwide</th>
<th>Along the Belt and Road</th>
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<tbody>
<tr>
<td>Oil and gas</td>
<td>Carrying out 51 oil and gas exploration projects in 25 countries. Owning overseas oil and gas properties of 42.52 million tons.</td>
<td>Carrying out 31 oil and gas exploration investment cooperation projects in 19 countries along the Belt and Road.</td>
</tr>
<tr>
<td>Oil refining</td>
<td>Investing in 39 oil refining &amp; chemical projects and implementing 62 service contracts in 11 countries, with total contract value of US$4.421 billion.</td>
<td></td>
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<tr>
<td>Engineering</td>
<td>Implementing 380 petroleum engineering service contracts in 33 countries. Implementing 75 refining engineering service contracts in 14 countries.</td>
<td>Implementing 217 petroleum engineering technical service contracts in 19 countries along the Belt and Road. Implementing 90 refining engineering projects contracts in 12 countries along the Belt and Road.</td>
</tr>
<tr>
<td>International Trade</td>
<td>Achieving international trade of 342 million tons of crude oil. Achieving international trade of 65.04 million tons of refined oil. Achieving international trade of 16.85 million tons of LPG.</td>
<td>Achieving international trade of 19 million tons of refined oil with more than 20 countries along the Belt and Road. Carrying out material, equipment and chemical product trade with 36 countries along the Belt and Road.</td>
</tr>
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</table>

Pursuing Innovation-driven Development

Sinopec has unwaveringly implemented the strategy of innovation-driven development. While adhering to the right direction of technological innovation, the corporation has accelerated the research of key and core technologies, strengthened the research of cutting-edge technologies, constantly deepened the reform of technological innovation mechanism and system, completed the development and industrialization of a series of key technologies in upper, middle and lower reaches of the industrial chain, and actively promoted the in-depth integration of informationization and industrialization, so as to provide a solid technological foundation for the corporation to achieve sustainable, high-quality development and development to a world-leading enterprise.

Management of Technological Innovation Mechanism and System

Sinopec has eight research institutes directly under its jurisdiction, as well as 10 branches under those institutes. Moreover, there are more than 50 research institutions under its subsidiaries. We boast a number of innovation platforms, including 19 state-level R&D institutions and 36 corporate key laboratories. Sinopec has established four technical plat forms concerning oil and gas exploration, oil refining, petrochemicals, and environmental protection public technology, respectively. In 2019, following the guideline of “reform, management, innovation and development,” Sinopec further deepened the reform of technological innovation mechanism and system, pushed forward research of bottleneck technologies, explored the research of disruptive technologies, and accelerated the industrialization and popularization of research results.

Cultivation of Technological Innovation Talent

Sinopec has adhered to the idea that “talent is the paramount resource” and strengthened the cultivation and selection of innovation talent. We have actively implemented the program of “strengthening the corporation through talent cultivation” and the “Two Hundred” talent recruitment plan, and enacted several documents such as Sinopec Methods for Subject Management of Excellent Young Talent Innovation Fund to fully unleash young technicians’ enthusiasm for innovation. Relying on major research and engineering projects, Sinopec will attract and cultivate a batch of strategic scientists, technological pioneers and young innovation talent to provide strong human resource support for the development of its mainstay business. In 2019, two persons won the Outstanding Technological Innovation Awards and 10 were cited as Excellent Youth Innovation Talent.
Industrialization and Application of Innovation Results

Sinopec has made fruitful results in patent application and major science and technology awards. In 2019, we submitted 7,439 patent applications in China and abroad, and obtained 4,843 patents. Six of its result results won the second prize of national scientific and technological progress, and one won the second prize of national technological invention. Moreover, we earned one China Patent Gold Prize, four China Patent Silver Awards and four China Patent Excellent Awards.

- The SCM-15 (SINOPEC Composite Material 15), a kind of new molecular sieve material developed by Sinopec Shanghai Research Institute of Petrochemical Technology, was officially assigned a framework type code (SOR) by the International Zeolite Association(IZA) Structure Commission. This was the second time that Sinopec earned a SOR for new molecular sieve material after the first in 2018.
- The ASTM D8062-19, "Standard Specification for Purified Terephthalic Acid (PTA) with Low p-Toluic Acid," formulated under the leadership of Sinopec, was officially published on the official website of the American Society for Testing and Materials (ASTM), which fills in the international void in relevant standards. This is the first time that Sinopec formulated an ASTM product standard, laying a solid technological foundation for the development of the PTA industry.

Promoting the Integration of Informationization and Industrialization

Sinopec has earnestly implemented the concept of new development, continuously advanced the building of the "421 Project" on informationization, constantly promoted the integration of informationization and industrialization, and accelerated digitalized transformation. Those moves have further improved the functions of the four platforms of management, production, customer service and technological support, accelerated high-quality development and injected strong momentum into the effort to build Sinopec a world-leading clean energy and composite material company.

Case: Sinopec Promotes High-quality Development with Intelligent Manufacturing

As a new round of technological revolution and industrial transformation sweeps across the world, Sinopec has taken active action to promote intelligent manufacturing and become the first in China’s petrochemical industry to launch research and trial run of smart factories. Through building smart plants, Sinopec has created the best practice in the construction of large-scale integrated refining enterprises with processing capacity of more than 10 million tons and the application of smart factories in inland, riverside, coastal and other typical areas, and formed a number of solutions and intelligent application scenarios that are replicable and have exemplary demonstration effect. So far, Sinopec has achieved a facility automatic control rate of more than 95 percent and a production data automatic gathering rate of more than 97 percent, which helps the corporation increase labor productivity by more than 30 percent and reduce energy consumption per 10,000 yuan output by about 8 percent. Moreover, Sinopec’s intrinsic safety and environmental protection capacity have been effectively improved, making great contributions to boost the development of local economy.

By the end of 2019, Sinopec had established a total of 10 smart factories, which was cited by the State-owned Assets Supervision and Administration Commission of the State Council as a "2019 typical case for informationization application of centrally administered enterprises." Sinopec Jiuyang Company was titled as a "2019 model enterprise in intelligent manufacturing." In terms of smart factory construction, Sinopec has maintained a leading position in China’s intelligent manufacturing sector. Sinopec Lubricant Company was granted the title of "advanced enterprise in the integration of informationization and industrialization" by the Ministry of Industry and Information Technology.

Case: Sinopec Establishes "Futuristic Gas Stations" to Bring New Intelligent Experience

Sinopec has vigorously explored futuristic gas stations and carried out a pilot project to build 70 smart gas stations in such provinces and municipalities as Guangdong, Zhejiang, Hunan, Jiangsu, Chongqing and Tianjin. Thanks to the application of new technologies including artificial intelligence and the Internet of Things (IoT), such gas stations have primarily realized new functions such as automatic car plate recognition, senseless payment and digital marketing, thus bringing new intelligent experience for customers and enhancing clients’ value.

Sinopec Hefei Company cooperated with the vehicle service provider 1KMXC to provide car washing and disinfecting service at 15 Easy Joy smart self-service car washing stations, which can perform unmanned, automatic washing and disinfecting to guarantee safety.
Guaranteeing Safe Operation

Sinopec has established and implemented an HSSE management system. We conduct meticulous management and control of major safety risks and hidden dangers as well as strict safety supervision on its contractors and direct operational process, and attaches great importance to public security. As a result, Sinopec has maintained overall stability in safety and environmental protection situation and further improved its intrinsic safety and environmental protection capacity.

Identification and Control of Risks and Detection and Regulation of Hidden Dangers

Sinopec has always placed the priority on "identifying major risks, removing major hidden dangers and eliminating major accidents" and adhered to a problem-oriented safety management principle. We have constantly strengthened the identification and control of risks and the detection and regulation of hidden dangers, comprehensively enhanced emergency management and continuously enhanced its capacity in safety risk management and control.

Emergency Management

Sinopec is advancing the building of volunteer emergency response teams in its subsidiaries. Through selecting and training capable members, this move reinforced their capacity to undertake "urgent, difficult and dangerous" tasks while implementing the principle of all employees bearing responsibility for emergency management. Pilot enterprises have defined daily management and awarding and punishment mechanisms for the emergency response team and organized vocational competitions and specialized training programs to enhance their capacities to handle emergencies.

Sinopec has also strengthened the building of professional emergency response teams. In accordance with the actual needs of production, such professional emergency response teams are responsible for various high-risk firefighting and gas supervision and protection operations, such as turning on off production facilities, special fire operations as well as operations in complicated conditions and confined space. Sinopec is active in pushing forward the building of the national hazardous chemical and oil & gas pipelines emergency rescue team. Such enterprises as Sinopec Yangzi Petrochemical Co., Ltd. and Sinopec Qingdao Refining & Chemical Co., Ltd. have been actively participating in public accident rescue to fulfill their social responsibility.

Contractor Safety

Executives of Sinopec and its subsidiaries are directly responsible for major risks in contractor safety. Sinopec has clarified the content, goal and examination standards for tackling major risks related to contractor safety. Executives of Sinopec and its subsidiaries take the responsibility for organizing the analysis of problems of contractor safety management to strengthen subcontractor management and contractor assessment. As a result, the awareness of reinforcing contractor safety risk management and control has been further enhanced.

Public Security

Sinopec has earnestly implemented the Requirements for Public Security and Counter Terrorism in the Petroleum and Petrochemical System, and arranged the work of hierarchical risk management and standard compliance. During important events such as the 70th anniversary of the founding of the People’s Republic of China, Military World Games, and China International Import Expo, Sinopec subsidiaries in various places strictly implemented the precaution measures against NBC (nuclear, biological and chemical) weapons, preformed guard duty around the clock, activated the mechanism of prompt information reporting under the leadership of top leaders, reinforced security and guard forces in key positions, and conducted background checks for those in key posts, guaranteeing the safe, smooth operation of those important activities.

In terms of overseas public security, Sinopec continues upholding the principle of "putting people first, prioritizing prevention and guaranteeing safe development." We have constantly improved our overseas public security management system, strengthened the implementation of the system by emphasizing relevant responsibility, and achieved "zero death" in overseas public security work for 12 consecutive years.

Authorized by the Work Safety Committee of the State Council, Sinopec summarized its experience and issued the Guidelines on Safety Risk Assessment, and other documents. We have also developed a unified safety risk assessment and management platform (PHAMS) that integrates databases and assessment tools and standards, so as to facilitate and standardize enterprises in conducting risk identification, assessment, management and control and achieving dynamic risk management by tracking the management and control process.

Sinopec has established a systemic safety risk list, according to which its subsidiaries can identify, manage and control relevant risks more efficiently. Executives of subsidiaries at different levels are responsible for managing and controlling the biggest risks of their respective companies. We have also realized risk quantification and conducted examination on major manufacturing enterprises in reducing total risks. In 2019, Sinopec achieved the goal of reducing total risks of its major manufacturing enterprises.

In accordance with the requirements of the Work Safety Committee of the State Council, Sinopec completed its three-year plan on comprehensive management of hazardous chemicals. Moreover, we started the work to check compliance to the new-edition Petrochemical Enterprise Design Fire Prevention Standards, conduct hydrogen sulfide-related hidden hazard screening and management in the entire workflow and system, and organize specialized screening and management of hidden dangers related to hazardous waste storage, air separation facility, bottled gas, firefighting, etc.
**Feature**

**Forty-year Effort to Develop Aromatic Hydrocarbon Technology for a Better Life**

As an important foundation for the chemical industry, aromatic hydrocarbons are widely used in three major synthetic materials and such fields as pharmaceuticals, national defense, pesticides, and building materials. One of the most used aromatic hydrocarbons, paraxylene is a kind of polyester staple fiber with the widest usage in synthesis and closely associated with daily life. Through more than 40 years of tireless efforts, Sinopec has independently developed a full set of aromatic hydrocarbon technology, not only achieving the goal for which generations of the corporation’s employees have striven, but also enabling the people to be clothed better and more warmly.

**Building factories to increase the output of chemical fibers**

In the early days after the founding of the People’s Republic of China in 1949, it was imperative to provide enough food and clothes for the people. However, the limited amount of tillable land made it hard to guarantee the supply of cotton and grain at the same time. The only solution to this dilemma was to develop chemical fibers from petroleum, so that the nation could get rid of its reliance on natural fibers with cotton as the mainstay. Back then, however, advanced chemical fiber production technologies and equipment were monopolized by a few foreign countries.

In 1972, China decided to introduce a complete set of technologies and equipment for chemical fiber production. Since then, the chemical fiber, Dacron, has been introduced to the Chinese market. Considering that China had a massive population of 800 million, the output of chemical fibers remained insufficient, lagging far behind the market demand. In 1977, undertaking the historic mission of solving the insufficient supply of fibers to meet Chinese people’s demand for clothing, Sinopec Yizheng began operation. By 1988, China’s chemical fiber output had reached 5.1 million tons, overtaking the U.S. to become the world’s first country in chemical fiber production.

**Breaking technical bottlenecks and foreign blockade**

New problems emerged as the Chinese people didn’t need to worry about clothing. The core of the entire polyester industrial chain is to meet people’s need for clothing, but the key source of the polyester industry—the technology for aromatic hydrocarbon production—completely relied on importing at that time. As a result, China not only needed to pay high prices for technology importing, but also let its polyester industry be subject to foreign monopoly. Prior to 2010, the United States and France were the only two countries in the world that grasped a complete set of aromatic hydrocarbon technologies, and the industry featured an extremely high technological barrier. Developing China’s own technology for aromatic hydrocarbon production became a major goal for Sinopec.

Establishing a research team

From 1972 to 2008, Sinopec joined hands with the Chinese Academy of Sciences (CAS) to launch cooperative research, laying the foundation for the development of aromatic hydrocarbon technology in China. Since 2003, to achieve the goal of making major breakthroughs and leading innovation, the Ministry of Science and Technology and Sinopec have constantly provided support in this regard through the Basic Research Program of China (973 Program), the “Ten Dragons” scientific and technological research program and others. In 2009, Sinopec formed a special research team to develop aromatic hydrocarbon technology. Through leveraging its institutional advantages, Sinopec gathered more than 2,000 technicians from research, design, engineering and production departments to jointly develop the technology.

Achieving high efficiency and energy conservation through innovation

The high-efficiency and eco-friendly aromatic hydrocarbon technology that Sinopec has developed and owns independent intellectual property right combined the previous experience of older-generation researchers and innovative ideas. In 2016, Sinopec’s project named “Development and application of high-efficiency and eco-friendly aromatic hydrocarbon technology” won the special prize of the 2015 National Scientific and Technological Progress Awards. This marked that China became the world’s third country grasping this technology, and achieved particularly important technological breakthrough and economic and social benefits while embodying the initiative of “Created in China,” thus having “milestone significance.”

**Social Benefits of High-efficiency, Environment-friendly Aromatic Hydrocarbon Technology**

Compared with its domestic peers, the unit energy consumption of Sinopec’s high-efficiency, environment-friendly aromatic hydrocarbon technology is 28 percent lower, and its environmental protection monitoring indicators are above the latest national standards, thus having prominent competitive advantage.

