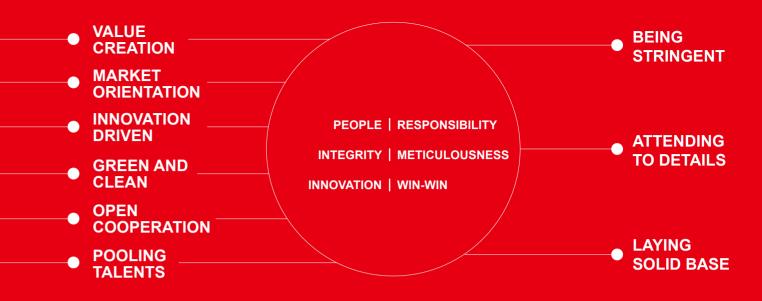


LOVE FOR CHINA PROSPERITY FOR SINOPEC
TO PROVIDE ENERGY FOR BETTER LIFE



BUILDING A WORLD LEADING CLEAN ENERGY AND CHEMICAL COMPANY



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■ About Us

China Petrochemical Corporation (the Company) was established in July 1998 on the basis of the former China Petrochemical Corporation, a move by the central government to strategically restructure the petroleum and petrochemical industry. It was further incorporated as a limited liability corporation in August 2018. A super large petroleum and petrochemical group, the Company has a registered capital of 326.5 billion yuan with the chairman of the board of Sinopec Group serving as its legal representative. Headquartered in Beijing, it exercises the investor's rights to the related state assets owned by its full subsidiaries, controlled companies and share-holding companies, including receiving returns on assets, making major decisions and appointing managers. It operates, manages and supervises state assets according to related laws, and shoulders the corresponding responsibility of maintaining and increasing the value of state assets

Principal businesses of the Company include industrial investment and investment management; petroleum and natural

gas exploration, production, storage and transportation (including pipeline transportation), sales and comprehensive utilization; coal production, sales, storage and transportation; oil refining; storage, transportation, wholesale and retail of oil products; production, sales, storage, transportation of petrochemical products, gasbased chemicals, coal chemical products and other chemical products; production, sales, storage and transportation of energy products such as new energy and geothermal energy; design, consulting, construction and installation of petroleum and petrochemical engineering projects; overhaul and maintenance of petroleum and petrochemical equipment; R&D, manufacturing and sales of electrical and mechanical equipment; production and sale of electricity, steam, water and industrial gas; research, development, application and consulting services of technology, e-commerce, information and alternative energy products; import & export, including import and export agency business of selfsupport products and commodities and technologies; foreign project contracting, bidding and purchasing; international storage and logistics business.

The Company is the largest oil and petrochemical products supplier and the second largest oil and gas producer in China, the largest refining company and the third largest chemical company in the world. Its total number of gas stations ranks the second place in the world. It ranked the 2nd on Fortune's Global 500 List in 2020.



Directors of the Board

Zhang Yuzhuo Ma Yongsheng Zhao Dong

Zhang Yuqing Wang Lili Shi Huan

Chen Yueming Wu Xiandong Yu Xizhi

Senior Management

Zhang Yuzhuo Chairman and Secretary of the Leading Party Member Group

Ma Yongsheng Director, President and Deputy Secretary of the Leading Party

Member Group

Zhao Dong Director, Deputy Secretary of the Leading Party Member Group

Yu Baocai Member of the Leading Party Member Group, Vice President

Jiang Liangping Member of the Leading Party Member Group, Leader of the

Discipline Inspection and Supervision Team

Liu Hongbin Member of the Leading Party Member Group, Vice President

Ling Yigun Member of the Leading Party Member Group, Vice President

Zhang Shaofeng Member of the Leading Party Member Group, Chief Financial Officer

Li Yonglin Member of the Leading Party Member Group, Vice President

■ CHINA PETROCHEMICAL CORPORATION ANNUAL REPORT 2020 Message from the Chairman ■



Zhang Yuzhuo, Chairman

Thank you for your interest in reading our annual report and continued support to our company. 2020 was extraordinary with COVID-19 raging across the globe, international oil prices experiencing historic plunging and numerous risks emerging. Under the strong leadership of the CPC Central Committee with Xi Jinping as the core, to address unprecedented difficulties and challenges, the Company focused on ensuring stability on six key fronts and maintaining security in six key areas with concerted effort, stressed on systemic optimization, defended red lines, converted risks into opportunities and recorded success in both pandemic control and business operations. Despite the year-on-year decrease in oil price by 21 USD per barrel, we recorded a revenue of 2.14 trillion yuan, total profit of 72.62 billion yuan, net profit of 62.05 billion yuan, and total taxes and fees of 299.3 billion yuan in 2020.

We were committed to serving the national needs in critical moments, playing a pillar role. Facing the severe situation of the pandemic, we managed to build a melt-blown fabric manufacturing line in 12 days and became the world's largest melt-blown fabric manufacturer in 76 days, supporting masks production and safeguarding life and health of our employees and the public. We completed the task of assisting poverty alleviation through lifting eight counties out of poverty, the last one being Dongxiang County of Gansu, with 67 subsidiaries engaged in helping 709 villages. We focused on improving quality and securing growth by pushing ahead the campaign to tide over difficulties and increase profit. Effective measures were taken to address the challenges brought by low oil prices and the pandemic. As a result, we recorded better-than-expected performances that outran the overall market, demonstrating our role as anchor and stabilizer.

We further blueprinted our corporate goals and vision based on existing circumstances. Analyz-

ing internal and external environment, we deepened strategic research and wide consultation to formulate a strategy of building world leading corporation with one foundation in energy and resources, two wings of clean fuels and advanced chemicals, and three growth drivers in new energy, new material and new economy. Meanwhile, we focused on value creation, market orientation, innovation driven, green and clean, open cooperation and pooling talents. We are confident on the journey of building a world leading clean energy and chemical company with strong force to realize high quality development.

We made concrete steps in restructuring for business transformation. In China, under the seven-year campaign, oil and gas proven reserves were increased remarkably with oil production stabilized and natural gas output and sales hit new highs, further fulfilling our responsibility in energy security. Overseas, we continued to optimize investment and operations and had positive free cash flow. Refining, marketing businesses and chemical were further strengthened and market leading position further consolidated. We grew significantly the business volume of oil products while securing leading position in the lowsulfur bunker fuel market. We were able to further replace imported materials with domestic production, completed and commissioned the Zhongke refining and chemical project, and progressed with other projects such as Zhenghai site, Hainan ethylene and Phase one of Gulei. Additionally, the transaction of Amur gas chemical project was completed. We recorded progress in new businesses with capital incubators playing an increasing role. We saw accelerated growth in degradable materials, EPEC, Chememall and Easy Joy. We also paced up construction of integrated energy service stations and developed new energy business such as hydrogen, wind, PV, and geothermal in an orderly manner.

We further tapped potential and improved efficiency through reform and innovation. The three-year deepened reform programme was fully rolled out with transfer of assets and personnel attached to related pipeline reform completed, pilot programme for research affiliates implemented, social functions handover basically concluded, and loss-making affiliates' turning around goal further met. Consolidation of subsiaries' properties in Beijing was reinforced. Building a technology-driven company, we headed and made progress in national key R&D projects with breakthroughs in ultra-deep oil and gas exploration and development, ultra-high temperature MWD, and Smart Point seismic acquisition. We broke ground for new type of R&D centers in Zhejiang and Guangdong, and smart operations center. Smart manufacturing pilot and scaling up accelerated and IT/IS foundation for upgrading was strengthened. We stuck to governance and risk management, benchmarking against world leading peers while ZRCC was selected model for SOEs. The three-year production

safety campaign was implemented according to schedule and safety performance was steady. We spared no effort in pollution prevention and control, constantly improving our green development quality.

We strengthened full and rigorous governance over the Party and focused on effectiveness. Striving for top tier in Party building among central SOEs, we emphasized on integrating Party building with business operation and innovated work approach. New progress was made in team building with more effort in training young employees and job rotations. College graduate recruits exceeded 10,000. We improved primary-level Party organizations standardization and informatization work and increased Party building app functions. Supervision was further enhanced with effort made in improving conduct, enforcing discipline and taking tough stance on corruption, yielding good effects. We carried on the good legacy and virtue of the industry, pooling all strengths together in working towards the great undertakings of the Company.

The above achievements would not have been possible without the concerted effort of all our employees. They should also be credited to the support from the central government, all related government departments, all walks of life, and trust from our customers and partners. On behalf of the board of directors, the management team and all employees of the Company, I'd like to send you our sincere appreciation.

2021 will be a milestone year. The Party will celebrate its 100th anniversary and the fourteenth Five-Year Plan period will unfold. At the new starting point, Sinopec will rally more closely around the Party Central Committee with Comrade Xi Jinping at its core, follow the guidance of XiJinping Thought on Socialism with Chinese Characteristics for a New Era, fully implement the guiding principles of the CPC's 19th National Congress and the second, third, fourth and fifth plenary sessions of its 19th Central Committee, forge ahead and overcome difficulties, and strive for the goal of building a world leading clean energy and chemical company, so as to celebrate the centenary of the Communist Party of China with outstanding achievements and contribute to building China into a modern socialist country.

We will continue to strengthen cooperation with partners and look forward to building a better tomorrow with you together.

夏五年

■ CHINA PETROCHEMICAL CORPORATION ANNUAL REPORT 2020 Message from the President ■



Ma Yongsheng, President

In 2020, COVID-19 raged across the world, international oil prices plunged at historic scale, the world economy recessed and market demand shrank, posing unprecedented risks to the Company. Faced with the severe and complex environment, we followed the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, and the leadership of the CPC Central Committee and the State Council, implemented the decisions and strategies by the Company, and stressed on systemic optimization, defending red lines, converting risks into opportunities and succeeded in both pandemic control and business operations. We recorded better-than-expected performances that outran the overall market.

We focused on market and profit improvements, achieving new progress in development quality. Market and profit oriented, we arranged productions and operations accordingly, implemented measures to tide over difficulties and improve profit, increased synergies of the business value chain and hit full-year targets. Despite the year-on-year decrease in oil price by 21 USD per barrel, we recorded a revenue of 2.14 trillion yuan, total profit of 72.62 billion yuan, net profit of 62.05 billion yuan, and total taxes and fees of 299.3 billion yuan in 2020, delivering first tier performance among central SOEs. Domestic oil and gas E&P efficiency was further enhanced according to the seven-year campaign, with natural gas value chain covering production, supply, storage and marketing further improved. In 2020, crude production was 35.14 million tonnes and natural gas output was 30.28 billion cubic meters, break even point further lowered. Outside China, equity production was 36.72 million tonnes of oil equivalent, with continued progress in turning around the previous loss and free cash flow for three consecutive years. Refining

and marketing synergies were further tapped, with crude throughput at 239 million tonnes and domestic oil products business volume at 168 million tonnes. Low-sulfur heavy bunker fuel, asphalt, and lubricants saw significant growth in sales. Chemicals structure continued to optimize with 12.06 million tonnes of ethylene production and 4.94 million tonnes of PX. High added-value products proportion in the three synthetic materials further rose and chemicals business volume reached 83 million tonnes. Oil field services business witnessed increasing weight of external market revenues and petchem engineering services business also saw growth from external market.

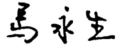
We focused on industrial pattern restructuring and transformation. Sticking to supply side structural reform and the one foundation, two wings and three growth drivers pattern, we continued with investment and industry layout optimization and stressed on improving competitiveness along the value chain. A number of major projects progressed smoothly including capacity building at Shunbei, West Sichuan and Weirong. A host of pipeline and storage and transmission projects were commissioned and commercial crude oil reserve projects in Tianiin. Kuche and Zhanijang were mechanically completed. World-scale refining and chemical sites further progressed, with Zhongke commissioned and Gulei, Zhenhai, Hainan and Jiujiang accelerated. Tianjin, SECCO, Yangzi, Tahe projects were pushed ahead in an orderly manner. New businesses also grew fast with 8 hydrogen stations and 281 e-vehicle charging stations operational, and progress in wind, PV and geothermal. International operations expanded as well. The transaction of Amur gas chemical project was completed, Sibur joint venture recorded successful operations and LNG term contracts were signed. The Company also compiled its development plan and related reports for the fourteenth Five-Year Plan period.

We focused on science and technology innovation and achieved new results. By vigorously implementing innovation driven strategy, we continued to increase R&D input, headed national key R&D projects with breakthroughs in melt-blown fabric and other medical materials, ultra-deep oil and gas exploration and development, functional film, ultra-high temperature MWD, and Smart Point seismic acquisition. High efficiency cat-cracking technology was commercialized, test production of 48K large tow fiber was started and pilot facility for high purity hydrogen for fuel cell use started up successfully. In the year, we filed 7.972 patent applications, and were granted 5,140 patents, won one gold prize, three silver prizes and 6 outstanding prizes. We were also lead winner of one fist prize and three second prizes for National Science and Technology Progress. In addition, we won a second prize for National Technology Invention. As a result, we continued to rank the first among central SOEs in terms of patents capability. We deepened reform to delegate power to subsidiaries, established an innovation incubator

company, unveiled pilot programme for R&D system, and inaugurated a new material research institute in Ningbo. Integration of industrialization and informatization was enhanced with smart model of incorporating field, plants, stations and institutes further promoted, and construction in smart operations centers and cloud system advanced. The supporting role of informatization and digitalization was further strengthened.

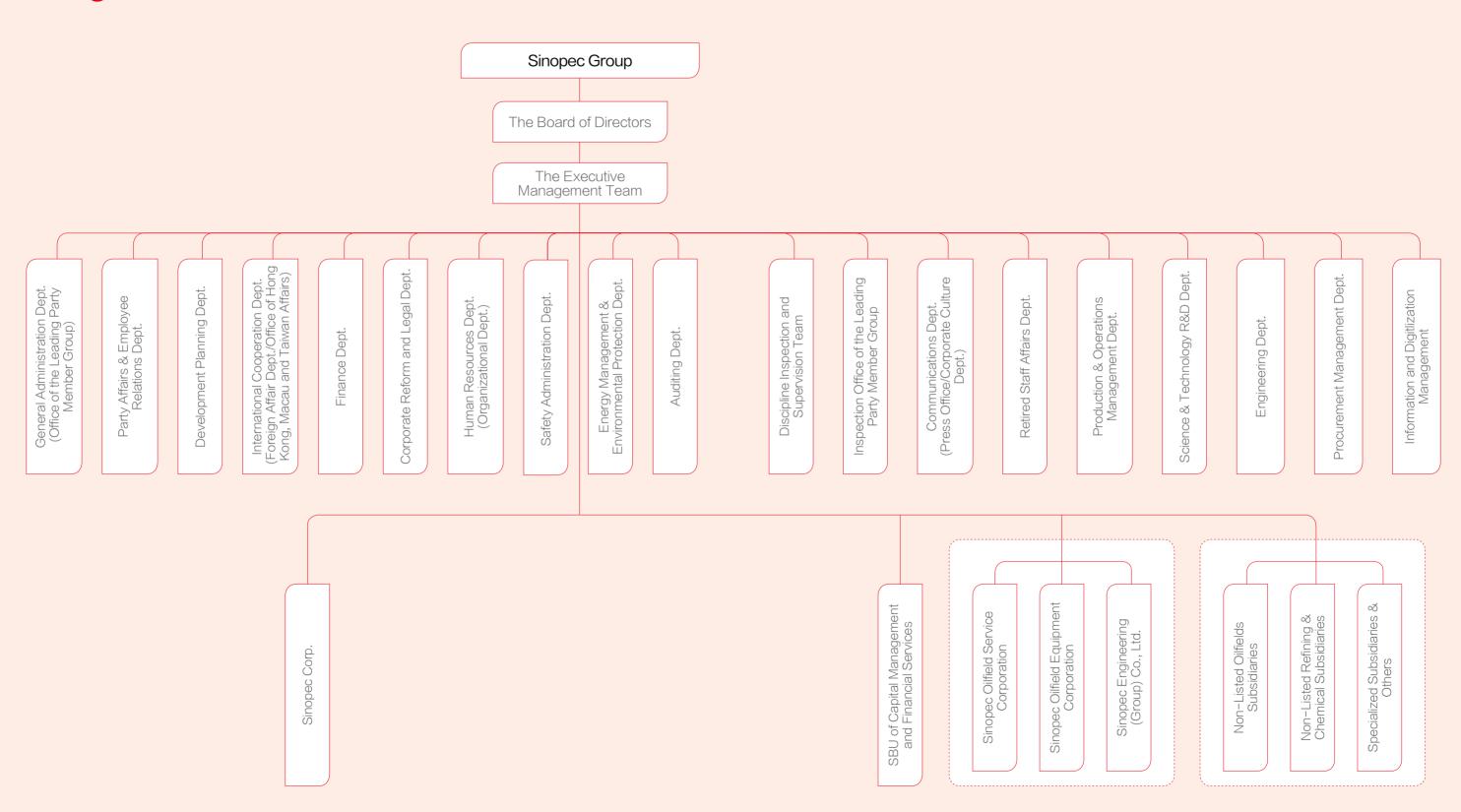
We focused on enhancing dynamism through deepened reform. The three-year SOEs reform was further pushed forward with continued reform at headquarter level and streamlining. Related assets and personnel transfer due to national pipeline reform was completed. Zhongke and Zhanjiang Dongxing assets merger was concluded and consolidation of listed and non-listed business of Baling was closed. Pilot was conducted in Zhenhai for additional profit sharing mechanism. Social functions handover was basically concluded, and loss-making affiliates' turning around goal was further met with dual decrease in both the number of loss-making affiliates and loss scale. SASAC initiated reform and mechanism for professional managers and executives were further implemented with market oriented approach. Benchmarking and improvement measures were carried out, centralized capital management was reinforced, debt structure was optimized, and inventory and receivables were further lowered. The Company's cash flow strengthened and debt ratio was within reasonable range. Total cost control was implemented in every business segment with cost cutting effect seen in crude purchase, materials sourcing, logistics, and commercial storage. Non-production expenses were reduced remarkably and lean management philosophy was practices thoroughly. The three-year production safety campaign was pushed ahead with more emphasis on contractors and direct operation supervision, stabilizing safety performance. We fought and won the battle against pollution, constantly reducing pollutants emission and improving green development. We also conducted major operation risks evaluation and improved risk control system, safeguarding out bottom line.

The new journey promises new challenges yet new starting point leads to new hope. In 2021, we will face more challenging environment and more demanding tasks. We will conscientiously implement the decisions and plans of the CPC Central Committee and the State Council, and strive for the world leading goal under the leadership of the Company's Leading Party Member Group and the Board of Directors. We will aim for high-quality development, ensure full completion of the goals for the whole year, and make better performances to celebrate the centenary of the Communist Party of China in the beginning year of the fourteenth Five-Year Plan period.