Through technological innovation, the localization rate of equipment in the project has reached 35 percent. Furthermore, the company has stimulated the development of absorbent and catalyst manufacturing, created new jobs and achieved significant social benefits. Through actively promoting technology export, it also made important work in implementing the Belt and Road Initiative.

In September 2019, the No. 2 PX facility of Sinopec Hainan Refining & Chemical Co., Ltd. officially began operation and produced products meeting relevant quality standards. This facility adopts the second-generation high-efficiency and eco-friendly aromatic hydrocarbon technology. Compared with the first large-scale domestically developed dimethylbenzene facility that put into production in Sinopec Hainan Refining & Chemical Co., Ltd. in 2010, the Sinopec PX facility is more energy-efficient and has greater production capacity, with key technical criteria leading the world. In the future, Sinopec aims to further increase the company’s PX production, directly to a 1 million tons per year scale, and become China’s largest aromatic hydrocarbon production base.

**Solving the absorption problem**

Due to foreign blockade on technology, everything started from scratch in the early stage of the research project. Despite various challenges, researchers eventually overcame technological bottlenecks related to adsorbent production, absorptive separation, etc. Consequently, China’s aromatic hydrocarbon technology gradually took shape. On December 27, 2013, the aromatic hydrocarbon united facility of Sinopec Hainan Refining & Chemical Co., Ltd. successfully produced high-quality dimethylbenzene, marking that Sinopec became the world’s third company owning a complete set of aromatic hydrocarbon production patents.
Green and Low-carbon Development for a Beautiful Home

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Enhancing Environmental Management and Control

Sinopec has been acting upon Xi Jinping Thought on Ecological Civilization and the guiding principles of the fourth plenary session of the 19th Communist Party of China Central Committee. Centering on its strategic planning, the corporation upholds the principle of HSSE management, puts environmental protection first and continuously strengthens management for environmental protection to improve corporate governance in this regard.

Improving environmental management

Making system innovation, Sinopec formulated and revised four management rules for environmental protection including Sinopec Management Measures for Ecological Protection and Sinopec Management Rules for Environmental Protection to standardize work on environmental protection. It has built a strict and swift accountability system and a strict and detailed performance evaluation system and faithfully carries out mechanisms for energy and environmental performance evaluation. Throughout the year, the corporation took inspections and reviews by central and local governments on many occasions, during which zero problems relating to environment pollution was reported. Sinopec planned a wide range of training programs and courses on environmental protection, and organized training sessions on environmental risks identification and management, emergency management and talents for environmental management in a bid to enhance the capability of all employees in fulfilling environmental obligations.

Preventing environmental risks

Sinopec includes prevention and control of environmental risks into its daily operation, holds subsidiaries accountable for environmental risks and improves the overall management in this regard.

Environmental management for engineering projects

Sinopec closely follows environmental management of key engineering projects and asks its subsidiaries to fulfill requirements for environmental protection evaluation and corresponding approvals. In 2019, the company continued following, coordinating and supervising major engineering projects including Zhong’an joint coal-to-chemical project, the energy chemical project in Guizhou Province, and Zhejiang refining chemical integration project. It also organized expert panels to provide on-site guidance on solving problems relating to environmental protection. All new engineering projects were carried out in compliance with environmental protection rules and regulations.

Providing Clean Products

Depend on research and development and commercialization of research results, Sinopec continues to improve its production processing and upgrade product quality to provide society with environmentally friendly products including clean oil products and biofuels to promote a green lifestyle.

Supplying GB-VI standard refined oil product

In 2019, 28 refined oil producers affiliated to Sinopec delivered clean gasoline and diesel products that are up to the New National VI Emission standards as scheduled and required. Since 2000, Sinopec has invested more than 300 billion yuan into refining, most of which went to the improvement of oil quality – first changing into unleaded petroleum and later adopting the GB-VI standards. As a result, the sulfur content in its products has dropped from nearly 1,000 ppm in 2000 to the current 10 ppm, which is on par with international standard and has less impact on the environment.

Biodiesel

As of April 2019, Sinopec Shanghai Oil Products Company had made B5 biodiesel available at its 247 gas stations, marking that an end-user market for biodiesel made from swill-cooked oil had taken shape. In May 2019, Sinopec Shanghai Oil Products Company and Jiushi Public Transport Group jointly launched a ceremony to start using biodiesel in public transport vehicles. As tank cleaning and other work being finished in succession, it is expected that more than 2,000 buses will be fueled by biodiesel, saving 22,000 tons of energy otherwise to be consumed by diesel-propelled buses or hybrid electric vehicles of the same scale.

Low-sulfur bunker fuel oil

In accordance with the International Convention for the Prevention of Pollution from Ships by the International Maritime Organization, all ships worldwide must operate on fuels with the sulfur content below 0.5 percent starting from January 1, 2020. Sinopec began preparing for the research and development of clean low-sulfur heavy bunker fuel oil as early as 2017. The company required its 10 costal oil refining companies including Sinopec Zhenhai Refining & Chemical Company to engage in the production of such products. In January 2019, Sinopec Shanghai Petrochemical Company Limited successfully produced low-sulfur bunker oil, becoming the first producer of such fuel in China. Sinopec Jinling Petrochemical Company, Sinopec Hainan Refining & Chemical Company and Sinopec Shanghai Petrochemical Company among other subsidiaries have been capable of mass producing the fuels to meet market demands through technological breakthroughs, facilities improvement and resources allocation. Sinopec Global Ship Oil Supply Center has begun to supply low-sulfur bunker oil to consumers at home and abroad. The annual output has reached 598,000 tons.

The annual output has reached 598,000 tons
Tackling Climate Change

Sinopac has been actively supplying clean products, strengthening integrated management of energy and environment, carrying out the Green Enterprise Action Plan, advancing the “Energy Efficiency Improvement” initiative, promoting clean production and enhancing management of greenhouse gas emissions to mitigate the impacts of climate change.

Energy efficiency improvement

Sinopac advances the integrated management of energy and environment, improves evaluation system for energy efficiency performance and faithfully works toward the goal of controlling both the total amount and intensity of energy consumption amid efforts to improve green development.

Advancing the adjustment of energy mix

Using more clean and low-emission energy, and building drilling rigs powered by clean energy alternatives including geothermal power, solar energy and wind power. In accordance with national policies including the Guidance Catalogue for Industrial Structure Adjustment, Sinopac renovated or shut down three sets of crude oil units with the annual output at 2 million ton or lower, and 14 small thermoelectric power units. The corporation accelerated efforts to phase out obsolete high-consuming electromechanical equipment.

Advancing the building of energy management system

Nine refining subsidiaries launched information systems for energy management. Another 16 optimized thermoelectric production online with dynamic optimization models, bringing benefits of more than 100 million yuan.

Developing and promoting energy-saving technologies and equipment

Five items of energy-saving technologies independently developed by Sinopac were included in the 2019 National Catalogue for Recommended Industrial Energy-Saving Technologies and Equipment and promoted nationwide.

Advancing the “Energy Efficiency Improvement” initiative

A total of 473 projects were implemented under the “Energy Efficiency Improvement” initiative, saving 12,000 tons of standard coals throughout the year.

Selecting forerunners in energy efficiency improvement

Organizing the campaign of selecting forerunners in energy efficiency improvement. Sinopac Qingdao Refining & Chemical Company and Sinopac Guangzhou Company were winners in the refining sector; Sinopac Maoming Company and Sinopac Zhenhai Refining & Chemical Company were winners in ethylene making sector; and Sinopac Hainan Refining & Chemical Company was the winner in xylene sector.

Management of greenhouse gas emissions

Sinopac takes active measures to cut greenhouse gas emissions. We revised Sinopac Regulations on Carbon Emissions to regulate work in this field. The corporation strengthened performance evaluation in terms of greenhouse gas emission reduction, made clear that each subsidiary should be responsible for the task, and improved management of greenhouse gas emissions in the Sinopac system.

Demonstration projects of carbon-dioxide flooding

Sinopac continues work on building demonstration projects of carbon-dioxide flooding. In 2019, the technologies were mainly used in its Shengli Oilfield, Zhongyuan Oilfield, East China Oilfield and Jiangsu Oilfield. A total of 230,000 tons of carbon dioxide were injected, adding 70,000 tons of oil.

Methane emissions reduction

Sinopac conducted special investigation on methane venting and escape, figured out major sources of methane emissions in the production session and decided on monitoring technology and methods. We promoted the technique of recycling methane in gas testing. Our oilfield companies recycle close to 400 million cubic meters of methane annually, equivalent to a cut of greenhouse gas emissions totaling 6 million tons. Refining subsidiaries continued to optimize the management of biochemical equipment to improve the efficiency in using marsh gas. Sinopac Yangzi Petrochemical Company recycled 2 million cubic meters of marsh gas throughout the year, and Sinopac Yizheng Chemical Fiber Company recycled 9.4 million cubic meters.

Carbon capture

Sinopac has been supporting its refining companies to recycle carbon dioxide. Its 16 companies including Sinopac Maoming Company and Sinopac Zhenhai Refining & Chemical Company have been recycling carbon dioxide emitted from hydrogen generating systems and synthetic ammonia installation for industrial purposes, displacement of reservoir oil and food-grade processing. In 2019, Sinopac refining companies recycled a total of 1.26 million tons of carbon dioxide.

Management of carbon assets

Sinopac sticks to its targets for carbon asset management, which is to figure out its carbon asset stockpile, realizing goals of carbon emission cut and creating carbon-related values. In order to achieve the targets, the company has built an information system for carbon asset management. The corporation also works to improve its capacity for carbon asset management, and the expertise of managements at all levels to enhance its capability for meeting the demands of the national carbon market.

Sinopac also takes an active part in carbon trade to improve the value of its carbon assets. Throughout the year, 26 subsidiaries piloting carbon trade programs met their goal in terms of carbon quota.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of energy saved (10,000 tons of standard coals)</td>
<td>130</td>
<td>80.4</td>
<td>105.6</td>
</tr>
<tr>
<td>Energy saving rate (%)</td>
<td>1.43</td>
<td>0.86</td>
<td>1.11</td>
</tr>
<tr>
<td>Volume of carbon traded (10,000 tons)</td>
<td>316</td>
<td>172</td>
<td>269</td>
</tr>
<tr>
<td>Value of carbon traded (10,000 yuan)</td>
<td>4,000</td>
<td>3,632</td>
<td>6,493</td>
</tr>
</tbody>
</table>
Promoting Green Production

Sinopec carries out measures for clean production, replaces toxic and hazardous materials, promotes green technology and environmentally friendly production process, and cuts discharge of effluents, gas exhaust and solid waste in production and consumption. From purchase of raw materials to consumption of finished products, the corporation works to limit the impacts of its production and business operation on the environment.

Sinopec Whole Process Clean Management System

Using non-toxic, renewable materials wherever possible and reducing discharge of waste and greenhouse gases

Employing green technologies and environmentally friendly procedures to minimize pollution, increase energy efficiency and utilization rate of resources, and reduce greenhouse gas emissions

Emissions: desulfurizing, denitrifying and removing dusts, recovering oil vapor and lowering emissions of SO₂, NOₓ, PM and VOC. Effluents: treating and reusing effluents, reducing COD level or discharge of ammonia nitrogen and other pollutants so as to meet relevant standards for environmental protection. Solid waste: reducing its quantity, and recycling it after removing hazardous elements

Sinopec has been actively practicing ideas of a circular economy, and making efforts to boost it in a bid to enhance energy efficiency.

Oilfields

Sinopec has ramped up efforts to recycle low-pressure and vented natural gas at oil and gas fields, recover and treat associated natural gas liquids, apply technologies for recycling fracturing outlet liquid and oily water in drilling. It replaces clean water with waste water in water injection operations, reducing the use of clean water and the "second injection." The company selects the most suitable drilling mud additives, widely applies the technology that prevents waste drilling mud from falling on the ground, and reuses oil-based drilling cuttings.

Refineries

With its advantage in refining-chemical integration, Sinopec explores its potential in resource recycle and reuses waste over the entire production process, and widely applies new technologies for heat integration and waste heat and pressure utilization. It has increased the utilization rate of refinery byproducts and the byproducts from smoke and gas treatment process. It has also launched pilot programs to make comprehensive use of waste catalysts, oil sludge and leftover active sludge in refining and petrochemical production.
Management of water resources

Sinopec continuously advances the replacement of fresh water resources with unconventional water resources. It further adjusted its water consumption structure and reduced the consumption of fresh water resources. In 2019, its consumption of nonconventional water resources amounted to 36.2 million cubic meters. The corporation also promotes the application of independent saving technologies, conducts water balance tests and identifies and fixes loopholes in its water supply network. It doubled input in treating environmental hazards arising from effluents, upgraded its wastewater sites and optimized systems for wastewater and rainwater recycling, ensuring all effluents discharged met relevant standards. Sinopec continued to recycle effluents and wastewater, and made full use of unconventional water resources including condensed water, reclaimed water, mine water and seawater. It improved the reuse of industrial water, steam condensate, effluents and wastewater. Indicators including the recycling rate of these water resources and the comprehensive loss ratio showed that Sinopec had reached the benchmark of a water-saving company. In 2019, chemical oxygen demand (COD) and ammonia emissions went down 2.4 percent and 2.3 percent year on year respectively. The corporation reported neither environment pollution nor ecological destruction events.

Management of solid waste

In handling solid waste, Sinopec follows the principle of reducing their quantity, transforming them into useful resources and making them innocuous. It promotes comprehensive utilization of solid waste. The corporation made 2019 the year of standardized solid waste treatment. It supervised and guided its subsidiaries to fulfill national and local requirements on solid waste management. Sinopec advanced efforts to build regional treatment centers for hazardous waste and used catalysts. It devoted great energy to minimize packing as a method to root the source of solid waste. In 2019, the corporation produced 5.1 percent less solid waste than it did in 2018. The comprehensive recycling rate increased 5.7 percent, and all hazardous solid waste was properly treated.

Handling of oil spilling events

Sinopec has established an emergency response system for oil spilling accidents. It faithfully implements management rules for long pipeline network and enhances the reliability of oil transportation equipment in terms of environmental protection. Sinopec makes continuous efforts to strengthen management of large-scale crude oil storage tanks to ensure safety. It also strengthens management of equipment in case of oil leakage, identifies the conditions of oil pipelines and treats potential problems in a comprehensive manner so as to eradicate risks of oil leakage from the source.

Sinopec Shengli Oilfield builds cofferdam around its oil wells as a way to reduce the production of solid waste from the source. It also avoids secondary pollution, improves clean production on the operation site and controls environmental risks. With the efforts, the oilfield avoids 11,000 tons of hazardous waste annually.

Sinopec International Petroleum Exploration and Production Corporation in Iran

Close to 40 swans spend the winter on expansive water next to #113/8 Oil Well in the Guangli management zone of Dongying oil extraction plant of Sinopec Shengli Oilfield Company.

Protecting Ecological Environment

Sinopec gives priority to environmental protection. We are meticulous in identifying and analyzing environmentally sensitive areas and environmental risks, and do everything possible to keep our operation away from ecological conservation areas and areas where ecosystems are fragile. We rehabilitate the land around abandoned oil and gas fields and pipelines to minimize their impacts on the environment. In addition, we protect biodiversity to safeguard the health and harmony of nature. In 2019, Sinopec reported no single incident of biodiversity damage.

There are eight berths in the oil product terminal of Sinopec Hainan Refining & Chemical Company. The port is small, but boasts crystal clear water, making it a destination for colorful tropic fishes. This makes people feel more assured about the environment of the terminal.

A camel lives in harmony with the Yadavaran oilfield of Sinopec International Petroleum Exploration and Production Corporation in Iran

The directional drilling program through Tongming Bay Strait under the Zhongke refining-chemical integration project constructed by Sinopec Natural Gas Company is adjacent to a mangrove forest under state protection and a vast seafood breeding farm. During the construction, the company invited domestic experts for several rounds of technological demonstration and breakthroughs. Materials of construction were mixed based on ratios that minimize damage to the environment amid efforts to protecting the soundness and stability of the ecological environment in Tongming Bay Strait.
In 2019, Sinopec continued advancing the “Green Enterprise Action Plan” and took active measures to build green enterprises, contributing to the building of ecological civilization and a beautiful home. The Sinopec Green Enterprise Action Plan is the largest-scale initiative for building a green enterprise throughout the entire industrial chain in China. Under the principle of supplying green energy and promoting green development, this plan aims to provide clean energy and green products, increase the capacity of green production, spearhead green development of the petrochemical industry, and build Sinopec into a clean, efficient and low-carbon enterprise of circular economy by 2023 with green, low-carbon production being its core competitiveness. It is what Sinopec plans to do to contribute to the building of ecological civilization and a beautiful home.

In 2019, Sinopec continued advancing the “Green Enterprise Action Plan” and took active measures to build green enterprises. A total of 27 subsidiaries won the honorary title of “Sinopec Green Enterprises of 2019.”

Case: Sinopec Shengli Oilfield

Sinopec Shengli Oilfield adheres to the principle of green development throughout the entire process of oil exploration, professional technological service delivery, products manufacturing and business operations, ensuring that waste, energy consumption and emissions are reduced throughout the whole system and process. Adopting green injection-production strategy and building green gathering and transportation system, it finishes the entire production process in a closed system, effectively reducing pollutant emissions. Making use of waste heat, geothermal energy and solar energy among other new energy, the company explores the utilization of green energy in an intelligent manner. It builds five systems for energy saving and lowers energy consumption year by year.

Case: Sinopec Jinan Refining & Chemical Company

Sinopec Jinan Refining & Chemical Company continued to conduct clean production review, maximizes energy use, advance the upgrading of equipment for energy saving, strengthen treatment of effluents, exhaust gas and solid waste, enhance efforts to identify and eliminate environmental hazards, and guard against major environmental risks. It implemented a project of decoking in a closed delayed coking unit and treats VOC emissions to reduce pollutant emissions. Diesel products for vehicles by the company have reached national VI standard. It built an alkylation unit with an annual capacity of 200,000 tons to further optimize gas components and ensure the production and sales of high-quality gas products.

Case: Sinopec Shanghai Oil Products Company

Sinopec Shanghai Oil Products Company scaled up investment in environmental protection. It fully phased out outdated production process and equipment and finished all necessary procedures of environmental evaluation to ensure business compliance. It built a complete biodiesel sales network to help solve the problem of gutter oil being used for cooking in Shanghai. It established the first domestic oil-hydrogen joint construction station in real senses. In terms of green production, it took the lead in finishing anti-seepage renovation for gas stations and built gas stations with standard drainage systems synchronously on the basis that pollutant discharges had meet due standards. In the year, the company finished investigations on soil and underground water around four oil depots and 310 gas stations. It launched “Love ++” app and other mobile services to foster green corporate culture.
Joining Hands with Partners to Create Values in a Win-win Approach

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Caring for Employees

Adopting a people-oriented management style, Sinopec safeguards employees’ basic rights and interests, protects their occupational safety and health, and promotes their career development, so as to ensure they have a sense of security, happiness and belonging while performing as a strong driving force for the continued growth of Sinopec.

Safeguarding Basic Rights and Interests

Sinopec cares for our employees and respects them. Following the principle of equal consultation for mutually beneficial and win-win results, we protect our employees’ basic rights and interests and have established harmonious and stable employment relationships with them.

Respecting Human Rights

Sinopec strictly abides by international conventions on human rights and China’s national human rights action plans. We also observe domestic laws, such as the Labor Law of the People’s Republic of China and the Labor Contract Law of the People’s Republic of China, relevant laws, regulations and rules of host countries, as well as the Ten Principles of the United Nations Global Compact. We respect and safeguard internationally-acknowledged human rights while opposing any act that disregards or violates human rights. We refuse the use of child labor in accordance with China’s Child Labor Provisions and relevant laws of host countries and regions. We treat all employees equally and refuse any form of discrimination on the grounds of nationality, gender, age, race and religion or against pregnant women or people with disabilities regarding recruitment, promotion, training and compensation.

Equal Employment

Sinopec is committed to promoting staff diversity, equal opportunities and a healthy workplace environment. We work for improving the working environment as well as the physical and mental health of female employees through policies such as maternity leave and regular health exams. To enhance workplace diversity, we provide equal job opportunities for ethnic-minority employees and actively participate in the placement of ex-servicemen in cooperation with central and local governments.

Compensation and Benefits

Sinopec attaches great importance to employees’ compensation and benefits and has established a multi-dimensional incentive scheme incorporating both salary and non-monetary benefits. Featuring social insurance, supplementary insurance and enterprise annuity, a multi-pillar, multi-layered insurance system has also been developed. In addition, Sinopec subsidiaries pay supplementary medical insurance for their employees based on their respective conditions.

Democratic Management

Sinopec encourages employees to engage in corporate governance and constantly improves our democratic management system highlighted by workers’ congress, worker directors and supervisors and operation information disclosure. Meetings on democratic management are organized on a regular basis to facilitate communication between executives and rank-and-file employees and appreciate employees’ advice and suggestions.

Occupational Safety and Health

Sinopec has made great efforts to ensure employees’ physical and mental health. Employees are able to communicate their ideas and demands through a variety of channels, including seminars and surveys on employee engagement and satisfaction.

Strengthening Control of major occupational hazards

Sinopec launched noise distribution and impact assessment of typical installations, conducted information sharing on noise control, and optimized the quality of air supply in crowded workplaces by improving central air-conditioning systems.

Standardizing Management on personal protective equipment

Sinopec equipped workers in oil refineries who face a high risk of exposure to fire and explosion with anti-flame, anti-static protective clothing. The company improved its management on breathing apparatus through a comprehensive examination on the use of the protective equipment.

Promoting Employees’ Physical and Mental Well-being

Sinopec carried out employee health investigations and took intervention measures tailored for employees facing high risks to health. The Employee Assistance Program was further implemented to enhance mental health and psychological crisis prevention.
Career Development

Firmly adhering to the principle of “no talents, no gains”, Sinopec has launched a talent development campaign to build qualified teams. We have also improved our mechanism of talent hunt, recruitment, management and utilization, providing strong human resources support for high-quality development of Sinopec.

Talent Recruitment

Sinopec has made continued efforts in the cultivation of fresh graduates and has been awarded as the best employer for fresh graduates for many years in a row.

Talent Cultivation

Sinopec actively cultivates highly qualified personnel and earnestly implements China’s National Key Talent Project. A number of outstanding employees won national honorary titles and awards: two were elected as academicians, two were selected as technology innovation leaders under the Ten-thousand Talents Plan of China, two were selected as members of China’s New Century Talents Project, one was granted the Sun Yueqi Energy Award, two were granted Sun Yueqi Youth Excellence in Science and Technology, and one was granted the Friendship Award by the Chinese government. In addition, six employees were awarded the honorary title of National Technical Expert and 296 employees won gold, silver and bronze awards in vocational skill competitions at national and company levels.

Training System

Sinopec has formulated Employee Education and Training Plan 2019-2023 in an effort to carry out systematic training and skills improvement. To form an echelon of qualified management personnel, we have developed a capacity building system featuring early-stage training, follow-up training and full-course training. Systematic training of technical personnel has been launched at different levels, positions and grades. We have implemented a technical personnel promotion plan with the aim of cultivating outstanding workers and improving their vocational skills. A total of 3,100 key talents participated in training programs on different themes in 2019.

Overseas Personnel Training

To meet the demand of overseas business development, Sinopec launched a region- and profession-specific training program for employees of subsidiaries operating outside China. Following emerging business trends in the overseas market, we continued to build a strong pool of talent. In 2019, 600 employees specialized in overseas business participated in different training programs and 2,350 backbone employees of overseas branches completed an online course in practical English. Sinopec International Exploration and Production Corporation organized its first training program for foreign employees, and 15 outstanding foreign personnel from 13 countries attended.

Employee Assistance

Sinopec has taken a series of measures to create a good working and living environment for employees, including a homelike workplace campaign; a long-term home visit mechanism, retired employee care and “Enterprising Sinopec” information-sharing platform.

Homelike Workplace Campaign

Sinopec strives for building a community of shared future for the organization and our employees and focuses on cultivating the interrelation between individual career development and corporate growth. We are committed to heightening employees’ sense of belonging and happiness as well as strengthening cohesion and solidarity of the corporation. To this end, a homelike workplace campaign was launched. We aimed at transforming frontline sections, such as oil (gas) stations, oil depots and oil transfer stations, into a comfortable, safe and harmonious place that inspires employees to work hard.

Home Visit Mechanism

Sinopec has established a long-term home visit mechanism to help employees address work and life concerns. The company has also improved related measures and defined specific responsibilities under Sinopec Employee Assistance Program, so as to offer practical solutions to employees’ problems.

<table>
<thead>
<tr>
<th>Assistance fund (100 million yuan) (including in-kind benefits)</th>
<th>Number of benefited employees (person-time)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>2.4</td>
</tr>
<tr>
<td>2018</td>
<td>2.0</td>
</tr>
<tr>
<td>2019</td>
<td>1.87</td>
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</tbody>
</table>

Retired Employee Care

Sinopec firmly believes that it is our duty to ensure retired employees enjoy a happy life. We respect and care for the elderly through concrete actions, such as giving free treatment to retired employees in their political and daily life, paying attention to their physical and mental health and enriching their retirement life. In 2019, Sinopec organized health check-ups for 378,000 retired employees and paid visits to 125,000 retirees in hospital.

"Enterprising Sinopec" Platform

The "Enterprising Sinopec", an information-sharing platform on WeChat, has continued to serve our employees. Registering in their real name, they have access to surveys and investigation, training sessions, online psychological counseling, latest corporation news and lifestyle information. As of the end of 2019, 650,000 Sinopec employees subscribed the account, accounting for 97.8 percent of our total employees on the payroll.
Boosting Brand Value for Customers

Adhering to the philosophy of putting clients first, Sinopec has made great efforts in building an independent brand system, improving product and service quality and boosting brand value. Our goal is to satisfy our customers’ needs and expectations for a better life.

Brand System

With "Smart Energy, Better Life" as our slogan, Sinopec has developed a widely recognized brand system that fuels customers’ desire for a better life with high-quality products and services. According to Brand Finance Global 500 2020, an annual report on the world’s most valuable and strongest brands by British consultancy Brand Finance, Sinopec’s brand value has jumped from 49th last year to 42nd, valuing at US$33.437 billion, an increase of 14.7 percent over the previous year.

Non-oil Business

To provide customers with integrated service, Sinopec has been optimizing its non-oil business and promoting coordinated development of multiple sectors. A new brand Easy Joy Coffee was launched as an attempt to expand in auto service, advertising and fast food. To integrate online and offline services, the cross-border e-commerce platform of Easy Joy began offering one-stop delivery to car or home. A special section devoted to poverty alleviation was open in Easy Joy convenience stores. In 2019, Sinopec’s non-oil business generated operating revenue of 32.05 billion yuan, a year-on-year increase of 2 percent, and a profit of 3.24 billion yuan, a rise of 7 percent over the previous year.

Case: Easy Joy Enabling Drivers to Enjoy a Smart Lifestyle

Easy Joy is a major independent brand of Sinopec in non-oil business. After more than 10 years of development, it has expanded into six areas, namely retailing, auto service, insurance, drinking water and environmental-friendly products, providing a variety of services for drivers, their vehicles as well as their daily life. As of the end of 2019, a total of 27,000 Easy Joy shops yielded sales revenue of 62 billion yuan and received over 20 million customers every day. With a brand value of 11.567 billion yuan, Easy Joy ranked first on China’s Top 100 Convenience Stores released by China Chain Store and Franchise Association.

Product Quality

To educate employees and raise their awareness of product quality, Sinopec’s chemical sales department carried out special events of “Quality Day” and “Quality Month.” To enhance product and service quality, we established a feedback mechanism regarding quality improvement, strengthened communication with customers via multiple channels and provided producers with timely feedback on existing problems. To meet customers’ demand for higher quality, we improved the production, marketing, research and application mechanisms and accelerated the development of new materials and mid-to-high-end products.

To enhance the adaptability, normalization and effectiveness of quality management system, Sinopec’s oil product sales department made constant efforts to improve the ISO9000 quality management system, oversee the operation of quality inspection agencies and strengthen the management of refined oil products from purchase to storage, shipping and marketing. To refine the non-oil product quality management system, Easy Joy Sales Co. obtained ISO9000 quality management system certification and ISO22000 food safety management system certification in 2019.

Customer Service

Sinopec always puts customers first and strives for perfecting pre-sales, sales and after-sales services. To understand their needs and offer solutions, we strengthened communication with customers through a variety of channels, including official WeChat account, chememall.com, Customer Relationship Management platform, visiting customers, symposiums, new product launches and annual customer satisfaction surveys. To protect customers’ privacy, we raised the awareness of information security, standardized business operations and enhanced network security and management.

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<tr>
<th>Indicator</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
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<tbody>
<tr>
<td>Rate of resolved customer complaints for refined oil products (%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
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<tr>
<td>Customer loyalty for lubricant products (%)</td>
<td>93</td>
<td>93</td>
<td>93</td>
</tr>
<tr>
<td>Rate of resolved customer complaints for refined oil products (%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Customer loyalty for chemical products (%)</td>
<td>99.2</td>
<td>100</td>
<td>99.8</td>
</tr>
<tr>
<td>Rate of resolved customer complaints for chemical products (%)</td>
<td>100</td>
<td>100</td>
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Forming Responsible Industrial Chain

Supplier Management

Sinopec has made constant efforts in enhancing supplier management and our procurement is open to all qualified suppliers. With the aim of creating a transparent supply chain ecosystem, we optimized our supplier qualification review and performance review on contract fulfillment, toughened penalties on breach of contract and promoted the establishment of a market integrity system.