■ CHINA PETROCHEMICAL CORPORATION ANNUAL REPORT 2020 Organizational Structure ■

■ Organizational Structure (As of 31 December 2020)



■ CHINA PETROCHEMICAL CORPORATION ANNUAL REPORT 2020 Financial Overview ■

■ Financial Overview

Balance Sheet

RMB: Millions

Item	2020	2019	2018	Item	2020	2019	2018
Current Assets				Current liabilities			
Cash at bank and in hand	206,269.99	151,408.96	200,150.24	Short-term loans	71,467.67	71,448.75	93,371.52
Financial assets held for trading	23,139.45	21,672.66	41,559.55	Bills payable	19,610.27	20,391.54	13,726.15
Bills receivable	0.00	2,192.53	12,017.32	Accounts payable	208,302.10	240,175.75	255,534.75
Accoundts receivable	41,146.59	66,578.64	73,996.23	Contract liabilities	146,754.11	148,226.19	143,068.44
Receivables Financing	11,475.20	10,068.89		Employees compensation payable	14,378.20	16,766.79	14,852.64
Advance payments	19,453.21	21,086.68	18,606.61	Taxes and fees payable	81,412.85	74,773.69	93,369.12
Other receivables	44,218.34	33,754.41	30,288.67	Other payables	92,346.87	79,075.55	80,590.30
Inventories	229,617.07	250,573.61	241,515.19	Current portion of non-current liabilities	39,944.52	56,254.64	50,641.64
Contract assets	21,274.88	17,878.54	14,299.71	Other current liabilities	46,490.48	22,624.89	50,398.97
Current portion of non-current assets	902.29	2,703.97	7,350.05	Total current liabilities	720,707.07	729,737.80	795,553.52
Other current assets	128,900.73	115,524.03	161,086.41	Non-current liabilities			
Total current assets	726,397.75	693,442.91	800,869.99	Long-term loans	43,134.47	60,920.70	62,850.03
Non-current assets				Debentures payable	205,867.51	193,506.23	227,833.56
Other debt investment	9,132.91	3,192.84	4,192.47	Long-term accounts payable	16,857.25	19,917.96	31,196.18
Long-term receivables	12,649.92	16,098.54	39,411.30	Lease liabilities	22,958.12	20,383.35	10,767.20
Long-term equity investment	181,061.16	145,422.12	137,959.30	Long-term empolyee compensation payable	2,047.80	2,287.20	2,428.47
Other equity instruments investment	12,930.96	9,727.18	12,318.67	Contigent liabilities	46,348.99	43,993.03	43,764.96
Fixed Assets	546,827.57	576,329.97	570,522.45	Deferred tax liabilities	8,782.83	7,030.29	6,696.25
Oil and gas assets	136,942.40	140,426.41	145,507.89	Other non-current liabilities	11,143.24	15,176.82	13,372.08
Construction in progress	149,461.53	191,973.29	154,489.32	Total non-current liabilities	357,140.20	363,215.58	398,908.74
Right-of-use assets	36,164.33	33,882.83	31,941.58	Total liabilities	1,077,847.27	1,092,953.38	1,194,462.26
Intangible assets	139,516.21	134,632.50	130,426.32	Shareholders' equity			
Goodwill	10,804.23	10,881.75	10,861.15	Paid-in capital	325,547.22	325,547.22	326,547.22
Long-term deferred expenses	16,020.69	14,965.79	11,913.43	Capital reserve	55,813.12	51,946.56	54,722.61
Deferred tax assets	26,920.78	19,486.49	23,586.76	Other comprehensive income	-22,589.58	-23,800.19	-27,999.04
Other non-current assets	235,130.06	221,256.77	209,065.33	Special reserve	2,278.25	2,193.17	2,069.04
Total non-current assets	1,513,562.73	1,518,276.49	1,482,195.97	Surplus reserve	228,834.82	223,498.74	217,355.85
				Provision for general risks	2,040.77	1,765.55	1,765.24
				Retained profits	198,021.51	169,350.11	147,683.67
				Shareholders' equity attributed to equity shareholders of the Group	789,946.12	750,501.16	722,144.60
				Minority interests	372,167.10	368,264.87	366,459.10
				Total shareholders' equity	1,162,113.21	1,118,766.03	1,088,603.70
Total assets	2,239,960.49	2,211,719.40	2,283,065.96	Total liabilities and shareholders' equity	2,239,960.49	2,211,719.40	2,283,065.96

Income Statement

RMB: Millions

	TAVID. IVIIIIO				
Item	2020	2019	2018		
Operating Income	2,142,332.42	3,003,416.84	2,936,840.85		
Total operating expenses	2,100,708.66	2,915,046.78	2,841,575.40		
Operating expenses	1,700,556.29	2,497,874.87	2,425,746.15		
Taxes and surcharges	237,335.18	247,173.54	251,392.65		
Selling expenses	64,323.00	63,553.43	61,166.33		
Administrative expenses	72,163.87	79,575.67	81,144.46		
R&D expenses	14,414.38	13,690.49	11,339.89		
Exploration expenses	9,722.73	10,519.67	10,753.27		
Financial expenses	2,193.22	2,659.10	32.65		
Add: Other income	8,836.23	7,111.66	8,178.58		
Investment gains	48,746.53	13,634.84	13,282.33		
Change of fair value	791.63	-2,736.85	2,028.11		
Credit impairment loss	-3,064.96	-1,991.62	-329.31		
Assets impairment loss	-30,655.51	-2,338.01	-16,172.02		
Assest disposal gains	3,170.57	-870.63	-846.81		
Operating profit	69,448.25	101,179.45	101,406.33		
Add: Non-operating income	10,461.53	5,498.48	8,049.71		
Less: Non-operating expenses	7,287.35	5,803.81	12,717.94		
Total profit	72,622.43	100,874.12	96,738.09		
Less: Income tax	10,572.19	21,773.05	24,253.45		
Net profit	62,050.24	79,101.07	72,484.64		
Less: Minority interests	19,234.54	32,170.88	33,821.92		
Net profit attributable to equity shareholders of the Group	42,815.70	46,930.19	38,662.72		

Investment Overview

In 2020, the Company focused on the development strategy of "One Foundation of Energy and Resources, Two Wings of Clean Fuels and Advanced Chemicals and Three Growth Drivers in New Energy, New Material and New Economy" based on the resumption of work and production, energy supply, structural adjustment, and transformation and upgrading. We tracked and optimized investment, reasonably controlled assets and liabilities, promoted high-quality and efficient construction of major projects, ensured the stable crude oil output, the rapid growth of natural gas output and oil and gas reserves, the rapid capacity building and release of anti-epidemic supplies, continuously strengthened and improved refining, marketing and chemical industry chains, promoted the steady development of new businesses and laid the foundation for building a world's leading clean energy and chemical company.

We invested 183.8 billion yuan (including profit and loss) throughout the year. Among it, the investment for oil and gas and new energy business segment was 79.2 billion yuan, the refining and marketing business segment 52.5 billion yuan, the chemical and materials business segment 45.0 billion yuan, the capital finance and support business segment 2.3 billion yuan, scientific research, IT and other business segments 4.8 billion yuan.

Optimizing domestic oil and gas exploration and development plans for the oil and gas and new energy segment. We accelerated the production capacity building in Northwest Shunbei Oilfield, Shengli Offshore Oilfield, Jianghan Fuling Shale Gas Field, Southwest Weirong Shale Gas Field, and North China Hangjinqi Conventional Natural Gas Field, increased the replacement rate of oil and gas SEC reserves; strengthened the construction of natural gas production, supply, storage and marketing systems, successfully completed and handed over Wen 23 gas storage, Qingdao-Nanjing pipeline, Guangxi LNG Phase II, accelerated a number of urban gas projects including Tianjin LNG Phase II, Shandong LNG Phase II; tapped the potential of oil and gas exploration and development of existing overseas assets to improve profitability, strictly controlled projects that were about to be disposed or investment with uncertain prospects, sped up the capacity building of potential projects in Angola, South America and other regions, and ensured positive net operating cash flow under low oil prices.

Promoting the efficient conversion of heavy oil and the adjustment of product slate for the refining and marketing business segment. Structural adjustment projects in Maoming. Tianjin, Luoyang, etc. and quality upgrading new alkylation units in Sinopec-SK Project and Shanghai Project have been put into production one after another; we achieved mechanical completion for Jinling's high-end carbon material project, and increased production of a number of bunker fuel oil projects. The marketing segment focused on bigger market share, further consolidated the advantages of network terminals, improved comprehensive energy services, newly developed 998 refueling (gas) stations and 6 of enterprises, society and the environment.

hydrogen refueling stations and seized the opportunity of low oil prices to advance 7 commercial crude storages. Three commercial storages in Tianjin Nangang, Kuche, and Donghai Island, Zhanjiang were built within that year.

Promoting the chemical base construction and optimizing the layout of ethylene units for the chemical and materials segment. We put the Zhongke project into production, upgraded Zhenhai Ethylene, Gulei Phase I, Sinopec-SK Ethylene, expanded capacity of Sinopec-SABIC Ethylene, accelerated Jiujiang Aromatics and other projects; fostered new advantages in international competition and cooperation, and launched the AGCC project; increased the proportion of high-end products, put several projects into production including polyester staple fiber project of Yizheng Chemical, Shanghai polyacrylonitrile-based carbon fiber project, Baling SEBS unit, Yanshan nanofiltration/reverse osmosis membrane project, made steady progress in Shanghai large-tow carbon fiber, Baling caprolactam industrial chain relocation and upgrading and transformation development projects; vigorously supported the urgent need for anti-epidemic supplies, and guickly completed and put into use 16 melt blown cloth production lines in Yanshan and Yizheng.

Investing in such areas as new energy, new materials, energy conservation and environmental protection, and high-end intelligent manufacturing in the capital finance and support business segment. We made strategic deployment for advanced technology companies such as Silicon Valley Intelligence, Boao Jingdian, Baijia, Tiangong Tools, Hisun Biomaterials, etc.; participated in the central enterprise credit fund, and established Enze and Chaoyang Funds.

Investing more in scientific and technological innovation. We focused on breakthroughs in core technologies, the building of key laboratories, special research on large tow carbon fibers, dry hot rocks, etc., and the establishment of a science and technology incubator fund. We increased the investment in scientific research by 500 million yuan, driving up research and development intensity to 0.8%; Sinopec continued to deepen informatization construction and application, vigorously promoted the shared services of investment, finance, and OA, accelerated the construction of production and operation systems for smart oil and gas fields and smart factories, upgraded commercial marketing platforms for IC cards, e-commerce, and customer management, advanced Internet +, and cultivated new business forms.

Investing in safety and environmental protection projects. A total of 18.1 billion yuan was invested in safety and environmental protection throughout the year. We vigorously promoted the investigation and rectification of potential safety hazards of units, accelerated the cleanup and relocation of pipelines, completed the upgrading of double-layer tanks at gas stations, relocated oil depots within the ecological red line, and continued to transform and upgrade to meet the emission standards and to achieve the harmonious development



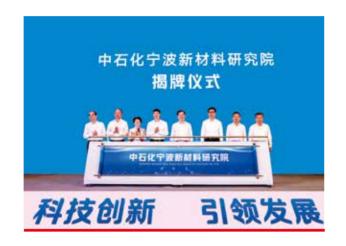


■ CHINA PETROCHEMICAL CORPORATION ANNUAL REPORT 2020

In 2020, the Company implemented the innovation-driven strategy, focused on the construction of "one foundation, two wings and three growth drivers" industrial pattern, promoted the "four batches" of science and technology innovation overall deployment, accelerated research on near-term industrialization of technologies, strengthened breakthrough in major basic research, and deepened reform of science and technology system mechanism, so as to play a supporting role in building a world leading clean energy and chemical company.

Reform of Science and Technology System and Mechanism

Establishing a long-term mechanism for continuous growth of investment in science and technology. We improved the management methods of scientific research funds, strengthened the assessment of science and technology innovation, and guided affiliates to increase investment in R&D. we deepened the reform of "delegating powers, management and service", simplifying project initiation and process management, giving greater autonomy to scientific research units. We strengthened basic research, formulating detailed rules for managing basic research projects to increase support for basic research. Two subsidiaries were selected by SASAC for the "Science Reform Demonstration Initiative", and we expanded the implementation of the "Science Reform Demonstration Initiative" in eight research institutes, improved the operation management system, and deepened the market-oriented selection process for personnel and made efforts to enhance the independent innovation capability. We promoted the construction of new type of R&D institutions, establishing a materials research institute in Ningbo and planned for a new type of R&D institution in Guangdong. We hosted the New Materials and New Energy track of the "Central SOEs Shining Star Innovation Contest", and established innovation incubation platforms.





Major Technology Development and Commercialization

Oil and gas exploration and development technology. Significant progress in shale oil and gas exploration was made, leading to the first commercial discovery of normal pressure shale gas in China; the theory and technology of oil and gas exploration in the Leikoupo Formation in western Sichuan was developed; efficient exploration and development in the Shunbei Oilfield was deepened; the technical system of non-homogeneous composite flooding for EOR was optimized; the seismic node acquisition system was developed and applied on a large scale; breakthroughs were made in key technologies and equipment for extra-deep petroleum engineering.

Refining Technology. Rapid bed catalytic cracking for low carbon olefin (RTC) production technology, high slag and low emission heavy oil catalytic cracking technology achieved industrialization.

Chemical and material technology. 2,000-tonne SE coal gasification project was successfully commissioned; 5 complete sets of technologies such as thermoplastic polyvinyl alcohol (TPVA), ethylene/vinyl alcohol copolymer (EVOH), ultrafiltration/nano-filtration membrane, etc. were developed, and the development and production of 17 types of functional polymer membrane materials were completed. The industrial production of 15 types of automotive lightweight materials such as long glass fiber reinforced polypropylene and high flow nylon was realized. The company also developed a complete set of technology for 48K

large tow carbon fiber and realized industrialized production of series of biodegradable materials such as PBST.

Public technology. The industrial demonstration unit of coal chemical with zero discharge of high salt wastewater realized continuous and reliable operation, and technologies such as high throughput plasma treatment of VOCs achieved industrial application.





Research and Development of New Energy and New Material Technologies

Hydrogen energy. Focusing on the goal of building the largest hydrogen company in China, we made effort in the entire industrial chain of hydrogen production, supply and sales by taking advantage of our technology and industrial resources, and built and put into operation hydrogen production facilities for fuel cells in Yanshan, Gaoqiao and Guangzhou, supplying 99.999% of high-quality hydrogen to the market. The Company led a research programme on hydrogen station standards, and completed and obtained the national CMA certification for its laboratory on hydrogen analysis for fuel cell. We also completed and put into operation four fuel-hydrogen service stations in Guangdong, Shanghai and Zhejiang.

Biofuel. The Company's bio jet fuel production plant was completed in Zhenhai, and the capacity reached 100,000 tonnes per year. Shanghai Oil Products Company expanded the sales of biodiesel, with the capacity of B5 biodiesel blending reaching more than 400,000 tonnes/year and the supply network covering 13 administrative areas in Shanghai. We completed development of synthesis technology and product formulations bio-based

dipolymer acid-based jet fuel anti-wear agent products, and are now in the process of airworthiness validation.

Medical materials. Through the hydrogen regulation method, we succeeded in producing specialty polypropylene for melt-blown fabric based on the metallocene gas-phase polypropylene process, filling the technology gap for China and ensuring the supply of the core layer of mask material. We promoted research and development of medical protective clothing, syringes and other high-end medical materials, fully supporting the battle on COVID-19.

Biodegradable materials. The Company actively participated in the action to end plastic pollution, becoming the first Chinese company to join the Alliance to End Plastic Waste (AEPW), and has continuously strengthened the research and development of biodegradable materials. We accelerated the technology development and industrialization of polyglycolic acid (PGA), vigorously carried out technology development and industrial application of polyester degradable materials, developed L-Propyl Acetate/PLA pilot technology and carried out pilot technology research of polycaprolactone.

Energy Efficiency Improvement and Energy Saving and Emission Reduction Technology

Energy efficiency improvement. We developed and industrialized a number of technologies including energy efficiency improvement technologies for oilfield injection, extraction and transmission integration, energy efficiency testing and optimization control technologies for oil and gas gathering and transmission, energy-saving equipment and technologies for new high-efficiency steam production and transmission for thick oil thermal recovery, energy efficiency improvement technologies for aromatics/xylene

plants, and intelligent optimization technologies for hydrogen systems in refining and chemical subsidiaries.

Carbon Capture, Utilization and Storage. We developed a new generation of organic amine-based CO_2 capture technology and carried out experimental research on new CO_2 capture technologies such as membrane absorption, separation and ionic liquid. The development of CO_2 capture and transmission process package was carried out.

Significant Achievements in Science and Technology Innovation

The Company applied for 7,972 patents in 2020 and was granted 5,140 patents, ranking 1st among central SOEs in terms of patent capability. We won 1 gold prize, 3 silver prizes and 6 outstanding prizes for China Patent Award.





Oil & Gas Exploration and Development



In 2020, we added 130 million tonnes of proven oil reserves, 208 million tonnes of controlled oil reserves, and 210 million tonnes of predicted oil reserves; the newly added natural gas proven reserves were 375.6 billion cubic meters, controlled reserves 167.5 billion cubic meters, and predicted reserves 281.6 billion cubic meters. The annual production of crude oil was 35.144 million tonnes, an increase of 13,000 tonnes; the production of natural gas was 30.28 billion cubic meters, an increase of 690 million cubic meters. The newly-built crude oil production capacity was 2.538 million tonnes; the newly-built natural gas production capacity was 5.92 billion cubic meters, an increase of 2.43 billion cubic meters.



added proven oil reserve

130 million tonnes

added proven natural gas reserve

375.6 billion m³

controlled reserve

208 million tonnes

controlled reserve

167.5 billion m³

predicted reserve

210 million tonnes

predicted reserve

281.6 billion m³

Oil and Gas Exploration

We made 5 key breakthroughs, 8 major breakthroughs, 6 new breakthroughs, and 17 commercial discoveries in oil and gas exploration, exceeding the annual reserve target.

In terms of oil exploration, a major breakthrough was made in the Shunbei New Area, with 81.72 million tonnes of additional predicted reserves. Important breakthroughs were made in the Paleogene in the eastern slope zone of the Bay in Jiyang Depression, and new types Dongying Depression new area. We explored a new place for increasing reserves in the "three new" areas of the old oilfield.

In terms of conventional gas exploration, a major breakthrough was made in the risk exploration of the new Cambrian system in eastern Sichuan, and the trap resources in the Fuling exploration area were evaluated at 126 billion cubic meters. A large-scale commercial discovery was achieved in the Leikoupo Formation in western Sichuan, with a total of 114 billion cubic meters

of proven reserves; an important breakthrough was made in the new Permian system in southwestern Sichuan, with an additional estimated reserves of 78.3 billion cubic meters. New breakthroughs were made in the new strata of Puguang marine and continental facies. New discoveries were made in the Paleozoic of Southern Hubei, Songnan volcanic rocks and the offshore area.