Enhancing Qualification Review

To help suppliers understand Sinopec’s rules of procurement, we revised Sinopec Management on Materials Procurement and Resources Supply and published Supplier Manual, FAQs for Related Parties and Instruction Manual for Resources Supply Management System.

Implementing Performance Measurement

Sinopec practices careful review of suppliers’ qualification before and after the procurement. For those who bid for the first time or show major changes in operation and financial conditions, we conduct on-site review on their plants, equipment, products, management and performance. In 2019, the on-site review covered a total of 1,346 suppliers, achieving risk control at source.

Implementing Performance Measurement

Under the Epec Standard System, we conduct comprehensive and objective evaluation of suppliers’ overall strength from four aspects, namely credit rating, product quality, contract fulfillment and business performance, creating a quality-centered supply chain ecosystem.

Strengthening Supplier Training

We organize regular training for suppliers to help them better understand Sinopec’s rules of supply management, inform them about the changing requirements in anti-corruption, environmental protection and safety management, and educate them to value cooperation opportunities and business integrity. More than 4,700 people participated in supplier training programs in 2019.

Contractor Management

Sinopec practices strong management on contractors through heavy penalties and a removal mechanism and strives for cultivating a group of excellent strategic contractors. We established a contractor management information platform as part of the Sinopec Performance Measurement of Construction Project Contractors. The platform enables Sinopec headquarters, construction branches and project employers to carry out online assessment of contractors and subcontractors. The assessment involves many aspects such as production safety, project quality, project progress, environmental protection, occupational safety and health as well as business integrity. Through the platform problems can be discovered, documented and solved in a timely manner.

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<tr>
<th>Indicator</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
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<tbody>
<tr>
<td>Proportion of suppliers with quality management system certification (%)</td>
<td>52.9</td>
<td>47.3</td>
<td>49.9</td>
</tr>
<tr>
<td>Proportion of suppliers with environmental management system certification (%)</td>
<td>31.1</td>
<td>29.9</td>
<td>34.7</td>
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<tr>
<td>Proportion of suppliers with occupational health and safety management system certification (%)</td>
<td>27.7</td>
<td>27.7</td>
<td>32.8</td>
</tr>
<tr>
<td>Proportion of main contractors with quality management system certification (%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Proportion of main contractors with environmental management system certification (%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
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</tbody>
</table>

Industrial Chain Development

Epec.com

Adapting to China’s supply-side structural reform and the development of Internet economy, Sinopec established a new e-commerce platform epec.com. Based on a solid industrial chain and customers’ needs, the online shop enjoys the advantage of Sinopec’s sound management on procurement. An innovation in supply chain management, it helps promote the steady development of China’s modern economic system.

Epec.com offers services such as procurement, sales, finance, creating a new e-commerce model of “Internet plus supply chain.” The new platform is aimed to realize the increment of supply chain and build a healthy and transparent e-commerce ecosystem of industrial products. By the end of 2019, the online shop achieved a total transaction value of 961.9 billion yuan with 205,000 registered users and 2.19 million products. Epec.com was awarded the Most Influential E-commerce Brand 2018 by China Central Enterprise E-Commerce Alliance.
Building Platforms for Win-win Cooperation

Sinopec has played an active role in building domestic and international platforms for sustainable development and win-win cooperation. We joined the Alliance to End Plastic Waste (AEPW) in an effort to deal with global issues and jointly promote green development. With the aim of helping achieve Sustainable Development Goals, Sinopec, along with 21 domestic and foreign pioneering companies, joined the GoldenBee Global 2030 CSR Initiative started by Global Compact Network China. We also participated in the China Social Responsibility 100 Forum, working with other enterprises to promote corporate social responsibility fulfillment.

Case: Joining the AEPW to Promote Green Development

Today, the prevention and control of plastic pollution has become a major issue in global governance. Established in London in January 2019, the AEPW is a non-profit organization made up of over 30 companies with a clear mission to end plastic waste in the environment. AEPW members pursue a four-part strategy covering infrastructure development, innovation, education and cleanup. The organization is committed to developing solutions that will reduce plastic waste or keep used plastics out of the environment, minimizing marine pollution, as well as maximizing the leading role of enterprises across the plastics value chain.

Sinopec, the world’s largest manufacturer of synthetic resin, joined the AEPW in July 2019 as the first supporter from Chinese mainland. We have taken concrete actions to fulfill our membership commitment and join hands with partners to promote green and sustainable development.

Sinopec actions to end plastic waste

- Offering advice on AEPW programs for ending plastic waste carried out across the world.
- Developing action plans on publicity and education, technology research and development and waste plastics application, with the aim to reduce plastic waste in the environment.
- Fostering exchange and cooperation between Chinese plastic manufacturers and other industry value chains, and assisting the AEPW and the China Petroleum and Chemical Industry Federation in organizing the dialogue among the Chinese plastics’ value chain stakeholders.
- To prevent microbeads leak in production, packaging, storage, loading and unloading and transportation, Sinopec published the Operation Guidance on Leak Prevention in Synthetic Resin, issued the General Principles on Synthetic Resin Packaging, and implemented the method of cover film plus shared tray.
- Research and development of degradable plastic products. Sinopec developed a new type of biodegradable polyhydroxy acid film. Used in agricultural production of rice, corn, peanut, vegetable and blueberry, the new technique has helped reduce pollution in more than 600,000 hectares of farmland. The biodegradable PBST copolyester film began trial use in the cotton field in Xinjiang. Wide application in the region is expected to realize in the next three years.

Strategic Cooperation

Following the principle of win-win cooperation, Sinopec has been deepening collaboration with governments and enterprises in multiple fields and building strategic partnerships with them for coordinated development by complementing each other’s advantages.

Sinopec Strategic Cooperation Projects in 2019 (typical examples)

- In July, Sinopec signed a framework agreement with PetroChina on joint research of the Tarim Basin, Junggar Basin and Sichuan Basin. It also signed a framework agreement with CNODC Limited on cooperation in areas of the Bohai Bay, Beibu Gulf, southern Yellow Sea and Subei basin, and a related joint research agreement was inked.

- In November, Sinopec signed a memorandum of cooperation on hydrogen energy with Air Liquide Group of France.

- In November, Sinopec Forum and Signing Ceremony, themed on “fostering open cooperation for a better world”, was held during the Second China International Import Expo. Sinopec signed contracts with 38 enterprises, including Kuwait National Petroleum Company, Russia’s petrochemicals company Sibur and GS Caltex, covering various fields such as crude oil, natural gas, chemicals, equipment materials, food and daily necessities.

- In December, Sinopec and Fujian Expressway Group signed an agreement on establishing a joint venture.

Boosting National Industry

In order to meet the needs of engineering construction, break the monopoly position of foreign manufacturers and foster the development of high-end national manufacturing, Sinopec has been vigorously promoting the localization of vital equipment required for major projects, such as shale gas development, LNG storage and transportation, refinery-petrochemical integration and large-scale production of aromatic hydrocarbon.

SINOPEC’s Major Breakthroughs in the Localization of Equipment and Technology in 2019

- Zhongke Refinery and Petrochemical has achieved the localization of extrusion granulator in polypropylene production with a capacity of 35 tons per year.

- A special heat exchanger of 200,000 standard cubic meters used in coal-to-hydrogen process developed by Sinopec Maoming Company passed appraisal. The equipment is the first of its kind in China, and delivered a world-class performance among similar products.
Feature

Inspiring Role Models in Mission Fulfillment

Chen Junwu: A 92-year-old Engineer Devoted His Life to Technological Innovation

Chen Junwu, a 92-year-old academician of the Chinese Academy of Sciences (CAS), has been working at Sinopec for 70 years since the founding of the People’s Republic of China (PRC). Even today, he remains at the forefront of research and development. Adhering to their original belief, they forged ahead with the spirit of innovation and dedication and fulfilled their responsibilities in respective fields and positions. These figures inspire generations of employees to write a new chapter in achieving the grand vision of Sinopec.

Chen Junwu graduated from the Department of Chemical Engineering of the School of Engineering, Peking University. China’s petrochemical industry lagged way behind the world’s average back then, so he decided to change the situation and devote himself to the development of the country’s petroleum engineering. In 1961, 34-year-old Chen was assigned to develop the first catalytic cracking unit of China. After more than four years of trial and error, the first set of such unit independently designed and installed by Chinese engineers was successfully put into production, achieving a leapfrog development in oil refining and ending China’s history of heavy dependence on imported oil products. Since then Chinese refineries were able to produce gasoline and diesel independently.

Instead of resting on his laurels, Chen continued his research on upgrading catalytic cracking technology for high-quality domestic oil products. In 1982, a new type of catalytic cracking unit began production, marking another significant progress in China’s oil refining. As the nation’s dependence on imported crude oil increased around the year 2000, Chen embarked on the study of substitutes for petroleum. Working together with Dalian Institute of Chemical Physics under the CAS, he presided over the development of dimethyl ether- or methanol-to-olefin (DMTO) technology and its application, representing a new breakthrough in China’s utilization of coal resources. In his nineties, Chen still works at the forefront of petrochemical engineering. He has trained a great number of oil experts and provided financial support for needy students and outstanding young talents. Chen has been granted numerous awards and honorary titles, including the National Model Worker, the National Outstanding Figure in Science and Technology, the National Labor Medal, the First Prize of the State Scientific and Technological Progress Award and the First Prize of the State Technological Invention Award.

Over the past 70 years, Chen has been always staying committed to his original aspiration, demonstrating the spirit of dedication and perseverance with concrete actions. In October 2019, as the Chinese people celebrated the 70th anniversary of the founding of PRC, Chen was awarded the title of "role model of the times" by the Publicity Department of the Communist Party of China Central Committee and his lifetime contribution to China’s oil industry were widely publicized.

After wide media coverage, Chen and his achievements won acclaim from all walks of life. Many applauded that Chen not only made remarkable achievements in his career life as an engineer, but also made significant contributions to promoting the advancement of Chinese oil refining technology, providing an example of patriotism and enterprising spirit. A large number of scientists expressed their respect for Chen, noting that they will follow his example of serving the country, carry forward his spirit of unremitting innovation and down-to-earth attitude and apply their technological expertise in transforming China into a technological powerhouse in the new era. The spirit of Chen has made up a strong core of Sinopec’s corporate culture as well as a valuable spiritual asset of the company.

Dr. Wang Tao: Thinking Outside the Box

Dr. Wang Tao has been working at the forefront of petroleum reservoir exploitation in Sinopec Shengli Oilfield for years. Thinking outside the box, she has succeeded in finding technical solution to the exploitation of harsh-condition reservoirs, a daunting challenge in oil industry worldwide. Inspired by boiling sweet rice balls, Wang developed a novel technique of in-depth polymer microsphere profile control together with her team members, providing a solution for the development of high-temperature, high-salinity oil reservoirs. So far, the technique has helped exploit 150,000 tons of oil at Shengli Oilfield, Qinhai Oilfield and Jidong Oilfield. Because of this, Wang won the nickname “Dr. Ball”. During her 15-year career life, she presided over 14 technology research projects at national and provincial levels, contributing to an enhanced oil production of more than 400,000 tons.

Located at the northernmost end of Yunnan Plateau, Basa Gas Station is the highest service station under Sinopec Yunnan Oil Products Company. Many station workers have left due to harsh natural environment and tough working conditions, but the station manager Zhao DIansheng has stayed at the post for 16 years, committed to serving customers and their vehicles from across the country. Thanks to the efforts of Zhao and his staff, drivers can enjoy all-day hot water, butter tea and pastries for free in the rest area. His work has provided warmth for countless drivers on their journey through the snowy plateau. His loyalty has also worked wonders. Over the past 16 years, the annual sales of the gas station have increased from about 400 tons to an annual average of over 6,000 tons, demonstrating a 15-fold growth. The highest annual sales exceeded 8,000 tons.
Giving Back to Society, Sharing Development Achievements

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Taxation Contribution

It is the basic obligation of an enterprise to pay taxes in accordance with the law. Sinopec has been fulfilling this obligation in good faith. In 2019, the company contributed taxes amounting to 312.2 billion yuan. With the payments used to improve people’s livelihood as well as public undertakings including national defense, science, education, culture and public health, Sinopec made due contributions to the national endeavor to finish the building of a moderately prosperous society in all respects.

Community Development

Sinopec stays firm to advance effort in splitting water, power, gas and heating utilities and real estate properties from its core business and transferring them to local competent authorities. It continues to push for institutional reform in communities of mining areas and implement livelihood projects so as to build communities with trusted support and quality services and improve residents’ sense of happiness.

Innovating in management to serve people’s livelihood. Sinopec worked in tandem with receiving authorities and gradually built a new model for community governance, in which services are for the residents, dominated by government and jointly participated by residential units, property owner committee, property management companies and social organizations. Community services and administration are integrated to the civil sector. The mechanism for daily-life services has been improved, seeing to it that there are channels for demands, measures to analyze and judge situations, and guarantees to basic life.

Advancing transformation of community services. Sinopec shifts its focus from providing services to residents in residential communities to providing services to production in mining areas. It made work plans and guidelines for logistic services to production, improved organizational structure for community services and ensured logistic services to production featuring integrated planning, professional management, standardized services and market-oriented operation. The company supported employees involved in social services splitting and transferring to relocate jobs to maintain stable staffs.

Social Services

Sinopec is committed to sharing its development achievements and wholeheartedly giving back to society. Over the years, the company has been devoting to improving people’s livelihood and promoting social harmony through targeted poverty alleviation efforts, social welfare events, brand name endorsed activities, social contributions and environmental protection actions.

Social services splitting and transferring. In 2019, work on social services splitting and transferring was advanced as scheduled. Functions had been smoothly transferred to competent authorities, and lives in communities stayed stable and orderly.

Social welfare events

Sinopec has been devoting itself to undertakings for public welfare and takes initiative in improving people’s livelihood. The corporation has been carrying our charitable projects of “Sinopec Lifeline Express,” “The Gas Station That Cares - A Better Road Home,” “Sanitation Workers’ Lounges” and “Caring for Girls – Spring Bud Program.”

Social welfare events

Sinopec Brightness Lifeline Express

Sinopec takes active measures to implement national policies and helps poverty alleviation efforts through supporting healthcare. It started to participate in the Brightness Lifeline Express charitable project in 2004. To help more poverty-stricken cataract patients, Sinopec donated 30 million yuan to building a hospital train named “Sinopec Lifeline Express,” the first and only charitable lifeline express sponsored by a corporation from the Chinese mainland. It is also an important part of the national blindness prevention and treatment program, which has been included in the plan of government work.

The train travels to three different impoverished regions nationwide, stays for three months in each region and cures an average of 3,000 patients every year. Success rate for the operations surpasses 99.9 percent, comparable with that of the top hospitals in first-tier cities in China. In February 2019, Sinopec conducted an A4-level overhaul of the lifeline express once in 10 years as required by regulations of China State Railway Group Co., Ltd. The corporation invested more than 20 million yuan for this overhaul which covered the interior and exterior of the compartments, electric installation, and water and electricity lines to ensure safe and sound running of the train.

Social contributions

Sinopec’s subsidiaries carry out campaigns of environment protection, volunteer to clean the beach area and launch educational programs on maritime protection in Hong Kong.

Environmental protection

Brand name endorsed activities

Public welfare efforts through brand products like “Easy Joy-Zhumai Spring,” and the Great Wall Lubricant

Social contributions

Serving for disaster relief, major state events and busy farming seasons as well as doing volunteer services

Assisting in poverty alleviation campaign through developing industries, boosting consumption, creating jobs, improving education and supporting basic healthcare

Social welfare events


Poverty fight
In 2019, “Sinopec Brightness Lifeline Express” brought surgeries to more than 2,000 poor cataract patients, helping them get back to light.

I had a wonderful experience. I am an ordinary person and lucky enough to take a cataract surgery on the ‘Sinopec Brightness Lifeline Express.’ The doctors, nurses were very nice to me. They were patient and explained everything to me. I am grateful to the government and Sinopec.

— Lian Shulou, a cataract patient in Qinxian County, Shanxi Province

Over the past 16 years, Sinopec has donated altogether over 180 million yuan (US$25 million) to the Lifeline Express project, helped cure more than 46,000 poor cataract patients for free in 38 regions of 18 provinces, municipalities and autonomous regions, and funded the building of 21 Lifeline Express ophthalmology centers. “Sinopec Brightness Lifeline Express” won the Special Brightness Award from China Life-Line Express Fund for 15 years in a row and the honorary titles of China’s Best Voluntary Service Project by the Publicity Department of the CPC Central Committee and SOE Excellent Voluntary Service Project by the commission for cultural and ethnical work under the State-owned Assets Supervision and Administration Commission of the State Council (SASAC).

Sanitation Workers’ Lounges

General Secretary of the CPC Central Committee Xi Jinping compared street cleaners to city beauticians, and called on the entire society to care for and respect those workers and their work. He ordered efforts to create a social environment where environmental hygiene is attached with great importance, the public hygiene undertaking is supported and sanitation workers are respected.

Sinopec has been actively acting upon General Secretary Xi’s call for caring for sanitation workers. In 2016, it launched a brand-endorsed public welfare project of building lounges for sanitation workers in Jiangsu Province. The project was further carried out in the Beijing-Tianjin-Hebei region, the Yangtze River delta region, the Pearl River delta region, Sichuan Province and Chongqing Municipality among other places in 2018. The lounges offer a place where sanitation workers can wash their hands, have some tea, and take a rest during smothering or chilling days while they are working. As of 2019, Sinopec had set up such lounges in 2,260 gas stations in 13 provincial-level regions across the country, providing a temporary home for hard-working sanitation workers.

In 2019, Sinopec encouraged public philanthropic events based on in-house brands to create social value, build up brand image and promote brand excellence. Sinopec Great Wall Lubricant Company has sponsored the Astronaut Experiencing Camp for 12 years in a row since 2008. The event had helped close to 700 children visit the Aerospace City to realize their dreams of being an astronaut. The corporation had organized the event of cheering for Chinese aerospace undertaking for nine consecutive years, providing aerospace enthusiasts opportunities to have a close contact with the space experience.

In 2019, Sinopec Great Wall Lubricant Company recruited truck drivers to take part in its space-experience philanthropic program named “Happy 1+1” as part of efforts to help truck drivers who spend little time at home throughout the year bond with their families. The program invited truck drivers and their families to visit China’s spacecraft launch base, leaving them memorable family journeys.

In 2019, “Easy Joy- Zhouma Spring” sponsored the National Games for Persons with Disabilities, the 11th National Traditional Games of Ethnic Minorities, brisk walking along Changzhou grand canal in Jiangsu Province and the First China-Africa Economic and Trade Expo among other events as a way to support sports undertakings and China’s economic and trade relations with foreign partners.

Social Contribution

Disaster relief and rescue

In April 2019, bushfire broke out in Daba Liangzi Mountains, Tiantai Township, Fuling District of Chongqing. Upon the order of the Fuling Shale Gas Company, the fire station in Fuling district operated by Sinopec Jianghan Oilfield immediately sent 12 firefighters, three fire-extinguishing foam tankers and one emergency support vehicle to help the rescue.

In July 2019, landslides hit Chagou community, Pingdi Village, Jichang Township, Shuicheng County, Liupanshui City in Guizhou Province. The branch of Sinopec in Liupanshui responded swiftly and joined competent authorities to carry out disaster relief. It sent oil tank trucks to transport oil to the disaster-stricken areas to ensure supplies to emergency rescue vehicles as well as emergency response teams to transport anti-disaster supplies. The corporation devoted all-out efforts to help with relief work and logistic support.
Supporting major national events

In 2019, Sinopec actively supported major national events. Products by the corporation played an important supporting role at the military parade to celebrate the 70th anniversary of the founding of the People’s Republic of China. They included fuels and lubricant oil for advanced armaments, high-performance abrasion-proof fibers produced by Sinopec Chuanwei Chemical Company, and special modified asphalt developed by Sinopec Qilu Petrochemical Company. The fibers were used in making combat suits, featuring moisture-absorbing and perspiration releasing, for the military. The asphalt outperformed international leading standards in terms of low temperature crack resistance, skid resistance, noise abatement and rutting resistance among other performances. Pavement with the asphalt could meet the high standards for military parade and day-to-day transportation.

Sinopec is building and will run a hydrogen-supply project to provide new energy fuels to electric vehicles during the Olympic and Paralympic Winter Games Beijing 2022. At the same time, Sinopec selected 30 students from Siyuan Experiment School in Fenghuang County, Hunan Province to take part in a Winter-Olympic-themed camp it funded. The camp helped the participants broaden their horizons and light up their Olympic dreams.

Serving busy farming seasons

It is a peak of oil consumption during farming seasons. In order to ensure smooth agricultural activities, Sinopec actively optimized logistics and supplied sufficient fuel products. The corporation gave favorable treatment and high quality service to farmers to guarantee their production. It organized volunteers to help farmers in the field, sent oil tank trucks to fields, ensured oil supply for agricultural purposes, and provided subsidies and presents to poor farming households. These efforts aimed to contribute to a good harvest.

Funding the building of “New Red Army Bridge”

In July 2019, the "New Red Army Bridge" funded by Sinopec with an investment of 1.8 million yuan was completed in Shangshao Village, Leping County, Qiongdongnan Miao and Dong Autonomous Prefecture in Guizhou Province. At the completion ceremony, local villagers presented a silk banner to Sinopec to show their appreciation. The new bridge measures 54 meters in length, 4.5 meters in net width and 5.6 meters in height. It could bear a weight of up to 20 tons. There are guardrails on both sides. The bridge was designed in an antique style, integrating itself with the surrounding environment. It is a bridge symbolizing that local people have shaken off poverty and heading for a moderately prosperous society. It is also a landmark carrying forward the spirit of the Long March.

Popularizing knowledge of law

Sinopec has been actively taking part in social campaign for popularizing knowledge of law. It has launched Constitution knowledge awareness quizzes for five straight years to promote knowledge of the Constitution in society. The efforts won recognition from competent authorities and the public. In 2019, the corporation received a letter of appreciation from the Ministry of Justice for its contribution to "1+1" China Legal Aid Volunteer Action Program, which had been carried out for 10 straight years.

Voluntary services

Upholding the spirit of "Devotion, Love, Help and Progress," Sinopec has actively organized employees to take part in voluntary services, bringing warmth to society and passing on positive energy. With voluntary services conducted from one to more areas, from within the corporation to the whole society, and from on occasional terms to on a regular basis, Sinopec has made volunteer spirit a special part of its corporate culture. The spirit has also been actively practiced by its employees.

In December 2019, Sinopec Chuangwei Chemical Company launched a “Winter Sunshine Warms Us” program, delivering new year gifts to left-behind children in Shypian Township Central Primary School and Yuntai Township Central Primary School in Changzhou District of Chongqing. The gifts helped children have a warm winter.

Environmental protection

Sinopec attaches great importance to environmental protection and has launched various environment-caring events, calling on the public to protect the environment and build a beautiful planet as our home.

Case: Sinopec Employees Take Part in Voluntary Tree-planting Campaign

Sinopec employees have been taking active part in voluntary tree-planting campaign and campaigns including the Yangtze River protection, desert afforestation and “Ant Forest.” It launched various forms of voluntary tree-planting activities, involving more than 420,000 participants who planted 1.46 million trees throughout the year. The corporation worked in tandem with Shanghai municipal government and organized 11 companies in Shanghai to take part in an “Internet plus voluntary tree planting” event. About 12,000 employees from companies like Sinopec Shanghai Petrochemical Company Limited, Sinopec Shanghai Gaopiao Petrochemical Co., Ltd, and Shanghai Petroleum Company made online donations totaling close to 1 million yuan for tree planting. The move showed high sense of social responsibility of Sinopec employees and won recognition of the National Afforestation and Environmental Protection Commission as well as experts.
Ensuring natural gas supply

Sinopec Tianranqi (Natural Gas) Company made natural gas supply during the epidemic a priority of its work. It supplied daily average natural gas of 5 million cubic meters to Hubei Province. Of the total, 2.6 million cubic meters were supplied to Wuhan on daily average terms. It followed the natural gas demands of major producers for medical supplies, drugs and anti-virus supplies in the region and supplied daily average natural gas of 35,000 cubic meters to nine companies in Hubei Province including Allmed Medical and Fushi Protective Products Co., Ltd, ensuring stable and full natural gas supply during the epidemic.

○ Offering free fuels and lubricants to Leishenshan Hospital and Huoshenshan Hospital

On January 30, 2020, Sinopec offered 16,500 liters of diesels and 1,000 pails of Great Wall lubricants to the construction site for Leishenshan Hospital in Jiangxia district of Wuhan. Starting from February 3, Sinopec gas station on Zhiyin Avenue in Wuhan became a designated gas station for Huoshenshan Hospital, offering 24-hour non-stop fuel services to ambulances transferring patients as well as emergency vehicles. On February 10, Sinopec began to provide free fuels to ambulances of Leishenshan Hospital and free food to paramedics on the ambulances.

○ Offering free natural gas to Leishenshan Hospital

On February 4, Sinopec began to offer free gas supply to Leishenshan Hospital as its 26 water heaters were switched on. The corporation set up a special team to ensure gas supply to Leishenshan Hospital and made detailed plans. It also arranged employees to follow the construction of the hospital and coordinate matters relating to gas supply so that the supply could be delivered in a timely and stable manner.

○ Supplying diesels for temporary field hospitals

Sinopec Hubei subsidiary set up 132 special teams and delivered 26,000 liters of diesels to temporary field hospitals, ensuring fuel supplies for power, heating and food in these venues.

Ensuring medical supplies

To address shortage of medical supplies, Sinopec subsidiary refineries adjusted production schedules, ramped up production of raw materials for medical supplies and promised to keep prices stable. The corporation made timely communications with clients along the downstream of the industrial chain to learn about their demands and helped medical materials producers resume production. It paced up the production of disinfectants and medical oxygen, providing basic protective supplies for people on the frontline. It changed to produce materials and melt-down fabrics for masks and finished face masks to shore up the weakness in protective products supply and alleviate the shortage of such supplies as soon as possible.
Ensuring supply of daily necessities and other anti-virus supplies including sanitizers and disinfectants. Of them, 62 stores sold more than 160 boxes of face masks to each traffic. Beijing Oil Products Company presented a box of face masks to each traffic police officer and sanitation worker working near its 169 gas stations with police officer and sanitation worker present. In cooperation with transportation disinfectant producers and mask-producing companies, Sinopec worked with mask producers to build production lines for children’s face masks and paced up market supply combining online and offline channels. At present, the daily sales of children’s face masks reached 300,000.

Cross-sector cooperation enabling production capacity for 1 million face masks
Sinopec found companies capable of producing face masks. They jointly established 11 production lines for medical masks. With Sinopec providing raw materials and the partnering companies producing masks, the cooperation enabled daily output of more than 1 million face masks. In addition, Sinopec worked with mask producers to build production lines for children’s face masks and paced up market supply combining online and offline channels. At present, the daily sales of children’s face masks reached 300,000.

Selling or presenting masks at gas stations
In cooperation with epidemic prevention and control in Beijing, Sinopec had its 50 gas stations in Beijing sell disposable protective masks starting from March 3. The daily market supplies were about 30,000 face masks. On March 5, a day for doing good deeds in China, Sinopec Beijing Oil Products Company presented one box of face masks to each traffic police officer and sanitation worker working near its 169 gas stations with lounges for the staff and 22 ones with lounges for sanitation workers.

Ensuring supply of daily necessities
To ensure the supply of daily necessities for residents in Wuhan, Sinopec Wuhan Oil Products Company activated its plan for optimizing goods allocation. Its more than 170 Easy Joy convenient stores at gas stations sold life necessities including rice, edible oil and other grain and anti-virus supplies including sanitizers and disinfectants. Of them, 62 stores sold more than 160 varieties of goods for the choice of Wuhan residents. It also promised that no Easy Joy convenient store would raise goods price.

At the same time, Sinopec Beijing Oil Products Company launched services of delivering grocery on demand. Users can order groceries on the Easy Joy Fueling app. Sinopec Beijing Oil Products Company launched drive-through contactless payment services, winning wide popularity among the clients and consumers. Sinopec Beijing Oil Products Company helped sell unmarketable agricultural produce during the epidemic. At present, contactless fueling is available in all 30,000 gas stations of Sinopec. More than 7,000 Easy Joy convenient stores across the country rolled out temporary grocery delivery services on demand, bringing convenience to residents while solving an urgent problem for rural farmers.

Boosting rapid recovery of related industries amid work production initiative
Sinopec knows that epidemic prevention and control as well as work and production resumption is not an “either-or” choice question. The two tasks had to be fulfilled at the same time for ultimate victory. As of March 4, all Sinopec subsidiaries but some specific ones in Henan Province had resumed production so as to minimize the fallout of the epidemic.

Sinopec Shengli Oilfield broke existing structure and reorganized manpower and equipment to maximize operation capacity. It applied approval for 114 production vehicles so that they can travel across regions during traffic restrictions amid the epidemic. The 1HP well project, a preliminary prospecting well for shale gas, carried out by Sinopec Exploration Company in Gushuzi Province made new progress as it yielded 50,300 cubic meters of shale airflow on a trial basis on February 19. Sinopec Hebei Oil Products Company made all-out efforts to ensure non-stop fuel supply for infrastructure construction projects in Xiongan New Area. It also took the initiative in transporting disinfectants and other anti-virus supplies and coordinating bank loans to solve capital liquidity problems for projects that resumed production. Sinopec Northwest Oilfield ensured the stable operation of oil and gas production. As of March 11, the oilfield had supplied 300 million cubic meters of gas to southern Xinjiang Uygur Autonomous Region, a year-on-year increase of 9.5 percent. The supply ensured the production and living demands of more than 20 enterprises and millions of residents.