In terms of unconventional oil and gas exploration, major breakthroughs were made in the Jurassic continental shale oil and gas exploration in southeastern Sichuan, and in shale oil exploration in the Jiyang and Boxing Depressions with 2 billiontonne confirmed shale oil resources. A major breakthrough was achieved in the exploration of atmospheric shale gas in southeastern Sichuan. We confirmed the resources of 268.8 billion cubic meters and 191.4 billion cubic meters in Wulong and Daozhen synclines respectively. The first large-scale commercial discovery of atmospheric shale gas in China was achieved in Nanchuan District, Chongqing, adding 191.8 billion cubic meters of proven reserves.



Oilfield Development

The crude production capacity building was advanced efficiently. The natural decline rate of mature oilfields was steadily reduced, and the annual crude oil production increased by 13,000 tonnes.

In terms of increments, the newly increased producing oil reserves for the year were 91.12 million tonnes, an increase of 2.23 million tonnes. We efficiently completed the production capacity of one million tonnes in Shunbei field, and continued to expand the scale of cooperative production of difficult-to-use reserves in Shengli Field. Solid progress were made in the production capacity construction of Junggar Basin Western Edge and Jiyang fields, and the newly-built crude oil production capacity was 2.538 million tonnes.

In terms of inventory, we strengthened fine description, fine water injection, and fine potential tapping, increased basic investment for stable production, optimized the injection and production structure of water drive reservoirs, strengthened the entire thermal management of thermal heavy oil reservoirs recovery, and improve the quality of water and gas injection in fractured vuggy reservoir, improved the tailored management of chemical flooding reservoirs, implemented demonstration project of heterogeneous combination flooding to enhance the recovery rate, and increased efforts in applying technologies to enhance the recovery rate. The annual natural decline rate was 10.2%, 0.1 percentage point lower.

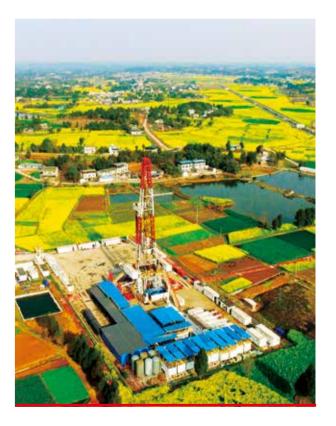
Natural Gas Development

In terms of conventional gas, we actively promoted production capacity construction in new areas such as the western Sichuan gas field, the mid-shallow layer in western Sichuan, Dongsheng, and Northeast Longfengshan, and continued to stabilize the production of major gas fields such as Puguang, Yuanba, and Daniudi. New conventional gas production capacity was 2.52 billion cubic meters, an increase of 750 million cubic meters. And the gas production was 21.44 billion cubic meters.

In terms of shale gas, Sinopec steadily promoted the production

capacity construction of the Weirong shale gas field, accelerated the rolling production capacity building of Nanchuan shale gas, continued to promote the three-dimensional development and adjustment of the Fuling shale gas field, and built a new shale gas production capacity of 3.4 billion cubic meters throughout in the year, an increase of 1.68 billion cubic meters. Gas production was 8.46 billion cubic meters, an increase of 1.1 billion cubic meters.

In terms of coal bed methane, we continued to promote the fine drainage of the Yanchuan South coal bed Methane Field, producing 380 million cubic meters of gas in the year.





Production & Operation of Refining Business

Creating Profits through Integration of Production and Sales

We took a flexible approach in adjusting the work load, optimizing the structure, expanding the market, and realizing integrated effects. During the pandemic response, 118 sets of facilities were closed to keep the work load under control. Beihai Refining & Chemical Company and Tahe Company stopped production early for turnaround. Sales in domestic market improved, and we worked hard in resuming work and production and adjusting product structure, improved the internal market-oriented mechanism for refined oil, and reduced the refined oil yield. Throughout the year, we processed 239 million tonnes of crude oil, a decrease of 11.81 million tonnes, down by 4.7%. Refined oil yield dropped by 4.6 percentage points, and the yield of chemical light oil increased by 1 percentage point. We optimized and arranged refined oil export of 16.3 million tonnes, down by 38%. We enhanced supply of low sulfur bunker fuel production, and produced 4.54 million tonnes, up by 4.41 million tonnes, accounting for more than 60% of production in domestic China, thus changing our dependence of imported bonded bunker

Optimizing the Industry and Fostering New Landscape

Through building the new industrial landscape of "one foundation, two wings, and three growth points", we comprehensively facilitated differentiated development of the refineries. Zhongke

Refinery and Petrochemical project was put into operation. Phase I of Zhenhai Refining & Chemical Company expansion project was fully carried out. Projects of adjusting refining structures in Jingmen Company, Tianjin Company, and Luoyang Company were commissioned. New business projects such as high-end graphite materials, supply centers for hydrogen fuel cells, high-end synthetic base oil, and low sulfur bunker fuel are in full swing.

crude processing volume export volume of refined oil production

239 million tonnes

16.30 million tonnes



Production & Operation of Chemical Business

We produced 12.06 million tonnes of ethylene, 4.94 million tonnes of PX, 17.69 million tonnes of synthetic resin, 1.39 million tonnes of synthetic rubber, 6.13 million tonnes of raw materials for synthetic fiber, 3.2 million tonnes of synthetic fibers, 1.32 million tonnes of synthetic fibers polymers, and 500,000 tonnes of fine chemicals. Among them, the output of synthetic resin and synthetic rubber achieved growth.

Strengthening Structural Adjustments

Based on the adjustments in feedstock, we followed the principle of "self production as the key, external procurement as a complement, and import as an adjustment", coordinated and dovetailed two markets and two types of resources, and secured the supply of ethylene feedstock. In terms of product structural adjustment, we developed and produced more high-performance new products, breaking new ground. The commercialization of our products was successful. We expanded market share and gained profits in fostering new products such as medical care units. We developed new technologies in producing melt-blown fiber, and built 10,000-tonne

production capacity in Yanshan Petrochemical Company and Yizheng Chemical Fiber Company within 76 days, playing a crucial role in fighting against COVID-19. We timely developed new medical and health protection materials and introduced them to the market. New progress was made in the technical research of new fine chemical materials, and mass production and sales were realized. In terms of facility structure adjustment, we actively responded to market changes and measured the performance of product chain and facilities, rationally arranged facility and product plans, and strived to optimize product structure and capacity.

Tapping into the Potential of Operation

We stringently controlled various costs, formulated key points and goals of cost management, focused on key costs such as auxiliary materials for fuel, repairs, external processing, and laboratory tests, measurement, and inspections, conducted comparative analysis from multiple angles, tightly managed and controlled over-budgeted expenditures, and continued to facilitate overall cost target management. We strictly managed the funding

plan, optimized the allocation of funds, minimized the net capital employment, and reduced the cost of capital use. We implemented 1,305 projects to raise efficiency throughout the year, established a working mechanism of "daily following up, weekly notification, and monthly review", strengthened supervision on operation, and ensured that various measures were carried out.





Maintaining Stable Supply Chain for Production and Sales

We dovetailed production and sales, dynamically adjusted the capacity utilization rate based on market changes, and made arrangements for product flow. To solve the insufficient storage capacity of production companies, we actively rented storage resources from the private sector, urgently allocated shared pallets to improve storage capacity, increased the turnover of transfer warehouses with concentrated product consumption and strong

loading and unloading capabilities, and spared no effort in clearing the obstacles for related companies. We solved the transportation of products in multiple ways, learnt about the commission and main demands of downstream sector customers in a timely manner, assisted customers in solving practical difficulties, and facilitated them to resume work and production.

Continuously Improving Operations in Coal to Chemical Industry

2 coal mines of Great Wall Energy & Chemical Company (Ningxia) carried out trial production and resumed production in accordance with the law and regulations. The operating cycle and capacity of chemical plants increased significantly, and the integration of coal, electricity, and chemical industry basically took shape. The coal mines of ZTHC Company kept stable and high volume production. The first turnaround for chemical facilities successfully completed. The output of major products set a new record, and techno-economic indicators climbed by a large margin. The coal mines of Zhonganlianhe Coal-chemical Company reached production capacity, and the chemical facilities there achieved stable operation and sustained profitability

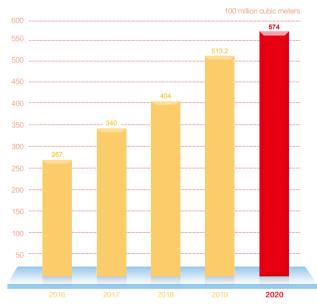
despite the overbearing design since they were commercialized for the first year. After comparison, selection, and demonstration, the 600,000 tonnes/year coal-to-polyolefin project of Guizhou Energy and Chemical Company was altered and optimized to a 500,000 tonnes/year coal-to-PGA project, and the first draft of its feasibility study was completed. The coal chemical projects put into operation produced 22.21 million tonnes of raw coal and sold 18.66 million tonnes of commercial coal throughout the year, an increase of 4.7% and 3.9% respectively. The output of major chemical products was 3.62 million tonnes, and the total operating volume was 2.98 million tonnes, an increase of 12% and 11% respectively.



Natural Gas

The business volume of natural gas for the whole year was 57.4 billion cubic meters, an increase of 11.8%, of which, sales of natural gas was 55.2 billion cubic meters, up by 14%, 7 percentage points higher than the national average increase, accounting for 16.8% of the domestic market share.

We actively coordinated upstream gas fields to ensure full production and sales of independently produced onshore gas resources, optimized long term LNG imports, and increased spot purchases. By the virtue of third party terminals, we introduced CNPC onshore natural gas and coal-bed methane from Shanxi to complement the demand and diversify the channels for resources. We completed 310 customers' long term contracts and 329 third party pipeline transport agreements with customers and pipeline transport companies, and stabilized the market for existing stock. We seized the post-pandemic demand growth, raised the proportion of gas supply for customers through dual gas sources and combined supply of natural gas and LNG. We tried our best to entice new customers, and we developed 220 new customers along pipelines as Tianjin, Erdos-Anping-Cangzhou, Qingdao-Nanjing, and Qianjiang-Shaoguan. We opened up new channels such as "movement of gas from south to north, from east to west, from Sichuan to Guizhou, and from the sea to the south", adding 13.5 million cubic meters of supply to the market every day. We adopted targeted marketing as "placing equal emphasis on natural gas and LNG", "leveraging LNG through developing natural gas", and "selling natural gas and delivering in LNG" in different localities, scaling up the sales of LNG. We leveraged the peak shaving advantages for Wen 96, Wen 23, and Jintan gas depots, rented Ganghua gas depot for its storage capacity, expanded the market



sales volume of natural gas

of North China in winter and that of the Yangtze River Delta in summer, and coordinated Sinopec's refining subsidiaries to enhance the supply of independently operated gas. Based on the platform of Great Wall Gas, we vigorously tapped into direct supply and end users, completed the delivery project of Binhai Investment Group's equity investment, and accelerated our entry into the mature gas market.

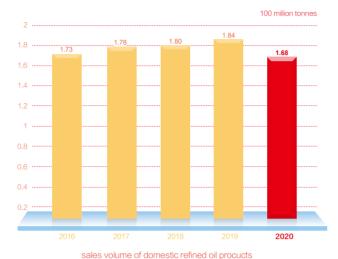
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Oil Products and Non-oil Products

The business volume of domestic oil products for 2020 reached 168 million tonnes, down by 8.9%, among which, the retail volume stood at 113 million tonnes, a decrease of 7.6%. The operating revenue of non fuel business grew by 5.6%.

Marketing and services of oil products. Under the strategy of "meticulous, targeted, and flexible marketing", we pursued differentiated marketing in various localities. We established a dynamic supervision mechanism on work and production resumption, organized market inspections, and paid visits to our customers, basically stabilizing the scale of direct sales and distribution. We proceeded with the special activity of "cracking down on the illegal wrongdoings in production and operation" together with the government, and tried our best to level the playing field. We closely followed the opportunity of growing demand for LNG heavy trucks, strengthened the connection between marketing organizations and resources, and scaled up the sales of LNG terminals. We actively responded to the spinoff of refined oil pipeline network, resolutely kept operation despite low inventory, moved deeper in full-caliber logistics optimization, and strictly controlled the flow of resources with high freights.

Marketing and services of non-oil products. The brand Easy Joy was continuously nurtured, shaped, and publicized, hence becoming the sub-brand with the highest value among the series of Sinopec brands. We strived to push up the sales of our proprietary brands, and added 16 brands of products belonging to 5 types through customized marketing and associated branding. We carried forward new sales model as Easy Joy online store and live stream marketing, organized 450 live streams for the whole year, and carefully organized the thematic marketing event of the third "Easy Enjoy Festival". We made headways in emerging businesses



We accelerated the integration of stations and their online applications and the construction of fuel card upgrading and replacement, improved the functions of one-click settlement of oil product sales, settling payment in multiple methods with invoice issued together, and other functions, forged ahead with the construction of the "Filling-up Sinopec" application, and improved the IT application and digitalization of service stations.

as car washing, advertising, fast food, and Easy Joy coffee, remark-

ably bolstering the comprehensive service for service stations.





Fuel Oil

The business volume of fuel oil throughout the year reached 28.37 million tonnes, an increase of 21%.

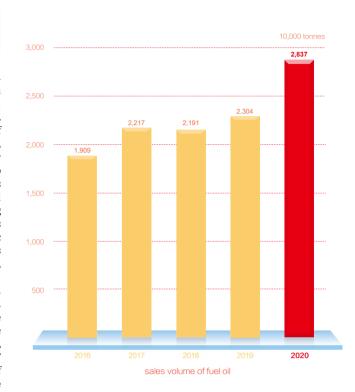
The volume and profits of bonded business hit a record high. In 2020, the business volume of bonded oil was 8.08 million tonnes, an increase of 49%, and terminal distribution reached 7.1 million tonnes, an increase of 48%, with a market share of 43%, up by 7 percentage points, making Sinopec the largest supplier of low sulfur bunker fuel in China. We captured 43% of the port market, up by 7 percentage points. We actively integrated supervisory warehouses for import with bonded warehouses for export, strived to have the resources "stored and sold nearby", and developed business models like "one ship serving multiple vessels", "cross-regional direct supply", "filling up oil on port of call", "oil supply on floating vessel", and "oil supply on anchorage". We paid strenuous efforts in maintaining steady offshore supply chain during the pandemic response, and purchased more than 60% of domestic commodities from large-scale customers such as the world's "three major miners",

"four largest grain traders", and "ten largest containers".

The quality of domestic trade operation steadily stepped up.

Domestic trade realized a volume of 5.46 million tonnes, up by 64%.

We signed official strategic cooperative agreement with Maritime Safety Administration of the Ministry of Transport, and became its major strategic supplier. The campaign of "visiting companies, providing services, expanding businesses, and creating profits" was regularly carried out. We made a push to the construction of onshore and offshore domestic trade branches, and completed the transfer of 24 offshore service stations in Guangdong Oil Products Company. Shandong Weishan No.1 oil refilling pontoon was put into operation.





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Other Refined Products



The business volume of our self-marketing refined products was 38.66 million tonnes. We strengthened the connection between production and sales, and guaranteed the supply of our self-marketing products and the civil gas resources in Hubei during the pandemic response. We focused on market leadership and adhered to value orientation. The price of our self-marketing products outran that of crude oil by 13.8 percentage points, helping refining to adjust product structure and improve economic efficiency. The annual business volume of asphalt was 10.42 million tonnes, breaking 10 million tonnes for the first time, a new annual high.

The total annual business volume of lubricate was 1.32 million tonnes, up by 9.5%, a record high. We adhered to technology-leading development, achieved new breakthroughs in high-end supporting facilities, obtained 35 authorized patents throughout the year, gained OEM certification and wrote 178 manuals, completed 139 domestic projects to replace the imports, developed 239 application cases for demonstration, and released more than 50 high-end new products, boasting global competitiveness. 86 new process formulas were developed, and 145 new raw materials were admitted, strongly underpinning our operation and profit generation.



Chemical Products

The business volume of chemical products for 2020 was 83 million tonnes, down by 6.5 million tonnes.

We implemented the operating philosophy of "putting customers at the core", kept improving the operation process of "one plan for one customer", and elevated the service and coordination of key customers. We enhanced strategic cooperation with major customers, integrated coordination and operation, services and business cooperation with cross-regional and clustered customers, optimized and integrated supply chain management, and ensured the production demand for major customers during COVID-19 pandemic and the turnaround. We strengthened the process management of customer services, boosted the application of information platforms, and fully utilized the "one plan for one customer" information collection system to deal with the needs of our customers. We leveraged the role of customer service centers, coordinated and solved all kinds of difficult problems, hence continuously raising the comprehensive services.

We guided and optimized production scheduling following the market and customer needs, and deepened the management of "one policy for one product" to meet customer demand for raw materials and product supply. We implemented the strategy of "basic + highend", fully leveraged the linking role as bridges and bonds, established 156 MPRC groups, developed and promoted new products as synthetic resin, synthetic fiber, and synthetic rubber, increased the sales ratio of the three major synthetic materials with high value-added products and special materials, and facilitated the optimization and adjustment of product structure. We set up specific working group on medical and health care materials and degradable materials, and made in-depth research on the market for our company's future reference. We revitalized the logistics stock assets of Sinopec, gave full play to the advantages of the railways within the plants, increased the economic traffic of railways and waterways, and saved costs for customers. We focused on the application of new technologies, and improved logistics services.

We further developed the ecommerce platform of "Chememall. com", and established a new model of ecommerce platform combining online transaction and offline services. We sped up the integration of platform with production and sales, and regional and branch integration, and enhanced the effectiveness of integration. We steadily pushed forward the adjustment of the ecommerce mechanism, and orderly carried out the post setting, responsibility adjustment, outlet layout, and process reengineering to gradually transform to the ecommerce marketing model. We set up 10 new representative offices in Hefei and Inner Mongolia, further improving the outlet layout and raising the market sensitivity and serving functions. "Chememall. com" operated steadily. The sales volume of the ecommerce platform continued to climb throughout 2020, and its Phase III construction entered into system development.

The total sales volume of catalyst products continued to grow. We redoubled efforts to ensure the high-quality operation of the refining and chemical facilities in Sinopec, and made breakthroughs in capturing domestic non-Sinopec market, realizing a sales increase of 2%.





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Petroleum Engineering Technology Services

A number of landmark achievements in high-precision, high-efficiency, low-cost geophysical technologies. Breakthroughs were made in the development of Smart Point seismic acquisition. The company had its own proprietary seismic acquisition instruments for the first time. Two leapfrogs were achieved for the node acquisition technology from experiment to deployment and from "mixed acquisition" to "blind acquisition". The Bonan project adopted "blind acquisition" technology, and the average daily efficiency set a new record for production in the mature field in the eastern area.