Initiating “100-day performance improvement” plan and pioneering efforts to stabilize national economy
Acting upon the requirements of coordinating epidemic prevention and control as well as economic and social development made by President Xi Jinping, Sinopec initiated a “100-day performance improvement” plan on March 23 to realize production and business targets in the second quarter and pioneer efforts to stabilize national economy.

Revolving around three targets of performance improvement, production enhancement and cost control, the plan put forth four areas of efforts and required advantageous strengths to be concentrated on realize the most important goals. Efforts should be made to seize opportunities for market expansion, come up with new measures to expand markets and strengthen cooperation in market expansion. The plan then called for efforts to optimize structure, lower costs of stockpile and crude oil and enhance capacity of coping with low oil price on the upper reach. The third area of efforts should be made on cost control by strengthening capital supervision and making use of government incentives. The fourth area is about safety production. Managers should be held accountable for production accidents and management of hazardous chemical products. Safety hazards should be spotted and eliminated. Safety production regulations should be faithfully implemented to guard against any form of production safety accidents. Meanwhile, Sinopec flushed out 10 major measures in terms of high-quality oil exploration, natural gas production improvement, refinery operation enhancement, chemical business upgrading, oil products sales improvement, stockpile reducing, major project construction, cost control, integrated management of capital and supporting measures. Specific tasks that must be fulfilled for each subsidiary and department were detailed.

Taking an employee-oriented approach and boosting positive energy among all employees
Since the epidemic, Sinopec has been implementing President Xi Jinping’s instruction on psychological counseling to help people mitigate the fallout of the epidemic. The corporation paid much attention to the psychological wellbeing of millions of its employees amid epidemic, and employed scientific methods to help them unleash stress, learn knowledge of epidemic prevention and control and increase capability for Enhancing immunity. While ensuring their psychological wellbeing, the corporation led its employees to devote to the fight against the epidemic. Sinopec made use of its Employee Assistance Program (EAP) and mobilized EAP leading lights and volunteers to offer mental health services, stimulate positive energy among the employees and form strong mental support, strengthening solidarity and stability of employee teams amid efforts to ride over the difficult times.

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Eight Years on, "The Gas Station That Cares • A Better Road Home" Program Continues Passing on Love across Borders of Five Provincial-level Regions

As the Chinese New Year approaches each year, it’s time for home coming. The Spring Festival travel rush is a peak period when migrant workers return home. Every year, tens of thousands of motorcyclists start from places across Guangdong Province and travel hundreds of miles to their home towns in Guangxi, Hunan, Guizhou and Sichuan among other provincial-level regions for the Spring Festival holiday. The "Gas Station That Cares • A Better Road Home" is a huge charity project of Sinopec starting from 2013. Sinopec brings warmth to migrant workers on their way home during the Chinese New Year by offering them free fueling for their motorcycles, warm rice congee, ginger decoction and nursery rooms.

On the first day of the Spring Festival travel rush in January 2020, the charity project was initiated once again, providing services to home-going motorcyclists for eight straight years. A total of 247 gas stations participated in the project.

Building a charitable platform and joining hands with 30 partners for philanthropic cause

Over the past eight years since the charity program was initiated, many caring businesses have joined forces to make donations. In 2020, 30 companies filled the Easy Joy lucky bags with instant foods and beverages. The participating gas stations also introduced agricultural products from poverty-stricken areas for migrant workers to choose, bringing convenience to home-going cyclers’ grocery purchase for the Spring Festival while contributing to poverty reduction efforts. In the process, Sinopec chose partners with strict standards so that high-quality and trustworthy caring products can be delivered to home-going migrant workers.

Bringing warmth to the road home across provincial borders

To make the road home easier, the number of participating gas stations increased from 10 to 14, expanding free fueling services from 10,000 to 11,000 times. The services covered an area measuring close to 1 million square kilometers in five provincial-level regions of Guangdong, Guangxi, Jiangxi, Guizhou and Hunan. In Guangdong, 10,000 Taiping short-term accident insurance policies, 10,000 sets of safety protective kits made up of raincoat, kneecap and waistcoat, as well as 10,000 Easy Joy lucky bags were presented to motorcyclists.

Opening 15 free bus lines to escort vulnerable groups home

Partnering with Guangdong Yuyuen Transportation Company, Sinopec opened 15 free bus lines for vulnerable groups including the old, young and pregnant people with financial difficulties, and six dedicated shuttle routes to railway stations for college students from poor families to make their way home easier and safer. In addition, Sinopec worked with the office of Guangxi Zhuang Autonomous Region in Guangzhou and arranged buses to escort migrant workers arriving in Guangxi to return their rural homes.

Coordinating free rides home

In 2020, the "Gas Station That Cares • A Better Road Home" program partnered with Sinopec Great Wall Lubricant Company and the charity of Free Ride Home and launched "Free Ride Home for Spring Festival" event. Car owners can log on the mini app of "Free Ride Home" and recruit riders. Sinopec also worked with Guangdong EMS to provide free mail delivery services for home-going motorcyclists. Since the cooperation began in 2017, the service had delivered a total of 500 tons of luggage for 30,000 migrant workers, greatly alleviating their burdens on the way home.

5,000 volunteers offering services over 40 straight days

In 2020, Sinopec and the Guangdong provincial branch of the Communist Youth League mobilized more than 5,000 volunteers to offer services for home-going migrant workers at gas stations during the 40-day Spring Festival travel rush. Most of the volunteers were employees of Sinopec gas stations. Others include deputies to the National People’s Congress, former motorcyclists, friends of migrant workers, officials working on the frontline of poverty fight as well as those who had got rid of poverty.

6 million social media users pass on love

Sinopec and its Guangdong Oil Products Company released registration notice for the volunteer services on social media platforms including WeChat, Sina Weibo and TikTok so that more people could learn about the program. The posts attracted the attention of more than 6 million social media users. In addition, it launched a microfilm titled “Love, For Everyone,” and an HS interaction game offering guidelines for self-protection during the Spring Festival. They were widely circulated online by Internet users, reaching more people who need such information.

So far, the ‘Gas Station That Cares • A Better Road Home’ program has become a platform integrating philanthropic resources and caring for migrant workers. It injects vitality to migrant workers and brings warmth to their way home.

—— Tang Rui, deputy secretary of the Guangdong provincial branch of the Communist Youth League

The "Gas Station That Cares • A Better Road Home" program by Sinopec has provided services during the Spring Festival travel rush for eight years in a row. Over the years, it has served more than 3.2 million home-going motorcyclists and 4,200 home-going people during the Spring Festival travel rush. More than 40,000 volunteers participated in the program. With eight years of development, the program has grown to be domestically leading charitable brand. It has won international and domestic awards including the SABRE Awards, the Gold Standard Award for Regional Corporate Citizenship in Asia and the Silver Award of China Youth Voluntary Program.
### Fulfilling CSR Overseas for Common Prosperity

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North America

In North America, Sinopec has made full use of its business advantages in oil and gas exploration and development, international trade and so on, to actively carry out cooperation with the United States in crude oil trade, and with Canada in oil and gas exploration and development, providing high-quality energy for local economic and social development. In this process, we have abided by international conventions, local laws and regulations, and paid taxes and fees in accordance with the law. We have attached importance to employment localization, workplace safety and environmental protection. We have actively carried out public welfare activities such as charitable donation, community donation and public welfare sponsorship, and promoted cultural communication and integration.

Case: Sinopec Canada Sets Two Records in Wapiti8-32 Well Drilling

In May 2019, Sinopec International Petroleum Exploration and Production Corporation (SIPC) Canada Company successfully concluded the drilling of Wapiti8-32 Well of the Daylight Project at 6,435 meters with a 3,513-meter-long horizontal segment, setting two records of the longest horizontal segment and the deepest horizontal well for the project.

For a long time, the block benefits of the Daylight Project tight gas has been a priority of development. In 2019, the company took the initiative to promote the development and evaluation of Wapiti Montney in an orderly manner by intervening in advance, strengthening process control, combination of geology with engineering, interdisciplinary joint review and active on-site guidance. Efforts were made in quality resources for the core area, optimization of craft and technology, cost reduction and synergy for the favorable results in rolling evaluation and cost reduction. The successful conclusion of the drilling of Wapiti32 Well laid an important foundation for the further development and evaluation of Wapiti Montney and the execution of long horizontal well volume fracturing. SIPC Canada will summarize the successful experiences in order to continuously improve quality and efficiency and make new contributions to the development of Wapiti block benefits.

Europe

In Europe, Sinopec has cooperated with its partners in crude oil trade, chemical products trade and petrochemical engineering, so as to realize resource sharing, mutually-beneficial cooperation and win-win results. While promoting the development of overseas business, Sinopec has actively implemented the requirements of the UN SDGs, fulfilled CSR overseas, and promoted the common sustainable development of our enterprise with the local economy, society and environment. In November 2019, Sinopec signed a cooperation memorandum with the French Liquefied Air Group and formally launched the first hydrogen energy cooperation project in Shanghai 13 days after the signing of the memorandum, opening a new chapter in clean energy cooperation between China and France.

Case: Sinopec and Imperial College London Jointly Establish an Academy

In November 2019, the Sinopec-Imperial College London Resource Geophysics Academy was officially established, expected to carry out world-class scientific research in related frontier fields, strengthen the cooperation among businesses, universities and research institutions, promote the commercialization of research outcomes, and make new contributions to the development of global energy and chemical industry.

With the establishment of this academy, the two sides will deepen cooperation on academic exchanges, joint research and training of high-level talents in the field of geophysics, in order to promote the transformation of advanced scientific and technological achievements into real productivity. They will also conduct high-level research in related professional fields such as geophysics, information engineering and chemical engineering to upgrade the cooperation between the two sides and make new contributions to the technological progress and transformation of the global energy and chemical industry.

Middle East

The Middle East is a region rich in petroleum resources. Regional countries such as Saudi Arabia and Kuwait are nodes on the central route of the Belt and Road, as well as a focus of China’s energy cooperation. Sinopec has carried out cooperation in this region in oil and gas resources investment, oilfield service, refining and petrochemical engineering service, crude oil trade, etc. Meanwhile, we have brought into play our advantages in technology and resources to promote local industrial upgrading and transformation from resources-exporters to resources-processors for added value. In our business operation in this region, we have advocated that employees from different cultural backgrounds respect each other’s religious beliefs, local customs and personal values. We have also advocated environmental protection, public welfare and charity, in order to create a favorable social environment.

Case: Sinopec-built Main Unit of the Largest Refinery in the Middle East Completed

In December 2019, the Sinopec-contracted construction of the main unit of Al-Zour Refinery in Kuwait, the largest of its kind in the Middle East, was completed, becoming a new model of China-Kuwait cooperation.

Al-Zour Refinery is the largest refinery in the world now with a lump-sum investment of US$12.9 billion. Its main products include gasoline, diesel and kerosene, with an annual processing capacity of 31.5 million tons, the quality of which meets European V emission standards. The commercial operation of the refinery will make Kuwait the largest producer of clean oil products in the Middle East with high value-added and high-quality clean fuel for the global market, which will be a landmark in facilitating the country’s economic transformation.

The project relied heavily on local resources for electrical equipment and instrumentation. A number of local subcontractors participated in the construction of the project. The purchase of equipment such as substations alone cost US$150 million, which has driven the progress of Kuwait's manufacturing industry and promoted local economic development. At the same time, the project provided a large number of jobs. Since the beginning of the project, a total of 100 million man-hours have been employed, which has promoted the employment of the local work force as well as those from neighboring countries.

Sinopec is a very trustworthy partner. They are very professional and hard working. I hope they will continue to participate in Kuwait's petrochemical industry.

—— Usama Ali, Project Representative of Kuwait, Project Manager of Al-Zour Refinery, Kuwait

Integrated Petroleum Industries Company (KIPIC)

Through years of hard work, thousands of Chinese workers not only completed the project ahead of schedule, but also ensured the quality of the project. It was amazing.

—— Christopher Smith, Kuwaiti Project Quality and Technical Engineering Supervisor
Central Asia-Russia

In Central Asia and Russia, Sinopec’s business involves oil and gas resources investment, oilfield service, refining and petrochemical engineering service, crude oil trade, and so on, to transform the region’s resource advantages into economic advantages and promote local economic and social development. In this process of enhanced cooperation, Sinopec has actively fulfilled its CSR, strictly abided by international rules, and attached great importance to public welfare and charity, as well as environmental protection, to achieve win-win cooperation results.

The pragmatic cooperation between China and Russia in the field of energy not only benefits Russia’s economic and social development, but also improves China’s energy structure and ensures its energy security. Sinopec has given full play to its business advantages in its active cooperation with Russia in all aspects of energy from upstream to midstream and downstream, which has promoted the energy cooperation between the two countries to a new level.

Case: Sinopec’s Energy Cooperation with Russia Reaches New Height

The pragmatic cooperation between China and Russia in the field of energy not only benefits Russia’s economic and social development, but also improves China’s energy structure and ensures its energy security. Sinopec has given full play to its business advantages in its active cooperation with Russia in all aspects of energy from upstream to midstream and downstream, which has promoted the energy cooperation between the two countries to a new level.

China and Russia will establish a joint venture in natural gas trading

In June 2019, Sinopec signed a key terms agreement with Novatek to establish a joint venture in natural gas trading in China. Under the agreement, the joint venture will purchase Liquefied Natural Gas (LNG) from Novatek’s portfolio and sell it to end customers in the Chinese market.

Sinopec signs a project cooperation agreement with Sibur

In September 2019, Sinopec signed a memorandum of understanding on the cooperation project of nitrile butadiene rubber (NBR) and a cooperation framework agreement on the project of hydrogenated styrene-butadiene block copolymer (SEBS) with Russia’s Sibur Holding. According to the document, Sinopec and Sibur will set up a joint venture for the production of NBR with a capacity of 50,000 tons per year in China and a unit for the production of SEBS with a capacity of no less than 20,000 tons per year in Russia.

South America

In South America, Sinopec’s main business is oil and gas exploration and development in six countries and regions, with 10 ongoing projects. The company has persisted in expatriate localization to provide more jobs for local population. We have carried out infrastructure construction to help improve people’s livelihood. We have adhered to safety and environmental protection standards to protect the ecological environment. We have also carried out social welfare activities and cared for vulnerable groups to build harmonious oilfields.

Asia-Pacific

In the Asia-Pacific Region, Sinopec has carried out business cooperation with numerous countries such as Malaysia, Singapore, Indonesia, Bangladesh, Pakistan and Australia in oil and gas exploration and development, oilfield service, refining and petrochemical engineering service, oil sales service, chemical product sales service, petrol station retail service, international trade, for win-win development. The company has actively advocated green low-carbon development, expatriate localization and social welfare, with hopes to deepen the friendship between the people of China and other countries and promote local economic and social development.
Case: "Easy Joy-Zhuoma Spring" Successfully Launched in Singapore

On August 9, 2019, the National Day of Singapore, Sinopec’s "Easy Joy-Zhuoma Spring" Tibetan glacial water hit shelves in the supermarkets of Singapore’s National Trade Union Congress (NTUC), the largest retail chain supermarket group in the country. The move further expanded the company’s non-oil sales and enhanced its business growth space.