Increasingly mature deep well drilling supporting technology. In 2020, 143 ultra-deep wells were completed, with an average well depth of 6,759.48 meters, an average ROP of 5.89 meters per hour, and an average drilling cycle of 133.58 days. In the Shunbei area, a series of technologies such as Permian and Silurian formation plugging and leakage prevention, deep hard formation drilling speed increase, 185 °C high temperature MWD, etc. were formed; in the southwest area, a series of technologies such as air foam drilling, pre-bending power drilling tool deflection prevention technology, Nitrogen drilling technology for tight reservoirs in western Sichuan, etc. were formed. The Shunbei 55X well set the domestic depth record (8,725 meters) of 139.7 mm diameter casing. The Shunbei 53-2H well set the domestic record of the deepest directional well (8,874.4 meters), and the Shunbei 71X well set a shortest drilling cycle record (132.74 days) of wells with a depth over 8,000 meters.

New progress in shale gas well drilling technology. 321 shale gas wells were drilled, with a drilling footage of 1,741,400 meters. The average depth of the completed well was 4,863.52 meters. The ROP was 7.25 meters per hour, and the drilling cycle was 84.18 days. In Fuling field, a series of technologies were developed such as radical parameter drilling technology, high-pressure jet

drilling technology, RSS, near-bit directional technology, rotary casing technology, pressure-controlled drilling technology, and anti-sticking technology for complex horizontal sections. We promoted the application of high-pressure jet drilling technology to effectively increase the average ROP in the middle and upper strata.

New progress in drilling fluid technology. We developed high-density water-based drilling fluid rheological stability control technology, high-density water-based drilling fluid friction control technology, lubricating alkyl glycoside product molecular design, preparation and industrial production technology, and APD high-performance water-based on-site drilling fluid technology, and applied on-site in 6 wells including Fengye 1 well, achieving good effects in stabilizing the well wall, lubricating and anti-sticking. The temperature-resistant 180°C spherical gel MPA-III was developed with little effect on the rheology of oil-based drilling fluids and good plugging properties. The filtration loss of HTHP at 180°C was reduced by 25%, and the penetration depth of the visible sand bed was reduced by more than 30%.

Obvious improvement in terms of speed and efficiency of new drilling tools. Sinopec promoted the use of high-temperature azimuth-while-drilling gamma instruments, all-metal hydraulic oscillators, high-efficiency screws, reinforced torque impactors, embedded spiral ball centralizers, vertical drilling systems, ZQS series wellbore sand cleaning joints, jet impactor and other new tools to effectively reduce downhole complex faults and improve drilling efficiency. Among them, thick wall screws showed obvious advantages in all indicators over the conventional ones when applied to horizontal shale gas wells in the Fuling field. The motor life was more than 1.5 times that of ordinary screws. The average ROP was increased by 30%.

New progress in logging technology. The SINOLOG900 network imaging logging system was put into production and

application, and the overall performance was continuously optimized; the direct-push logging technology collected all logging data accurately. The logging depth was 8,874.4 meters, and the bottom hole temperature was 170.5 ℃, creating the deepest directional well logging record in Asia. We improved the tractor perforation technology and hit 2 national records for the largest inclination transported by the tractor and the largest inclination perforated by the tractor. We innovated and formed the logging evaluation of complex geological areas and intelligent shale gas geological sweets logging evaluation to improve the logging and evaluation capabilities; the integrated geosteering technology for horizontal wells became more mature, improving the geological target rate, reservoir drilling rate and efficiency.

Continuous development of special operation technology. We continuously strengthened the ultra-deep + high temperature + high pressure + high sulfur well testing technology to provide strong support for the commercial discovery of oil and gas exploration in the Shunbei Oil and Gas Field. We developed multiple sets of fracturing technology, fracturing fluid systems and fracturing monitoring methods as the main supporting technologies to meet the demand for shale gas exploration and development; We explored the combination of "high conductivity channel main fracture + volume branch fracture" fracturing technology and achieved a major breakthrough in the exploration of shale oil in the Jiyang Depression; new progress was made in coiled tubing operation technology, and 76 types of 196 tools in 8 categories were developed to form 36 characteristic technologies including completion stimulation, photoelectric testing, salvage workover and conventional operation. Sinopec became the first domestic service provider of coiled fiber/cable fiber/cable technology, created more than 10 domestic engineering records, and realized the first domestic variable well workover in the China Petroleum shale gas field.

Significant achievements in ground engineering technology innovation. "Key technology for design, construction and safety assurance of new near-shallow structures" won the second prize of National Science and Technology Progress Award, and "Key Technology and Application of Shengli Chemical Flooding Polymer Solution Adhesion Protection" won the first prize of Sinopec Science and Technology Progress Award; Sinopec won 11 provincial and ministerial-level high-quality engineering awards, applied for 108 patents, and obtained 66 authorized patents. The self-developed "welding intelligent management system of semi-automatic welding machine" was launched on the EPEC platform. The oil and gas field and pipeline EIT integration device, high-frequency coalescence water separation unit, and pressure regulating skid were included in the company's superior product catalog.

development. Sinopec made 10 landmark achievements including 5000 type complete sets of electric fracturing equipment, formed 8 engineering technologies including "well factory" fracturing to strongly support the large-scale and profitable development of shale gas. We accelerated the upgrading of oil and gas equipment technology. Land electric cementing trucks and 2500 type super-power cementing trucks were successfully phased out. 80DB and 90DB drilling rigs came out one after another. We completed in-plant tests for 52 MPa high-sulfur compressor units, and put oil-based slut harmless treatment equipment into industrial application. The average service life of hybrid drills was increased by 30%, and breakthroughs were continuously made in product research and development. The integrated service of drill bits and drilling tools set 37 speed-up and efficiency-increasing records, and the fracturing equipment set 23 production-increasing and cost-cutting records.



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Refining and Chemical Engineering Services

In 2020, 1,076 engineering, consulting, EPC and construction projects were implemented in China, 929 projects were newly commenced and 550 projects achieved mechanical completion.

Continuous Improvement of Engineering Service

We strengthened whole process management and took multiple measures simultaneously to enhance engineering design efficiency and project execution level. Refining structural adjustment projects in Sinopec Zhongke, Sinopec Tianjin and Sinopec Luoyang were started up in full swing. Commercial crude oil storage projects in Tianjin, Kuche and Zhanjiang, residue hydrotreating project in Maoming and EVA project in Yangzi achieved mechanical completion after being constructed at an ultra-conventional pace. We also progressed with projects such as SSTPC polycarbonate, ZRCC base and Gulei refining and petrochemical integration. Sinopec Hainan ethylene, Sinopec Anqing structural adjustment and Sinopec Baling caprolactam projects with project safety and quality under control.

We increased the input of automatic welding machines, increased the proportion of pipeline prefabrication, and constantly improved the project management. We continuously enhanced information technology application with digital delivery of major projects in Gulei, Hainan and ZRCC progressing smoothly. While continuously providing customers with high-quality services in the traditional petrochemical industry, the Company also provided customers with overall solutions in the fields of new coal chemical industry, LNG, bio-energy, soil treatment etc, and gradually realized transformation from a single engineering contractor to a comprehensive service provider covering the whole energy and chemical industrial chain and full life circle.

Key Technological Innovation Projects Completed

22 key R&D projects were well under way. 8 projects including 2nd generation of high-efficiency and environmental-friendly aromatics technology and solid super acid C_5 and C_6 isomerization technology industrial test were completed at high standards. 8 projects including development and industrial application of complete technology for producing ethylene directly from crude oil were added to the research list.

Projects such as the catalytic cracking and hydro desulfurization

of TSRMP and low sulfur fuel oil components were mechanically completed on schedule. A batch of projects entered normal operation stage such as the complete technology of 400,000 tonnes per year kta low cost ethane cracking gas to styrene, purification and supply technology R&D for hydrogen used for fuel cell vehicles, and standards for oil-hydrogen combined service stations as well as the construction and application of related supply chain.





Development and Utilization of New Energy

Hydrogen business was paced up. We accomplished the specific planning for the hydrogen business of the Company and accelerated the construction of hydrogen stations. By the end of 2020, 10 hydrogen stations had been completed with 8 already in operation. We had been reviewing the early stage plan for hydrogen production using wind and photovoltaic power in south Xinjiang and Inner Mongolia.

Geothermal energy development and utilization were advanced in an orderly manner. In terms of resource exploration, we optimized the deployment around key development areas of Henan, Shandong and Hebei, and completed 9 exploration wells, with a success rate of 100%. In terms of market development, the Company actively expanded high-quality markets such as "2 + 26" in the north, 11 cities in the Fenwei Plain and cities in the south where it is cold in winter and hot in summer. We built 104 new heat exchange stations, and successfully executed the heating capacity construction covering 2 million square meters of Qinghe and 2.85 million square meters in Bazhou, Boye and Dongguang. In terms of facilitating the construction of the Xiong'an New Area, the heating project for the Xiong'an Railway Station of the state key project"Beijing to Xiong'an high speed railway" and the governmental project for heating resource renovation and replacement covering 1 million square meters in Xiongxian county were completed as scheduled. We successfully won the bid for the construction, operation and management service project of Rongdong district heating (cooling) project, completed the establishment of the joint venture company and participated in the construction of Rongdong district. The geothermal heating capacity was increased by over 8 million m³ throughout the year, with a cumulative heating capacity of over 60 million m³.

Distributed photovoltaic projects were actively promoted. The Company vigorously expanded distributed photovoltaic power generation projects by utilizing abandoned oil and gas well sites and roofs, completed the feasibility study approvals for 39 projects(with an installed capacity of 100 MW) and built 21 MW new installed capacity, with an accumulative installed capacity of over 100 MW. The 16.4MW photovoltaic project of Shengli, the 2.41 MW photovoltaic project in Shuanghe East District of Henan Oilfield, and Xianyang Fast 4.5 MW photovoltaic project of Xinxing Petrol was successfully connected to the grid. The annual power generation was 100 million kWh.

Wind power generation pilot projects were pushed forward steadily. In the aspect of onshore wind power, the Company completed the feasibility study approval of Shaanxi Weinan 20 MW wind power project, setting foot in wind power business for the very first time. In terms of offshore wind power, we carried out the preliminary study on the planning and site selection of offshore wind farms in Hainan, Shandong, Guangdong, Fujian, Tianjin, Jiangsu and other regions, initially completed the preparation of the offshore wind power development planning report, and formed the planning scheme of 5.95 GW in the short term, 8.55 GW in the long term, and 14.5 GW in total.



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Key Engineering and Construction Projects



In 2020, we launched 46 key engineering and construction projects covering oilfield service, refining & chemical and pipeline, storage and transportation. 2 oil and gas field surface engineering projects, 34 refining and chemical units, 4 sets of oil and gas storage and transmission facilities and pipelines were completed and put into use. 120 major production units in 5 subsidiaries were shut down for overhaul.

Key oil and gas field surface engineering projects. Jiangdong block and produced water collection and treatment system of the surface engineering for Fuling shale gas field phase II production capacity construction project were completed and put into operation. The first phase of Weirong shale gas field production capacity construction surface engineering project was basically

completed, 5 gas production platforms were put into operation, and the overall progress of the second phase project was 48%. 86.7% of the overall schedule had been completed for the Ordovician production capacity construction surface engineering in Shunbei oil and gas field area 1 with the 110kV power transmission and transformation project mechanically completed

and No. 5 combined station stepping up construction.

Key oil refining and chemical engineering projects. Projects including Sinopec Zhongke refining and chemical integration, refining structural adjustment in Sinopec Tianjin, Luoyang and Maoming, EVA in Sinopec Yangzi, catalytic cracking project in Sinopec Jingmen, and continuous reforming in Yanshan were completed and ready for operation. The polypropylene units of Gulei integrated refining and chemical project was mechanically completed, and the first and second circulating water fields, 220 kV main substation and other public facilities were put into operation in succession. 53.5% of the overall project schedule in ZRCC base was completed with the stripper hoisted in place. The overall progress of ethylene debottlenecking transformation project in Sinopec-SK was 94.4%, the concrete, ground pipes and steel structure construction of the PP plant were completed, and the concrete pouring and ground pipe construction of HDPE plant entered the final stage. The relocation and upgrading project of the caprolactam industrical chain in Baling officially kicked off. Sinopec Hainan ethylene, Sinopec-SABIC polycarbonate, Jiujiang

aromatics, Sinopec Baling SEBS and other projects were advanced in full swing. Sinopec Anqing, Yangzi oil refining restructuring and other projects were under construction preparation.

Key oil and gas storage and transportation projects. The connecting lines of Puguang gas field pipeline 1# - 4#, Zhanjiang-Beihai oil product pipeline and Sinopec Zhongke integrated gas transmission pipeline were completed and put into operation. Shandong LNG (phase II), Tianjin LNG (phase II) and Jintan gas storage stepped up construction. Seven projects including Rizhao-Puyang-Luoyang and Dongjiakou-Dongying crude oil pipelines, Qingdao-Nanjing gas pipeline, Qianjiang-Shaoguan gas pipeline, Guangxi trunk pipeline, Shixing station tie line of Shaoguan-West-East gas pipeline No.2, and the gasification and export capacity expansion of Guangxi LNG terminal were successfully handed over to PipeChina.

Supporting Facilities for R&D. Shahe R&D base was built and put into use. The construction of Shanghai R&D base was progressing steadily.





International Oil and Gas E&P

By the end of 2020, we had 46 overseas oil and gas exploration and production projects in 24 countries. A comprehensive overseas oil and gas strategic layout had initially come into shape featuring simultaneous development of oil and gas as well as of offshore and onshore, and diversification of conventional and unconventional resources. Efforts were made to develop the potential resources and good results were yielded through exploration. Throughout the year, we completed 2,800 square kilometers of 3D seismic acquisition, drilled 29 exploration wells and evaluation wells with a success rate of 83% and had oil and gas discoveries in regions like Egypt, Ecuador,

Brazil, Angola and Russia. Newly-added 2P reserve and 2C resource reached 7.33 million tonnes of oil equivalent. Development and production remained stable. Altogether we drilled 390 new wells (including projects with equity participation), put 505 new wells into production, and built 3.32 million tonnes of equity capacity. We stepped up efforts in new project development and existing asset management to promote asset portfolio optimization. We vigorously reduced cost, increased efficiency and strengthened risk prevention and control. Our international upstream business was showing steady progress, quality improvement and good momentum.

	2020	2019	2018	2017	2016
Overseas equity crude oil (in 10,000 tonnes)	2,838.76	3,379.41	3,339.32	3,431.56	3,448.64
Overseas equity natural gas (in 100 million m³)	102.09	106.75	111.20	114.54	103.20

International Oilfield Services

We focused our efforts in cultivating key markets to further consolidate our position in traditional markets. Our profits were outstanding in major markets such as Saudi Arabia and Kuwait with efficient and stable project operations. By the end of 2020, we had executed 397 oilfield serviced projects (contracts) in 37 countries, with a total contract value of USD 16.27 billion. In 2020, the contract value of new orders was USD 2.68 billion and the completed contract value was USD 1.7 billion.

International Refining & Chemical Engineering Services

We made timely adjustment to our international market development strategy and turned challenges to opportunities. In 2020, the value for completed contracts was USD 807 million. The number of newly-signed overseas contracts was 39 with a total value of USD 1.537 billion. Our projects progressed on schedule smoothly and yielded good results through proper contract management. By the end of 2020, we had executed 55 refining &chemical engineering projects in 16 countries with a total contract value of USD 5.477 billion.



International Refining & Chemical Joint Ventures

In 2020, we completed the deal of Amur gas chemical complex (AGCC) project in Russia. Operation was steady and smooth for YASREF in Saudi Arabia, the equity participation project in Sibur in Russia, Krasnoyarskiy NBR JV project in Russia, the lubricants plant and supporting jetty project in Singapore, the Fujairah storage project in UAE, and VESTA storage project in the Netherlands. By the end of 2020, our cumulative initial investment had reached USD 4.7 billion and possessed overseas refining capacity of 7.5 million tonnes/year, storage capacity of 1.36 million cubic meters, lubricant grease production capacity of 80 thousand tonnes/year and NBR production capacity of 10.5 thousand tonnes/year. Key projects like SEBS project in Russia and refining and marketing project in Thailand were advanced as planned.

International Joint Venture Cooperation in China

In response to the requirements of opening to the outside world at a higher level and "stabilizing foreign investment", we actively promoted the implementation of key international joint venture cooperation in China. We accelerated the development of new projects including signing strategic cooperation memorandum with INEOS and proceeding with a package of cooperation projects such as introducing foreign capital into domestic refining and chemical assets. We further expanded the cooperation of existing joint ventures, carrying out a number of new projects such as central waste gas treatment of BASF-YPC (BYC) and commencing the feasibility study of IPS III project in BYC. A batch of new chemical projects were implemented, such as the second PO/SM joint venture project between ZRCC and LyondellBasell as well as and cooperation with Arlanxeo in rubber.

International Trade

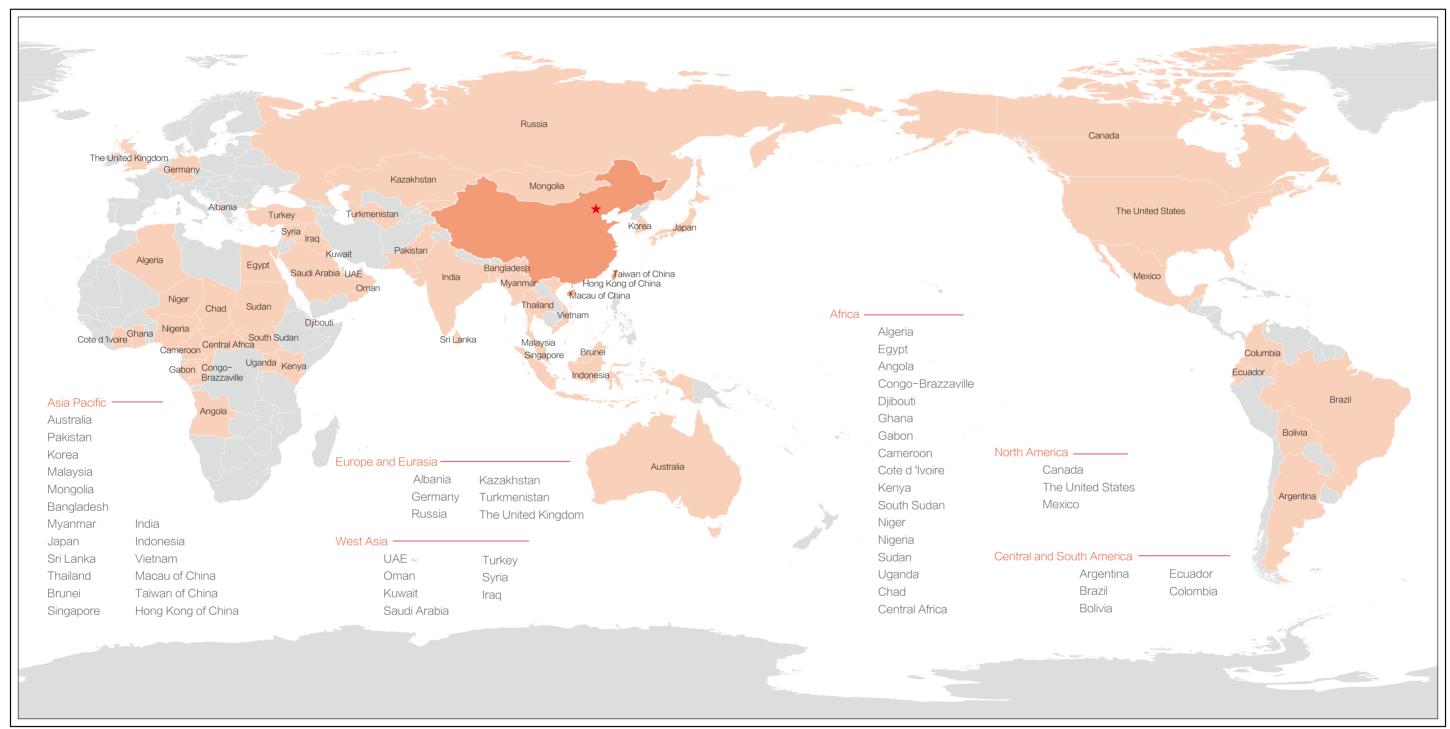
We imported 209.6 million tonnes of crude oil in 2020. Total oil product export was 16.3 million tonnes. We seized the favorable opportunities in global LNG market and procured more spot LNG to dilute the overall import cost so as to achieve the double increase in both volume and profitability. LNG import of the year stood at 17.47 million tonnes, equaling to 24.6 billion cubic meters of natural gas which rose by 2.98 billion cubic meters or 13.8%.

The realized annual international trade value for equipment and materials (petroleum machinery), coal, and by-products in refining and marketing segments reached USD 1.654 billion. Transaction value on the EPEC international business platform reached USD 14.534 billion. We established cooperation with 125 suppliers and 154 purchasers in 59 countries along the Belt and Road and realized industrial trade worth of USD 4.941 billion. Our trade value with BRICS countries was USD 1.235 billion. The chemical sales business overcome the adverse impact of the pandemic and saw increase in its overseas market. The annual overseas trade value of chemical business was USD 3.42 billion with a total business volume of 7.236 million tonnes and that of catalyst products was USD 75 million with a total business volume of 23 thousand tonnes. The polyolefin catalyst business successfully entered new markets in South Korea, Indonesia and Kuwait. The fuel oil business accomplished the plan for the global bunker fuel network and stepped up the progress for putting its Sri Lanka branch into operation. The lubricant business stepped up efforts in developing global renowned corporate clients and continuously promoted its brand recognition around the world.



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Our Operations Outside China's Mainland (including Hongkong, Macau and Taiwan)



审图号: GS(2016)1667号



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Reform and Management

In 2020, the Company firmly implemented a series of decisions and arrangements made by the CPC Central Committee to deepen the reform of state-owned enterprises, focused on ensuring stability on six key fronts and maintaining security in six key areas, and persisted in major issue resolution, system optimization and bottom-line control. At the same time, we focused on injecting vitality and motivation, deepening the reform of management system, continuously improving the management level, and successfully preventing systematic risks.

Adhering to deepening reform to break down the obstacles of system and mechanism and achieving remarkable results in promoting major reform tasks. We comprehensively deployed the threeyear action plan for deepening reform, made clearer of the direction, goal, path and focus of reform, and fulfilled the annual reform tasks in an all-round way. The organization and personnel of the headquarters were further optimized, the interface of the major delegations and responsibilities of the headquarters departments was clearer, and the streamlining of administration and decentralization continued to deepen. The assets and personnel of the oil and gas pipeline network were successfully transferred to PipeChina. Special reform campaigns such as the "Double-100" and "S&T Reform Demonstration" were concretely promoted. We were approaching to the end of transferring functions of supplying heat, water, electricity and steam and property management to regional governments. The socialized management of retirees was basically completed. We accomplished the goal of reforming the collectively owned factories operated by Sinopec Group and its subsidiaries, pushed forward the treatment of subsidiaries in difficulties and further cleaned up the redundant offices of subsidiaries in Beijing.

Adhering to the first-class benchmarking and continuously improving the corporate management. We promoted the world-class benchmarking management upgrade action in a solid and orderly manner, determined 8 benchmarking areas, 45 key tasks, and formulated 66 improvement goals and 153 improvement measures. We also revised the "Three Basics" work standards, ap-

plied the operational and management handbooks for grassroots job posts. Typical best practices were summarized into standards to promote the implementation of "Three Standards" guidelines at grass root level and strengthen the enterprise basic management. We improved the management innovation mechanism, leading to a great increase in the quantity and quality of applying subsidiaries and achievements. More and more innovative results on management were promoted and applied.

Adhering to the bottom-line thinking, enhancing the awareness of potential risks, and promoting major risk prevention and control. We strengthened the building of risk management and control system in an all-round way to enhance the overall operation, took the initiative to grasp the general trend, and accurately reviewed risks following with effective treatment. We carried out diagnosis and construction for major business risk management and control system and formulated short, medium and longterm rectification and construction objectives and measures. We adhered to "managing business paralleling with managing risks", reinforced major risk management responsibilities at all levels, and implemented 33 major risk prevention and control measures in 8 aspects. We deepened the implementation of the internal control system to enhance its effectiveness, organized and carried out internal control inspection, improved the internal control and risk control systems, continuously strengthened the management of financial derivatives business, as well as the management and control of credit risks, legal risks and US-related risks.

Organizational & HR Management

Senior management and professional staff construction. We studied, devised, and carried out the thinking and measures of the organizational guideline of the CPC in the new era, and delivered good results in selecting and utilizing talents. We launched a political ability increase plan for the head of the team, explored and improved the ways and moves to review their political quality, and guided officials to strengthen their political judgment, understanding, and execution. We ensured deepening the inspection and rectification of the Party Central Committee as an important political and long-term task, improved dynamic evaluation method, actively pushed ahead the institutional arrangement of multiple job holding for chairman (executive board members, and representative from subsidiaries) and secretary of the Party Committee, enhanced communication among officials, and made sure the measures for rectification take effect. We prioritized our work, and regarded pandemic response, operation and production resumption, and poverty alleviation as a test for the officials. We improved the staffing of our management, intensified its overall functions, ensured our officials can accept higher and lower posts, and spurred them to action. We focused on overall evaluation, pragmatic inspections, and precise analysis on the officials, proceeded with comprehensive tests and appraisal, ability tests, and performance evaluation, and completed the all round inspections on officials once every three years. We made solid strides in Three Year Action Plan on Deepening Reform, scaled up tenure system and contractual management of the leaders for 5 organizations, and revised (formulated) the retirement and leaving management for them. We took a three pronged approach to cultivate young officials, kicked off a "three hundred and three thousand post exchange" campaign to boost the development of our young talents, and enhanced selection and employment of excellent young officials. We conducted specific overhaul on the leaders' personal information report system, and the consistency rate of the important items of the information was kept at 100%. We revised and launched The Measures for the Supervision, Inspection and Accountability of The Selection & Appointment of Leaders in Sinopec, improved supervision on selection and employment of talents, deployed and introduced Special Action for Supervision and Inspection of Selection and Employment of Organizations Directly Affiliated under Sinopec and Improvement of Governance (2020-2022), and conducted specific tests on the selection and employment of talents for 24 organizations directly affiliated under Sinopec. We tightened supervision on key areas and sensitive posts, systematically sorted out, investigated, and pushed forward post rotary communications. We conducted investigations on "promotion during sick leave" for mid level managers, and appointed more young mid level managers. The proportion of mid level managers aged below 40 years old reached 15%, up by 1.6%, accomplishing the goal of our Thirteenth Five Year Plan.

Employee team building, training, and development. We took a holistic approach to building talent teams covering strategic scientists, S&T leading experts, technical backbone talents, and young reserve talents for S&T. We launched a "three hundred and three thousand post exchange" campaign, and initiated the first batch of staff to assume temporary posts. We stressed on the allocation of introduced talents, engaged in particular recruitment on "pandemic

response, post stabilization, and employment increase", ensured stability on six key fronts, and maintained security in six key areas. We formulated measures to enhance technical team building, carried forward professional title evaluation and vocational skill certificate reforms, and organized national and Group level vocational skill competition. Among our employees, 9 were awarded the title of "National Technical Expert"; 2 won National Innovative Forerunner awards; 1 won the "Excellent Engineer Prize"; and 63 were granted with the State Council Special Allowance. We sped up young talent team building, and co-developed 7 young scientists with Imperial College London. We overcame the hindrance of COVID-19, and seized opportunity to kick off physical training programs among central SOEs, leveling the scale with that of 2019. The online training time amounted to 41.42 million hours, twice the time of last year. We took an active part in "pandemic response, post stabilization, and employment increase" of central SOEs, and introduced another 3,500 college graduates. In 2020, we introduced 11,000 employees, 2.3 times that of 2019. In 2020, Sinopec was also included among "Annual Best Employers in China", and awarded the honor of "Outstanding Employer for College Graduates in Beijing".

Labor remuneration and performance evaluation. We orderly optimized and allocated human resources, actively explored the utilization of market oriented labor system in "one hundred large scale companies and one hundred emerging companies" and "S&T reform demonstration companies", and proceeded with the implementation of the Three Year Action Plan for SOE reform. The overall labor force continued to decline, orderly revitalizing human resources. We expedited the market oriented labor system with labor contract management as the key and post management as the foundation. We improved the management on total payroll. introduced benchmarking results of the salary market, established and improved the mechanism where the payroll coordinates with economic benefits, the payment of human costs can be adjusted, and the payroll is market oriented, and moved faster to set up evaluation allocation system that is market oriented, categorized, differentiated, and multi-faceted. We strengthened positive incentives, carried out a reward mechanism for the first time on companies which realized profits increase and creation, and incorporated evaluation on the added value of human resources into annual performance assessment of the management. We pressed ahead the categorized management on total payroll, and put the record of total payroll of some companies in full market competition and under standardized regulation on file. We rendered support to companies in raising their independent innovation capabilities, and assumed separate management of the wages by leading talents and their team who made R&D in key and core technologies, and national innovation platform such as national key laboratories and national engineering laboratories. We controlled the human costs, dynamically adjusted the human cost of the companies based on profits and efficiency, and intensified control on companies that lost profits. We conducted incentive annuity selection, appraised 65,100 employees, and utilized RMB 567 million of capital. We improved the evaluation and assessment system, and devised Ways of Special Awards for

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Improving Quality, Enhancing Efficiency, and Stabilizing Growth in 2020. Sinopec was awarded Grade A in SASAC's evaluation of operational performance for heads of central SOEs, and won the title of "Outstanding Organization of Evaluation & Allocation".

Reform and coordination through the three-system reform. We conscientiously implemented the Three Year Action Plan for SOE reform, took the three system reform as a key task, and devised, dovetailed, and carried out the reform in step with compiling the human resources development plan during the "14th Five Year Plan"

Period and benchmarking world leading management improvement actions. We established a working group for deepening human resources reform and a regular meeting system, compiled a record keeping file for tracking our progress in implementing the Three Year Action Plan, collected basic data on key quantitative indicators, and improved work implementation. We scaled up the reform evaluation indicators for the "three systems", studied and formulated reform evaluation methods of the "three systems", carried out trial evaluations, and notified related companies.

Digital Transformation

Strengthening Digital and Smart Operation in Production and Making Progress in Upgrading Industrial Smart Manufacturing

Smart operation center. We formulated the idea of "1+4+N", and launched 15 applications for dynamic shipping monitoring, hazardous chemical transportation monitoring, and major hazard risk early warning.

Smart oil and gas fields. Based on the "Sinopec Smart Cloud" industrial Internet platform, we developed smart oil and gas field construction specifications and business components, and promoted smart oil and gas fields in Sinopec Northwest Oilfield, Sinopec Shengli Offshore Oil Engineering Company and Sinopec Jianghan Fuling Gas Field.

Smart factory. We launched smart factories in 6 subsidiaries in full swing and commenced the promotion in 4 other subsidiaries. It was the first time for the Company to realize synchronous design, construction and operation of the production base and the smart factory in Sinopec Zhongke integrated refining and chemical project. By the end of 2020, we had built smart factories in 11 refining and chemical subsidiaries.

Smart service station. We developed the new generation of integrated IT system at station level and applied in nearly 20,000 service stations. Based on mobile Internet, cloud computing, big data and other information technologies, we developed applications such as "Easy Joy Fueling" and "Sinopec Wallet", which were launched nationwide. We have built more than 150 smart service stations and provided "smart fueling" service such as car plate automatic recognition, senseless payment and digital marketing.

Smart research institutes. We piloted smart research institute in Sinopec Dalian Petroleum and Chemical Research Institute. 13 applications were fully launched and operated for project process management, experimental method notification push and technical service management, which enhanced the management for R&D activities, innovation ability and technology transformation efficiency and shaped the comprehensive solution and promotion template of Sinopec Intelligent Research Institute were thus

Strengthening the Promotion and Construction of Financial Technology and Other Service Platforms and Helping New Business and New Economy Development to Achieve Breakthroughs

Promoting the construction of Fintech platform. We launched functional applications such as risk control management, credit reference service and online transaction of financial products, expanded online payment application scenarios, realized online operation of financial services such as risk control, credit reference, supply chain finance, insurance, financial management and personal loan, provided online risk management services for e-commerce platforms such as EPEC and Chememall, and offered credit reference service for all subsidiaries of the Company.

Promoting online business travel platform. We promoted the online business travel platform in 186 subsidiaries, achieved the one-stop service of travel application, approval, reservation and reimbursement for the employees and continuously optimized the applications operation experience to facilitate employees' travel. During 2020, the platform had served employees over 320,000 times.

Promoting "Chememall". We improved the entry process and store management function of third-party stores on Chememall.com, and realized online operation of all kinds of chemical products, self-marketed projects of Sinopec subsidiaries, fuel oil, natural gas etc. In 2020, 470 million tonnes of resources were marketed on the platform, 5301 customers completed online procurement, and the trading volume reached 60.94 million tonnes.

Promoting "EPEC". We strengthened the IT interconnection and business integration with key stakeholder companies, reinforced the "Sunshine Supply Chain" featuring transparent transaction and promoted the Global Select Shop. The platform had a total of 2.72 million online commodities, 239,000 registered users and 1,217 IT integration with key stakeholder companies. EPEC was awared as the "2020 Big Data Industry Development Pilot Demonstration" by the Ministry of Industry and Information Technology.

Strengthening the Integration and Application of Digital Technology and Striving for Value Creation

Building the operation and management data service platform. We completed building the core functions of Sinopec operation and management data service platform by taking "acquisition, gathering, management, utilization and maintenance" as the main design idea. We established more than 30,000 data resource models and data sharing service system, which supported the data sharing and analysis application in financial, material, marketing, finance and other business fields.

Building "Sinopec Smart Cloud" industrial Internet platform. By the end of 2020, the platform had carried more than 400 industrial mechanism models and more than 20 industrial intelligent algorithms, connected more than 750,000 sets of industrial equipments, provided 11 sets of technical services such as big data and Internet of things, supported the smart manufacturing the direct IT integration with aerospace cloud network and the platforms with material suppliers.

Strengthening the application of artificial intelligence and big data. Intelligent applications were applied in the field of production, such as abnormal condition identification, production early warning, equipment fault diagnosis and analysis, so as to realize online evaluation of equipment operation status and fault diagnosis and early warning. In the field of operation and management, we developed more than 10 customer big data applications such as customer portrait, customer group analysis, procurement forecast and marketing analysis and launched them on EPEC, Chememall and online platforms of the marketing segment, advancing the level of precision marketing and precision service.

Four achievements were selected into the "2020 Digital Transformation Cases of State-owned Enterprises" of SASAC.



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Digital Technology Contributing to the Pandemic Prevention and Control as well as Resumption of Work and Production

Quickly setting up "Cloud Office" model. During the pandemic, the Company completed the deployment of video conference equipment and network expansion at the headquarters as soon as possible, fully meeting the needs of multi business scene video conference and telecommuting for the resumption of production and work, and successfully facilitated many large-scale video conferences, such as the live broadcast and interaction of the "Cloud Production Commencing Ceremony" of Sinopec Zhongke refining and chemical integration project, connecting participants in three different locations. All subsidiaries rapidly promoted IT facilitation such as electronic access control, resumption of work control and mobile office etc.

Making all-out efforts to ensure smooth network and stable

system. The Company continuously strengthened inspection on the computer facilities and network, enhanced the operation guarantee and technical support of various information systems and e-commerce platforms, and ensured the smooth access of headquarters dispatching instructions with the link among "supply, production, marketing and transportation" and the finance management working in order.

Five information systems including the e-commerce platform EPEC, logistics management system for factories, integrated communication, mobile application and Sinopec i-Academy, have been selected into the "first product and service list of digital pandemic control methods applied by enterprises " by SASAC of the State Council.



Corporate Governance

Law-based Governance

In 2020, the Company conscientiously studied and implemented President Xi Jinping's Thought on the Rule of Law, and actively promoted the rule of law in centrally-controlled SOE. Great achievements were made in legal services for projects and contract management, dispute settlement and reduction of account receivable and inventory-occupied capital, compliance management system construction, and the construction of the rule of law culture, playing a role in providing support, standardization and value creation. The Company successfully accomplished the final acceptance of the SASAC of the State Council, the Publicity Department of the CPC, the Ministry of Justice and the National Legal Promotion Office, and won the A-level evaluation.

Orderly promoting the compliance management system, continuously optimizing the system management. The Company formulated the compliance management measures and the development scheme of the compliance management system, and selected some subsidiaries to carry out pilot projects. More than 200,000 cadres and employees participated in the study of the compliance manual. We compiled the list and guidelines of legal compliance risks such as international sanctions, export control, overseas anti-corruption and anti-monopoly laws, and promoted the integration of internal control, risk control and compliance. We actively responded to foreign-related compliance cases and strictly controlled compliance risks. We revised the system management measures, strengthened the system management and control requirements, and orderly promoted the reform of legislation. A number of important systems related to the overall situation, such as the company's articles of association and investment management measures were further improved.

Actively following up the legal services for major projects, further improving the contract management level. We participated in major contract projects in the whole process, strengthened the legal services for projects such as overseas direct investment, domestic capital operation and domestic and foreign financing, and strived to promote the smooth progress of major projects in accordance with the law. We strictly followed two-level legal review and carried out legal compliance demonstration. We organized the contract system to promote the implementation of the project, and improved the Sinopec contract text library composed of more than 3,000 standard contract texts. By benchmarking the first-class legal sharing platform, the level of legal management informatization reached a new level. We also built industrial and commercial family map to provide basic data support for company management, equity management, credit risk prevention and control.

Vigorously carrying out special actions on handling disputes, realizing the double decline of the number of accumulated cases and the capital amount involved in the cases. The Company put emphasis on the accountability mechanism of subsidiaries where the legal case occurred and the requirements for the heads of the relevant subsidiaries to participate in handling major dispute cases, implemented measures such as "one case, one policy" and supervision of major legal disputes based on ratings of severity, and a number of major long-standing cases were properly handled. In addition, the Company carried forward with the legal campaign of collecting account receivable and inventory-occupied capital and made remarkable results. We also strengthened the legal protection of intellectual property, prevented the risks related to software use, carried out special actions to investigate the clues of intellectual property infringement, and properly dealt with legal disputes over intellectual property.