With the strong support from the company, Sinopec’s retail sales team in Singapore carried out a series of investigation, negotiation and calculation before making the final decision to cooperate with NTUC to introduce "Easy Joy-Zhuoma Spring" to the local market with its sales network and brand impact, allowing more Singaporeans to have the opportunity to drink the natural glacial water from the Tanggula Mountains of Tibet, which is more than 5,000 meters above sea level.

In addition, Sinopec’s business in Singapore includes gas stations and lubricating grease, providing quality energy for local economic and social development.

Case: World’s Largest Crude Distillation Unit to Help Nigeria Upgrade Its Refining Capacity

In July 2019, the world’s largest integrated crude distillation unit was rolled on a ship at Xincun Port in Zhejiang Province headed to Nigeria. The cylinder of the unit is 12 meters in diameter and 112.56 meters in length. The whole unit is 2,252 tons in weight as a mega distillation equipment with a record diameter, length and weight among all of the equipment exported from China. The unit is going to be installed at Nigeria’s Dangote Refinery, currently the world’s largest single series atmospheric/vacuum distillation plant with a capacity of 32.50 million tons per year.

The Ningbo Company of Sinopec Engineering (Group) Co., Ltd. (SIEG) is responsible for the manufacturing of nine crude distillation units for Dangote Refinery. The total weight of the units is 7,960 tons, with four of them weighing more than 1,000 tons. After a year of manufacturing and processing, the company has completed all the work on the nine mega units at its production bases in Xiangshan and Zhejiang, and handed them over to the owner in batches. The installation and operation of these units will further upgrade in refining capacity of Dangote Refinery.

Case: Sinopec Demonstrates Its CSR in Ghana

Since entering Ghana in 2013, Sinopec’s Zhongyuan Oilfield Natural Gas Purification Plant has provided support for the commissioning and operation of Ghana’s Gas Purification Plant with its superb technology and excellent service. Meanwhile, the project administration department has respected the living habits of the local people, cared for every Ghanaian in need, and actively fulfilled its CSR. During its operation in Ghana, the project administration department has donated more than 1,600 pieces of clothing to the local residents, schools and kindergartens, and more than 300 pieces of school bags, football and other stationery and sports accessories. It has also actively organized its staff to teach Tai Chi and Chinese at local schools. When the local residents meet with the staff of the administration department, they would greet with "nihao" in Chinese, and the local children would chant "Hi, China!"

Case: Providing Hong Kong Residents Energy for a Better Life

Sinopec has actively fulfilled its CSR in Hong Kong and contributed to the sustainable development of Hong Kong in various fields such as environmental protection, education and charity. Sinopec Hong Kong has for nine consecutive years been awarded the title of "Caring Company" by the Hong Kong Council of Social Service (HKCSS).

Eight Years of "Beach Care" for Environmental Sustainability

In April 2019, Sinopec Hong Kong Representative Office organized a "Beach Care" operation. Thirty staff members and their family members, as well as 30 volunteers, visited Hong Kong’s Little Palm Beach to collect garbage. After more than two hours of hard work, they sorted out the garbage they had collected and handed over the recyclable waste to a local dealer for further treatment.

The members of "Hong Kong Beach and Country Park Care Team" affiliated with Sinopec (Hong Kong) Petrol Filling Station Company have carried out a number of environmental protection publicity and beach care activities in their spare time. They have made voluntary caring trips to Cheung Chau Island, Lamma Island, Lung Chau Island, Lung Keu Tan, Tai Lam Country Park, Sai Kung Bay, Ma On Shan, and so on, with the participation of 1,300 person-time. It has become Sinopec’s brand public welfare organization in Hong Kong with a good image of corporate social responsibility.

Sinopec Hong Kong hosts "Sinopec Public Open Day"

In August 2019, Sinopec Hong Kong hosted a "Sinopec Public Open Day" with the theme of "Smart Energy for Better Life" at Hong Kong Tsing Yi Oil Depot. In a lively manner, visitors were informed of the whole process of oil exploration, exploitation, refining and marketing. They were also informed of the company’s management philosophy and business model in the whole process of oil products transportation, sale and storage, including quality control, anti-leakage and anti-fouling, safety guarantee, etc. With this "Open Day" event, visitors got a full picture of Sinopec’s "smart energy" and its pursuit for "better life."

Hong Kong staff visit Xiongan New Area to witness the development of the motherland

In September 2019, Sinopec organized a trip to the mainland for its staff members in Hong Kong. In Xiongan New Area, they visited the overall planning exhibition, the civic center and Sinopec’s geothermal project. They also visited the Tunnel Warfare Site in Ranzhuang and the War of Resistance Against Japanese Aggression Memorial in Baiyangdian. In Beijing, they visited the Badaling Section of the Great Wall, the Bird’s Nest (Beijing National Stadium), and other attractions. With these visits, the Hong Kong staff members got a better understanding of the country’s past and present. During the trip, the visitors were pleasantly caught in a flash mob of My Homeland and I. They joined others in singing the patriotic song with proud smiles on their faces.

Hong Kong, Macao and Taiwan

In Hong Kong, Macao and Taiwan, Sinopec mainly carries out the wholesale and retail business of gasoline, diesel, liquefied gas and fuel oil, and the trade of all kinds of refined oil. By 2019, the company possesses 49 petrol (gas) stations and two oil depots in Hong Kong to provide energy support for its development. We have paid taxes and fees according to law, with a contribution of over HK$200 million per year. We have employed local professionals, with 838 local employees in the region. We have also carried out various public welfare projects and organized a staff volunteer team to participate in environmental protection activities and contribute to regional harmony.
Sinopec has conscientiously carried out the decisions and plans of the CPC Central Committee and taken an active part in the construction of the Belt and Road. We have carried out mutually-beneficial cooperation with 26 countries along the route in the fields of oil and gas investment, refining and storage investment, petroleum and petrochemical engineering service, trade in chemical products and equipment, and so on, shaping a long-term, beneficial and sustainable cooperation model. A number of demonstration projects, such as Yanbu Refinery in Saudi Arabia, Sibur Refinery in Russia, and Al-Zour Refinery in Kuwait, have been built.

Saudi Arabia is an important hub in the blueprint of the Belt and Road Initiative (BRI). Saudi Arabia has been China’s largest trading partner in West Asia and Africa for 13 years in a row, while China has been Saudi Arabia’s largest trading partner for six years in a row. Over the last 19 years of business operation in Saudi Arabia, Sinopec has always abided by the principle of “mutual benefit and win-win cooperation” to help the country with its industrial development and economic diversification. Meanwhile, we have actively performed our CSR and contributed wisdom and strength to the realization of Saudi Arabia’s Vision 2030.

### Energy Supply Contributes to Saudi Arabia’s Economic Transformation

With the world’s leading refining and chemical technology, equipment and oilfield service capabilities, Sinopec has been committed to developing broader and more in-depth cooperation with its Saudi partners. Yanbu Refinery is a joint venture of Sinopec and Saudi Aramco with a total investment of US$8.6 billion and an annual processing capacity of approximately 20 million tons. It is one of the largest refineries in the world and one of China’s largest investment projects in Saudi Arabia, the Middle East and the Gulf region at large. The successfully launch and operation of the refinery has provided a strong impetus for Saudi Arabia’s economic transformation and upgrading. It is a new achievement of the long-term cooperation between the two countries in the field of energy and an important embodiment of the mutually-beneficial cooperative relationship between them.

### Joining Hands with Saudi Arabia to Build a Model of Belt and Road Cooperation

The successful launch of Yanbu Refinery, a demonstration project of China-Saudi Arabia energy cooperation, has contributed to Saudi Arabia’s economic transformation and upgrading. With the strengthening of cooperation between the two sides, Sinopec’s investment and operation in Saudi Arabia has gradually evolved from the cooperation in resources and capital to the cooperation in research and development for innovation. Sinopec’s Middle East R & D Center at Dhahran Technology Valley (DTV) in Saudi Arabia, which focuses on the research and development of fundamental, forward-looking and applied technology, will continue to boost the petroleum and petrochemical industry of Saudi Arabia.

### Fulfilling CSR to Promote Saudi Arabia’s Social Development

While promoting its production and business operation in Saudi Arabia, Sinopec has actively performed its CSR. We have adhered to the highest standards of HSE management and local laws and regulations. We have been committed to the protection of the ecological environment and biodiversity with strict classification of industrial and domestic waste to reduce the impact of production and operation on the local environment. We have persisted in the localization of employment and the protection of the legitimate rights and interests of our employees, including career development. We have promoted communication with the local communities and cultural exchanges between our peoples by launching a pilot project of “Silk Road Bookshelf” and a “Ramadan Charity Donation.” We have been active in public welfare activities to provide support and assistance within our capability to the local vulnerable groups to improve their lives in the desert.

In January 2016, Chinese President Xi Jinping attends the launch ceremony of Yanbu Refinery together with Saudi King Salman bin Abdulaziz Al Saud during his visit to Saudi Arabia.

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**Feature**

**Fulfilling CSR to Promote Saudi Arabia’s Social Development**

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**2019**

- Sinopec Oilfield Service Corporation’s SP103, Sino-18 teams won Saudi Aramco’s award for 12 consecutive years without LTI (Lost Time Injury)
- An average of more than 3 million yuan a year for the disposal of all kinds of garbage

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**Communication with Saudi stakeholders tells Sinopec’s stories**

Sinopec has actively communicated with the stakeholders in Saudi Arabia. SINOPEC in Saudi Arabia: Sustainability Report on Serving the Construction of the Belt and Road was released to disclose relevant information on the company’s fulfillment of its economic, safety, environmental and social responsibilities. On “Sinopec Public Open Day,” stakeholders were invited to the company to be informed of its philosophy and performance. On social media platforms such as Facebook, Twitter, YouTube and Instagram, “Sinopec in Saudi Arabia” official accounts have been launched. All of the efforts have told stories of Sinopec’s business operation and CSR fulfillment in Saudi Arabia, conveying to the world voices from China.

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**In January 2016, Chinese President Xi Jinping attends the launch ceremony of Yanbu Refinery together with Saudi King Salman bin Abdulaziz Al Saud during his visit to Saudi Arabia.**
Pursuing Sustainable Development through CSR Management

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CSR Organization

Sinopec’s Corporate Social Responsibility Committee, the CSR decision-making body of the company, is mainly in charge of planning and coordinating CSR work, making relevant policies, and reviewing relevant documents. Sinopec is the first Chinese centrally-administered SOE that has established such a committee under its Board of Directors.

Under the Corporate Social Responsibility Committee is a CSR Office affiliated with the Publicity Department. The office is mainly responsible for the planning, coordination and promotion of CSR strategic planning and specific affairs, the compilation and publication of CSR reports, as well as CSR communication, publicity and research. Each department in the headquarters is responsible for part of CSR work based on functional division. Each subsidiary (enterprise) has set up a CSR management body to promote CSR practice and ensure the work is carried out smoothly.

Sinopec CSR Governance Structure

CSR Planning

Sinopec formulated and issued its 13th Five-Year Plan on Corporate Social Responsibility, striving to promote CSR work in six areas, namely basic management, CSR integration, overseas CSR performance, public welfare and charity, transparent operation and capacity building. Its aim is to achieve better management, greater ability to fulfil responsibilities and better corporate image by the end of the 13th Five-Year Plan period (2016-2020), so as to provide support and guarantee for Sinopec’s efforts to build a world-leading company specializing in clean energy and synthetic materials and make positive contributions to promoting higher quality, more efficient, fairer and more sustainable economic and social development.

CSR System

Sinopec has formulated and issued the Measures for the Management of Corporate Social Responsibility. Work and established and improved relevant mechanisms to promote the institutionalization and normalization of the company’s CSR work and enhance effective management of the CSR work of all departments and subsidiaries under the group.

CSR Governance

Upholding our mission of “providing better energy for better living,” Sinopec also makes this our philosophy of corporate social responsibility. We incorporate the “people-oriented, low-carbon and win-win cooperation” principles into corporate management and daily operation, aiming to meet the needs of all parties concerned to the maximum extent and form a CSR culture system with our own characteristics.

CSR Philosophy

Adhering to the path of green, low-carbon sustainable development and accelerating the forming of an industrial structure and production methods that are conducive to resource conservation and environmental protection, in an effort to contribute to the promotion of ecological civilization;

Making the people’s aspiration to live a better life the focus of the company’s development and committed to providing more advanced technology, higher quality products and more thoughtful services to help fuel the development of society;

Adhering to the philosophy of “serving the country, the people and the greater good of mankind” through win-win cooperation, with an aim to bring benefit to all stakeholders while seeking continuous business growth.
CSR Integration

To better incorporate its CSR philosophy into corporate management and business operation, Sinopec has compiled 20 key CSR issues based on national macro policy guidance, domestic and international social responsibility standards, corporate development strategic planning, social responsibility issues in the energy and oil and gas industries at home and abroad, as well as the focus of public opinion. The company has also worked to embed specific requirements of social responsibility issues into the workflow in light of the functions of respective departments and subsidiary enterprises, in a bid to effectively promote the implementation of social responsibility issues and maximize economic, social and environmental values to achieve common sustainable development.

CSR Issues

Sustainability and CSR management
Risk management
Combating corruption
Energy and chemical products supply
Non-fuel service
Product quality and service
Innovative development
Safe production
Occupational health and safety
Supply chain management
Clean energy supply
Conserving energy and reducing emissions
Responding to climate change
Biodiversity conservation
Focusing on shareholders' equity
Safeguarding employees' interests
Human rights protection
Public welfare, charity and voluntary service
Targeted poverty alleviation
CSR overseas

CSR Performance

Sinopec has incorporated social responsibility work into its assessment system and defined indicators for systematic evaluation. When any problem is detected, modification suggestions and implementation supervision will follow, so as to promote excellence through evaluation.

CSR Assessment Indicators (for example)

Availability of stakeholder communication sessions
Use of public welfare logo
Participation in external CSR evaluations

CSR Capability

By benchmarking the sustainable development work of international oil and gas companies and participating in social responsibility training and social responsibility surveys organized by the State-owned Assets Supervision and Administration Commission of the State Council (SASAC), the State Council Leading Group of Poverty Alleviation and Development and industry organizations, Sinopec learns from advanced companies’ experience in CSR management and practice to improve its social responsibility management and work.

In 2019, Sinopec joined hands with the Chinese Academy of Social Sciences, the Responsible Cloud Research Institute and LG Chem (China) Investment Co., Ltd. to compile and publish Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises – Petrochemical Industry (CASS-CSR4.0) to provide a standard reference for CSR report compilation by enterprises in the petrochemical industry and promote the CSR development of Chinese enterprises.
CSR Communication

Sinopec attaches great importance to the communication with stakeholders. We conduct in-depth studies of the needs and expectations of the parties concerned before translating them into part of our development goals and plans. In the meantime, we work to expand and diversify communication channels to disseminate our CSR philosophy and practice in a timely and effective manner to create a brand image as a responsible company.