Continuing to deepen the legal compliance culture and cultivating legal talents in an orderly way. The top leader of the Company issued a signed article to study President Xi Jinping's Thought on Rule of Law, and the Party group (Party committee) theoretical learning group normalized the learning activity on the rule of law. The responsibility system of "manager responsible for law dissemination among the team" and the pattern of "Comprehensive Law Dissemination" were further improved. We rolled out law dissemination activities focusing on improving quality and efficiency, transformation and development, safety production, environmental protection, labor and employment, etc. the "Seventh Five -Year Plan" of law dissemination was successfully completed. We selected and recruited legal experts and built a two-layer expert team and a corporate lawyer team consisted of 260 lawyers. thus widening the career path and improving the professional quality and performance ability.

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Audit Supervision

In 2020, The audit departments at all levels of the Company carried out 982 auditing projects of various types, including 250 economic responsibility auditing, 190 fixed assets investment auditing, 16 financial capital auditing, 76 internal risk control auditing, 15 joint venture cooperation projects auditing. In addition, the Company also implemented 435 special auditing or audit investigation on clearing up the accounts payables for small and medium-sized private enterprises, information management, and financial derivatives business and so on.



Corporate Culture

Adhering to the corporate mission of "provide energy for a better life". We adhered to the sense of a community with a shared future for mankind, took people's yearning for a better life as the growth direction of the Company, and strived to provide more advanced technology, better quality products and more considerate services to help fuel social development. We persisted in the green and clean road of sustainable development, and built a clean, low-carbon, safe and efficient modern energy system to contribute to the construction of ecological civilization. We adopted the development concept of win-win cooperation by bringing benefits to all stakeholders while achieving high-quality development.

Taking "building a world-leading clean energy and chemical company" as the corporate vision. We practiced the new development concept of "innovation, coordinated, green, open and sharing growth", implemented the requirements of high-quality development, strived to build the development pattern of "One Foundation of energy and resources, Two Wings of clean fuels and advanced chemicals, and Three Growth Engines in new energy, new materials and new economy, and aimed to build Sinopec into a world-leading clean energy and chemical company step by step.

Sticking to the corporate value of "people-oriented, responsibility, integrity, refinement, innovation and win-win". We regarded the value as the basic value criterion for all employees in building a world leading company, and as the principle and standard that the Company must adhere to while developing its business.

Cultivating the "strictness, meticulousness and practicalness" corporate working style. We inherited the core spirits of the petroleum industry featuring "hard work" and "three honests and four stricts", carried forward the traditions of the petrochemical industry featuring patriotic, truth-seeking and pragmatic, and rigorous spirits, and strived to incorporate these spirits into the whole process of operation and management.

Strengthening the corporate culture and the cultural appeal. We further improved the top-level design of corporate culture construction and made a special plan for the "14th five-year plan" of corporate culture construction, thus laying a foundation for the upgrading of corporate culture construction to cultural management. We continued to promote the integration of corporate culture and manage-

ment, and set up special themes for cultural campaigns such as safety, green, quality, rule of law and integrity. The Company continuously built influential cultural and educational bases. Sinopec Nanjing Chemical Industry Co., Ltd., formerly known as Sinopec Yongli Chemical Ammonium Plant and the Meritorious Well of Sinopec Shengli Oilfield were selected as the National Industrial Heritage Bases. 6 subsidiaries including Sinopec Fourth Construction Co. Ltd., and Sinopec Beijing Research Institute of Chemical Industry were awarded the sixth National Civilized Units.

Enhancing the leading force of cultural cohesion with petroleum spirits and petrochemical traditions. We continued to strengthen the education of "inheriting and carrying forward the spirits and traditions of petroleum and petrochemical industry", held lectures respectively on publicizing "The Petroleum Spirit -- Daqing Spirit and Iron Man Spirit", "Inheriting Petroleum Spirit and Vowing to Gain Victories", "Inheriting the Spirits and Traditions of the Petroleum and Petrochemical Industry, Strengthening Corporate Culture Promotion", and carried out campaigns on promoting the national role models for fighting the pandemic including the synthetic resin plant of Sinopec Yanshan Petrochemical Company and Li Zhengjun, Manager of Wuhan Zhiyin service station of the Hubei Branch of Sinopec Marketing Company.



Brand Building

In 2020, Sinopec fully implemented the brand strategy and gradually improved the system construction. The brand value continued to increase. Sinopec's brand value was 33.437 billion U.S. dollars, ranking 42nd in the world (2020 ranking by Brand Finance). Sinopec's brand value ranked second in the "China Brand Value Information Evaluation" and first in the energy and chemical industry, with a brand value of 299.197 billion yuan. The brand values of "Easy Joy", "EPEC", "Great Wall Lubricant", "Donghai Asphalt" were 16.1 billion yuan, 9.8 billion yuan, 7.7 billion yuan, and 1.2 billion yuan respectively.

Strengthening the top-level design of the brand. Sinopec completed the "14th Five-Year Plan Period Brand Building Plan", issued the "Guiding Opinions on Strengthening Sinopec Brand Building" and "Implementation Opinions on Sinopec Business Brand Building" to accelerate of the brand building in the whole Sinopec system.

Releasing new brand mission and slogan

Brand Mission: Leading the future of the industry by driving innovation, creating a better life by shouldering responsibilities

Sinopec will promote and pursue global low-carbon transformation, lead the future of energy and chemical development with innovation, fuel a better life by fulfilling responsibilities, and create and share a better life with stakeholders.

Slogan: Cleaner Energy, Better Life

Sinopec's Top Ten Excellent Brand Marketing Cases. Sinopec selected Top Ten Excellent Brand Marketing Cases including "I have melt blown cloth and who has mask producing machines", "Sinopec's "one-click refueling" to achieve contactless digital services", "Using holistic thinking to multiply technology by service", "creating Sinopec's 'overseas business card'" etc., to further promote the in-depth integration of brand and business, and improve profitability through brand excellence.







Self Construction of the Leading Party Group

We formulated and implemented *The Guidelines on Implementing Important Instructions by General Secretary Xi Jinping for Leading Party Group of Sinopec*, carried out the primary item system, established supervision mechanism, set up a close loop for our work, and secured the important instructions of General Secretary Xi Jinping were fully implemented in Sinopec. We devised and implemented the *Management Measures for the Pre-research & Discussions on Listing Major Operational and Management Matters by the Leading Party Group of China Petrochemical Corporation (Trial)* to integrate party leadership into corporate governance and leveraged the guiding role of the Leading Party Group. We formulated and implemented *The Working Mechanism for Leading Party Group of China Petrochemical Corporation to Strengthen Reporting to the Party Central Committee*, and submitted 17 reports to the Party Central Committee and filed 29 documents throughout

the year. We revised *The Measures of the Leading Party Group of China Petrochemical Corporation to Assume Full Responsibility in Deepening Party Governance*, improved the responsibility system, and listed the responsibilities. The Leading Party Group studied and pushed ahead party building and business in parallel, and the members of the Leading Party Group supervised and urged the management and governance of the party and fulfilled production and operation tasks. We consolidated and deepened the achievements on the education themed as "staying true to our founding missions", the Leading Party Group took the lead in throwing reading classes, collectively studied the Party Constitution, gave special lectures on the Party, conducted research on topics related to the Party, directly contacted the party members working in frontline, and vigorously solved problems.

Party and Employee Relation Work

Always putting the party affairs in the first place and resolutely practicing the "Two Upholds". Sinopec always put political construction in the first place, strictly implemented the "first topic" system, promptly conveyed and studied the spirit of General Secretary Xi Jinping's latest important speeches and instructions, organized the education on the Fifth Plenary Session of the 19th CPC Central Committee, made efforts to acquire the "golden key" to promote work and solve problems, convened a promotion meeting to strengthen the party's political construction, coordinated with the central inspection and rectification, continued to focus on the theme education rectification, formulated and implemented 22 key measures for the company to deepen and promote the party's political construction, and 25 essential measures to consolidate the gains from the initiative to raise awareness of the need to stay true to the Party's founding mission, guided party members and cadres to continuously enhance the "Four Matters of Confidence" and practice the "Two Upholds", revised and issued the management measures for external donations to strengthen the management of external donations, and carried out "Help Poverty Alleviation with Party Fees" and poverty alleviation through consumption campaigns to contribute to poverty alleviation and demonstrate political responsibility.

Ensuring full and strict governance over the Party with more responsibilities. Sinopec formulated and implemented the list of responsibilities for the Leading Party Member Group to ensure full and strict governance over the Party, the working rules of the party building leading group, the guiding opinions on the operation mechanism of party working committee of different business segments, and regulations on the party building management interface of the directly affiliated organizations, and specified the responsibilities and tasks of each level from top to bottom. We have organized party committee secretaries at all levels to conduct review of party building for five consecutive years, and conducted system-wide party building assessments for seven consecutive years to improve party building responsibility, quality, and effectiveness assessment systems. The 2020 assessment reflected the "four firsts" and "four whethers". The "baton" orientation is more systematic and clearer. We sorted out and formed a comprehensive and strict party management system catalog index, and strictly enforced the system and measures of "abolishing, reforming and establishing" to enhance the effectiveness of the party building system.

Strengthening the top-level design to improve the system construction. As a central enterprise, Sinopec aimed to "top the ranks and strive for the first" in terms of party construction, grasped the concepts of "pragmatic, innovative, and integrated", and formed a systematic thinking for party building. Focusing on the implementation of the spirit of the Fifth Plenary Session of the 19th Central Committee of the Communist Party of China, in alignment with its development strategy of building a worldleading company, Sinopec put forward the overall idea of "1355" for party building, prepared "14th Five-Year" party building plan which was continuously improved in accordance with the "five-year plan, three-year rolling plan, and annual revision", made systematic arrangements for the Leading Party Member Group (party committee) to play the leading role of "control and promotion", for the leading cadres to enhance the "three political forces" and to strengthen the construction of the "three teams" of party committee secretaries, party branch secretaries, and party

cadres.

Serving the overall situation with more obvious transforming advantages. Sinopec formulated and implemented the "Guiding Opinions on the Implementation of the Integration of "One Post and Two Responsibilities" for Party Members and Leading Cadres" and the "Opinions on Giving Full Play to the Party's Political Advantages in Major Tasks, Major Events, Major Projects, Special Times, and Special Events", focused on playing the role of the party committees, the labor unions and CCYL committees in the fight against the epidemic and the "100-Day Campaign of Improving Profitability" and its "Followup Campaign", and played the role of stabilizers and ballast stones. A group of the company was awarded the title of "National Advanced Group in Fighting against COVID-19 Epidemic". One individual was awarded the title of "National Advanced Individual in Fighting against COVID-19 Epidemic". Another group was awarded the title of "Advanced Anti-epidemic Group of Central Enterprises of the Stateowned Assets Supervision and Administration Commission of the State Council". 5 Individuals were awarded the title of "Advanced Individuals in Anti-epidemic of Central Enterprises of the Stateowned Assets Supervision and Administration Commission of the State Council". We selected and commended 20 anti-epidemic models, 10 organizations with outstanding contributions, 200 models individuals, and 50 model organizations. The Leading Party Member Group made a keynote speech at the meeting of heads of central enterprises on the improving profitability through party building.

Consolidating foundation. Sinopec implemented the mechanism of party members contacting the working teams, achieved 100% coverage in the whole system, formulated the "Key Measures for Continuously Improving the Quality of Party Members contacting Grassroots Teams" to strengthen the role of party members and ensure the party work extending to the grassroots level. We compiled and issued "Sinopec Party Branch Building Standardization Manual", "500 Questions on the Basic Knowledge that Party Branch Secretaries Should Know", carried out "Four Noes and Two Directs" research and supervision, applied Sinopec party building platforms, standardized information construction of party building, held a special meeting to promote ethical standards within the headquarters, formulated and implemented 9 relevant measures, launched the party building day with the theme of promoting ethical standards, took multiple measures, revised and issued the "Work Rules of Discipline Inspection Commissions Directly under Sinopec" and "Party Disciplinary Work *Procedures*", carried out political supervision based on the prevention and control of the epidemic and the profitability improvement, organized the investigation of integrity risks, warning education and key node reminders, and continued to improve Party Conduct.

Focusing on the united front and gathering more strengths. Sinopec strengthened the party's leadership of the united front work, and continued to gather people outside the party to contribute to the reform and development of the enterprise. We persisted in letting party building lead industrial construction and team building, carried out knowledge competitions and youth commando activities focusing on profitability improvement, set up innovative studios, and vigorously spread the spirit of model workers, labor spirit, and craftsmanship. 21 people were awarded "National Model Workers" Title. 3 innovative studios for model workers and craftsmen were rated as national model studios. 8 people were awarded the title of "National Youth Specialists".

Anti-Corruption

Resolutely performing the major political responsibilities of the "Two Upholds", ensuring that the spirit of General Secretary Xi Jinping's important instructions, the decisions and deployments of the Party Central Committee are implemented. Sinopec highlighted political guidance, adhered to and improved the "first topic" system, strengthened political supervision, closely followed the CPC and the overall trend, focused on coordinating epidemic prevention and control, resumption of work and production, guaranteeing national energy security, driving scientific and technological innovation, deepening three-year reform, achieving a decisive victory of the fight against poverty, enhancing the supervision and inspection on the implementation of decisions such as guaranteeing the stability in six key areas and ensuring the security in six fronts, etc. Through all these measures, Sinopec has implemented major decisions made by the Party Central Committee and the key tasks deployed by the Leading Party Member Group.

Adhering to system integration, efficient coordination, continuous improvement of the overall supervision structure. Sinopec optimized the top-level design of the "overall supervision", transferred more personnel to the supervision committee and its office, formulated the working rules of the supervision committee, and improved the operation mechanism of requesting instructions and major risk research and judgment. Relying on the "overall supervision" pattern, Sinopec focused on special rectification of issues such as tunneling, rent-seeking and turning public into private, established the system of illegal operation and investment accountability, organized special supervision of fund management, non-fuel business, etc., resolved the issue of leaders' relatives doing business or starting enterprises, and reinforced the supervision on the dispatched to key projects such as Hainan Refining and Chemical, Gulei Petrochemical, etc. Through these measures, Sinopec has improved the supervision effects of "loss stopping and recovery, forced reform, standard management, and further development".

Continuing to oppose the "Four Forms of Decadence" (formalism, bureaucratism, hedonism, and extravagance), establish new standards, and make continuous progress in promoting ethical standards.

Sinopec strictly and quickly investigated and dealt with violation of the "Eight-Point Regulation of the CPC Central Committee", exposed typical problems, sternly stopped the practice of "welcoming and seeing off" when cadres were transferred to other posts or paid business trips and resolutely stopped food waste. A special inspection on the issue of purchasing local specialties as gifts with public funds in the name of canteen procurement was carried out. Sinopec consolidated and expanded the results of special rectification on the Beijing Offices, steadily promoted their assets disposal and strengthened supervision and inspection. We resolutely rectified formalism and bureaucratism, formulated "Measures for Promoting Ethical Standards in the Headquarters", implemented 23 key measures that continued to solve the difficulties of the grassroots, evaluated the actions opposing the "Four Forms of Decadence", and consolidate and further reduced the burden on the grassroots.

Focusing on reducing stocks and curbing increment, and promoting the "three noes" in a solid and effective manner. Sinopec always maintained a tough stance to punish corruption, gave full play to the advantages of joint case handling by enterprises and local governments and internal level-skipping case-handling, and seriously investigated and dealt with violations of discipline and law. We intensified accountability, accurately used the "four forms", deepened the implementation of the "three distinctions", improved and used well the mechanism of clarification, fault tolerance and correction, so as to create entrepreneurship and encourage employees to take up more responsibilities. Sinopec promoted case-based education, case-based reform, and case-based governance, conducted special analysis of typical cases in areas such as fund management and gas station construction, made good use of disciplinary inspection and supervision recommendations, and urged systematic rectification to plug up loopholes. We have further standardized corporate business decision-making management and risk prevention and control by learning lessons from typical cases, hiring independent intermediary agencies to appraise the management of key subsidiaries, and improving the management and control system for major business risks.



Inspection Work

Deepened effectiveness of the central inspection and rectification. The self-examination was carried out based on the problems found in the fifth round of the 19th Central Inspection. And 30 rectification measures were formulated in 7 areas, which were included in the central inspection and rectification task list to promote relevant work based on classification. The 159 measures formulated for central rectification have all been completed or completed in stages, and a number of deep-seated problems have been effectively resolved. Sinopec improved the rectification mechanism, earnestly implemented the requirements of General Secretary Xi Jinping on the "four integrations" to rectify, practiced the "three threes" rectification mechanism, and continuously improved the quality and effect of rectification. We established a working mechanism of "weekly follow-up supervision, monthly summary analysis, stage summary review", and had regular special research to promote the central inspection and rectification work. The Leading Party Member Group, headquarters departments and directly affiliated enterprises addressed the same issues, resonated at the same frequency, and worked in the same direction. The Company improved and supplemented the rectifica-

The exemplified role of the Leading Party Member Group inspection and supervision platform. Benchmarking the central inspection work, focused on the key issues such as ensuring national energy security and promoting the "petroleum spirit" reflected by the central inspection, Sinopec further refined the "four implementations" into "five focuses" and "ten major issues". Aiming at the "four steps" of political ecological construction, we closely related to functional responsibilities and a few key issues. Highlighting the joint efforts to tackle the same issue, Sinopec made inspection supervision a major political task that must be completed by all members at all levels and in the entire process.

tion measures, formed a new version of the rectification account,

and promoted the decomposition of rectification tasks, the clarifi-

cation of responsibilities, and the implementation of measures.

We further clarified the responsibility of the main body that was instructed to carry out rectification by the party inspection group so as to do a good job in the "second half" of the inspection work. Sinopec continuously innovated methods, adopted the "one supporting three" method for the first time in the second round of inspection, carried out regular inspections, sudden inspections and "going back" inspections simultaneously. for the first time the mobilization speech was delivered by Secretary of the Leading Party Member Group. For the first time the mobilization meeting and the education conference were held together. The second round of inspection feedback in 2020 was completed for the first time in a combination of "video + on-site" and "oral + written". For the first time, 130 organizations inspected since 2017 were "revisited" to evaluate the inspection and rectification results. As a result, the authority, deterrence, effectiveness and credibility of the Leading.

Party Member Group inspection have been significantly enhanced. Further standardized inspection work. In accordance with the three-step general guidance of "Full Coverage -Standardized Advancement - Quality Improvement", Sinopec reinforced efforts in "paper work", issued the "Opinions on the Inspection Work of the Party Committee of Directly Affiliated Businesses", and compiled the "Party Committee Inspection Work Manual", which provided guidance and basis for the comprehensive and standardized inspection work, and cleared the "last mile" of ensuring full and strict governance over the Party. On the one hand, we promoted "online" communication by organizing inspection work seminars for some directly affiliated units to exchange experience and practices, discuss and solve problems, and improve capabilities. On the other hand, we strengthened "one on one" research and supervision by carrying out inspection work research on enterprises to understand the development of inspection work and existing problems and suggestions and carry out "one on one" supervision and assistance so as to enhance the quality of the inspection work.