- **"1+1" reporting system**
  - Sinopec Report on Corporate Social Responsibility 2018
  - Sinopec Report on Poverty Alleviation through Consumption
  - Sinopec Report on Saving Sustainable Development along the Belt and Road – Sinopec in Saudi Arabia

- **Print media outlets**
  - China Petrochemical News (daily paper)
  - Sinopec Monthly magazine

- **Social media platforms**
  - Sinopec News app
  - weibo.com/sinopec (Sinopec official Weibo)
  - www.sinopec.com (Sinopec official website)
  - zgh (Sinopec official TikTok account)
  - Twitter: @SinopecNews
  - Facebook: @Sinopec
  - YouTube channel: Sinopec

- **"Internet Plus" platforms**
  - Sinopec news network: www.sinopecnews.com
  - Sinopec online museum: museum.sinopec.com

- **"Entering Sinopec" series activities**
  - Organized "Public Open Day" activity for 9 consecutive years
  - Organized "Social Supervisors" activity for 9 consecutive years
  - Organized "Media Briefing" activity for 10 consecutive years

- **CSR exchange activities**
  - Attended the Third Beijing CSR Exhibition, the press conference for Research Report on Poverty Alleviation by Chinese Enterprises (2019) and the Seventh CSR Sharing Annual Conference sponsored by China Social Responsibility 100 Forum, and shared experience during the events
  - Attended China Corporate Social Responsibility International Forum organized by China News Service and China Newsweek and shared experience
  - Attended the International Conference on CSR Reporting in China and other events

Case: "Public Open Day" with the Largest Scale—65 Sinopec Subsidiaries in 45 Cities Involved

On April 22, 2019, the 50th World Earth Day, the fourth edition of Sinopec Public Open Day officially kicked off. Sixty-five Sinopec subsidiaries in 45 Chinese cities opened house to the public, attracting nearly 3,000 visitors to the venues alongside some 23 million netizens watching the event live online. So far the first Public Open Day of a central enterprise to have built up brand recognition and the largest in scale among such events of Chinese industrial enterprises, Sinopec Public Open Day demonstrated Sinopec’s image as an innovative, eco-friendly and open enterprise, served as a bridge of communication between the public and the company, allowed the public to gain a better understanding and recognition of Sinopec, and helped expand the influence and reputation of the company.

Sinopec Public Open Day has been observed for nine years in a row, attracting more than 100,000 participants. The event has won a China Outstanding Corporate Culture Award (Asia-Pacific), the highest honor in international public relations community.

Visitors admire the koi carp swimming in the recycled water pool of Sinopec’s Guangzhou sewage treatment plant.
Forging a CSR Model to Perform Obligations

Practicing corporate social responsibility has become an international consensus and an important business norm. As a multinational corporation, Sinopec has been active in practicing social responsibility and making CSR part of its management philosophy, development strategy, production operation and corporate culture. The company continuously strengthens CSR management, explores CSR practices, increasing CSR communication, and gives full play to its irreplaceable role in driving economic, social and environmentally sustainable development, making its due contribution to building a better world and a better future.

CSR Model

- **CSR Philosophy**
- **CSR Organization**
  - Corporate mission: Better Energy for Better Living
  - CSR governance organization
- **CSR Planning**
  - 13th Five-Year Plan on Corporate Social Responsibility
- **CSR System**
  - CSR work management method
  - CSR benchmarking
  - CSR training
  - CSR research
  - CSR performance included in assessment

- **Issue Practice**
- **Stakeholders**
  - Government, shareholders, clients, employees, partners, relevant organizations, nongovernmental organizations, communities and the public

- **CSR Performance**
  - ESG
  - CSR performance included in assessment

- **CSR Capability**
  - ESG
  - CSR work management method

According to the Blue Book of Corporate Social Responsibility (2019) released by the Chinese Academy of Social Sciences, Sinopec’s social responsibility development index reached five-star level, ranking first in China’s petrochemical industry. For nine years in a row, we have won the “Responsible Enterprise Award” granted by China News Service and China Newsweek. For 15 years in a row, we have won the “Bright Meritorious Service Special Award” issued by China Health Express Foundation. For eight years in a row, we have been honored as a “China Low-Carbon Model.” Sinopec’s CSR work has won recognition and praise from all walks of life, which will further inspire the company to better fulfill its social responsibility and create a better life for all!
Future Prospects

2020 is a landmark year for realizing China's first Centenary Goal of completing the building of a moderately prosperous society in all aspects. Sinopec will usher in a year of decisive victory in achieving comprehensive sustainable development, a year of deepening reform, and a year of building foundations for high-quality development.

Sinopec will continue to follow Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, seize the day and live it to the fullest, and pursue progress while ensuring stability to deliver better performances and make greater contributions to the building of a moderately prosperous society in all aspects.
## Appendix

### Key Performances

#### Economic Performance

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<th>Indicator</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
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<tr>
<td>Total Assets (100 million yuan)</td>
<td>22,567</td>
<td>22,601</td>
<td>22,117</td>
</tr>
<tr>
<td>Operating Revenue (100 million yuan)</td>
<td>24,003</td>
<td>29,368</td>
<td>30,034</td>
</tr>
<tr>
<td>Taxes and Fees Paid (100 million yuan)</td>
<td>3,623</td>
<td>3,581</td>
<td>3,222</td>
</tr>
<tr>
<td>Domestic Crude Oil Production (10,000 tons)</td>
<td>3,505</td>
<td>3,506</td>
<td>3,513</td>
</tr>
<tr>
<td>Domestic Natural Gas Production (100 million cubic meters)</td>
<td>257</td>
<td>276</td>
<td>296</td>
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<tr>
<td>Overseas Equity Oil and Gas Equivalent (10,000 tons)</td>
<td>4,372</td>
<td>4,258</td>
<td>4,252</td>
</tr>
<tr>
<td>Crude Oil Processing Capacity (10,000 tons)</td>
<td>24,012</td>
<td>24,597</td>
<td>25,041</td>
</tr>
<tr>
<td>Number of Sinopec Petrol Stations</td>
<td>30,633</td>
<td>30,661</td>
<td>30,702</td>
</tr>
<tr>
<td>Handling of Petroleum Products (10,000 tons)</td>
<td>23,121</td>
<td>23,769</td>
<td>25,495</td>
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<tr>
<td>Ethylene Production (10,000 tons/year)</td>
<td>1,161</td>
<td>1,151</td>
<td>1,129</td>
</tr>
<tr>
<td>Handling of Chemical Products (10,000 tons)</td>
<td>7,850</td>
<td>8,660</td>
<td>8,581</td>
</tr>
<tr>
<td>Refined Oil Customer Complaint Handling Rate (%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Lubricating Oil Customer Loyalty (%)</td>
<td>93</td>
<td>93.5</td>
<td>93</td>
</tr>
<tr>
<td>Chemical Products Customer Complaint Handling Rate (%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
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<tr>
<td>Number of Patents Applied Home and Abroad</td>
<td>6,830</td>
<td>7,184</td>
<td>7,439</td>
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<tr>
<td>Number of Patents Granted Home and Abroad</td>
<td>4,239</td>
<td>5,241</td>
<td>4,843</td>
</tr>
<tr>
<td>Energy Saving Rate (%)</td>
<td>1.43</td>
<td>0.86</td>
<td>1.11</td>
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<tr>
<td>Industrial Water Intake Compared with the Same Period Last Year (%)</td>
<td>-1.27</td>
<td>-1.1</td>
<td>-1.1</td>
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#### Environmental Performance

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<th>2018</th>
<th>2019</th>
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<tbody>
<tr>
<td>Effluent Waste Water Compliance Rate (%)</td>
<td>99.9</td>
<td>99.9</td>
<td>99.9</td>
</tr>
<tr>
<td>Carbon Trading Volume (10,000 tons)</td>
<td>318</td>
<td>372</td>
<td>269</td>
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#### Social Performance

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<td>Collective Contract Coverage Rate (%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
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<tr>
<td>Labor Contract Signing Rate (%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Social Security System Participation Rate (%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Social Security System Premiums Rate (%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Percentage of Ethnic Minority Employees (%)</td>
<td>3.2</td>
<td>3.2</td>
<td>3.1</td>
</tr>
<tr>
<td>Percentage of Female Employees (%)</td>
<td>33.7</td>
<td>33.0</td>
<td>31.9</td>
</tr>
<tr>
<td>Percentage of Female Managers (%)</td>
<td>12.8</td>
<td>12.6</td>
<td>12.4</td>
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<tr>
<td>Percentage of Employees Joining Trade Union (%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Employee Occupational Health Examination Rate (%)</td>
<td>99.0</td>
<td>99.0</td>
<td>99.0</td>
</tr>
<tr>
<td>Medical Examination and Health Records Coverage Rate (%)</td>
<td>99.0</td>
<td>99.0</td>
<td>99.0</td>
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<tr>
<td>Social Donations (100 million yuan)</td>
<td>2.98</td>
<td>2.73</td>
<td>0.08</td>
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<tr>
<td>Assistance for Tibet and Qinghai Funds (headquarters) (10,000 yuan)</td>
<td>4,334</td>
<td>4,270</td>
<td>4,573</td>
</tr>
<tr>
<td>Targeted Poverty Alleviation Funds (headquarters) (10,000 yuan)</td>
<td>9,292</td>
<td>10,719</td>
<td>11,927</td>
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<tr>
<td>Assistance for Impoverished Students (persons)</td>
<td>1,025</td>
<td>2,028</td>
<td>2,053</td>
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## Future Prospects

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**Corporate Social Responsibility Report 2019**

China Petrochemical Corporation
Rating Report

Rating Report on Sinopec Corporate Social Responsibility Report 2019

Entrusted by the Sinopec Group, a panel of experts of the Chinese CSR Report Rating Expert Committee has conducted the rating on the Sinopec Corporate Social Responsibility Report 2019 ("the Report" for short).

I. Rating Basis

II. Rating Process
1. The panel reviews and confirms The CSR Report Procedural Information Confirmation Document and relevant supporting material presented by the compilation team of the report.
2. The panel assesses the preparation process and discloses contents of the report and prepares the rating report.
3. The vice chairman of the Expert Committee, based on the panel and members of the panel jointly review and approve the rating report.

III. Rating Conclusion

1. Readability (★★★★★)
The report continues with the theme of “Better Energy for Better Living”, systematically presenting Sinopec’s CSR practice and major achievements in six dimensions, namely energy and chemicals, green and low-carbon, partnership, social contribution, overseas CSR performance and CSR management, which responds to the expectations and requirements of stakeholders as well as reflects the company’s thorough understanding of social responsibility. The cover design continues the national trendy style and incorporates elements of the company’s main business sectors including ecological protection, poverty alleviation and social audits, which improves the identification and vividness of the report. The “Feature” section, starting the end of each chapter focuses on relevant highlight projects, and the attached QR codes allow for extended reading to strengthen effective dissemination and communication of the report. All this shows excellent readability and performance.

2. Innovation (★★★★★)
The report actively responded to the United Nations Sustainable Development Goals (SDGs), following a strong sense of times. The release of country-specific report SINOPEC in Saudi Arabia: Sustainability Report on Serving the Construction of the Belt and Road and Sinopec Report on Poverty Alleviation through Consumption, the first such report by a central enterprise, reflects Sinopec’s report system and highlights the central enterprise’s sense of mission as a passport. The company’s publication of Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises (CASS-CSR 4.0) — Petrochemical Industry can help improve its CSR management and promote sustainable development of the industry. All this shows excellent innovation performance.

3. Overall Evaluation

The report systematically elaborates on the key issues of the petrochemical industry, such as the implementation of macroeconomic policies, energy and chemical products supply, occupational health management, production safety, product safety, transport safety, scientific and technological innovation, energy saving and emissions reduction, circular economy, response to climate change, strategy of protection and supply chain responsibility, with excellent substantive performance.

The report provides high-quality guidance for Sinopec subsidiaries to compile their respective CSR reports, especially through the reports and strengthens CSR communication. This report is planned to be released in PDF and printed versions, in both Chinese and English, on the official website of Sinopec subsidiaries to compile their respective CSR reports, ensures quality of their CSR management, and improves the company’s CSR management system and CSR image, identifying and promoting the leaders, and prepares the rating report.

The Compilation Group of the report, established with initiation of Sinopec’s CSR Office, coordinated the compilation work and kept control over the key nodes across the process, while the company’s Social Responsibility Committee was responsible for the final approval of the report. The report has been defined as an instrumental tool to improve the company’s CSR management system and CSR image, identifying substantive issues with analysis on national macro policies, domestic and international CSR standards, industry benchmarks, focus of the public opinions and development strategies of the company. The CSR Office also provides guidance for Sinopec subsidiaries to compile their respective CSR reports, retains quality information, and strengthens CSR communication. The report is limited to be released in PDF and printed versions, in both Chinese and English, on the official website of the company, with excellent procedural performance.

The report systematically elaborates on the key issues of the petrochemical industry, such as the implementation of macroeconomic policies, energy and chemical products supply, occupational health management, production safety, product safety, transport safety, scientific and technological innovation, energy saving and emissions reduction, circular economy, response to climate change, strategy of protection and supply chain responsibility, with excellent substantive performance.

In the report, 80.91 percent of the core indicators in the petrochemical industry are systematically disclosed from the aspects of “Meeting People’s Needs for Energy and Chemicals,” “Green and Low-carbon Development for a Beautiful Home,” “Joining Hands with Partners to Create Values in a Win-win Approach,” “Taking Back to Society, Sharing Development Achievements,” “Fulfilling CSR Obligations for Common Prosperity” and “Pursuing Sustainable Development through CSR Management,” with excellent integrity performance.

The report reveals some negative data information such as “number of major safety accidents,” “number of major quality accidents,” “number of overseas public security deaths” and “number of biodiversity damage incidents,” with excellent balance performance.

The report reveals Sinopec’s performance in three consecutive years in 57 indicators such as “Operating Revenue,” “Profit and Costs Paid,” “Energy Saving Rate,” “Volume of Carbon Traded,” “Number of Employees” and “Social Donations.” It also makes a horizontal data comparison through “2nd place on Fortune’s Global 500 List,” “the world’s largest refining capacity” and “the world’s largest carbon trading company,” with excellent comparability performance.

The report systematically elaborates on the key issues of the petrochemical industry, such as the implementation of macroeconomic policies, energy and chemical products supply, occupational health management, production safety, product safety, transport safety, scientific and technological innovation, energy saving and emissions reduction, circular economy, response to climate change, strategy of protection and supply chain responsibility, with excellent substantive performance.

4. Suggestions for Improvement

1. The disclosure of core indicators in the industry could be enhanced to further improve the integrity of the report.

2. Detailed disclosure of deficiencies in CSR Performance could be enhanced to improve the balance of the report.