■ CHINA PETROCHEMICAL CORPORATION ANNUAL REPORT 2020 Social Responsibility ■

Safety and Employee Health

Production Safety

Promoting the effective operation of the HSSE management system and gradually establishing a long-term mechanism for safe production management. Sinopec formulated and released system operation management measures, clarified the responsibility requirements for the main departments of the system elements, established system audit standards and quantitative scoring rules to standardize system audit and management review, revised and improved the safety management system to further improve the operability of the system, strengthened the research on safety technology standards, compiled a manual of petroleum engineering HSE standards, and sped up the development of enterprise standards for the operation and maintenance of key safety facilities and risk assessment technology, built up a team of system auditors at the group company level, and carried out "two-party system audit" on pilot organizations by business segments.

Strengthening risk control and hidden hazards management and further improving the level of intrinsic safety. Sinopec made a list of the company's major safety risks and hidden hazards, promoted the mechanism of leaders at different levels managing and controlling different levels of risks, downgraded major safety risks, eliminated major safety hazards, studied, formulated and implemented systemic safety risk management and control plans, optimized and upgraded the potential hazards analysis and management system (PHAMS), improved and applied the safety reliability database in refining and chemical subsidiaries, standardized quantitative risk assessment (QRA) institutional management, carried out ORA of external targets, collected basic data for external risk prevention, organized a large-scale investigation and rectification of hidden hazards, aligned with the three-year special rectification of safety production to focus on the prevention of safety hazards such as excessive oil and gas in the sealing of the external floating roof tank floating plate and defects of the independent safety instrumented system (SIS).

Making up for shortcomings and strictly managing contractors and direct operations. Sinopec formulated plans for contractors' "top leaders" contracting safety risks, clarified the responsibility list for the "top leaders", carried out special rectification of construction safety, strictly managed key links such as project contracting and construction and production organization, carried out special rectification of confined space and high-altitude operations, formulated and implemented the "Double Ten" control measures, organized subsidiaries to carry out epidemic prevention and control and safety conditions investigation and confirmation during the kick-off (resumption) of projects to ensure the orderly progress of key project construction, launched special supervision and remote supervision and inspection on contractors and direct operation links, carried out the safety inspections of "Four Noes and Two Directs" at Qingdao and Tianjin LNG terminals, offshore sites and coal mines, made public the inspection results, and urged all subsidiaries to learn from one another, investigate and resolve problems.

Strengthening emergency management and comprehensively improving emergency response capabilities. Sinopec revised the overall

plan and production safety special plan, added the emergency response principles for coal mine accidents, completed the emergency command platform to effectively improve emergency response capabilities, strengthened the pertinence and actual effects of emergency drills, organized drill assessments to improve comprehensive emergency response capabilities, promoted the transformation of the full-time fire brigade into a comprehensive emergency rescue team, to enhance the comprehensive emergency rescue capability of the full-time team, and strengthened the building of voluntary emergency response teams of grassroots units to improve the early-stage emergency response capabilities at the forefront.

Improving the management mechanism to ensure stable and safe production at offshore sites and coal mines. Sinopec carried out professional risk assessment, formulated and implemented risk control measures for offshore production platforms, mobile facilities, and submarine pipelines, promoted the construction of video monitoring systems for offshore platforms to realize remote monitoring and emergency command of major operations, analyzed and evaluated the safety risks of holding and participating coal mines, studied measures to strengthen coal mine safety management, organized the supervision and inspection of the offshore safety production of key facilities and units in the Shengli offshore field, and hired coal system experts to provide safety technical services to the coal mine of Great Wall Energy and Chemical Co., Ltd. in Ningxia.

Focusing on key areas and key links to ensure a stable public security situation. Sinopec promoted the construction of the first-level key targets of public security and counter-terrorism prevention to meet the standards, standardized the equipment of people defense, physical defense, and technical defense, urged subsidiaries to upgrade safety precautions, guaranteed the security for major events and conferences such as the Fifth Plenary Session of the 19th Central Committee and the Third International Import Expo, formulated natural disaster prevention and management regulations, completed special emergency plans, and actively controlled pipeline geological disasters, organized training of newly promulgated regulations and standards, studied and formulate safety management systems for the transportation of hazardous chemicals, strengthened the safety management during the transition period of the pipeline network reform, implemented the "two specials and two priorities" upgrade management and control during the transition period, conducted safety mutual inspections of oil reserve bases involved in the pipeline network reform, and clarified the main responsibilities of relevant subsidiaries.



Overseas Public Security

Sparing no efforts in preventing and controlling the epidemic at overseas. Faced with severe and complex overseas epidemic situation, Sinopec timely adjusted prevention and control priorities, redoubled prevention and control efforts, optimized prevention and control measures, established overseas epidemic prevention and control system covering supply guarantee, emergency response, and derivative risks prevention, shifts of personnel, and stability of the workforce, carried out grid management, strictly implemented the "3345" work policy, paid close attention to key links such as forefront and remote prevention and control and vaccination of cross-border mobile personnel, strengthened overseas medical security and emergency response capabilities, carried out strict video inspection and supervision, coordinated the epidemic prevention and control and business development to ensure the smooth operation of international operations.

Doing a good job in overseas public security work under the new situation. Sinopec revised the overseas public security management system, conducted in-depth overseas public security risk assessment, actively organized overseas public security training, timely expanded medical insurance to cover COVID-19, provided remote "speedy diagnose through interrogation" services, continued to promote safety risk investigation and emergency response capacity building, fully carried out emergency response work, strengthened risk information collection, analysis and judgment, and coordinated the country risk warnings and safety risk warnings. Sinopec maintained the record of "zero deaths" in overseas public security for 13 consecutive years.

Vigorously promoting the physical and mental health management of overseas employees. Sinopec collected and summa-

rized employees' physical and mental health management experience of international oil company through questionnaire surveys, statistical analysis, on-site surveys, benchmarking evaluations, etc., investigated the medical emergency response capabilities of overseas institutions, analyzed the physical and mental health incidents and situation of the company's overseas employees. We formulated and revised the physical and mental health management system for overseas employees, proposed measures to strengthen and improve the physical and mental health management of overseas employees, and established a physical and mental health management and service information platform for overseas employees, effectively improving the physical and mental health management of overseas employees.



Employee Health

Promoting the management and control of risks brought by occupational hazards. Sinopec implemented technical and management measures, addressed positions with excessive noise and places with excessive chemical poisons and dust, carried out pilot projects for noise hazard management, summarized and promoted management experience, and improved the working environment of employees.

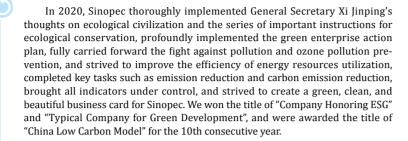
Consolidating the foundation of occupational health management. Sinopec organized special training on national standards, shot educational videos of noise protection equipment, launched Occupational Disease Prevention and Control Law Publicity Week activities to enhance the awareness and ability of occupational health protection of all employees, and strengthened the quality inspection while entering warehouses. As a result, the qualification rate of labor protection products and the satisfaction of employees continued to increase.

Promoting employee health management. Sinopec instructed subsidiaries to establish emergency medical rooms equipped with automatic external defibrillators (AED), blood pressure monitors and other facilities, launched a pilot project for employee group health intervention, organized test for employees with high health risks, promoted tailored health intervention measures, mobilized

corporate EAP staff and volunteers to start a psychological war during the epidemic, used the official WeChat platform to educate the majority of cadres and employees to correctly face the epidemic, maintain mental health, and safe and stable production; and upgraded the module to provide psychological counselling services for employees on issues related to COVID-19.



Green & Low-carbon Dvelopment



Green Enterprise Action Plan

Coordinating and promoting the six major plans to enhance green development in an all round way. We implemented green enterprise action plan, and concentrated on green development, green energy, green production, green services, green technology, and green culture. The green enterprise action plan took remarkable effect, fostering green culture and steadily raising green development. 39 companies completed green enterprise building, and all previously approved enterprises passed reevaluation for 2020. 76 companies finished the building in the past three years, creating a 67% of completion rate. 2 companies were awarded the title of "National Green Mines", 3 awarded the title of "National Green Factory", 4 awarded the title of "Green Factory in Petrochemical Industry", and products of 4 companies were appraised as green products in the petrochemical industry.

Pushing full coverage of green enterprise actions and continuing to carry out creation and review. We improved the green enterprise evaluation system, carried out on-site + remote guidance and one-on-one tracking services for key enterprises, and achieved horizontal coverage of green enterprise actions in an all round way. The oilfields, refining, and sales increased assistance, diagnosis, and guidance for companies not engaged in green enterprise action, and strengthened the supervision and review of the companies that were evaluated. Our professional companies benchmarked against the standards and overcame shortcomings. Engineering and scientific research sectors concentrated green development and achieved steady progress. Outstanding results have been yielded in the supply of green energy such as natural gas, geothermal heating capacity, and low-sulfur marine bunker fuel.

Consolidating the foundation for green development and implementing green construction for grassroots level. We improved 10 types of green evaluation systems in grassroots organizations such as oil production units, facilities, and gas stations, and scientifically guided enterprises to carry out green evaluations. The oilfield sector completed 550 green constructions in the grassroots level, such as green oil production and green gathering and transportation. Refining and chemical companies standardized on-site management, eliminated odors in the region, reduced gas and water leaks, and built 530 green devices. Sales companies broadened their ideas and introduced smart elements in gas stations, installed photovoltaic power generation on the top of the canopy to promote the green construction of grassroots



organizations, and more than 6,000 green gas stations were built. SSC boosted the zero discharge drilling mud system, constructed environmentally friendly toilets in the field, vigorously promoted grid electricity instead of diesel power generation, and built more than 240 green drilling teams and operation teams. By the end of 2020, 8,800 grassroots level organizations of Sinopec completed the establishment of green grassroots units, fostering a green grassroots creation rate of 37%.

Conducting mid-term evaluation for green enterprise action and making plans for the work of following stages. We comprehensively went through the achievements gained during the three years since we implemented the Green Enterprise Action Plan, basically fulfilled the targets set for clean energy, green products, resource and energy utilization, pollutant discharge, and GHG emission, and orderly advanced 24 measures under six major plans. We focused on the key development task based on "One Foundation, Two Wings, and Three Growth Points", carbon peak, and carbon neutrality, enhanced prevention and control on pollution, defused major environmental risks, and formulated targeted goals and tasks of green enterprise action during the "Fourteenth Five Year Plan" period, to lay a solid foundation to comprehensively implement green and clean development strategy and uphold a showcase of green development in our industry.

Energy Management

Energy saving and water saving indicators were fully completed. Comprehensive energy consumption per RMB 10,000 of output decreased by 0.38% year on year. Industrial comprehensive energy consumption decreased by 4.89 million tonnes of standard coal. Industrial water intake dropped by 10 million cubic meters year on year, and the wastewater recycling rate went up by 1.68 percentage points year on year.

Stringently managing total volume and intensity of energy. We signed annual energy environmental responsibility agreement, enhanced management on overall volume, and strengthened process surveillance and early warning. We bolstered internal and external audits of the energy management system, carried out energy audits and energy conservation supervision, and improved energy conservation management. We conducted post evaluation of energy conservation for fixed asset investment projects, and effectively oversaw the "three barriers" of energy conservation, namely, feasibility study report demonstration, basic design review, and acceptance evaluation, and resolutely restricted the growth of energy consumption from the source. We put on energy conservation tests and tapped its potential.

Intensifying the benchmarking. The benchmarking between enterprises and devices was enhanced. We raised the weight of energy efficiency evaluation, and threw out competition activities of "comparing, learning, and surpassing" and device compliance. In 2019, the State-owned Assets Supervision and Administration Commission of the State Council launched energy efficiency benchmarking activities of central enterprises in the petroleum and petrochemical industry. The refining business of Sinopec Qingdao Refining & Chemical Company was rated as the most energy efficient business. The ethylene business and ethylene and diene of Sinopec Zhenhai Refining & Chemical Company, Sinopec Maoming Petrochemical Company, and Tianjin Shihua Company were awarded as most energy efficient. In 2019, during The Leading Benchmarking Evaluation of Energy Efficiency for Key Energy-consuming Products of the petroleum and chemical industry, Sinopec Qingdao Refinery Company won the first place for crude oil processing company. Sinopec Zhenhai Refining & Chemical Company and Sinopec Maoming Petrochemical Company won the first and second place for ethylene production companies. Sinopec Hainan Refining & Chemical Company won the first place for paraxylene production company.

Strengthening R&D and promotion for energy conservation technologies. We sorted out mature and applicable energy conservation technologies, and scaled up the promotion of those technologies. Oilfield companies promoted machine extraction, gathering and transformation system, and energy conservation technologies, facilities, and application of regarding water (gas) injection. Refining companies put forward energy saving technologies covering the whole process for all plants, energy saving pro-

cesses and energy saving public facilities improvement, high efficiency heating furnace series, and new energy saving technologies. Sales companies facilitated new energy saving and consumption reducing technologies such as photovoltaic gas stations, automatic metering of oil depots, and phased change energy storage for heating. The green and high efficiency ethylene complete technology of million ton grade, large scale and high efficiency energy conservation aromatics complete technology, low energy consumption and high efficiency hydrocracker (modification) complete technology was applied in new construction and expansion projects. We developed energy saving RAX-4000 adsorbent for aromatics device, RIC270 isomerized agent, and energy conservation polypropylene HA catalyst, improving the active reaction. We developed and successfully applied energy conservation equipment such as twisted pieces of ethylene cracking furnace, high efficiency divided-wall distillation tower, high flux reboiler, scale inhibiting high efficiency condensing cooler, and new type of distillation tray, realizing essential energy saving.

Pushing ahead the utilization of new energy. We vigorously utilized residual heat from oil extraction wastewater, geothermal energy, and solar energy to build a clean energy structure. As of December, 38 companies implemented 230 new energy projects covering residual heat from oil extraction wastewater, geothermal energy, and solar energy utilization, replacing 1.214 million tonnes of standard coal.

Carrying forward information technology construction for energy management. We orderly boosted the digital transformation and smart development of energy management, actively carried out the information system construction of energy management for 37 refining companies, and realized five functions covering energy planning, energy operation, energy statistics, evaluation analysis, and energy optimization. In particular, we optimized the operation of thermal power plants online through the steam optimization model, and the benefits for the cumulative power optimization reached over RMB 100 million. The energy management through IT application project for petrochemical company was awarded as a standardized demonstration project for national energy conservation.

Continuously carrying out water conservation. We improved the evaluation index system for saving water, optimized the structure of using water, and continued to reduce the total amount of water intake, saving 10 million cubic meters of water in 2020. We run water balance tests on two refining and chemical companies. The annual consumption of fresh water was reduced by about 250,000 tonnes, and the consumption of fire water was cut by about 200,000 cubic meters. Sinopec Zhenhai Refining & Chemical Company was awarded as the "leading company" of water efficiency in the petroleum refining industry. It was also recognized as the "leading company" of water efficiency in the ethylene industry together with Sinopec Yanshan Petrochemical Company.





Environmental Protection

Resolutely fighting the battle against pollution. Through a series of measures such as close supervision, monthly notification, and strict evaluation, we vigorously pressed ahead with the implementation of pollution control measures. We fully carried out the requirements of the *Law of the People's Republic of China on Prevention and Control of Environmental Pollution by Solid Waste*, and orderly constructed 10 hazardous waste disposal centers. We accelerated the investigation of soil and groundwater in corporate land, and 88 companies completed the investigations and report review.

Making every effort in ecological protection with the Yangtze River and Yellow River basins as the focus. We stressed on raising energy efficiency of the companies in major basins, compiled the guidelines for Sinopec in implementing the Yellow River Basin ecological protection action plan, and formulated the goals and tasks of the companies in the Yellow River Basin. We fastened the shutdown and exit of facilities in the conservation red line area and ecological restoration. Shengli Oilfield and Northwest Oilfield withdrew from 401 oil and gas wells and 20 stations, completed the exit tasks imposed by the environmental protection inspector of the central government as scheduled, shut down and relocated 8 oil depots and terminals, implemented comprehensive environmental management of terminal shorelines, covering 378,000 square meters of green area, and maintained the ecological restoration rate of the temporary land occupation at 100%.

Keeping up with the management on hindering dangers in environmental protection. We ensured solid waste reduction, resource utilization, and harmless treatment, actively expanded the comprehensive utilization of solid waste, and dealt with old solid waste landfills as required. We adopted special safety rectification of hazardous waste and the treatment of construction and domestic waste, and issued a series of guiding documents such as *Guidance on Sinopec Hazardous Waste Environmental Management(Trial)* to avoid the solid hazardous waste violations. The compliance rate of solid waste disposal was 100%, and the comprehensive utilization rate of solid waste increased by 3.0% in 2020.

We continuously carried out comprehensive exhaust gas treatment, scientific and technological research, and improved the treatment of exhaust gas. We took special actions to prevent and control ozone pollution with high standards, and issued the Sinopec Special Action Plan for Ozone Pollution Prevention and Control, made special rectifications of VOCs and NOx in an all-

round way, put forward VOCs and NOx emission concentration standards which were stricter than the national and local standards, and vigorously pushed forward the implementation of emission reduction projects. The comprehensive compliance rate of exhaust gas reached more than 99.9%, and the total amount of sulfur dioxide and nitrogen oxide decreased by more than 4% year on year.

We treated waste water based on a standard stricter than the national ones, and continued to improve the treatment. We pursued cleaner production, vigorously implemented emission reduction at the source, and strengthened the use of unconventional water resources and the reuse of sewage. The zero emission project of Zhongan United Coal Chemical Company was listed among the Sinopec "ten-dragon" program for Science and Technology Development, and set up demonstration engineering for zero emission. 100% of our effluent discharges met the standard. Total discharge of COD and ammonia nitrogen went down by more than 2%, and total discharge of wastewater decreased by 3.2%.

Taking an active part in national afforestation of different localities. Companies combined the green construction of factories and mines with the establishment of "National Forest City", "Sponge City" and "Garden Factory", achieving fruitful results. 47 companies or organizations were awarded with honorary titles as "National Model for Green Development" and "National Advanced Green Organization". The "Sinopec Green" has won wide approval from the society.

Continuously enhancing risk and danger resolution and emergency response. We proceeded with environmental risk degradation and assessment. We formulated a grading management and control plan for environmental risks, and implemented control measures for hidden risks. We strengthened the management and control of major environmental risks and the governance of hidden dangers. We continued to implement the mechanism where the leadership of Sinopec Group assumed management and control, and held video conferences on bolstering major environmental risk management and management on major environmental hazards. We vigorously reviewed and rectified various environmental protection problems, innovated methods, and sped up the completion of rectification. The sources of our first grade environmental risks were downgraded by 79%, and no company level sudden environmental pollution and ecological damages occurred.

Response to Climate Change

Launching a specific research on carbon peaking and carbon neutrality. We signed a letter of intent for cooperation with the Energy Research Institute of the National Development and Reform Commission, the National Center for Climate Change Strategy and International Cooperation (NCSC), and Tsinghua University, set up research topics of strategies for Sinopec to lead the energy and chemical industry in carbon emissions peaking and carbon neutrality, formulated Sinopec's strategies, goals, roadmaps, and safeguard measures in carbon peaking and carbon neutrality, and piloted trials in carbon peaking and carbon neutrality.

Consolidating the basis for carbon emission management. We continued to carry out carbon inventory verification and consolidated the basis of emission reduction data. We strengthened reduction assessment, clarified the main responsibility of companies for carbon emission reduction, and facilitated the in-depth development of system-wide carbon emission management. We conducted research and established carbon footprint calculation and evaluation methods for different products, and boosted the formation of carbon labeling management for Sinopec's products. We upgraded and improved the carbon emission information system, and underpinned all companies to achieve carbon peaking and carbon neutrality goals and tasks.

Enhancing carbon dioxide capture and utilization. We continued to carry out the recovery and utilization of carbon dioxide in refining and chemical companies, and recovered highly concentrated carbon dioxide emitted by hydrogen production and ammonia synthesis equipment for industrial gas, oil displacement or food grade processing gas. 1.29 million tonnes of carbon dioxide was recycled and reutilized by refining and chemical companies. We implemented carbon dioxide flooding projects in oil and gas field companies, and achieved the dual benefits of increasing oil and reducing emissions. Oil field companies injected 298,000 tonnes of carbon dioxide flooding and increased oil output by 43,000 tonnes.

Strengthening the control on methane emission. We carried out key technical research on oil and gas loss monitoring and prevention, and explored the establishment of a quantitative assessment and prevention and control system for oil and gas loss in production. Oilfield companies continued to strengthen the use of closed mixed transportation technologies, vigorously implemented casing gas recovery, boosted the "testing while

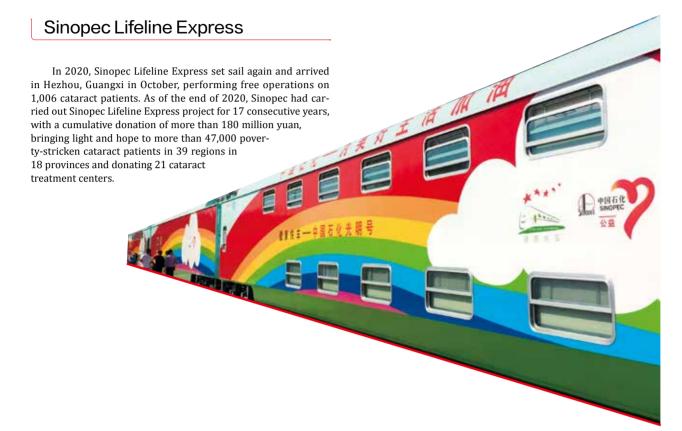
entering the station" process, and strengthened the recovery of remote scattered wells. The annual recovery of methane reached about 600 million cubic meters, and the corresponding reduction of greenhouse gas emissions stood at about 9 million tonnes of carbon dioxide equivalent. Refining and chemical companies continued to optimize the operation and management of biogas delivery and burning projects in biochemical plants, raised the efficiency of biogas utilization, and recycled 12.86 million cubic meters of biogas annually.

Actively participating in carbon trading. Carbon trading pilot companies formulated reasonable implementation plans and trading plans, actively followed the policy of using CCER to deduct quota, reduced performance costs, and completed annual carbon quota implementation on time. The annual carbon trading volume was 3.596 million tonnes, and the turnover was RMB 120 million.



■ CHINA PETROCHEMICAL CORPORATION ANNUAL REPORT 2020 Social Responsibility ■

Social Contribution



The Gas Station that Cares: A Better Road Home

Sinopec continued to provide "1+10+X+1" free services to 247 gas stations in the five provinces (regions) of Guangdong, Guangxi, Jiangxi, Hunan and Guizhou for people traveling, staying at home or remaining at their posts during the Spring Festival. Sinopec provided 10,000 free fukubukuro and prevention supply packages for migrant workers staying in Guangdong for the Chinese New Year, offered free delivery services in 20 gas stations in 7 cities including Guangzhou and Foshan which provided migrant workers with 10,000 free New Year goods and gifts deliveries.

Sinopec included products from poverty-stricken areas into the "New Year Shopping Festival" and launched the "Poverty Alleviation Package" to help rural revitalization. As of the end of 2020, "The Gas Station that Cares: A Better Road Home" had served more than 4.2 million people riding motorcycles home and nearly 50 million Spring Festival travelers, and the total number of volunteer services has exceeded 45,000. "The Gas Station that Cares" has become a well-known charity brand in China, and won the "Global Brand and Reputation Outstanding Achievement Award", "Asian Corporate Citizenship Gold Standard Award", "China Young Volunteer Service Project Silver Award", etc.



Sinopec Gas Stations of Love · Sanitation Workers' Lounges

Sinopec officially launched the "Sinopec Gas Stations of Love · Sanitation Workers' Lounges" charity brand project in Jiangsu in 2016 and then expanded it to 13 provinces (regions and municipalities) including Beijing-Tianjin-Hebei, Yangtze River Delta, Pearl River Delta, Sichuan and Chongqing. The project uses gas stations as a platform, equipped with basic service facilities such as air conditioners, microwave ovens, thermos bottles, lockers, books and newspapers, and access to the Internet to provide sanitation workers with services such as cooling, heating, drinking water, food reheating, surfing the Internet, reading, and resting. As of the end of 2020, Sanitation Workers' Lounges have been set up in 2,617 gasoline (gas) stations across the country.



Brand Charity

Great Wall Lubricant has held the "China Astronaut Experience Camp" for 12 consecutive years, organized the "China Aerospace Cheering Group" for 10 consecutive years, and continuously carried out the "Happiness 1+1" program to create opportunities for ordinary people to learn about China's aerospace industry, carry forward the aerospace spirit and spread the aerospace culture. The "China Astronaut Experience Camp" is the longest-lasting and most influential non-profit space science education activity in China.

In October 2020, Great Wall Lubricant, together with Shun-

fengche, Easy Joy and other organizations, launched the "Finding Good Car Owners in China" public welfare activity to encourage car owners to record and convey traffic civilization on the way, and guide more car owners to drive safely and travel in a civilized manner.

In 2020, "Easy Joy Tibet Glacial Water" innovated in public welfare methods and joined hands with China's high-speed rail to title sponsor the Beijing-Shanghai high-speed rail to guarantee the resumption of work and production.



■ CHINA PETROCHEMICAL CORPORATION ANNUAL REPORT 2020 Social Responsibility ■

Emergency and Disaster Relief

In March 2020, a forest fire broke out in Xichang, Sichuan. Sinopec initiated emergency plans as soon as possible. On the basis of ensuring the safety of gas stations closer to the fire site, Sinopec increased efforts in resource allocation, opened green channels, and spared no effort to ensure the oil products supply for emergency and disaster relief. In July, the southern region experienced multiple rounds of heavy rainfall, and many places suffered from floods. Sinopec donated flood prevention materials to flood-stricken areas in Jiangxi and Yingshang County, Anhui, made every effort to ensure oil resources supply, and took practical actions to help flood prevention and disaster relief.



Cheering for the Winter Olympics

In September and October 2020, Sinopec organized the recruitment activities for the Winter Olympic Experience Camp with the theme of "Cheering for the Winter Olympics, Realizing Snow and Ice Dreams - Sinopec Light up Hope Action" in Bulenggou Elementary School in Dongxiang County, Gansu Province and Petrochemical Elementary School in Ban'ge County, Tibet. Thirty-five students were selected as members of the Winter Olympics Experience Camp, and they were given the "Green Pass" to go to Beijing to watch the flag-raising ceremony, visit the Olympic venues, cheer for the Winter Olympic athletes, and realize the Winter Olympics dreams. In November, the Company launched the "Clean Refueling" brand action, and 3 initiatives of Providing clean Products for Creating Wonderful, Extraordinary, and Outstanding Beijing Winter Olympics and Paralympics, Providing Clean Services for Hundreds of Millions of People's Participation into Winter Sports and Take Clean Actions to Light up Dreams and Create a Better Life, so as to actively participate in, serve, and contribute to the Winter Olympics, and help achieve the goal of 300 million people participating in winter sports.



Sinopec Winter Olympic Promotional Video



Serving Farming Seasons

In order to ensure agricultural production and the use of oil for agricultural machinery during farming seasons, Sinopec, guided by the market, strengthened communication, provided considerate services, and took multiple measures including agricultural assistance service teams, tailor-made preferential policies, green channels, and free oil delivery to the farmland to contribute to a good harvest.



Popularizing the Knowledge of Law

Sinopec actively participated in the popularization of law, and has carried out the Constitution knowledge award-winning quizzes for 6 consecutive years, guided the public to learn constitutional knowledge, promoted the spirit of the constitution, and maintained the authority of the constitution. Sinopec donated 1 million yuan to the China Legal Aid Foundation to support voluntary legal aid services.



Volunteer Services

Adhering to the service spirit of "dedication, friendship, mutual assistance, and progress", the company organized employees to participate in voluntary activities to send warmth



to the society and spread positive energy. The number of young volunteer services reached 951,600 person-times and 1.51 million hours in the whole year.



■ CHINA PETROCHEMICAL CORPORATION ANNUAL REPORT 2020 COVID-19 Control ■

■ COVID-19 Control



COVID-19 has been the most challenging public health crisis that spreads to and affects people at unseen scale since the founding of the People's Republic of China. As the nation's pillar company, Sinopec responded in the first place to secure energy supply, increase medical materials production and make donations, contributing to controlling the pandemic and reopening the economy. Our bedrock role in the economy is demonstrated in the challenges.

Party Construction

The Company's leading Party member group acted under the guidance of the central government and General Secretary Xi Jinping, and established a mechanism that made fast decisions and coordinated systemic response. Through leadership meetings, all requirements by the government were followed and fully implemented. Top executives held numerous calls and video conferences with subsidiaries in Hubei and other places, and paid visits to gas stations, masks production lines and melt-blown fabric facilities construction sites, passing on confidence and rallying response forces.

All the 130-strong subsidiaries of Sinopec established respective response mechanism led by the head of each subsidiary to ensure highly efficient operation. The mechanism calls on each Party member and organization at the grass root level to fully fulfill their role as a model in fighting the pandemic.



Securing Supply

Faced with the severe situation of COVID-19 outbreak, Sinopec directed its subsidiaries in Hubei to donate 200 tonnes of sanitizer, some 10,000 cotton-padded overcoats to the Wuhan Municipal Government, and 50 million yuan to the Hubei Provincial Government. Meanwhile, we sent medical workers from in-house hospitals and affiliated hospitals to pandemic-hit regions.

Utilizing its 30,000 plus stations, Sinopec managed to secure oil products supply with stations open to customers amid the COVID-19. All its subsidiaries in Hubei ensured oil products supply for emergence response. More than 1,800 stations and 1,600 convenience stores remained open in Hubei, while 5,300 front line employees worked round the clock to make sure that products supply was not disrupted. To support the construction of the makeshift hospital of Leishenshan, Hubei Oil Products Company and Sinopec Lubricants Company provided 16,500 liters of diesel and 1,000 barrels of lubricants for engineering machines free of charge. When the hospital was operational, free refuel was continued for ambulances. When several makeshift hospitals were in urgent need for fuels, Hubei branch supplied 26,000 liter of diesel. The Southwest Petroleum Bureau managed to meet industrial and civil demand for natural gas in Sichuan and Hubei. Sinopec Gas Company sent gas to Leishenshan free of charge and guaranteed steady gas supply during the pandemic control period.

To address the shortage in supply of medical materials, Sinopec rescheduled the production plan of refining and chemical plants to produce raw materials for medical use at full utilization, and kept prices stable. To meet the rocketing demand for masks, Sinopec announced in social media to look for masks machine and cooperated with companies in setting up 11 masks production lines. Meanwhile, Sinopec invested 200 million yuan to build 10 melt-blown production lines in Yanshan and Yizheng branches with a daily total capacity of 18 tonnes, sufficient for 18 million surgical masks or 3.6 million N95 masks. On March 3, 2020, Sinopec's daily supply of masks at its service stations reached 150,000. 50 service stations started to sell children masks on March 17 with a total supply of 10,000 per day.

During the pandemic-raging period, a "one click refueling" service was introduced at all Sinopec's 30,000 stations to reduce person-to-person transmission risk. In addition, more than 7,000 convenience stores sold vegetables to resident. Some 170 Easy Joy stores at Sinopec Wuhan stations added daily



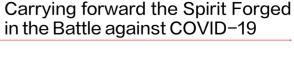
necessities such as rice, grain, oil as well as hand sanitizer and disinfectant for COVID-19 prevention. Sinopec Beijing stations introduced numerous services via mobile app such as one click refueling, placing order for vegetables, top-up account and e-invoice, reducing physical contact. Sinopec Guangdong's 2,200 convenience stores kept open against the pandemic and customers could refuel cars and settle bills without leaving their cars. More than 1,700 Sinopec Zhejiang convenience stores teamed up with more than 30 companies and farmers to help sell agricultural produce.

Resuming Work and Production

Sinopec was among the first to resume production and operations during the pandemic which drove the rebound of related industries and recovery of economy. By March 4 2020, Sinopec subsidiaries had seen 100% operation resumption except for those in Hubei in accordance with local pandemic control requirements, stabilizing industrial chains and supply chains.

Stabilizing Job Positions and Expand Employment

Under the guidance of the central government and SASAC, Sinopec proactively implemented a programme to stabilizing job positions and increasing new employment through recruiting peasant workers, skilled workers and college graduates. Recruitment favoured particularly poverty areas and Hubei Province, promoting steady local economic development and employment.



In August 2020, on the fourteenth China Brand Festival jointly organized by the Brand Alliance, CPC Wuhan Committee and the Wuhan Municipal Government, Sinopec was awarded "the most respected enterprise in fighting COVID-19" and "Huapu Prize". Sinopec also won SABRE 2020 awards for Reputation Management in two categories of Chemicals & Industrials and Energy and Natural Resources.

In September 2020, a meeting was held at the Great Hall of the People in Beijing to commend role models in the fight against the COVID-19 epidemic. Sinopec's synthetic resin unit of Yanshan Company and Li Zhengjun, head of Zhiyin service station of Sinopec Wuhan were awarded National Role Model in Fighting against COVID-19 in the categories of organization and individual, respectively.

In October 2020, SASAC held a meeting to commend role models among central SOEs in battling COVID-19 in Beijing. Sinopec Yizheng's melt-blown fabric unit was awarded outstanding organization title.

In December 2020, UNGC awarded Sinopec 2020 Best Corporate Practice for Achieving Sustainable Development Goals (SDGs) for its outstanding contributions in securing oil and gas supply, increasing production of medical materials, innovating businesses for convenient services and driving business resumption along the industrial chain.



■ Major Events

May July September October **February** March **April August** November December June **January** 10th the construction of Sinopec Open Day was Sinonec kicked off the Sinonec started up the Sinonec won the award according to the decision Sinonec was bestowed according to the decision Sinonec completed dovethe Organization Departthe first run of melt-blown Sinopec successfully tailing 11 mask production Weirong gas field, the selected as Ten Outby the Organization Dethe Anti-pandemic Tribute biggest college graduate construction of its Beidou by the Organization of Company Fulfilling ment of the CPC Central fabrics production line of issued 3 billion US dollars lines with our partners. first deep shale gas field standing Public Participapartment of the CPC Cen-Brand Company Award recruitment since its Operation Service Center. Department of the CPC SDG with Best Practices Committee announced Yanshan petrochemical of foreign bonds, creating tion Cases co-released tral Committee Comrade Central Committee Comin 2020 issued by UN in China, was rolled out. and Huapu Award during founding in 1983 company successfully the Decision on Adjusting the lowest interest rate of by Ministry of Ecological Zhang Shaofeng was the annual meeting of rade Li Yonglin was ap-Global Compact. the Chairman and Party started up, and delivered the company. Environment and Civilizaappointed as member of pointed as Vice President China Brand Festival Secretary of Sinopec qualified products. Li Keqiang, member of Sinopec deployed and tion Office of the Central the Party Committee and and member of the Party Group Issued by CPC the Standing Committee moved ahead in the 10th Communist Party Com-Chief Accounting Officer Committee of China Pet-Central Committee, apof the Political Bureau, Three Year Action Plan of China Petrochemical Phase | of the hydrogen rochemical Corporation. pointing Comrade Zhang 2020 China Brand Eval-Premiere of State Counfor Deepening Reform. Sinonec deployed and fa-Corporation. supply center of hydrogen Yuzhuo as the Chairman both the masks Sinonec uation Press Conference cil. and Head of the cilitated actions in benchfuel cell in Guangzhou and Secretary of the produced independentwas released. Sinopec Central Leading Group marking and improving Petrochemical Company Party Committee of China was selected as the first ly and collaboratively for COVID-19 Prevention 14th the Zhongke Refinery & management to a world the following counties that was put into production. Petrochemical Corporainto the list of China and Control, paid a visit to Petrochemical Complex China National Intellectu-Sinopec devoted targeted brand value evaluation of our partners and inspectal Property Administration was put into operation. assistance in were all liftenergy and chemistry ined on mask production. unveiled the 21st China ed out of poverty: Donaxdustry, the second among Patent Award. Ten patents iang County in Gansu, Sinopec convened a work Sinopec launched a "100all brands in China. of Sinopec won awards, Fenghuang County & conference, comprehen-24th day campaign to tide over with one golden award. Luxi County in Hunan, sively deployed strategies difficulties and improve Sinopec decided to set three silver awards, and Yingshang County & for world leading develperformances" campaign. up 10 melt blown fabric Yuexi County in Anhui, opment, and embarked on six outstanding awards. according to the decision production lines and Yuepuhu County in a new journey to foster a by the Organization Xinjiang. Bange County in world leading clean energy Department of the CPC Tibet and Zeku County in and chemical company. the first run of melt-blown Central Committee, Sinopec was rated Grade Qinghai that were paired fabrics production line of Comrade Zhao Dong A during the annual opup with Sinopec in pover-Yizheng Chemical Fiber was appointed as Deputy erational performance ty alleviation also shook Company successfully Secretary of the Party evaluation on heads of off poverty. started up. Committee of China Petcentral SOEs rochemical Corporation. Sinopec put in place stra-20th tegic research on carbon Sinopec issued its Corpoemission peak and carrate Social Responsibility bon neutrality. Report of 2019, pointing out that Sinonec paid RMB 312.2 billion for taxes and fees in 2019, twenty one employees of ranked first in both refin-Sinopec were awarded ing capacity and aromatthe title of National Model ics production capacity, Workers. dedicated RMB 231 million in poverty alleviation, and held steady at No. 2 on Fortune's Global 500

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